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24 October 2017

RECEIVED
By Alameda County Environmental Health 3:48 pm, Oct 24, 2017

Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

Subject: 205 Brush Street
Oakland, CA
RO0003196

Mr. Keith Nowell:

As the legal authorized representative of PG&E, who contracted ERM-WEST, Inc.(ERM) to prepare the *3rd Quarter 2017 Monitoring Report,* I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to Alameda County Department of Environmental Health's FTP server and the State Water Resources Control Board's GeoTracker website.

Sincerely,

Ben A. LePage, Ph.D.

Manager, Remediation

Environmental Resources Management

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24 October 2017

Mr. Keith Nowell
Hazardous Materials Specialist
Alameda County Environmental Health
1313 Harbor Bay Parkway
Alameda, CA 94502-6540

Subject: Third Quarter 2017 Monitoring Report
RO0003196: 205 Brush Street, San Jose, California

Dear Mr. Nowell:

On behalf of Pacific Gas and Electric Company (PG&E), ERM-West, Inc. (ERM) has prepared this *Third Quarter 2017 Monitoring Report* for the former Port of Oakland property located at 205 Brush Street in Oakland, Alameda County, California (site; Figure 1). This report documents the second quarterly sampling event as outlined in the *Additional Investigation, In Situ Chemical Oxidation Pilot Study, and Bench-Scale Testing Work Plan* (Work Plan [ERM 2017a]). In addition, this report includes the results of the third monthly perfomance monitoring following the in situ chemical oxidation (ISCO) pilot study, as decribed in the Work Plan.

SITE BACKGROUND

PG&E acquired this property from the Port of Oakland for redevelopment as part of upgrading and improving safety of its natural gas distribution infrastructure in the area. As part of the 6 March 2015 Real Property Transfer Agreement, PG&E will address the on-site environmental conditions; all off-site impacts are the responsibility of the Port of Oakland.

The subject property consists of an approximately 0.74-acre parcel of land that is improved with three vacant structures and concrete- and/or asphalt-paved areas. The subject property is identified as Alameda County Assessor's Parcel Number 001-0111-005-02 and is situated in a primarily commercial and industrial (C/I) area in Oakland, California (Figure 1). Historical use of the site and a description of previous site investigations were presented in the *Site Characterization Summary Report* (ERM 2016).

The site is currently occupied by three commercial buildings (Buildings 412, 413, and 414) located in the northern and eastern portions of the site. The remainder of the site consists of a concrete-paved yard, except for an asphalt-paved area on the western side of the subject property (where former underground storage tanks [USTs] were removed). The vacant portion of the subject property is surrounded by fencing with an access gate located along the western boundary at Market Street.

This quarterly event marks the second monitoring event completed for the site, which began with the Second Quarter 2017 baseline event reported in the *Additional Investigation – Monitoring Well and Soil Vapor Installation Summary Report* (ERM 2017b).

This report presents the following:

- Results of water-level monitoring and laboratory analysis for volatile organic compounds (VOCs), total petroleum hydrocarbons (TPH), semivolatile organic compounds (SVOCs), and metals in groundwater from quarterly (August 2017) and performance monitoring (August and September 2017) events; and
- Results of soil vapor sampling for VOCs during the quarterly (August 2017) event.

The monitoring well and soil vapor probe locations are presented on Figure 2.

ACTIVITIES COMPLETED

ERM conducted the following activities at the site on 14 and 15 August 2017 as part of the Third Quarter 2017 monitoring event:

- Inspected the condition of each monitoring well and well box;
- Measured groundwater elevation in five site monitoring wells (MW-01 through MW-05);
- Measured oxidation reduction potential (ORP), pH, temperature, and specific conductance during groundwater sampling using a flow cell;
- Collected groundwater samples from site monitoring wells (MW-01 through -05);
- Collected soil vapor samples from six soil vapor probes (SV-1 through -6);
- Submitted all soil vapor samples for VOC and natural gas (oxygen, methane, and carbon dioxide) analysis by United States Environmental Protection Agency (USEPA) Method TO-15 and ASTM D-1946, respectively; and

- Submitted all groundwater samples for analysis for the following compounds of concern:
  - VOCs and TPH-gasoline (TPH-g) using USEPA Method 8260B;
  - TPH-diesel (TPH-d) and TPH-motor oil (TPH-mo) by USEPA Method 8015M;
  - SVOCs by USEPA Method 8270C; and
  - Title 22 Metals by USEPA Methods 6010A/7470B.

In addition, the third monthly performance monitoring event was completed on 15 September 2017. The following activities were completed as part of the performance monitoring event:

- Measured groundwater elevation in five site monitoring wells (MW-01 through MW-05);
- Measured ORP, pH, temperature, and specific conductance using a flow cell;
- Collected groundwater samples from site monitoring wells (MW-01 through -05); and
- Submitted all groundwater samples for analysis for the following compounds of concern:
  - VOCs and TPH-g using USEPA Method 8260B;
  - TPH-d and TPH-mo by USEPA Method 8015M with silica gel cleanup;
  - SVOCs by USEPA Method 8270C; and
  - Title 22 Metals by USEPA Methods 6010A/7470B.

THIRD QUARTER 2017 FIELD ACTIVITIES

Third Quarter 2017 field activities included sampling for quarterly and performance monitoring. Field sheets for the quarterly and performance monitoring events are provided as Attachment A. The following subsections describe the sampling activities.

Sustainability Tracking and Practices

In partnership with PG&E, ERM tracked and monitored progress against key sustainability indicators and, where possible, took action to improve performance through best practices. Sustainability stressors considered applicable for these

activities include greenhouse gas emissions, waste production, health and safety, and stimulation of the local economy. The following best practices were identified and applied during the site characterization field activities:

- Work trucks did not idle while on site;
- Small equipment such as peristaltic pumps were powered by rechargeable batteries rather than running generators;
- Minimized liquid waste through the use of low-flow sampling;
- Consistent and thorough application of health and safety planning and safety culture by PG&E and ERM contributed to completion of the event with no safety incidents; and
- Local purchases of fuel, food, and supplies stimulated the local economy.

ERM tracked the overall impacts caused by project activities at the site, and the reduction of impacts attained through best practices. The site-specific data was provided to PG&E so that programmatic tracking of impact reductions can be done and further efforts can be encouraged.

Groundwater Monitoring Activities

ERM completed the third quarter groundwater monitoring activities on 14 and 15 August 2017. Prior to sampling, depth-to-groundwater measurements were taken to the nearest 0.01 foot using a conductivity-based tape. Field groundwater level measurements are included on the field sheets in Attachment A. Groundwater elevations are presented on Table 1.

Three casing volumes of water were purged from the groundwater monitoring wells using a peristaltic pump while stabilization parameters were monitored using a flow cell. Following purging, groundwater samples were collected into laboratory-supplied containers, properly preserved and labeled, and placed in an iced cooler. The samples were submitted under proper chain-of-custody procedures to Enthalpy Analytical (Enthalpy), a California-certified laboratory in Berkeley, California, for analysis of the parameters listed in the previous section.

ERM completed the third and final monthly performance monitoring event on 15 September 2017. Prior to sampling, depth-to-groundwater measurements were taken to the nearest 0.01 foot using a conductivity-based tape. Field groundwater level measurements are included on the field sheets in Attachment A. Groundwater elevations are presented on Table 1.

Consistent with the quarterly groundwater monitoring event, the five wells were purged from the groundwater monitoring wells using a peristaltic pump while stabilization parameters were monitored using a flow cell. Following purging, groundwater samples were collected into laboratory-supplied containers, properly preserved and labeled, and placed in an iced cooler. The samples were submitted under proper chain-of-custody procedures to Enthalpy for laboratory analysis of the parameters listed in the previous section.

All groundwater sample containers were labeled, placed in zip-top-style plastic bags, packed in an ice-filled cooler, and transported under standard chain-of-custody documentation to Enthalpy. The results of this sampling event are provided in the report tables and discussed within the context of the previous sampling results in subsequent sections of this report.

Soil Vapor Sampling Activities

Consistent with the Alameda County Environmental Health-approved Work Plan, soil vapor samples were collected from SV-1 through SV-6 on 15 September 2017, as part of quarterly monitoring activities. Before sampling, three purge volumes were removed from the soil vapor probes using a portable pump. Purge volumes were calculated for the volume of air within the length of tubing, sand filter pack voids, and potential granular bentonite voids. Soil vapor samples were collected in 1-liter SUMMA canisters. Consistent with previous monitoring events, the leak detection compound isopropyl alcohol (2-propanol) was released into the atmosphere surrounding the sampling apparatus and soil vapor well.

Following sample collection, the SUMMA canisters were labeled, packed in shipping containers, and transported under standard chain-of-custody documentation to Eurofins Air Toxics, Inc., a California-certified laboratory in Folsom, California. Soil vapor samples were analyzed for methane, oxygen, and carbon dioxide by ATSM Method D-1946 and VOCs by USEPA Method TO-15.

GROUNDWATER MONITORING RESULTS

The groundwater-level monitoring and laboratory analytical results for the Third Quarter 2017 monitoring events are discussed below.

Groundwater Elevations and Flow Direction

During the Third Quarter 2017 monitoring events (August and September), water-level measurements were collected from the five site monitoring wells (MW-01 through -05). Groundwater elevations for the two events are presented in Table 1, and potentiometric surface maps for August and September 2017 are presented as Figures 3 and 4, respectively. Site hydrostratigraphy was documented during previous investigations, and is included in the *Site Characterization Summary Report* (ERM 2016). Monitoring wells installed as part of this investigation were installed within the shallow groundwater zone. This first groundwater interval appears to be perched, occurring within coarser-grained sand stringers in primarily fine-grained silts and clays.

Groundwater level measurements were taken on 14 August and 15 September 2017. Static water level measurements collected from site wells during the most recent monitoring event (September 2017) ranged from 4.88 feet (MW-02) to 5.79 feet (MW-01) above mean seal level. As seen in Table 1, groundwater elevations at the site have dropped an average of 1.24 feet since the May 2017 baseline monitoring event.

As shown on Figures 3 and 4, groundwater flows to the southwest towards the Port of Oakland.

Groundwater Field Parameters

Field parameters used to characterize groundwater quality included pH, electrical conductivity, temperature, dissolved oxygen, and ORP. Field parameter data collected from site monitoring wells during the two Third Quarter 2017 monitoring events are presented in Table 2. Field readings were recorded on groundwater sampling sheets, which are included in Attachment A.

As seen in Table 2, two wells continue to exhibit negative ORP readings (MW-02 and MW-04). One well, MW-03, continues to exhibit high dissolved oxygen, most likely due to the oxygen releasing component of the injectant. The parameters of the wells closest to the former UST (MW-02 and MW-04) appear to indicate a return to pre-injection conditions.

Soil Vapor

Soil vapor analytical results from this investigation are summarized in Table 3 along with the Tier-1 Environmental Screening Levels (ESLs) and, for comparison purposes, from the applicable ESLs based on current and future use as a C/I site

from the Regional Water Quality Control Board ESL Workbook (RWQCB 2016). The most relevant screening level for the site will be the C/I ESLs as the site will be redeveloped as an unmanned facility. Figure 5 presents the locations and compounds in exceedance of their respective ESLs.

As seen in Table 3, multiple VOCs were detected in four of the five soil vapor samples collected during the quarterly event; VOCs were not detected in SV-3. One concentration of tetrachloroethene detected in SV-4 exceeded its applicable ESL of 2,100 micrograms per cubic meter (µg/m^3). This soil vapor probe is located within the former automotive maintenance shop. SV-5, located near the former UST area, contained an exceedance of benzene during the May 2017 baseline sampling but was not detected above the reporting limit of 180 µg/m^3, which is below its applicable ESL of 420 µg/m^3. Other fuel-related VOCs including hexane, cyclohexane, heptane, and 2,2,4-trimethylpentane were also detected in the SV-5 sample although ESLs have not been established for these compounds.

In addition, soil vapor samples were collected for analysis of naturally occurring components of soil vapor including oxygen, methane, and carbon dioxide. Methane was not detected in any of the six soil vapor samples. Oxygen percentages ranged from 1.6 (SV-5) and 16 (SV-3 and SV-6) percent and carbon dioxide ranged from 2.8 (SV-6) to 16 (SV-5) percent; average oxygen and carbon dioxide percentages in air are 20.95 and 0.04 percent, respectively.

TPH and VOCs in Groundwater

TPH and VOC groundwater analytical data are included in Table 4 and on Figure 6. As shown on Table 4, TPH-d was detected in two wells (MW-02 and MW-04) during both of the monitoring events, with both detections in excess of the Tier-1 ESL of 100 micrograms per liter (µg/L) for TPH-d. However, the chromatograms do not resemble the diesel standard and the detections are most likely due to the presence of TPH-g, whose carbon range overlaps the diesel carbon range.

TPH-mo was not detected in any of the groundwater samples collected during the August 2017 quarterly event. Low concentrations of TPH-mo were detected at estimated concentrations below the reporting limit but above the method detection limit in four of the five samples collected during the September 2017 performance monitoring event. The concentrations ranged from 180 (MW-05) to 210 (MW-02) µg/L and are well below the Tier-1 ESL.

TPH-g was detected in two of the five site wells sampled during the August 2017 quarterly monitoring event at concentrations of 1,300 µg/L (MW-04) and 12,000 µg/L (MW-02). Both of the August 2017 TPH-g detections were above the direct-exposure ESL for TPH-g (220 µg/L). TPH-g was detected in four of the five samples collected during the September 2017 performance monitoring event with concentrations ranging from 16 (MW-03) to 8,500 (MW-02) µg/L. Two of the TPH-g detections (MW-02 and MW-04) from the September 2017 event exceeded the direct-exposure ESL for TPH-g (220 µg/L).

Benzene, toluene, ethylbenzene, and xylene concentrations above their applicable ESLs were detected in groundwater samples collected from MW-02 and MW-04 during each event. Benzene was detected at concentrations of 2,500 and 2,100 µg/L in samples from MW-02 during August and September 2017, respectively. In MW-04 samples, benzene concentrations were detected at concentrations of 530 and 1,000 µg/L, respectively. Toluene was detected in MW-02 at concentrations of 1,400 and 1,100 µg/L in August and September 2017, respectively, exceeding its direct-exposure ESL of 150 µg/L. Ethylbenzene was detected in two wells, MW-02 and MW-04, at concentrations of 210 (August)/190 (September) µg/L and 81 (August)/170 (September) µg/L, respectively; all these concentrations exceed the ethylbenzene direct-exposure ESL of 30 µg/L. Concentrations of m/p-xylene and o-xylene in samples collected from MW-02 during both monitoring events were above their direct-exposure ESL of 190 µg/L, as shown in Table 4. The sample collected from MW-04 during the September 2017 performance monitoring contained a concentration of m/p-xylene in excess of its direct-exposure ESL of 190 µg/L.

Methyl tertiary-butyl ether was detected in four wells (MW-02 through -05) during both monitoring events with concentrations ranging from 1.4 µg/L (MW-05) to 210 µg/L (MW-03). Samples collected from two of the wells (MW-02 and MW-03) during both monitoring events contained concentrations in excess of the direct-exposure ESL of 13 µg/L.

Naphthalene was detected in samples collected from MW-02 during both monitoring events at concentrations (31 and 17 µg/L) exceeding the direct-exposure ESL of 0.17 µg/L. During the quarterly monitoring event, the sample from MW-04 contained a concentration of 16 µg/L, which exceeds the direct-exposure ESL of 0.17 µg/L. Naphthalene was not detected in the sample collected during the September 2017 monitoring event.

Other VOCs that exceed their direct-exposure ESLs include:

- Trichloroethene, detected in the sample from MW-01 during the September 2017 monitoring event at a concentration of 8 µg/L, slightly above the 5 µg/L direct-exposure ESL; and
- 1,2-Dichloroethane, detected in the samples collected from MW-05 during both monitoring events, at concentrations of 0.8 and 0.7 µg/L, slightly above the 0.5 µg/L direct-exposure ESL.

SVOCs in Groundwater

SVOC groundwater analytical data are included in Table 5. As shown on this table, several SVOCs were detected in groundwater samples collected during both monitoring events; however, only naphthalene concentrations in samples collected from MW-02 and MW-04 exceeded the direct-exposure ESL of 0.17 µg/L.

Metals in Groundwater

Metals in groundwater analytical data are included in Table 6 and on Figure 7. As shown in Table 6, during the August 2017 quarterly monitoring event, a number of metals were detected at concentrations above their direct-exposure ESLs, including antimony (MW-02), arsenic (MW-04 and MW-05), chromium (MW-03), and thallium (MW-01, MW-02, MW-03, MW-04, and MW-05). During the September 2017 performance monitoring event, only the groundwater sample from MW-03 contained concentrations of cobalt and nickel in excess of their direct-exposure ESLs. The changes in metals concentrations from August to September 2017 may be due to the apparent return to pre-injection conditions within the aquifer, as suggested by the physical parameter results.

As seen in Table 6, all other metals detected were below their respective Tier-1 and direct-exposure ESLs.

DATA QUALITY REVIEW

ERM performed a data quality review of analytical data from the Third Quarter 2017 monitoring events. The review indicated that all data can be used for decision-making purposes. A copy of the data review and the analytical data reports are provided as Attachment B.

PLANNED ACTIVITIES FOR FOURTH QUARTER 2017 MONITORING PERIOD

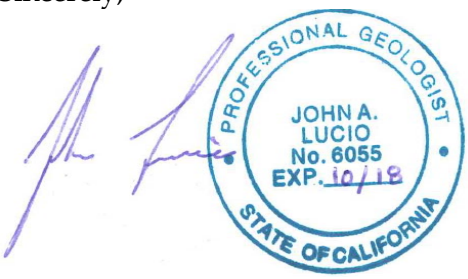
ERM plans the following activities for the Fourth Quarter 2017 monitoring period:

- Inspect the condition of each monitoring well and well box;
- Measure groundwater elevation in five site monitoring wells (MW-01 through MW-05);
- Measure ORP, pH, temperature, and specific conductance during groundwater sampling using a flow cell;
- Collect groundwater samples from site monitoring wells (MW-01 through -05);
- Submit all groundwater samples for analysis for the following compounds of concern:
  - VOCs and TPH-g using USEPA Method 8260B
  - TPH-d and TPH-mo by USEPA Method 8015M
  - SVOCs by USEPA Method 8270C
  - Title 22 Metals by USEPA Methods 6010A/7470B
- Collect soil vapor samples from six soil vapor probes (SV-1 through -6); and
- Submit all soil vapor samples for VOC analysis by USEPA Method TO-15.

CLOSING

If you have any questions regarding this report, please feel free to contact either of the undersigned at (925) 946-0455.

Sincerely,



John A. Lucio, P.G.
Project Manager

Arun S. Chemburkar, P.E.
Principal-in-Charge

JAL/ASC/ih/0399889.02.05

Enclosures: Tables 1-6
Figures 1-7
Attachment A – Field Sampling Sheets
Attachment B – QA/QC Review Summary and Laboratory Data Sheets

cc: Mr. Ben LePage, PG&E
Ms. Anne Conner, PG&E

Tables

Table 1
Groundwater Elevation Summary
Third Quarter 2017 Monitoring Report
205 Brush Street
Oakland, California

Monitoring Well	Date	Top of Well Casing Elevation (NAVD 88)	Depth to Groundwater (feet bmp)	Groundwater Elevation (NAVD 88)
MW-01	5/4/2017	11.42	4.50	6.92
MW-01	7/18/2017	11.42	5.21	6.21
MW-01	8/14/2017	11.42	5.41	6.01
MW-01	9/15/2017	11.42	5.63	5.79
MW-02	5/4/2017	11.50	4.85	6.65
MW-02	7/18/2017	11.50	5.51	5.99
MW-02	8/14/2017	11.50	5.40	6.10
MW-02	9/15/2017	11.50	6.62	4.88
MW-03	5/4/2017	10.41	3.95	6.46
MW-03	7/18/2017	10.41	4.72	5.69
MW-03	8/14/2017	10.41	4.88	5.53
MW-03	9/15/2017	10.41	5.11	5.30
MW-04	5/4/2017	11.63	5.02	6.61
MW-04	7/18/2017	11.63	5.71	5.92
MW-04	8/14/2017	11.63	5.91	5.72
MW-04	9/15/2017	11.63	6.11	5.52
MW-05	5/5/2017	11.81	5.30	6.51
MW-05	7/18/2017	11.81	5.96	5.85
MW-05	8/14/2017	11.81	6.16	5.65
MW-05	9/15/2017	11.81	6.37	5.44

Notes:

NAVD 88 = North American Vertical Datum of 1988.

bmp = below measuring point

Elevations were surveyed relative to the North American Vertical Datum of 1988 (NAVD 88).

Table 2
Field and Natural Attenuation Parameters in Groundwater
Third Quarter 2017 Monitoring Report
205 Brush Street
Oakland, California

Monitoring Well ID	Screen Interval (feet bgs)	Sample Date	Temperature	pH	Conductivity	Turbidity	Dissolved Oxygen[1]	ORP[1]	Alkalinity, Bicarbonate	Alkalinity, Carbonate	Alkalinity, Hydroxide	Alkalinity, Total as $CaCO_3$	Bromide	Chloride	Fluoride	Sulfate	Iron	Manganese	Nitrogen, Nitrite	Nitrogen, Nitrate	Methane	
			°C	S.U.	µmhos/cm	NTU	mg/L	mV	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	mg/L	mg/L	mg/L	
MW-01	4-16	5/5/2017	**20.4**	**7.31**	**646**	**0.70**	**2.92**	**144**	150	<6.7	<6.7	150	NS	NS	NS	98	<20	350	NS	11.00	0.001	J
MW-01	4-16	7/19/2017	**20.7**	**6.72**	**706**	NS	NS	**68.7**	NS	NS	NS	NS	NS	NS	NS	**NS**	**NS**	**NS**	NS	**NS**	**NS**	
MW-01	4-16	8/14/2017	**20.4**	**5.58**	**687**	NS	NS	**35.1**	NS	NS	NS	NS	NS	NS	NS	**NS**	**NS**	**NS**	NS	**NS**	**NS**	
MW-01	4-16	9/15/2017	**21.1**	**6.73**	**675**	NS	**0.24**	**92.3**	NS	NS	NS	NS	NS	NS	NS	**NS**	**NS**	**NS**	NS	**NS**	**NS**	
MW-02	4-15	5/4/2017	**20.3**	**6.80**	**1.385**	**5.9**	**0.5**	**25.3**	770	<20	<20	770	NS	NS	NS	42	52	580	NS	9.40	0.13	
MW-02	4-15	6/6/2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.2	56	<0.50	33	NS	NS	0.16	J 0.33	NS	
MW-02	4-15	7/19/2017	22.3	6.58	1,641	NS	0.77	**-130.3**	NS	NS	NS	NS	NS	NS	NS	**NS**	NS	NS	NS	**NS**	NS	
MW-02	4-15	8/14/2017	22.8	6.29	1,652	NS	0.02	**-97.1**	NS	NS	NS	NS	NS	NS	NS	**NS**	NS	NS	NS	**NS**	NS	
MW-02	4-15	9/15/2017	23.5	6.59	1,680	NS	0.06	**-89.7**	NS	NS	NS	NS	NS	NS	NS	**NS**	NS	NS	NS	**NS**	NS	
MW-03	4-15	5/4/2017	**19.8**	**6.16**	**1.550**	**21.3**	**2.99**	**80**	590	<20	<20	590	NS	NS	NS	320	69	10,000	NS	0.02	J 0.018	
MW-03	4-15	7/19/2017	**22.1**	**11.98**	**8,724**	NS	**32.27**	**43.5**	NS	NS	NS	NS	NS	NS	NS	**NS**	**NS**	**NS**	NS	**NS**	**NS**	
MW-03	4-15	8/14/2017	**22.4**	**10.69**	**3,525**	NS	**32.04**	**58.3**	NS	NS	NS	NS	NS	NS	NS	**NS**	**NS**	**NS**	NS	**NS**	**NS**	
MW-03	4-15	9/15/2017	**22.2**	**6.58**	**2,534**	NS	**34.09**	**291.5**	NS	NS	NS	NS	NS	NS	NS	**NS**	**NS**	**NS**	NS	**NS**	**NS**	
MW-04	4-15	5/4/2017	**20.1**	**6.75**	**1.319**	**80.0**	**0.5**	**-74**	960	<20	<20	960	NS	NS	NS	14	3,100	3,200	NS	0.05	2.90	J-
MW-04	4-15	7/19/2017	**23.0**	**6.51**	**819**	NS	**0.78**	**-172.4**	NS	NS	NS	NS	NS	NS	NS	**NS**	**NS**	**NS**	NS	**NS**	**NS**	
MW-04	4-15	8/14/2017	**22.8**	**6.31**	**1,095**	NS	**0.07**	**-138.3**	NS	NS	NS	NS	NS	NS	NS	**NS**	**NS**	**NS**	NS	**NS**	**NS**	
MW-04	4-15	9/15/2017	**23.5**	**6.59**	**1,458**	NS	**0.12**	**-133.1**	NS	NS	NS	NS	NS	NS	NS	**NS**	**NS**	**NS**	NS	**NS**	**NS**	
MW-05	4-15	5/4/2017	**17.9**	**6.80**	**1.017**	**7.5**	**0.55**	**91.5**	460	<20	<20	460	NS	NS	NS	93	<20	810	NS	16	<0.005	R
MW-05-DUP	4-15	5/4/2017	NA	NA	NA	NA	NA	NA	450	<20	<20	450	NS	NS	NS	95	<20	820	NS	16	<0.005	R
MW-05	4-15	7/19/2017	**20.6**	**6.62**	**1,329**	NS	**0.85**	**43.3**	NS	NS	NS	NS	NS	NS	NS	**NS**	**NS**	**NS**	NS	**NS**	NS	
MW-05	4-15	8/14/2017	**20.8**	**6.37**	**1,348**	NS	**0.12**	**49.4**	NS	NS	NS	NS	NS	NS	NS	**NS**	**NS**	**NS**	NS	**NS**	NS	
MW-05	4-15	8/14/2017	**21.4**	**6.67**	**1,318**	NS	**0.10**	**54.8**	NS	NS	NS	NS	NS	NS	NS	**NS**	**NS**	**NS**	NS	**NS**	NS	

Legend:
ft bgs = feet below ground surface
ORP = Oxidation reduction potential
ESL = Environmental Screening Level
MCL = Maximum Contaminant Level
--- = No screening level established
MW-# = Monitoring Well Location
< = Analyte not detected at or above the stated laboratory reporting limit
NS = Not Sampled
NA = Not Available
J = Lab Qualifier - Estimated Value
J- = Detected results are estimated with low bias.
U = ERM qualifier - Non-detect
R = Rejected data, > 1 mL headspace
S.U. = Standard Units
µg/L - micrograms per liter
mg/L = milligrams per liter
µmhos/cm = micromhos per centimeter
NTU = Nephelometric Turbidity Unit
mV = millivolt

Notes:
1. Dissolved oxygen and ORP measurements collected during well development on 2 May 2017.
Samples were analyzed by United States Environmental Protection Agency (USEPA) Method 6010/7000 series.
Tier 1 ESLs = Tier 1 Environmental Screening Levels for Groundwater, San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB), ESL Workbook, Tier 1 Summary Table, February 2016.
Direct Exposure Groundwater ESLs = San Francisco Bay RWQCB, ESL Workbook, Table GW-1, February 2016.
ESLs for Vapor Intrusion = Commercial/Industrial Environmental Screening Levels for Evaluation of Potential Vapor Intrusion, San Francisco Bay RWQCB, ESL Workbook, Table GW-3, February 2016.
MCLs = Commercial/Industrial Regional Screening Level, EPA Region 9 RSL Summary Table, November 2013.
Bold values indicate detections at or above the laboratory reporting limit.

Table 3
Volatile Organic Compounds in Soil Vapor
Third Quarter 2017 Monitoring Report
205 Brush Street
Oakland, California

Sample ID Location	Sample Depth (ft bgs)	Date Sampled	Oxygen (%)	Methane (%)	Carbon Dioxide (%)	Acetone	2-Butanone	Ethanol	2-Propanol	Hexane	Cyclohexane	2,2,4-Trimethylpentane	Benzene	Heptane	Naphthalene	Toluene	Tetrachloroethene	Trichloroethene	1,1,1-Trichloroethane	Carbon Disulfide	Chloroform	Freon 11	Bromodichloromethane	m,p-Xylene	Carbon Tetrachloride
		Tier 1 ESL	---	---	---	*15,000,000*	*2,600,000*	---	---	---	---	---	*48*	---	*41*	*160,000*	*240*	*240*	*520,000*	---	*61*	---	*38*	*52,000*	*33*
		Applicable ESL	---	---	---	*140,000,000*	*22,000,000*	---	---	---	---	---	*420*	---	*360*	*1,300,000*	*2,100*	*3,000*	*4,400,000*	---	*530*	---	*330*	*440,000*	*290*
SV-1	3.5	5/5/2017	NA	NA	NA	<24	<12	<7.7	<10	<3.6	<3.5	<4.8	<3.2	<4.2	NA	<3.8	<6.9	<5.5	<5.6	**21**	**53**	<5.7	**9.6**	<4.4	<6.4
SV-1	3.5	8/15/2017	**12**	<0.00023	**11**	<27	<14	<8.6	<11	<4.0	<3.9	<5.3	<3.6	<4.7	NA	<4.3	<7.8	<6.2	<6.2	<14	**26**	<6.4	<7.7	<5.0	<7.2
SV-2	3.5	5/5/2017	NA	NA	NA	<24	<12	**150**	<10	<3.6	<3.5	<4.8	<3.3	<4.2	NA	<3.9	<7.0	<5.5	<5.6	<13	**28**	**7.1**	<6.9	<4.4	<6.4
SV-2 DUP	3.5	5/5/2017	NA	NA	NA	<24	<12	**400**	<10	<3.6	<3.5	<4.8	<3.3	<4.2	NA	<3.9	<7.0	<5.5	<5.6	<13	**26**	**6.7**	<6.9	<4.4	<6.4
SV-2	3.5	8/15/2017	**14**	<0.00023	**8.4**	<28	<14	<8.8	<11	<4.1	<4.0	<5.4	<3.7	<4.8	NA	<4.4	<7.9	<6.3	<6.4	<14	**24**	<6.5	<7.8	<5.0	<7.3
SV-3	3.5	5/5/2017	NA	NA	NA	<25	<12	<8.0	<10	<3.8	<3.7	<5.0	<3.4	<4.4	<8.3 UJ	<4.0	**14**	<5.7	<5.8	**21**	**5.4**	<6.0	<7.1	<4.6	<6.7
SV-3	3.5	8/15/2017	**16**	<0.00023	**4.1**	<28	<14	<8.8	<11	<4.1	<4.0	<5.4	<3.7	<4.8	NA	<4.4	**33**	<6.3	<6.4	<14	<5.7	<6.5	<7.8	<5.0	<7.3
SV-4	3	5/4/2017	NA	NA	NA	**74**	**150**	<16	<21	<7.5	<7.3	<9.9	<6.8	<8.7	NA	<8.0	**3,600**	<11	**140**	**29**	<10	<12	<14	<9.2	<13
SV-4	3	8/15/2017	**14**	<0.00023	**6.0**	<110	<55	<35	<46	<16	<16	<22	<15	<19	NA	<18	**6,400**	<25	**160**	<58	<23	<26	<31	<20	<29
SV-4-DUP	3	8/15/2017	**14**	<0.00023	**6.0**	<110	<55	<35	<46	<16	<16	<22	<15	<19	NA	<18	**6,300**	<25	**160**	<58	<23	<26	<31	<20	<29
SV-5	4	5/4/2017	NA	NA	NA	<1,700	<2,100	<1,400	<1,800	**77,000**	**33,000**	**540,000**	**900**	**11,000**	<8.3 UJ	<680	<1,200	<980	<990	<2,300	<890	<1,000	<1,200	<790	**1,100**
SV-5	4	8/15/2017	**1.6**	**0.30**	**16**	<520	<650	<410	<540	**79,000**	**26,000**	**650,000 E J**	<180	**10,000**	NA	<210	<370	<300	<300	<680	<270	<310	<370	<240	<350
SV-6	4	5/4/2017	NA	NA	NA	<25	<12	**9.0**	**41**	<3.7	<3.6	<4.9	<3.4	<4.3	<8.3 UJ	<4.0	**20**	<5.7	<5.8	<13	<5.2	<5.9	<7.1	<4.6	<6.6
SV-6	4	8/15/2017	**16**	<0.00022	**2.8**	<26	<13	<8.3	<11	<3.9	<3.8	<5.1	**7.2**	<4.5	NA	<4.1	**160**	<5.9	**36**	**19**	**17**	**6.2**	<7.4	<4.8	<6.9

Legend:
ft bgs = feet below ground surface
C/I = Commercial/Industrial
ESL = Environmental Screening Level
--- = No screening level established
SVP-# = Soil Vapor Probe Location
< = Analyte not detected at or above the stated laboratory reporting limit
E = Exceeds instrument calibration range
UJ = Nondetected, estimated report limit.
NA = Not Analyzed
J = ERM qualifier. Detected result qualified as estimated.

Notes:
All concentrations reported in micrograms per cubic meter ($\mu g/m^3$).
Samples were analyzed by United States Environmental Protection Agency (USEPA) Method TO-15.
Samples analyzed for naphthalene analyzed by USEPA Method TO-17.
Samples were analyzed for oxygen, carbon dioxide, and methane by ASTM D-1946.

Tier-1 ESL = Tier 1 Environmental Screening Level for Shallow Soils, San Francisco Bay Regional Water Quality Control Board, ESL Workbook, Tier-1 ESL Table, February 2016.

Applicable ESL = Appropriate ESL based on current and future site use as a Commercial/Industrial site using the Vapor Summary Table from the San Francisco Bay Regional Water Quality Control Board ESL Workbook, February 2016.

Bold values indicate detections at or above the laboratory reporting limit.
Values shaded gray indicate concentrations detected above the Applicable ESLs.

Table 4
Total Petroleum Hydrocarbons and Volatile Organic Compounds in Groundwater
Third Quarter 2017 Monitoring Report
205 Brush Street
Oakland, California

Sample ID Location	Sample Interval / Screen Interval (ft bgs)	Date Sampled	TPH-d*	TPH-mo*	TPH-g*	Acetone	Benzene	Chloroform	Toluene	Ethylbenzene	m/p-Xylenes	o-Xylene	Methyl tert-butyl ether (MTBE)	Naphthalene	Tetrachloroethene	Trichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	2-Butanone	Isopropylbenzene	para-Isopropyl toluene	Propylbenzene	n-Butylbenzene	sec-Butylbenzene	1,2-Dichloropropane	Methylene Chloride	Carbon Disulfide	Bromomethane	Vinyl Chloride	Chloromethane	tert-Butylbenzene
		Tier-1 ESL	*100*	*50,000* [1]	*100*	*1,500*	*1*	*2.3*	*40*	*13*	*20*	*20*	*5*	*0.17*	*3*	*5*	*5*	*3.2*	*0.5*	*6*	---	---	*5,600*	---	---	---	---	---	*5*	*5*	---	*7.5*	*0.61*	*0.18*	---
		ESL Direct Exposure [2]	*150*	*50,000*	*220*	*14,000*	*1*	*80*	*150*	*30*	*190*	*190*	*13*	*0.17*	*5*	*5*	*5*	*10.0*	*0.5*	*11*	---	---	*5,600*	---	---	---	---	---	*5*	*5*	---	*7.5*	*0.5*	*190*	---
		C/I Groundwater ESLs for Vapor Intrusion	---	---	---	*290,000,000*	*9.7*	*20*	*30,000*	*110*	*11,000*	*11,000*	*11,000*	*170*	*26*	*49*	*180*	*1,400*	*53*	*950*	---	---	*13,000,000*	---	---	---	---	---	*66*	*420*	---	*300*	*0.53*	*3,700*	---
		MCLs	---	---	---	---	*1*	---	*150*	*30*	*1,750*	*1,750*	---	---	*5*	*5*	---	*6.0*	*0.5*	*6*	---	---	---	---	---	---	---	---	*5*	*5*	---	---	---	---	*0.5*
MW-01	4-16	5/5/2017	**37 NJ**	<290	<50	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	**1.0**	**0.5**	**0.4 J**	**0.3 J**	**0.9**	<0.5	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	**0.6**	<1.0	<0.5	<1.0	<0.5
MW-01	4-16	7/19/2017	<50	<300	<50	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	**0.9**	**0.6**	**0.3 J**	**0.3 J**	**0.7**	<0.5	<0.5	**1.1 J**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<0.5	<1.0	<0.5	<1.0	<0.5
MW-01	4-16	8/14/2017	<50	<300	<18 U	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	**1.6**	**0.7**	**0.6**	**0.4 J**	**1.1**	<0.5	<0.5	<1.3 U	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<0.5	<1.0	**0.1 J**	<1.0	<0.5
MW-01	4-16	9/15/2017	<49	<290	**22 J**	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	**8.8**	**0.7**	**2.0**	**0.5 J**	**2.0**	<0.5	<0.5	**1.0 J**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<0.5	<1.0	**0.1 J**	<1.0	<0.5
MW-02	4-15	5/4/2017	**2,100**	**1,100**	**5,100**	**30 J**	**550**	<3.1	**530**	**94**	**350**	**190**	**26**	**16**	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	**100**	**33**	**11 J**	**5.9**	**1.3 J**	**15**	**2.8 J**	**3.0 J**	<3.1	<63	<3.1	<6.3	<3.1	<6.3	<3.1
MW-02	4-15	7/19/2017	**300 NJ**	<300	**9,000**	<330	**2,000**	<17	**1,500**	**170**	**480**	**210**	**35**	**39 J**	<17	<17	<17	<17	<17	<17	**130**	**34**	<330	**7.9 J**	<17	**16 J**	<17	<17	<17	<330	<17	<33	<17	<33	<17
MW-02-DUP	4-15	7/19/2017	**390 NJ**	<300	**8,100**	<330	**1,900**	<17	**1,400**	**150**	**440**	**190**	**31**	<67	<17	<17	<17	<17	<17	<17	**120**	**28**	<330	**7.7 J**	<17	**15 J**	<17	<17	<17	<330	<17	<33	<17	<33	<17
MW-02	4-15	8/14/2017	**420 NJ**	<300	**12,000**	<330	**2,500**	<17	**1,400**	**210**	**520**	**240**	**41**	**31 J**	<17	<17	<17	<17	<17	<17	**160**	**43**	**21 J**	**13 J**	<17	**23**	<17	<17	<17	<330	<17	<33	<17	<33	<17
MW-02	4-15	9/15/2017	**430**	<290	**9,500**	<330	**2,100**	<17	**1,100**	**190**	**380**	**200**	**37**	**17 J**	<17	<17	<17	<17	<17	<17	**130**	**35**	**21 J**	**9.2 J**	<17	**18**	<17	<17	<17	<330	<17	<33	<17	<33	<17
MW-02-DUP	4-15	9/15/2017	**400 NJ**	**210 J**	**8,500**	<330	**2,000**	<17	**990**	**180**	**360**	**190**	**35**	**14 J**	<17	<17	<17	<17	<17	<17	**110**	**31**	**18 J**	**8.8 J**	<17	**16 J**	<17	<17	<17	<330	<17	<33	<17	<33	<17
MW-03	4-15	5/4/2017	**550 NJ**	**390**	32 U	<10	**0.1 J**	**0.1 J**	<0.5	**0.2 J**	**0.5**	<0.5	**160**	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.1 J**	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.3 J**	<0.5	<1.0	<0.5	<1.0	<0.5
MW-03	4-15	7/19/2017	<50	<300	**7.7 J**	**31**	**0.2 J**	**0.4 J**	<0.5	<0.5	<0.5	<0.5	**78**	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**3.4 J**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<0.5	**2.8 J+**	<0.5	**0.9 J**	<0.5
MW-03	4-15	8/14/2017	<50	<300	<41 U	**12**	**0.9**	**0.1 J**	**0.1 J**	<0.5	<0.5	<0.5	**160**	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.4 U	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	**0.2 J**	**1.1**	<0.5	<1.0	<0.5
MW-03	4-15	9/15/2017	<110 U	**180 J**	**16 J**	**4.4 J**	**0.4 J**	<0.5	**0.2 J**	<0.5	**0.2 J**	<0.5	**210**	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.5 J**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<0.5	<0.4 U	<0.5	<1.0	<0.5
MW-04	4-15	5/4/2017	**1,900 NJ**	**890**	**8,100**	<140	**760**	<7.1	**140**	**230**	**590**	**200**	**5.7 J**	**29**	<7.1	< 7.1	<7.1	<7.1	<7.1	<7.1	**160**	**56**	<140	**19**	**1.5 J**	**49**	**5.1 J**	**3.5 J**	<7.1	<140	<7.1	<14	<7.1	<14	<7.1
MW-04	4-15	7/19/2017	**850 NJ**	<300	**3,500**	<130	**190**	<6.3	**24**	**260**	**29**	**50**	<6.3	**39**	<6.3	<6.3	<6.3	<6.3	<6.3	<6.3	**150**	**40**	<130	**27**	<6.3	**67**	<6.3	**5.6 J**	<6.3	<130	<6.3	<13	<6.3	<13	<6.3
MW-04	4-15	8/14/2017	**590 NJ**	<300	**1,600**	<63	**460**	<3.1	**6.5**	**81**	**7.0**	**9.5**	**3.3**	**16**	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	**29**	**12**	<63	**10**	<3.1	**25**	<3.1	**2.6 J**	<3.1	<63	<1.1 U	<6.3	<3.1	<6.3	**0.6 J**
MW-04-DUP	4-15	8/14/2017	**510 NJ**	<300	**1,300**	<63	**530**	<3.1	**5.9**	**55**	**6.2**	**5.2**	**4.2**	**14**	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	**18**	**9.3**	<63	**7.5**	<3.1	**16**	**1.0 J+**	**1.8 J**	<3.1	<63	<1.0 U	<6.3	<3.1	<6.3	<3.1
MW-04	4-15	9/15/2017	**470 NJ**	**200 J**	**3,500**	<130	**1,000**	<6.3	**55**	**170**	**270**	**82**	**8.6**	<13 U	<13	<6.3	<6.3	<6.3	<6.3	<6.3	**79**	**23**	<130	**13**	<6.3	**31**	<6.3	**2.5 J**	<6.3	<130	<6.3	<13	<6.3	<13	<6.3
MW-05	4-15	5/4/2017	**240 NJ**	**310**	17 U	<10	<0.50	<0.5	<0.5	**0.1 J**	**0.3 J**	<0.5	**0.8**	<2.0	**0.3 J**	**0.1 J**	<0.5	<0.5	**0.5**	<0.5	**0.1 J**	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.3 J**	<0.5	<1.0	<0.5	<1.0	<0.5
MW-05-DUP	4-15	5/4/2017	**180 NJ**	**280 J**	18 U	<10	<0.5	<0.5	<0.5	<0.5	**0.2 J**	<0.5	**0.8**	<2.0	**0.3 J**	**0.2 J**	<0.5	<0.5	**0.6**	<0.5	<0.5	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.2 J**	<0.5	<1.0	<0.5	<1.0	<0.5
MW-05	4-15	7/19/2017	<50	<300	<50	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1.4**	<2.0	**0.4 J**	**0.2 J**	<0.5	<0.5	**0.8**	<0.5	<0.5	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<0.5	<1.0	<0.5	<1.0	<0.5
MW-05	4-15	8/14/2017	<50	<300	<27 U	<10	<0.5	<0.5	**0.1 J**	<0.5	<0.5	<0.5	**1.5**	<2.0	**0.4 J**	**0.2 J**	<0.5	<0.5	**0.8**	<0.5	<0.5	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<0.5	<1.0	<0.5	<1.0	<0.5
MW-05	4-15	9/15/2017	<110 U	**180 J**	<50	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1.4**	<2.0	**0.4 J**	**0.2 J**	<0.5	<0.5	**0.7**	<0.5	<0.5	<0.5	<10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<0.5	<0.4 U	<0.5	<1.0	<0.5

Legend:
ft bgs = feet below ground surface
TPH-d = Total Petroleum Hydrocarbons as Diesel
TPH-mo = Total Petroleum Hydrocarbons as Motor Oil
TPH-g = Total Petroleum Hydrocarbons as Gasoline
C/I = Commercial/Industrial
ESL = Environmental Screening Level
MCL = Maximum Contaminant Level
--- = No screening level established
SB-# = Soil Boring Location
< = Analyte not detected at or above the stated laboratory reporting limit
NA = Not Analyzed

Qualifiers:
HD - The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
SG - The sample extract was subjected to Silica Gel treatment prior to analysis.
J = Lab Qualifier - Estimated Value
U = ERM qualifier - Non-detect
NJ= ERM qualifier - Estimated value, chromatogram did not resemble the standard hydrocarbon pattern.
J+ = ERM qualifier - Estimated with high bias

Notes:
All concentrations reported in micrograms per liter (µg/L).
* = Samples were analyzed by United States Environmental Protection Agency (USEPA) Method 8015B Modified (M).
Samples were analyzed by USEPA Method 8260B.
Tier 1 ESLs = Tier 1 Environmental Screening Levels for Groundwater, San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB), *ESL Workbook*, Tier 1 Summary Table, February 2016.
Direct Exposure Groundwater ESLs = San Francisco Bay RWQCB, *ESL Workbook*, Table GW-1, February 2016.
ESLs for Vapor Intrusion = Commercial/Industrial Environmental Screening Levels for Evaluation of Potential Vapor Intrusion, San Francisco Bay RWQCB, *ESL Workbook*, Table GW-3, February 2016.
MCLs = 2016 Federal and State MCLs, DLRs, and PHGs Review, September 2016
Bold values indicate detections at or above the laboratory reporting limit.
Values shaded gray indicate concentrations detected above the applicable ESLs. For groundwater, assumes direct exposure.
1. Tier 1 for TPH-mo based on gross contamination level as TPH-mo is not soluble in water.
2. Defaulted to higher value upon comparison of "MCL Priority" and "Human Health Risk Based Only" values from San Francisco Bay RWQCB, ESL Workbook, Table GW-1, February 2016.

Table 5
Semivolatile Organic Compounds in Groundwater
Third Quarter 2017 Monitoring Report
205 Brush Street
Oakland, California

Sample ID Location	Sample Interval / Screen Interval (ft bgs)	Date Sampled	Acenaphthene	Anthracene	Benzo (a) Anthracene	Benzo (a) Pyrene	Benzo (b) Fluoranthene	Benzo (g,h,i) Perylene	Benzo (k) Fluoranthene	Benzoic Acid	bis (2-Ethylhexyl) phthalate	Chrysene	Dibenzofuran	Fluoranthene	Fluorene	Indeno (1,2,3-c,d) Pyrene	2-Methylnaphthalene	1-Methylnaphthalene	2-Methylphenol	4-Methylphenol	2,4-Dimethylphenol	Naphthalene	Phenanthrene	Phenol	Pyrene	Benzyl Alcohol
		Tier-1 ESL	*20*	*0.73*	*0.027*	*0.014*	*0.012*	*0.1*	*0.017*	---	*4*	*0.049*	---	*8*	*3.9*	*0.034*	*2.1*	---	---	---	*100*	*0.17*	*4.6*	*5*	*2*	---
		ESL Direct Exposure [1]	*530*	*1,800*	*0.034*	*0.2*	*0.012*	---	*0.017*	---	*5.6*	*0.17*	---	*800*	*290*	*0.034*	*36*	---	---	---	*100*	*0.17*	---	*4,200*	*120*	---
		C/I Groundwater ESLs for Vapor Intrusion	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	*170*	---	---	---	---
		MCLs	---	---	---	*0.2*	---	---	---	---	*4*	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-01	4-16	5/5/2017	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	NA	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4
MW-01	4-16	7/19/2017	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	NA	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	NA	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4
MW-01	4-16	8/14/2017	<11	<11	<11	<11	<11	<11	<11	<53	**2.1 J**	<11	<11	<11	<11	<11	<11	<11	<11	<11	<11	<11	<11	<11	<11	<11
MW-01	4-16	9/15/2017	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<47	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3
MW-02	4-15	5/4/2017	<20	<20	<20	<20	<20	<20	<20	<98	<20	<20	<20	<20	<20	<20	**8.0 J**	NA	**40**	**5.1 J**	**7.7 J**	**15 J**	**4.4 J**	**86**	<20	**6.2 J**
MW-02	4-15	7/19/2017	<38	<38	<38	<38	<38	<38	<38	NA	<38	<38	<38	<38	<38	<38	**7.0 J**	NA	**4.8 J**	<9.4	<38	**29 J**	<38	**5.0 J**	<38	<38
MW-02-DUP	4-15	7/19/2017	<38	<38	<38	<38	<38	<38	<38	NA	<38	<38	<38	<38	<38	<38	**8.4 J**	NA	**5.4 J**	**4.5 J**	<38	**34 J**	<38	**5.2 J**	<38	<38
MW-02	4-15	8/14/2017	<10	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10	**11**	**6.0 J**	<10	**3.4 J**	<10	**39**	**2.4 J**	**5.5 J**	<10	<10
MW-02	4-15	9/15/2017	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<47	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	**8.1 J**	**4.5 J**	<9.3	**2.5 J**	<9.3	**36**	**1.9 J**	<9.3	<9.3	<9.3
MW-02-DUP	4-15	9/15/2017	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<47	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	**8.2 J**	**4.5 J**	<9.3	**2.5 J**	<9.3	**37**	**1.9 J**	<9.3	<9.3	<9.3
MW-03	4-15	5/4/2017	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	NA	<9.4	<9.4	<9.4	<9.4	<9.4	**1.4 J**	<9.4	<9.4
MW-03	4-15	7/19/2017	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	NA	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	NA	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5
MW-03	4-15	8/14/2017	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<47	**5.2 J**	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4
MW-03	4-15	9/15/2017	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<47	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3
MW-04	4-15	5/4/2017	**4.2 J**	<19	<19	<19	<19	<19	<19	<94	<19	<19	<19	**6.2 J**	<19	<19	<19	NA	**4.2 J**	<19	**11 J**	**5.3 J**	<19	**52**	**6.0 J**	<19
MW-04	4-15	7/19/2017	**5.5 J**	**8.8 J**	<9.4	<9.4	<9.4	<9.4	<9.4	NA	<9.4	<9.4	**3.0 J**	**15**	**5.4 J**	<9.4	**12**	NA	<9.4	<9.4	<9.4	**27**	**17**	**2.9 J**	**11**	<9.4
MW-04	4-15	8/14/2017	**4.2 J**	**7.2 J**	<11	<11	<11	<11	<11	<56	<11	<11	**2.1 J**	**14**	**3.9 J**	<11	**2.3 J**	**11**	<11	<11	<11	**13**	**9.8 J**	**19**	**10 J**	<11
MW-04-DUP	4-15	8/14/2017	**4.1 J**	**7.8 J**	<9.4	<9.4	<9.4	<9.4	<9.4	<47	**3.3 J**	<9.4	**2.0 J**	**13**	**3.6 J**	<9.4	<9.4	**11**	<9.4	<9.4	<9.4	**12**	**9.3 J**	**1.8 J**	**10**	<9.4
MW-04	4-15	9/15/2017	**4.3 J**	**6.4 J**	<9.3	<9.3	<9.3	<9.3	<9.3	<47	<9.3	<9.3	**2.0 J**	**11**	**3.7 J**	<9.3	**4.8 J**	**8.1 J**	<9.3	<9.3	<9.3	**18**	**3.8 J**	**4.7 J**	**9.3 J**	<9.3
MW-05	4-15	5/4/2017	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<47	5.9 U	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	NA	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4
MW-05-DUP	4-15	5/4/2017	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<47	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	NA	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4
MW-05	4-15	7/19/2017	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	NA	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	NA	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4
MW-05	4-15	8/14/2017	< 9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<47	**1.9 J**	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4	<9.4
MW-05	4-15	9/15/2017	< 9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<47	**2.2 J**	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3	<9.3

Legend:
ft bgs = feet below ground surface
C/I = Commercial/Industrial
ESL = Environmental Screening Level
MCL = Maximum Contaminant Level
--- = No screening level established
< = Analyte not detected at or above the stated laboratory reporting limit
NA = Not Analyzed
J = Lab Qualifier - Estimated Value
U = ERM qualifier - Non-detect

Notes:
All concentrations reported in micrograms per liter (µg/L).
Samples were analyzed by United States Environmental Protection Agency (USEPA) Method 8270C.
Tier 1 ESLs = Tier 1 Environmental Screening Levels for Groundwater, San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB), ESL Workbook, Tier 1 Summary Table, February 2016.
Direct Exposure Groundwater ESLs = San Francisco Bay RWQCB, ESL Workbook, Table GW-1, February 2016.
ESLs for Vapor Intrusion = Commercial/Industrial Environmental Screening Levels for Evaluation of Potential Vapor Intrusion, San Francisco Bay RWQCB, ESL Workbook, Table GW-3, February 2016.
MCLs = Commercial/Industrial Regional Screening Level, EPA Region 9 RSL Summary Table, November 2013.
Bold values indicate detections at or above the laboratory reporting limit.
Values shaded gray indicate concentrations detected above the applicable ESLs. For groundwater, assumes direct exposure.
1. Defaulted to higher value upon comparison of "MCL Priority" and "Human Health Risk Based Only" values from San Francisco Bay RWQCB, ESL Workbook, Table GW-1, February 2016.

Table 6
Total Metals in Groundwater
Third Quarter 2017 Monitoring Report
205 Brush Street
Oakland, California

Sample ID Location	Sample Interval / Screen Interval (ft bgs)	Date Sampled	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Mercury
		Tier-1 ESL	*6*	*10*	*1,000*	*2.7*	*0.25*	*50*	*3*	*3.1*	*2.5*	*100*	*8.2*	*5*	*0.19*	*2*	*19*	*81*	*0.051*
		ESL Direct Exposure[1]	*7.8*	*10*	*1,000*	*4*	*5*	*50*	*6*	*1,000*	*15*	*100*	*100*	*50*	*100*	*2*	*50*	*6,000*	*2*
		MCLs	*6*	*10*	*1,000*	*4*	*5*	*50*	*---*	*1,300*	*15*	*---*	*100*	*50*	*---*	*2*	*---*	*---*	*2*
MW-01	4-16	5/5/2017	<0.50	<0.50	**50**	<0.50	<0.25	<0.50	**1.2**	<2.0	<0.50	**1.4**	**2.6**	<0.50	<0.19	<0.50	**1.6**	<15	<0.20
MW-01	4-16	7/19/2017	<10	<10	**39**	<2.0	**0.43 J**	<5.0	<5.0	**5.1 J+**	**3.4 J**	<5.0	<5.0 U	<10	**1.5 J**	<10	<5.0	<20	<0.20 U
MW-01	4-16	8/14/2017	<20	**7 J**	**33**	<5.0	<5.0	<10	<5.0	<6 U	<5.0	**23**	<20	**6 J**	<5	**24**	<5	**10 J**	<0.25
MW-01	4-16	9/15/2017	<10	<10	**40**	<2.0	<5.0	<5.0	<5.0	<1.7 U	**2.9 J**	<5.0	**1.8 J**	<10	<3.7 U	<10	<5.0	<20	**0.051 J**
MW-02	4-15	5/4/2017	<0.50	**0.74**	**140**	<0.50	<0.25	<0.50	**5.7**	<2.0	<0.50	**1.6**	**31**	<0.50	<0.19	<0.50	**2.5**	<15	<0.20
MW-02	4-15	7/19/2017	<10	**3.4 J**	**140**	<2.0	**0.39 J**	<5.0	**7.4**	<5.0 U	<5.0	<5.0	**34**	<10	**4.5 J**	<10	<5.0	<20	<0.20 U
MW-02-DUP	4-15	7/19/2017	<10	**3.4 J**	**130**	<2.0	**0.38 J**	<5.0	**7.1**	<5.0 U	<5.0	<5.0	**34**	<10	**5.4**	<10	<5.0	<20	<0.20 U
MW-02	4-15	8/14/2017	**22**	<10	**107**	<5	<5	<10	**6**	<6 U	**10**	**15**	**22**	<10	<5	**12**	<5	**129**	<0.20
MW-02	4-15	9/15/2017	<10	<2.3 U	**140**	<2.0	<5.0	<5.0	**5.7**	<2.2 U	**1.4 J**	<5.0	**32**	<10	**6.5 J+**	<3.2 U	<5.0	<20	**0.056 J**
MW-02-DUP	4-15	9/15/2017	<10	<10	**140**	<2.0	<5.0	<5.0	**5.9**	<1.7 U	**3.5 J**	<5.0	**31**	<10	**5.8 J+**	<4.9 U	<5.0	<20	<0.20
MW-03	4-15	5/4/2017	<0.50	**1.2**	**47**	<0.50	**0.38**	<0.50	**69**	<2.0	<0.50	**1.8**	**160**	<0.50	<0.19	<0.50	**2.0**	**98**	<0.20
MW-03	4-15	7/19/2017	<10	**10**	**27**	<2.0	**0.75 J**	**260**	<5.0	<5.0 U	**6.2**	**1.4 J**	<5.0	<10	**16**	**2.8 J**	**13**	<20	<0.20 U
MW-03	4-15	8/14/2017	<20	<10	**10**	<5	<5	**98**	<5	<7 U	**10**	**11**	**10 J**	<10	<5	**20**	**10**	**62**	<0.20
MW-03	4-15	9/15/2017	<10	<10	**17**	<2.0	<5.0	**32**	**28**	<3.6 U	**7.5**	**1.3 J**	**160**	<10	**14**	<10	<5.0	**130**	**0.79**
MW-04	4-15	5/4/2017	<0.50	**8.3**	**160**	<0.50	<0.25	<0.50	**2.9**	<2.0	<0.50	**2.9**	**28**	<0.50	<0.19	<0.50	**1.1**	<15	<0.20
MW-04	4-15	7/19/2017	<10	**16**	**110**	<2.0	**0.36 J**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 U	<10	**1.1 J**	<10	<5.0	<20	<0.20 U
MW-04	4-15	8/14/2017	<20	**30**	**62**	<5	<5	<10	**2 J**	<4 U	**13**	**7 J**	**4 J**	<10	<5	**8**	<5	**8 J**	<0.20
MW-04-DUP	4-15	8/14/2017	<20	**20**	**79**	<5	<5	<10	**2 J**	<4 U	**12**	**7 J**	**6 J**	<10	<5	**10**	<5	**7 J**	<0.20
MW-04	4-15	9/15/2017	<10	**10 J+**	**110**	<2.0	**0.60 J**	<5.0	**1.6 J**	<5.0	**2.0 J**	**1.3 J**	**18**	<10	**5.1 J+**	<6.6 U	<5.0	<20	<0.20
MW-05	4-15	5/4/2017	<0.50	**0.80**	**35**	<0.50	<0.25	<0.50	**3.2**	<2.0	<0.50	**1.8**	**12**	<0.50	<0.19	<0.50	**2.2**	**16**	<0.20
MW-05-DUP	4-15	5/4/2017	<0.50	**0.87**	**36**	<0.50	<0.25	<0.50	**3.2**	<2.0	<0.50	**0.97**	**13**	<0.50	<0.19	<0.50	**2.1**	<15	<0.20
MW-05	4-15	7/19/2017	<10	<10	**35**	<2.0	**0.36 J**	<5.0	**2.8 J**	<5.0 U	**2.8 J**	<5.0	**13**	<10	**3.6 J**	<10	<5.0	**28**	<0.20 U
MW-05	4-15	8/14/2017	<20	**25**	**32**	<5	<5	<10	**3 J**	<4 U	**14**	**10**	**7 J**	<10	<5	**15**	<5	**16 J**	<0.20
MW-05	4-15	9/15/2017	<10	<10	**35**	<2.0	<5.0	<5.0	**3.4 J**	<2.5 U	<5.0	<5.0	**17**	<10	<4.9 U	<3.7 U	<5.0	<7.2 U	**0.043 J**

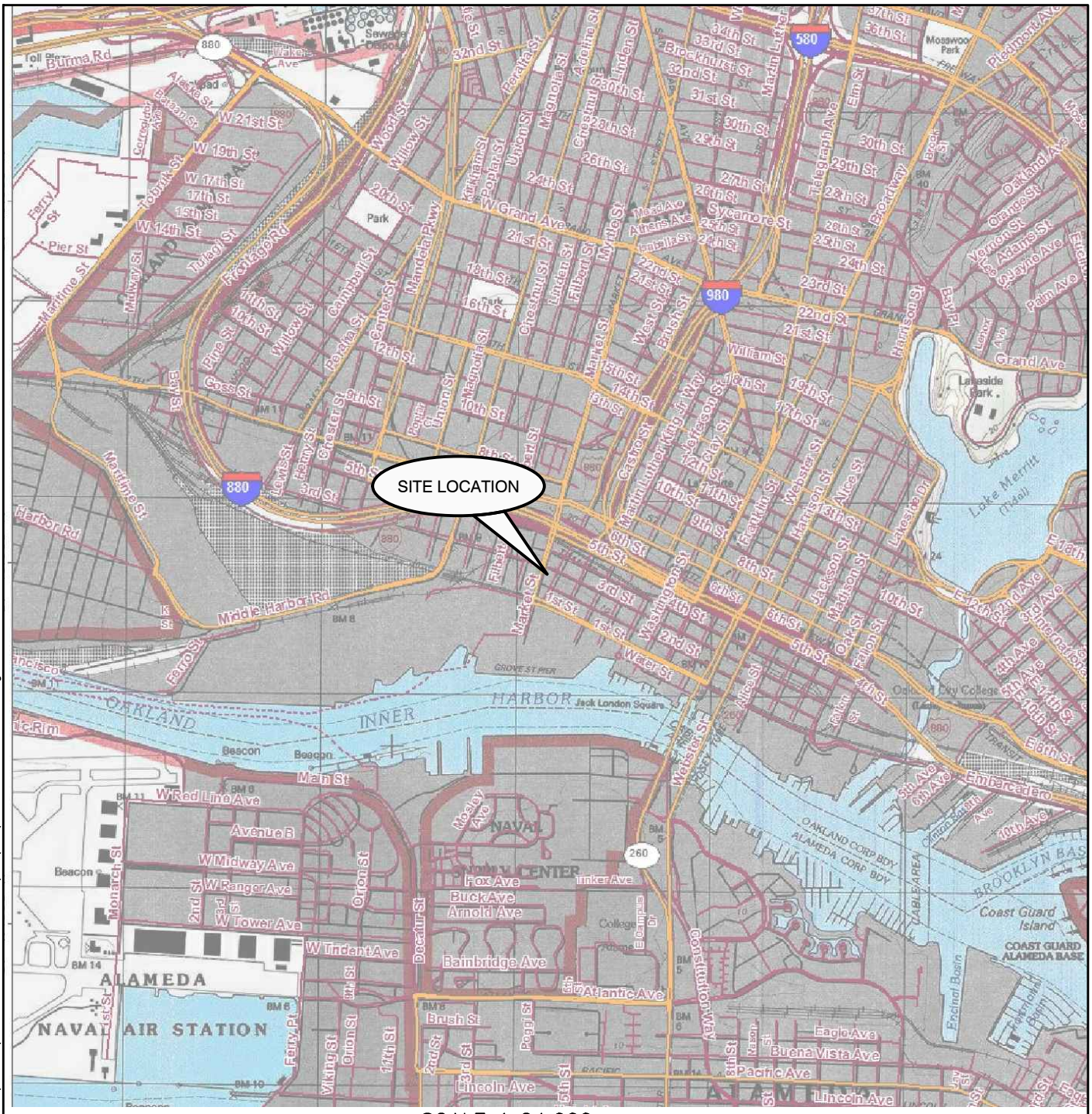
Legend:

ft bgs = feet below ground surface
ESL = Environmental Screening Level
MCL = Maximum Contaminant Level
--- = No screening level established
SB-# = Soil Boring Location
< = Analyte not detected at or above the stated laboratory reporting limit
J = Lab Qualifier - Estimated Value
U = ERM qualifier - Non-detect
J+ = ERM qualifier - Estimated with high bias

Notes:

All concentrations reported in micrograms per liter (µg/L).
Samples were analyzed by United States Environmental Protection Agency (USEPA) Method 6010/7000 series.
Samples were field filtered.
Tier 1 ESLs = Tier 1 Environmental Screening Levels for Groundwater, San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB), ESL Workbook, Tier 1 Summary Table, February 2016.
Direct Exposure Groundwater ESLs = San Francisco Bay RWQCB, ESL Workbook, Table GW-1, February 2016.
ESLs for Vapor Intrusion = Commercial/Industrial Environmental Screening Levels for Evaluation of Potential Vapor Intrusion, San Francisco Bay RWQCB, ESL Workbook, Table GW-3, February 2016.
MCLs = 2016 Federal and State MCLs, DLRs, and PHGs Review, September 2016
Bold values indicate detections at or above the laboratory reporting limit.
Values shaded gray indicate concentrations detected above the applicable ESLs. For groundwater, assumes direct exposure.
1. Defaulted to higher value upon comparison of "MCL Priority" and "Human Health Risk Based Only" values from San Francisco Bay RWQCB, ESL Workbook, Table GW-1, February 2016.

Figures



SCALE 1: 24,000

1 1/2 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

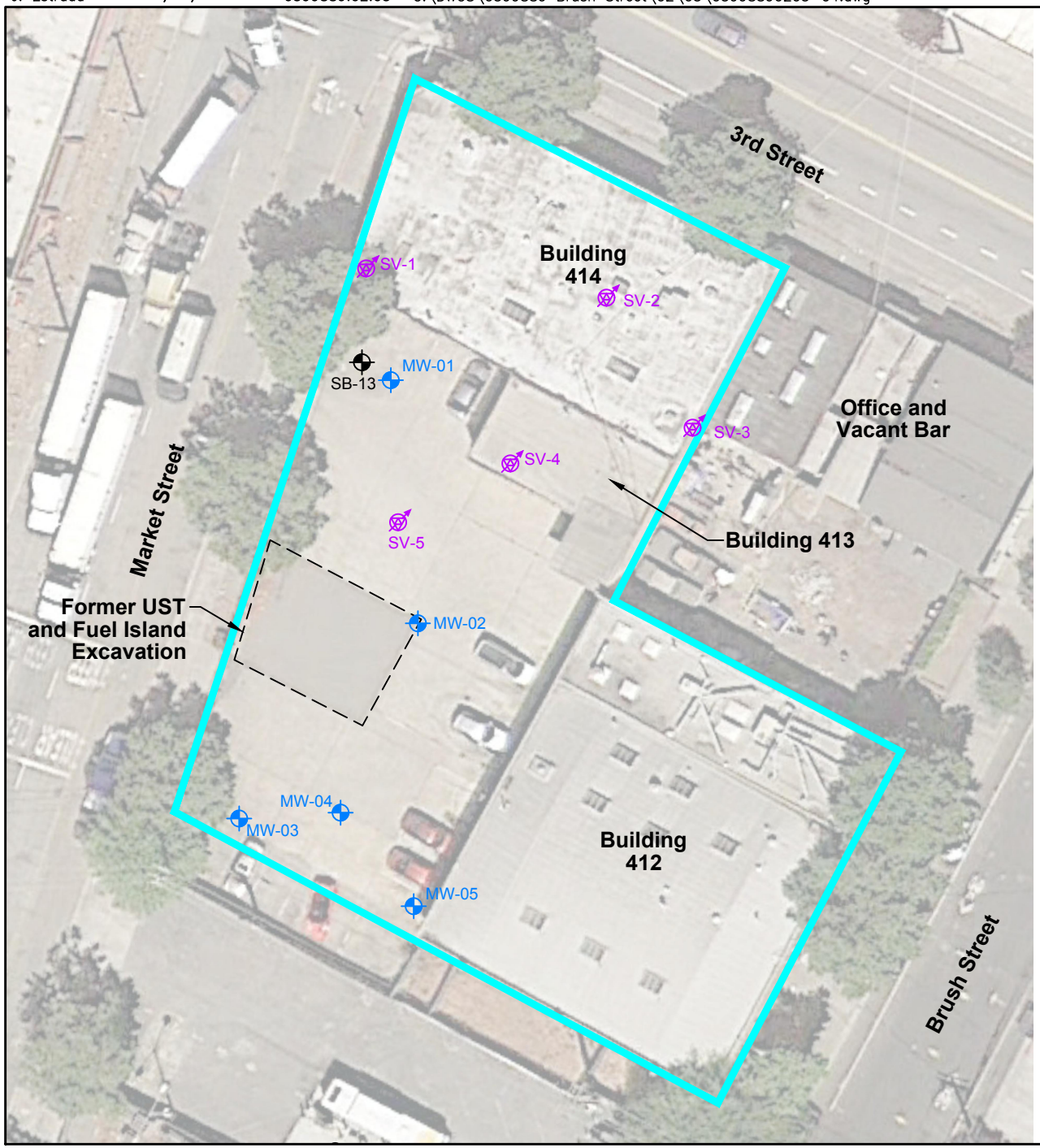
References:
TOPO!® Software
U.S.G.S. 7.5 Minute Series (Topographic) Quadrangle,
Oakland West, California
Dated: 1997

Figure 1
Site Location
Third Quarter 2017 Monitoring Report
205 Brush Street
Oakland, California

Environmental Resources Management
www.erm.com
ERM

J. Estrada 10/10/2017. 0399889.02.05 G:\DWGS\0399889 Brush Street\02\04\0399889020409.dwg

J. Estrada 10/10/2017. 0399889.02.05 G:\DWGS\0399889 Brush Street\02\05\03998890205-04.dwg



Legend

- Site Boundary
- Soil Vapor Sampling Location
- Monitoring Well Location

Aerial Photo Source: © 2009 Google Earth Pro Ver 5.0.11733.9347

N

0 40

Approx. Scale (feet)

Figure 2

Monitoring Location Map
Third Quarter 2017 Monitoring Report
205 Brush Street
Oakland, California

Environmental Resources Management
www.erm.com
ERM

Legend

- Site Boundary
- Monitoring Well
- 6.92 Groundwater Elevation (NAVD 88)
- 6.9 Groundwater Elevation Contour (NAVD 88)

Aerial Photo Source: © 2009 Google Earth Pro Ver 5.0.11733.9347

N

0 30

Approx. Scale (feet)

Figure 3

Groundwater Elevations August 2017
Third Quarter 2017 Monitoring Report
205 Brush Street
Oakland, California

Environmental Resources Management
www.erm.com

ERM

J. Estrada 10/11/2017 0399889.02.05 G:\DWGS\0399889 Brush Street\02\05\0399889020503.dwg

Legend

- Site Boundary
- Monitoring Well
- 6.92 Groundwater Elevation (NAVD 88)
- * Anomalous, Not Used in Contouring
- 6.0 Groundwater Elevation Contour (NAVD 88)

Aerial Photo Source: © 2009 Google Earth Pro Ver 5.0.11733.9347

N

0 30

Approx. Scale (feet)

Figure 4

Groundwater Elevations September 2017
Third Quarter 2017 Monitoring Report
205 Brush Street
Oakland, California

Environmental Resources Management
www.erm.com

J. Estrada 10/11/2017 0399889.02.05 G:\DWGS\0399889 Brush Street\02\05\0399889020 5-02.dwg

Legend

- Soil Vapor Sample Location
- Site Boundary
- Approximate Area of Soil Vapor Exceeding ESLs

SV-4 (1/27/14)
Depth 5.5'
Tetrachloroethene 4.2

- Sample Identifier and Date of Sample
- Sample Depth (ft. bgs)
- Concentration in $\mu g/m^3$
- Chemical Depth

Yellow shading indicates concentrations above Commercial/Industrial ESL.

Applicable ESLs

Tetrachloroethene	2,100 $\mu g/m^3$
Benzene	420 $\mu g/m^3$

ESL	Environmental Screening Level
ft. bgs	Feet Below Ground Surface
$\mu g/m^3$	Micrograms per Cubic Meter

Aerial Photo Source: © 2009 Google Earth Pro Ver 5.0.11733.9347

N

0 50

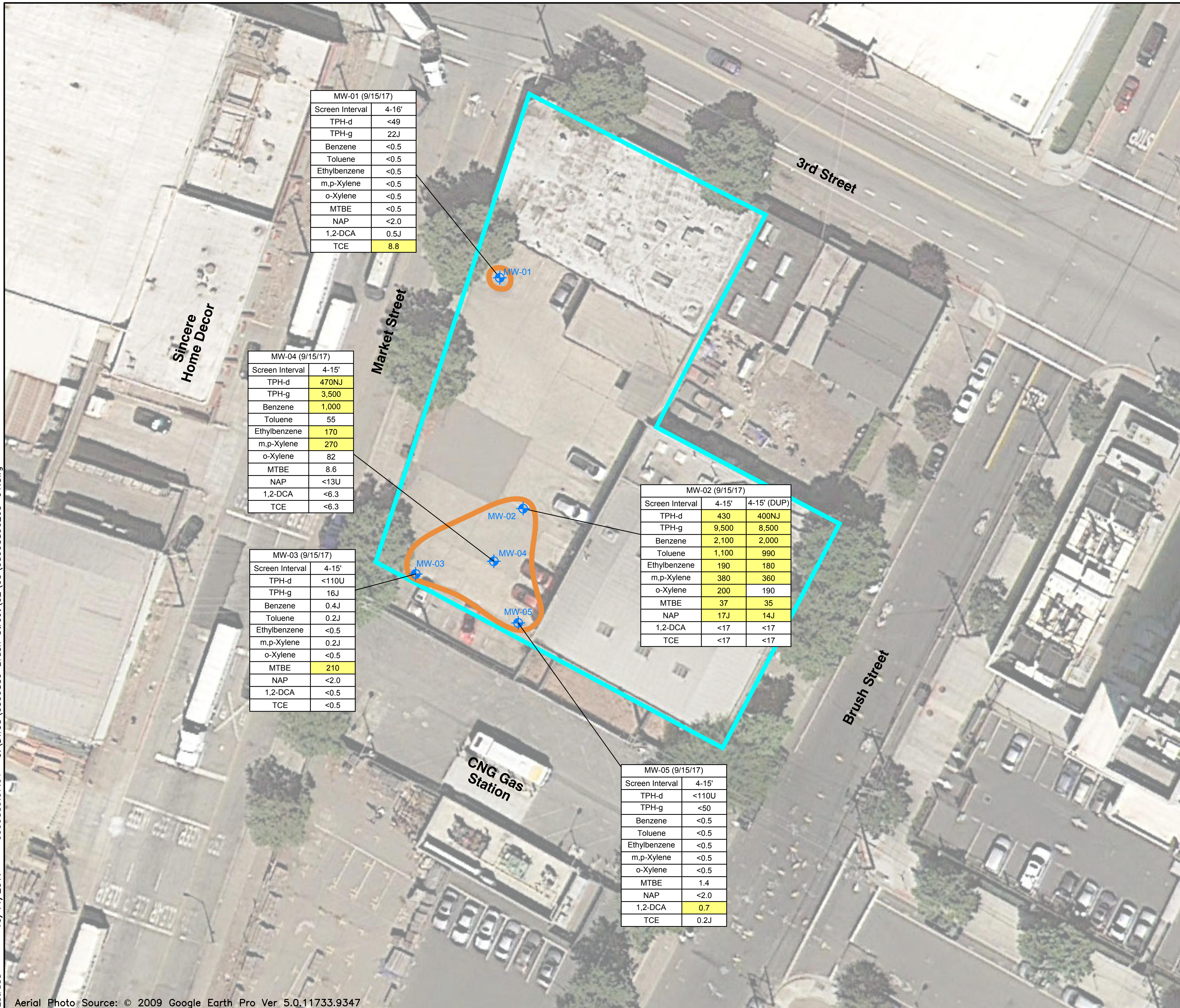
Approx. Scale (feet)

Figure 5

Volatile Organic Compounds in Soil Vapor
Third Quarter 2017 Monitoring Report
205 Brush Street
Oakland, California

Environmental Resources Management
www.erm.com

J. Estrada 10/11/2017 0399889.02.05 G:\DWGS\0422595 PG&E Brush St\04\05\0422592040S-04.dwg



MW-01 (9/15/17)	
Screen Interval	4-16'
TPH-d	<49
TPH-g	22J
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylene	<0.5
o-Xylene	<0.5
MTBE	<0.5
NAP	<2.0
1,2-DCA	0.5J
TCE	8.8

MW-04 (9/15/17)	
Screen Interval	4-15'
TPH-d	470NJ
TPH-g	3,500
Benzene	1,000
Toluene	55
Ethylbenzene	170
m,p-Xylene	270
o-Xylene	82
MTBE	8.6
NAP	<13U
1,2-DCA	<6.3
TCE	<6.3

MW-02 (9/15/17)		
Screen Interval	4-15'	4-15' (DUP)
TPH-d	430	400NJ
TPH-g	9,500	8,500
Benzene	2,100	2,000
Toluene	1,100	990
Ethylbenzene	190	180
m,p-Xylene	380	360
o-Xylene	200	190
MTBE	37	35
NAP	17J	14J
1,2-DCA	<17	<17
TCE	<17	<17

MW-03 (9/15/17)	
Screen Interval	4-15'
TPH-d	<110U
TPH-g	16J
Benzene	0.4J
Toluene	0.2J
Ethylbenzene	<0.5
m,p-Xylene	0.2J
o-Xylene	<0.5
MTBE	210
NAP	<2.0
1,2-DCA	<0.5
TCE	<0.5

MW-05 (9/15/17)	
Screen Interval	4-15'
TPH-d	<110U
TPH-g	<50
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylene	<0.5
o-Xylene	<0.5
MTBE	1.4
NAP	<2.0
1,2-DCA	0.7
TCE	0.2J

Legend

Monitoring Well

Site Boundary

Approximate Area of Groundwater with TPH and/or VOC COCs Exceeding ESLs

MW-02 (5/4/17)	
Depth	2-12'
Benzene	0.9

Sample Identifier and Date of Sample

Sample Screen Interval (ft. bgs)

Concentration in µg/L

Chemical Depth

Yellow shading indicates concentrations above applicable ESLs based on current and future site usage.

Applicable ESLs

TPH-d	150 µg/L
TPH-g	220 µg/L
Benzene	1.0 µg/L
Toluene	150 µg/L
Ethylbenzene	30 µg/L*
m,p-Xylenes	190 µg/L
o-Xylene	190 µg/L
MTBE	13 µg/L
NAP	0.17 µg/L
1,2-DCA	0.50 µg/L
TCE	5.0 µg/L

* Value is the Maximum Contaminant Level, which is higher than the applicable ESL

J	Lab Qualifier - Estimated Value
U	ERM Lab Qualifier - Nondetected
NJ	ERM Qualifier - Estimated Value, Chromatogram did not Resemble the Standard Hydrocarbon Pattern
TPH-g	Total Petroleum Hydrocarbons as Gasoline
TPH-d	Total Petroleum Hydrocarbons as Diesel
MTBE	Methyl Tert-butyl Ether
NAP	Naphthalene
1,2-DCA	1,2-Dichloroethane
TCE	Trichloroethene
ESL	Environmental Screening Level
VOC	Volatile Organic Compound
COC	Chemical of Concern
ft. bgs	Feet Below Ground Surface
µg/L	Micrograms per Liter

N

0 40
Approx. Scale (feet)

Figure 6

TPH and VOCs in Shallow Groundwater
Third Quarter 2017 Monitoring Report
205 Brush Street
Oakland, California

Environmental Resources Management
www.erm.com
ERM

J.Estrada 10/11/2017 0399889.07.01 G:\DWGS\0399889 Brush Street\02\05\03998890205-01.dwg

Legend

- Monitoring Well
- Site Boundary
- Approximate Area of Groundwater with Metals Exceeding ESLs

MW-02 (5/4/17)	
Depth	4-15'
Cobalt	5.7

- Sample Identifier and Date of Sample
- Sample Screen Interval (ft. bgs)
- Concentration in µg/L
- Chemical Depth

Yellow shading indicates concentrations above applicable ESLs based on current and future site usage.

Applicable ESLs
Cobalt 6 µg/L
Nickel 100 µg/L*

* Value is the Maximum Contaminant Level, which is higher than the applicable ESL.

ESL	Environmental Screening Level
ft. bgs	Feet Below Ground Surface
µg/L	Micrograms per Liter

Aerial Photo Source: © 2009 Google Earth Pro Ver 5.0.11733.9347

N

0 40
Approx. Scale (feet)

Figure 7
Metals in Shallow Groundwater
Third Quarter 2017 Monitoring Report
205 Brush Street
Oakland, California

Environmental Resources Management
www.erm.com
ERM

J. Estrada 10/11/2017 0399889.07.01 G:\DWGS\0422595 PG&E Brush St\04\05\0422592040 5-05.dwg

Attachment A
Field Sampling Sheets

Date: 8/14/17
Job #: 0399889
Measured by:

Ground Water Elevations
PG&E Brush Street
Oakland, California

Well	Date	Time	Total Depth (ft-bmp)	Depth to Groundwater (ft-bmp)	Screen Interval (ft-bmp)	Depth to Water Before sampling (ft-bmp)	Depth to Water After Sampling (ft-bmp)	Functional Well Lock ?	Notes/Well Condition
MW-1	7/18/2017	10:05	15.89	5.41	4-16'		6.10	N	
MW-2	7/18/2017	10:12	14.32	5.40	4-15'	5.41	7.48	N	
MW-3	7/18/2017	10:28	14.10	4.88	4-15'			N	
MW-4	7/18/2017	10:17	14.40	5.91	4-15'		6.50	N	
MW-5	7/18/2017	10:22	14.38	6.16	4-15'			N	

PG&E Brush Street
MONITORING WELL SAMPLING FORM
ERM-West, Inc.

Date: 8/14/14
Set up time: 9:55
Weather: overcast, cool
Sampler: AB + MW

WELL ID: MW-01

Well Location: See site map
Casing Diameter: 4"

Screened Interval: 4-16'
Construction Depth: 16.5'

Purge Method: low-flow
Purge Start Time: 10:09
Discharge Rate: 0.2 gal/min
Purge End Time:
Sample Method: low-flow

Depth to Water: 5.41
Total Measured Depth: 15.89
Height of Water Column: 10.48
Volume of one casing:

Purge calculations: (height of water column) 10.48 ft. x (conv. factor) 0.653 x 3 = 20.5 gallons

Well Diameter Inches	0.5	0.75	1	2	3	4	5	6	7	8
Conversion factor (gal/ft)	0.010	0.023	0.041	0.163	0.367	0.653	1.020	1.469	1.999	2.611

Time	Gallons	Temp. °C	pH	EC (µs/cm)	ORP (mV)	Water Level	Water Clarity/Turbidity
10:09	0	20.6	8.74	850	62.9		clear.
10:14	1	21.5	6.86	829	89.1		clear
10:19	2	21.1	6.66	832	96.0		clear bubbles observed in flow cell
10:34	5	20.6	6.60	804	97.1		clear "
10:59	10	20.4	6.61	716	43.0	5.46	" "
11:35	15	20.4	6.53	691	36.1		"
12:01	20	20.4	6.58	687	35.1	6.10	

ANALYSES REQUIRED	SAMPLE TIME	CONTAINERS REQUIRED	FILTRATION?
TPHg / VOCs	12:05	40ml voas x6	N
TPHd/mo w/silicagel		1L Amber x 2	N
SVOCs		50ml Amber x 2	N
CAM17		poly (no preserv)	N

QA/QC Samples Collected:

QA/QC Sample ID:

FIELD OBSERVATIONS:
Headspace PID/FID: –
Well condition/ repairs needed: none
Pump previously used at well/site: –
Disposal method of purge water: 2mm onsite
Decontamination procedure:
Other notes: Alconox + DI water

Sampler Signature(s):

PG&E Brush Street MONITORING WELL SAMPLING FORM ERM-West, Inc.	Date: 8/14/17 Set up time: 1225 Weather: overcast, cool Sampler: AB + HW

WELL ID: MW-02

Well Location: See site map
Casing Diameter: 2"

Screened Interval: 4-15'
Construction Depth: 15.5'

Purge Method: Low-Flow
Purge Start Time: 12:28
Discharge Rate: 250 mL/min
Purge End Time: 13:27
Sample Method: Low-Flow

Depth to Water: 5.40'
Total Measured Depth: 14.32'
Height of Water Column: 8.92'
Volume of one casing: 1.45

Purge calculations: (height of water column) 8.92' ft. x (conv. factor) 0.163 x 3 = 4.36 gallons

Well Diameter Inches	0.5	0.75	1	(2)	3	4	5	6	7	8
Conversion factor (gal/ft)	0.010	0.023	0.041	(0.163)	0.367	0.653	1.020	1.469	1.999	2.611

Time	Gallons	Temp. °C	pH	EC (µs/cm)	ORP (mV)	Water Level	Water Clarity/Turbidity	DO (mg/L)
12:53	0.25	24.4	6.44	1988	-142.3	5.92	clear, product odor	—
12:48	1	24.1	6.40	2005	-148.3		" "	6.05
13:03	2	23.1	6.32	1802	-149.3		" "	0.03
13:18	3	22.9	6.29	1673	-116.4		" "	0.03
13:31	4	22.8	6.29	1652	-97.1	7.48	" "	0.02

ANALYSES REQUIRED	SAMPLE TIME	CONTAINERS REQUIRED	FILTRATION?
TPH-g/VOCs	13:30	40 mL VOAs (6)	N
TPH-d/mo w/ SGC		1L Amber (2)	N
SVOCs		50mL Amber (2)	N
CAM 17 Metals		250mL Poly (1) no preserv	N

QA/QC Samples Collected:

QA/QC Sample ID:

FIELD OBSERVATIONS:
Headspace PID/FID: —
Well condition/ repairs needed: None
Pump previously used at well/site: —
Disposal method of purge water: Drum onsite
Decontamination procedure: Alconox + DI
Other notes:

Sampler Signature(s):

PG&E Brush Street MONITORING WELL SAMPLING FORM ERM-West, Inc.	Date: Set up time: Weather: Sampler:

WELL ID: MW-03

Well Location: See site map
Casing Diameter: 2"

Screened Interval: 4-15'
Construction Depth: 15.5'

Purge Method:
Purge Start Time: 16:13
Discharge Rate:
Purge End Time:
Sample Method:

Depth to Water: 4.88
Total Measured Depth: 14.10
Height of Water Column: 9.22
Volume of one casing: 1.50

Purge calculations: (height of water column) 9.22 ft. x (conv. factor) 1.50 x 3 = 4.5 gallons

Well Diameter Inches	0.5	0.75	1	2	3	4	5	6	7	8
Conversion factor (gal/ft)	0.010	0.023	0.041	0.163	0.367	0.653	1.020	1.469	1.999	2.611

Time	Gallons	Temp. °C	pH	EC (µs/cm)	ORP (mV)	Water Level	Water Clarity/Turbidity	DO mg/L
16:15	0.25	22.4	12.52	5785	-81.5		clear	32.27
16:18	1	22.6	12.43	5261	-73.6	6.90	clear - white cloudy	31.95
16:23	2	22.5	12.17	5146	-45.5	7.10	~~water~~ white & cloudy	33.36
16:27	2.5	22.5	11.14	3531	16.9		clear	31.76
16:35	3	22.5	10.71	3523	49.0	8.19	clear	31.96
16:40	3.5	22.4	10.69	3525	58.3	8.21	clear	32.04

ANALYSES REQUIRED | SAMPLE TIME | CONTAINERS REQUIRED | FILTRATION?

16:45

QA/QC Samples Collected: none

QA/QC Sample ID: none

FIELD OBSERVATIONS:
Headspace PID/FID: —
Well condition/ repairs needed: none
Pump previously used at well/site: —
Disposal method of purge water: drum onsite
Decontamination procedure: Alconox + DI water
Other notes:

Sampler Signature(s):

PG&E Brush Street
MONITORING WELL SAMPLING FORM
ERM-West, Inc.

Date: 8/14/17
Set up time: 13:50
Weather: Overcast, cool
Sampler: AB + HW

WELL ID: MW-04

Well Location: See site map
Casing Diameter: 2"

Screened Interval: 4-15'
Construction Depth: 15.5'

Purge Method: Low-Flow
Purge Start Time: 13:54
Discharge Rate: 250mL/min
Purge End Time: 14:38
Sample Method: Low-Flow

Depth to Water: 5.91'
Total Measured Depth: 14.40'
Height of Water Column: 8.49'
Volume of one casing: 1.38 gal

Purge calculations: (height of water column) 8.49 ft. x (conv. factor) 0.163 x 3 = 4.15 gallons

Well Diameter Inches	0.5	0.75	1	2	3	4	5	6	7	8
Conversion factor (gal/ft)	0.010	0.023	0.041	0.163	0.367	0.653	1.020	1.469	1.999	2.611

Time	Gallons	Temp. °C	pH	EC (µs/cm)	ORP (mV)	Water Level	Water Clarity/Turbidity	DO mg/L
13:55	0	22.5	6.96	1012	-125.1		clear, product odor	0.56
14:01	0.5	23.2°	6.39	988	-155.9	6.51	" "	0.14
14:06	1	23.2°	6.33	995	-161.1		" "	0.08
14:16	2	23.1	6.29	1021	-152.2		" "	0.05
14:28	3	22.8	6.30	1055	-143.9	7.12	" "	0.04
14:37	4	22.8	6.31	1095	-138.3		" "	0.07

ANALYSES REQUIRED	SAMPLE TIME	CONTAINERS REQUIRED	FILTRATION?
TPH-g/VOCs	14:40	40mL vows (6)	N
TPH-d/mo w/SGC	↓	1L Amber (2)	N
SVOCs		50mL Amber (2)	N
CAM 17 Metals		250mL poly (1) no preserve	N

QA/QC Samples Collected: DUP-01 (yes) @ 14:50
QA/QC Sample ID: DUP-01 @ 14:50

FIELD OBSERVATIONS:
Headspace PID/FID: -
Well condition/ repairs needed: None
Pump previously used at well/site: -
Disposal method of purge water: Drum onsite
Decontamination procedure: Alconox + DI water
Other notes:
"Containers required" does not account for the duplicate sample, only primary.

Sampler Signature(s):

DTW after sampling: 6.50'

PG&E Brush Street MONITORING WELL SAMPLING FORM ERM-West, Inc.	Date: 8/14/17 Set up time: 15:10 Weather: Overcast, cool Sampler: AB + HW

WELL ID: MW-05

Well Location: See site map
Casing Diameter: 2 in.

Screened Interval: 4-15'
Construction Depth: 15.5'

Purge Method: low flow
Purge Start Time: 3:15 (15:15)
Discharge Rate: 250 ml/min
Purge End Time:
Sample Method: low flow

Depth to Water: 6.16
Total Measured Depth: 14.38
Height of Water Column: 8.22
Volume of one casing:

Purge calculations: (height of water column) 8.22 ft. x (conv. factor) 1.34 x 3 = 4.02 gallons

Well Diameter Inches	0.5	0.75	1	2	3	4	5	6	7	8
Conversion factor (gal/ft)	0.010	0.023	0.041	0.163	0.367	0.653	1.020	1.469	1.999	2.611

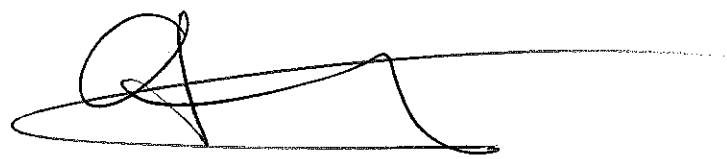
Time	Gallons	Temp. °C	pH	EC (µs/cm)	ORP (mV)	Water Level	Water Clarity/Turbidity	DO mg/L
15:27	0.5	20.9	6.38	1483	49.4	7.41	clear	—
15:32	1	21.0	6.38	1430	50.4		" "	0.11
15:42	2	20.9	6.37	1371	50.6		" slightsed obs. "	0.12
15:52	3	20.8	6.37	1348	49.4		" "	0.12
15:55								

ANALYSES REQUIRED	SAMPLE TIME	CONTAINERS REQUIRED	FILTRATION?
TPH-g/VOCs	15:55	40mL vaas (6)	N
TPH-d/mo w/SGC		1L Amber (2)	N
SVOCs		50mL Amber (2)	N
CAM 17 Metals		250mL poly (1) no preserve	N

QA/QC Samples Collected: None
QA/QC Sample ID: None

FIELD OBSERVATIONS:
Headspace PID/FID: -
Well condition/ repairs needed: No
Pump previously used at well/site: -
Disposal method of purge water: Drum onsite
Decontamination procedure: Alconox + DI water
Other notes:

Sampler Signature(s) :



Date:
Job #: 0399889
Name:

Drum Inventory
205 Brush Street
Oakland, California

Drum #	Contents	Empty/Full?	Notes
5	Purge Water	½ - ¾	
2	Decon water	"	
6	Soil	¾	
2	water/concrete slurry	½ - ¾	

15 Total

Soil: 6
Water: 7 – 2 Purge, 5 Decon
water/concrete slurry: 2

ERM	Applicability: North America	Form	Document Number: NAM-1501-FM1	Version: 3
	Title: **Site Safety Meeting Form**		**Last Revision Date:**	1/16/17

Project Name/ Location:	PG&E Brush Street			**Phone:**	408-701-7007
Project Number:		**Date:**	8/15/17	**Time:**	0830
Meeting Leader:	Alex Martinez				

Today's Work Tasks(s)	**Conducted By:**
Soil vapor sampling	ERM

1. **Review relevant sections of the Health and Safety Plan (HASP), Job Hazard Analyses (JHAs) for planned tasks, and any other applicable procedures. Discuss potential hazards of planned work and control measures to be used to eliminate or reduce risks (including PPE). Pay specific attention to overlapping/ simultaneous operations.**
2. **Review emergency response procedures including emergency phone numbers, location of emergency equipment (fire extinguishers, first aid kit, AED, eyewashes, safety showers, etc.), exit routes, muster points, methods of conducting head count at muster point, and identity of first responders trained in first aid/CPR.**
3. **Does everyone fully understand the task(s)? Are there any changes that need to be assessed? Use SNAP cards to assess risks associated with changed or unplanned tasks.**
4. **Remind the team that everyone on the job site is empowered to stop work if something is unsafe or if there are any questions or concerns regarding safety.**

What tools and equipment are required for today's tasks? Have they been inspected and are they in good condition?

Hand tools, Soil vapor equipment

What training/qualifications/experience is necessary for today's assigned tasks?

40 HR HAZWOPER CPR/First Aid.

List any new or Short Service personnel on site today:

None

Discuss any recent incidents, near misses, field inspection findings, or other safety observations (or observations from similar tasks performed at other sites):

Recent site security concerns

Additional Safety Meeting Topics (check those discussed)
☑ What client safety rules or procedures are applicable to today's activities?
☑ How will you communicate with others on site? How will you communicate with the PIC and PM?
☑ What are the potential impacts of planned activities to visitors, nearby workers, or the public?
☑ Who do you contact if you have questions or before deviating from written procedures?
☑ What happens and who do you contact if there is an injury or other emergency? If working at an active facility, how will you be alerted of an emergency and what will you do?
☑ Where is nearest medical facility and how would we get an injured employee there? If medical help is more than five minutes away, is at least one person on site trained in first aid/CPR? How do you contact them?
☑ Do you have any medical condition or allergy that the project team needs to be aware of? Write this down and keep it in your pocket for reference in the event of an emergency.
☑ Are any work permits required?
☑ Has anything unexpected or out-of-the-ordinary occurred on this job recently to share?
☑ Is there anything different about today's operations as compared to yesterday or previous days?
☑ What is the worst that could happen if something goes wrong today?
☑ What activities occurring today could result in hand injuries? Is everyone aware that the use of fixed open-blade knives is not permitted?
☑ What natural hazards are present (including plants, animals, and insects)?
☑ What areas of the site have slip/trip/fall hazards? Can these be avoided? Are everyone's work boots in good shape?
☐ Other items:

Meeting Attendees (including employees, contractors, and visitors)

Name	Company	Sign-In*	Sign-Out**
Alex Martinez	ERM		
Anthony Billecci	ERM		

* Signature/initials in this space verify that the employee is fit for performing work.

** Signature/initials in this space verify that the employee was uninjured during the workday.

Soil Vapor Sampling

Date: 8/15/17
Set up Time: 1100
Weather:
Samplers: AB + AM

Sample Probe #: SV-1

Location: Brush St. Oakland
Sample Probe Depth: feet bgs 3.5 Sand Pack: 30"

Purge Calculations Sand Pack (annulus) vol. = 0.70 L

Outer diameter of tubing: 0.25 inch
Length of tubing, above and below ground: ~ 5 feet
1 Purge Volume for 0.25-inch OD tubing = length of tubing x 4.46 = 1256.4 mL

Volume to be purged: 3769 mL (3 x [tube vol. + annulus vol.])
Purge Rate: _____ (rate = 200mL/min 0.5 hour flow controllers)
Purge Time = Purge Volume/ Purge Rate = 18.85 min

Purge Start Time: 1050 Purge End Time: 1109

Leak Test	Start Time	*(inches Hg)*	Start Time	*(inches Hg)*
	0942	-17.5	1000	-17.5

Leak Test Compound : Isopropyl Alcohol
Notes:

Initial Vacuum *inch Hg (Probe\Sample)*	**Sample Start Time**	**Sample End Time**	**Final Vacuum** *inch Hg (Probe\Sample)*
-29.5	11:10	1117	-5

PID reading at the time of sampling: —
Temperature at Time of Sampling: _____
Humidity at Time of Sampling: _____

Analysis Required	**Sample Time**	**Summa Canister ID**	**Flow Controller ID**
VOCs + 2-Propanol (TO-15)	11:10	3032	22390
$O_2 + CH_4 + CO_2$			
CASTM #1946			

Field Observations:

Sampler Signature(s):

Soil Vapor Sampling	Date: 8/15/17 Set up Time: 11:55 Weather: Sunny, Cool, Indoors Samplers: AB + AM

Sample Probe #: SV-2

Location:
Sample Probe Depth: 3.5 feet bgs Sand Pack: ~~36~~ 24"

Purge Calculations Sand Pack (annulus) vol. = 0.70 L

Outer diameter of tubing: 0.25 inch

Length of tubing, above and below ground: ~5 feet

1 Purge Volume for 0.25-inch OD tubing = length of tubing x 4.46 = 1011.6 mL

Volume to be purged: 3035 mL (3 x [tube vol. + annulus vol.])

Purge Rate: _____ (rate = 200mL/min 0.5 hour flow controllers)

Purge Time = Purge Volume/ Purge Rate = 15.17 min

Purge Start Time: 1204 Purge End Time: 1219

Leak Test	Start Time	*(inches Hg)*	~~Start~~ End Time	*(inches Hg)*
	10:11	-18	10:31	-18

Leak Test Compound : Isopropyl Alcohol

Notes:

Initial Vacuum *inch Hg (Probe\Sample)*	**Sample Start Time**	**Sample End Time**	**Final Vacuum** *inch Hg (Probe\Sample)*
-29.5	12:20	1229	-5

PID reading at the time of sampling: —

Temperature at Time of Sampling: 65° F

Humidity at Time of Sampling: 72%

Analysis Required	**Sample Time**	**Summa Canister ID**	**Flow Controller ID**
VOCs + 2-propanol (TO-15)	12:20	1L2262	21473
$O_2 + CH_4 + CO_2$ (ASTM-D1946)			

Field Observations:

Sampler Signature(s):

Soil Vapor Sampling

Date: 8/15/17
Set up Time: 1140
Weather: Sunny, Cool
Samplers: AB + AM

Sample Probe #: SV-3

Location:
Sample Probe Depth: feet bgs 3.5 Sand Pack: 24"

Purge Calculations Sand Pack (annulus) vol. = 0.70 L

Outer diameter of tubing: 0.25 inch
Length of tubing, above and below ground: 4.5 feet
1 Purge Volume for 0.25-inch OD tubing = length of tubing x 4.46 = 1011.6 mL

Volume to be purged: 3035 mL (3 x [tube vol. + annulus vol.])
Purge Rate: _____ (rate = 200mL/min 0.5 hour flow controllers)
Purge Time = Purge Volume/ Purge Rate = _____ min

Purge Start Time: 1130 Purge End Time: 1145

Leak Test	Start Time	*(inches Hg)*	Start Time	*(inches Hg)*
	1004	-15.35	1020	-15.35

Leak Test Compound : Isopropyl Alcohol
Notes:

Initial Vacuum *inch Hg (Probe\Sample)*	**Sample** Start Time	**Sample** End Time	**Final Vacuum** *inch Hg (Probe\Sample)*
	1149	1154	-5

PID reading at the time of sampling: —
Temperature at Time of Sampling: _____
Humidity at Time of Sampling: _____

Analysis Required	Sample Time	Summa Canister ID	Flow Controller ID
VOCs + 2-propanol (TO-15)	1149	1L1564	22415
$O_2 + CH_4 + CO_2$ (ASTM 01946)			

Field Observations:

Sampler Signature(s):

Soil Vapor Sampling	Date: Set up Time: Weather: Samplers:

Sample Probe #: SV-4

Location: Bruin St.
Sample Probe Depth: feet bgs 3 Sand Pack: 30"

Purge Calculations Sand Pack (annulus) vol. = 0.70 L

Outer diameter of tubing: 0.25 inch
Length of tubing, above and below ground:_____ feet
1 Purge Volume for 0.25-inch OD tubing = length of tubing x 4.46 = 1253.9 mL

Volume to be purged: 3762 mL (3 x [tube vol. + annulus vol.])
Purge Rate:_____ (rate = 200mL/min 0.5 hour flow controllers)
Purge Time = Purge Volume/ Purge Rate = 18.81 min

Purge Start Time: 1248 Purge End Time: 1307

Leak Test	Start Time	*(inches Hg)*	Start Time	*(inches Hg)*
	1237	-10.5	1241	10.5

Leak Test Compound : Isopropyl Alcohol
Notes:

Initial Vacuum *inch Hg (Probe\Sample)*	**Sample** **Start Time**	**Sample** **End Time**	**Final Vacuum** *inch Hg (Probe\Sample)*
-30 -30	1309	1319	-5

PID reading at the time of sampling:_____
Temperature at Time of Sampling: _____
Humidity at Time of Sampling: _____

Analysis Required	**Sample Time**	**Summa Canister ID**	**Flow Controller ID**
	1309	1L2999	6976
Field Observations: SV-4-DUP	1309	1L1503	6976

Sampler Signature(s):

Soil Vapor Sampling	Date: 8/15/17 Set up Time: 0940 Weather: Sunny, cool Samplers: AB + AM

Sample Probe #: SV-5

Location: SV-5
Sample Probe Depth: 4 feet bgs Sand Pack: ~~3.5~~ 24 in

Purge Calculations Sand Pack (annulus) vol. = 0.70 L

Outer diameter of tubing: 0.25 inch
Length of tubing, above and below ground: 4' + 3' = 7' feet 1014.1
1 Purge Volume for 0.25-inch OD tubing = length of tubing x 4.46 = ~~31.22~~ mL

Volume to be purged: 3042 mL (3 x [tube vol. + annulus vol.])
Purge Rate: 200mL/min (rate = 200mL/min 0.5 hour flow controllers)
Purge Time = Purge Volume/ Purge Rate = 15.21 min

Purge Start Time: 09:59 Purge End Time: 10:14

Leak Test	Start Time	(inches Hg)	~~End Time~~	~~Start~~ End Time	(inches Hg)
	09:35	-20		09:44	-20

Leak Test Compound : Isopropyl Alcohol
Notes:

Initial Vacuum *inch Hg (Probe\Sample)*	Sample Start Time	Sample End Time	Final Vacuum *inch Hg (Probe\Sample)*
-29.5	1016	1029	-5

PID reading at the time of sampling: —
Temperature at Time of Sampling: 63° F
Humidity at Time of Sampling: 76%

Analysis Required	Sample Time	Summa Canister ID	Flow Controller ID
VOCs + 2-Propanol (TO-15)	10:16	1L2644	2469
O_2 + CH_4, CO_2 (ASTM-D1946)			

Field Observations:

Sampler Signature(s):

Soil Vapor Sampling	Date: 8/15/17 Set up Time: 13:20 Weather: Sunny cool Samplers: AB + AM

Sample Probe #: SV-6

Location:
Sample Probe Depth: 4 feet bgs Sand Pack: 36"

Purge Calculations Sand Pack (annulus) vol. = 0.70 L

Outer diameter of tubing: 0.25 inch

Length of tubing, above and below ground: 7 feet

1 Purge Volume for 0.25-inch OD tubing = length of tubing x 4.46 = _____ mL

Volume to be purged: _____ mL (3 x [tube vol. + annulus vol.])

Purge Rate: _____ (rate = 200mL/min 0.5 hour flow controllers)

Purge Time = Purge Volume/ Purge Rate = 18.88 min

Purge Start Time: 1329 Purge End Time: 1348

Leak Test	Start Time	*(inches Hg)*	Start Time	*(inches Hg)*

Leak Test Compound : Isopropyl Alcohol

Notes:

Initial Vacuum *inch Hg (Probe\Sample)*	**Sample Start Time**	**Sample End Time**	**Final Vacuum** *inch Hg (Probe\Sample)*
-28	1350	1358	-5

PID reading at the time of sampling: —

Temperature at Time of Sampling: 62° F

Humidity at Time of Sampling: 77%

Analysis Required	**Sample Time**	**Summa Canister ID**	**Flow Controller ID**
VOCs + 2-propanol (TO-15) O_2 + CH_4 + CO_2 (ASTM-01946)	1350	1L2770	30994

Field Observations:

Sampler Signature(s):

DAILY FIELD RECORD

Project and Task Number:	Date:
Project Name:	Weather:
Location:	Field Activity:
Recorded By:	

PERSONNEL: Name	Company	Time In	Time Out

TIME	DESCRIPTION OF WORK PERFORMED		
	Canister	Manifold	Leak Test (in Hg)
✓0942	3032	22390	-17.5
✓0935	IL2644	~~2469~~	-20.0
✓1004	IL1564	22415	~~-30~~ -15.25
✓1011	IL2262	21473	-18
1025 DUP	IL2999	6976	~~-12.75~~ -15.5 -12.75
1031	IL2720	30994	-12.75

CHAIN OF CUSTODY

ENTHALPY ANALYTICAL
Formerly Curtis & Tompkins Labs
2323 Fifth Street
Berkeley, CA 94710
Phone (510) 486-0900
Fax (510) 486-0532

Chain of Custody # _____

C&T LOGIN # _____

Project No: 0399889.02.05
Project Name: Brush St.
Project P. O. No: 0399889.02.05
EDD Format: Report Level ☑ II ☐ III ☐ IV
Turnaround Time: ☐ RUSH _____ ☒ Standard

Sampler: Hilary Whitney / Anthony Bilecci
Report To: John Lucio
Company: ERM
Telephone: 925 482 3292
Email: john.lucio@erm.com

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST																			
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None	TPH-g and VOCs (8260B)	TPH-d and TPH-mo (8015)SG	SVOCs (8270C)	Title 22 Metals (6010/7000)*																
	MW-01	8/14/17	12:05	X				7						6	2	2	1															
	MW-02	↑	13:20	X				11						6	2	2	1															
	MW-03		16:45	X				11						6	2	2	1															
	MW-04		14:40	X				11						6	2	2	1															
	DUP-01		14:50	X				11						6	2	2	1															
	MW-05		15:55	X				7						6	2	2	1															
	TB-051417	↓		X				2	X					X																		

Notes:
* metals filtered in the field
also email hilary.whitney@erm.com and anthony.bilecci@erm.com
doug.moberg@erm.com
* shannon.martin@erm.com

SAMPLE RECEIPT
☐ Intact
☐ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
Hilary Whitney DATE: 8/14/17 TIME: 17:10
DATE: TIME:
DATE: TIME:

RECEIVED BY:
DATE: 8/14/17 TIME: 17:10
DATE: TIME:
DATE: TIME:

Attachment B
QA/QC Review Summary and
Laboratory Data Sheets

Memorandum

Environmental Resources Management

555 17th Street
Suite 1700
Denver, Colorado 80202
(303) 741-5050
(303) 773-2624 (fax)
www.erm.com

To: John Lucio

From: Shanna Bauer

Date: September 29, 2017

Subject: Data Review of PG&E Brush Street Groundwater Samples Collected September 2017

Project Number: 0399889.07.03

Data Package: Enthalpy Analytical Package 292500

The quality of the data was assessed and any necessary qualifiers were applied following the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review,* January 2017, and *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review,* January 2017.

SAMPLE RECEIPT EVALUATION

One sample was received with air bubbles in the VOA vials. The sample was not qualified because 3 of the 6 vials was received without bubbles. No samples required qualification. The samples with air bubbles is presented in Table 1.

HOLDING TIME AND PRESERVATION EVALUATION

The samples were prepared and analyzed within the method prescribed time period from the date of collection. The sample shipments were received at the laboratory within the method prescribed temperature and preservation requirements. No samples were qualified for holding time or preservation exceedances.

BLANK EVALUATION

The method and trip blank sample results were nondetected for each of the target analytes, with several exceptions. Several analytes were detected in various method blanks. Associated results were qualified as non-detect (U) if the result was within 5 times the blank results as adjusted for dilution for organic analytes. Associated inorganic results

were qualified as estimated detected with high bias (J+) if sample results were detected at concentrations greater than the reporting limits but less than ten times the method blank concentration and as non-detect (U) for sample results less than reporting limits and less than ten times the method blank concentrations as adjusted for dilution. The blank detections and associated qualified data are listed in Table 2.

BLANK SPIKE EVALUATION

The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) recoveries were within the laboratory's limits of acceptance. The LCS/LCSD recoveries indicate acceptable laboratory accuracy and precision.

MATRIX SPIKE EVALUATION

The matrix spike (MS) and matrix spike duplicate (MSD) recoveries were within the laboratory's limits of acceptance with limited exceptions. Cobalt and zinc had high MS/MSD recovery in one sample. The parent sample was not associated with the site; therefore, no qualifiers were required for MS/MSD performance. MS/MSD recoveries are presented in Table 3.

SURROGATE SPIKE EVALUATION

The surrogate recoveries were within acceptable limits. No qualifications to the data were made. The surrogate recoveries indicate minimal matrix interference in the samples.

CALIBRATION VERIFICATION EVALUATION

Continuing calibration verification (CCV) recoveries were within laboratory acceptance limits. No qualifiers were required for CCV performance.

TPH EVALUATION

The laboratory noted that the sample chromatograms for diesel C10-C24 analysis did not resemble the diesel standard in several samples. ERM qualified the affected sample as tentatively identified and estimated (NJ) as shown in Table 4.

DUPLICATE EVALUATION

One sample was submitted in duplicate. ERM calculated the relative percent difference (RPD) between detected results. The USEPA has not established control criteria for field duplicate samples. The field duplicate RPDs are presented in Table 5.

OVERALL ASSESSMENT

No samples required rejection. All data, including qualified data, can be used for decision-making purposes; however, the limitations indicated by the applied qualifiers should be considered when using the data. The quality of the data generated during this investigation is acceptable for the preparation of technically defensible documents.

Table 1
Samples with Exceeded Preservation Requirements
PG&E Brush Street Groundwater Samples Collected September 2017
PG&E
Oakland, California

Lab Package	Sample ID	Analysis Method	Preservation Issue	Preservation Limits	Comments	ERM Qualifier
292500	DUP-1	8260B	>1 ml headspace	<1 ml	3/6 vials	--

Key:
ml = Milliliter

Table 2
Blank and Associated Suspect Sample Detections
PG&E Brush Street Groundwater Samples Collected September 2017
PG&E
Oakland, California

Lab Package	Blank ID	Associated Samples	Detected Compound	Reported Concentration	Report Limit	Units	ERM Qualifier
292500	BLANK QC901663	see below	Diesel C10-C24	45	50	ug/L	--
		MW-3	Diesel C10-C24	110	49	ug/L	<110 (U)
		MW-5	Diesel C10-C24	110	49	ug/L	<110 (U)
292500	BLANK QC901812	--	Bromomethane	0.3	1.0	ug/L	--
292500	BLANK QC901966	--	Bromomethane	0.4	1.0	ug/L	--
292500	BLANK QC902365	see below	Bromomethane	0.3	1.0	ug/L	--
		MW-3	Bromomethane	0.4	1.0	ug/L	<0.4 (U)
		MW-5	Bromomethane	0.4	1.0	ug/L	<0.4 (U)
292500	BLANK QC902449	--	m,p-Xylenes	0.2	0.5	ug/L	--
		--	1,2,4-Trimethylbenzene	0.2	0.5	ug/L	--
		--	1,4-Dichlorobenzene	0.1	0.5	ug/L	--
		--	n-Butylbenzene	0.2	0.5	ug/L	--
		--	1,2,4-Trichlorbenzene	0.2	0.5	ug/L	--
		see below	Naphthalene	1.1	2.0	ug/L	--
		--	1,2,3-Trichlorobenzene	0.9	0.5	ug/L	--
		MW-4	Naphthalene	13	50	ug/L	<13 (U)
292500	BLANK QC901360	--	Arsenic	2.6	10	ug/L	--
		see below	Zinc	9.8	20	ug/L	--
		MW-5	Zinc	7.2	20	ug/L	<7.2 (U)
292500	BLANK QC901365	see below	Arsenic	2.2	10	ug/L	--
		see below	Copper	2.3	5.0	ug/L	--
		--	Selenium	3.1	10	ug/L	--
		see below	Silver	0.84	5.0	ug/L	--
		see below	Thallium	2.0	10	ug/L	--
		MW-1	Copper	1.7	5.0	ug/L	<1.7 (U)
		MW-1	Silver	3.7	5.0	ug/L	<3.7 (U)
		MW-2	Arsenic	2.3	10	ug/L	<2.3 (U)
		MW-2	Copper	2.2	5.0	ug/L	<2.2 (U)
		MW-2	Silver	6.5	5.0	ug/L	J+
		MW-2	Thallium	3.2	10	ug/L	<3.2 (U)
		MW-3	Copper	3.6	5.0	ug/L	<3.6 (U)
		MW-4	Arsenic	10	10	ug/L	J+
		MW-4	Silver	5.1	5.0	ug/L	J+
		MW-4	Thallium	6.6	10	ug/L	<6.6 (U)
		MW-5	Copper	2.5	5.0	ug/L	<2.5 (U)
		MW-5	Silver	4.9	5.0	ug/L	<4.9 (U)
		MW-5	Thallium	3.7	10	ug/L	<3.7 (U)
		DUP-1	Copper	1.7	5.0	ug/L	<1.7 (U)
		DUP-1	Silver	5.8	5.0	ug/L	J+
		DUP-1	Thallium	4.9	10	ug/L	<4.9 (U)

Key:
U = Nondetected
J+ = Estimated with high bias
µg/L = Micrograms per liter

Table 3
Spike Recoveries Outside of Acceptable Limits
PG&E Brush Street Groundwater Samples Collected September 2017
PG&E
Oakland, California

Lab Package	Spike Sample ID	Associated Sample	Compound	Recovery (%)	Limit (%)	RPD	RPD Limit	Result	ERM Qualifier
MS/MSD									
292500	MS/MSD	None	Cobalt	70/68	75-122	1	20	--	--
		None	Zinc	49/50	66-130	0	22	--	--

Key:
RPD = Relative percent difference
ND = Nondetected

Table 4
Suspect TPH Results
PG&E Brush Street Groundwater Samples Collected September 2017
PG&E
Oakland, California

Lab Package	Sample ID	Compound	Reported Concentration	ERM Qualifier	Notes
292500	MW-3	Diesel C10-C24	110	NJ	Sample exhibits chromatographic pattern which does not resemble the standard.
	MW-4	Diesel C10-C24	470	NJ	Sample exhibits chromatographic pattern which does not resemble the standard.
	MW-5	Diesel C10-C24	110	NJ	Sample exhibits chromatographic pattern which does not resemble the standard.
	DUP-1	Diesel C10-C24	400	NJ	Sample exhibits chromatographic pattern which does not resemble the standard.

Key:
NJ = Estimated value - chromatogram did not resemble the standard hydrocarbon pattern

Table 5
Field Duplicate Results and Calculated Relative Percent Differences
PG&E Brush Street Groundwater Samples Collected September 2017
PG&E
Oakland, California

Lab Package	Sample ID	Compound	Concentration				Report Limit	Units	RPD (%)	Qualifier
			Sample		Duplicate					
290750	MW-2 / DUP-1	Diesel C10-C24	430		400	Y	49	ug/L	7	--
		Motor Oil C24-C36	ND		210	J	290	ug/L	NC	--
		Gasoline C7-C12	9500		8500		1700	ug/L	11	--
		MTBE	37		35		17	ug/L	6	--
		2-Butanone	21	J	18		330	ug/L	15	--
		Benzene	2100		2000		17	ug/L	5	--
		Toluene	1100		990		17	ug/L	11	--
		Ethylbenzene	190		180		17	ug/L	5	--
		m,p-Xylenes	380		360		17	ug/L	5	--
		o-Xylene	200		190		17	ug/L	5	--
		Isopropylbenzene	9.2	J	8.8	J	17	ug/L	4	--
		Propylbenzene	18		16	J	17	ug/L	12	--
		1,3,5-Trimethylbenzene	35		31		17	ug/L	12	--
		1,2,4-Trimethylbenzene	130		110		17	ug/L	17	--
		Naphthalene	17	J	14	J	67	ug/L	19	--
		4-Methylphenol	2.5	J	2.5	J	9.3	ug/L	0	--
		Naphthalene	36		37		9.3	ug/L	3	--
		2-Methylnaphthalene	8.1	J	8.2	J	9.3	ug/L	1	--
		1-Methylnaphthalene	4.5	J	2.5	J	9.3	ug/L	57	--
		Phenanthrene	1.9	J	1.9	J	9.3	ug/L	0	--
		Arsenic	2.3	J	ND		10	ug/L	NC	--
		Barium	140		140		5.0	ug/L	0	--
		Cobalt	5.7		5.9		5.0	ug/L	3	--
		Copper	2.2	J	1.7	J	5.0	ug/L	26	--
		Lead	1.4	J	3.5	J	5.0	ug/L	86	
		Mercury	0.056	J	ND		0.2	ug/L	NC	--
		Nickel	32		31		5.0	ug/L	3	--
		Silver	6.5		5.8		5.0	ug/L	11	--
		Thallium	3.2	J	4.9	J	10	ug/L	42	--

Key:
µg/L = Micrograms per liter
RPD = Relative percent difference
J = Estimated concentration
ND = Nondetected
NC = Not calculated

ENTHALPY

ANALYTICAL

Enthalpy Analytical
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 291572
ANALYTICAL REPORT

ERM	Project : 0399889.02.05
1277 Treat Blvd.	Location : PG&E Brush Street
Walnut Creek, CA 94597	Level : II

Sample ID	Lab ID
MW-01	291572-001
MW-02	291572-002
MW-03	291572-003
MW-04	291572-004
DUP-01	291572-005
MW-05	291572-006
TB-081417	291572-007

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 08/24/2017

Dina Ali
Project Manager
dina.ali@enthalpy.com
(510) 204-2223 Ext 13105

CA ELAP# 2896, NELAP# 4044-001

ENTHALPY ANALYTICAL

CASE NARRATIVE

Laboratory number:	**291572**
Client:	**ERM**
Project:	**0399889.02.05**
Location:	**PG&E Brush Street**
Request Date:	**08/14/17**
Samples Received:	**08/14/17**

This data package contains sample and QC results for seven water samples, requested for the above referenced project on 08/14/17. The samples were received on ice and intact.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
High response was observed for n-butylbenzene in the CCV analyzed 08/17/17 10:15; this analyte was not detected at or above the RL in the associated sample, and affected data was qualified with "b". Low recovery was observed for toluene in the MSD of MW-02 (lab # 291572-002); the LCS was within limits, and the associated RPD was within limits. High surrogate recovery was observed for 1,2-dichloroethane-d4 in the BS for batch 250723. Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 250675; this analyte was either not detected in samples at or above the RL, or detected at a level at least 10 times that of the blank. N-butylbenzene was detected between the MDL and the RL in the method blank for batch 250723; this analyte was not detected in the sample at or above the RL. Carbon disulfide was detected between the MDL and the RL in the method blank for batch 250751; this analyte was not detected in samples at or above the RL. No other analytical problems were encountered.

Semivolatile Organics by GC/MS (EPA 8270C):
No analytical problems were encountered.

Metals (EPA 7470A):
No analytical problems were encountered.

California Title 22 Metals (EPA 6010B):
Enthalpy Analytical (Orange) in Orange, CA performed the analysis (NELAP certified). Please see the Enthalpy Analytical (Orange) case narrative.

CHAIN OF CUSTODY

ENTHALPY ANALYTICAL
Formerly Curtis & Tompkins Labs
2323 Fifth Street
Berkeley, CA 94710
Phone (510) 486-0900
Fax (510) 486-0532

Chain of Custody # _____

C&T LOGIN # 291572

Project No: 0399889.02.05
Project Name: Brush St.
Project P. O. No: 0399889.02.05
EDD Format: Report Level ☒ II ☐ III ☐ IV
Turnaround Time: ☐ RUSH ☒ Standard

Sampler: Hilary Whitney / Anthony Bilecci
Report To: John Lucio
Company: ERM
Telephone: 925 482 3292
Email: john.lucio@erm.com

Lab No.	Sample ID.	SAMPLING		MATRIX				# of Containers	CHEMICAL PRESERVATIVE					ANALYTICAL REQUEST				
		Date Collected	Time Collected	Water	Solid				HCl	H2SO4	HNO3	NaOH	None	TPH-g and VOCs (8260B)	TPH-D and TPH-mo (8015M)	SVOCs (8270C)	Title 22 Metals (6010/7000)*	
	MW-01	8/14/17	12:05	X				11						6	2	2	-	
	MW-02		13:30	X				11						6	2	2	-	
	MW-03		16:45	X				11						6	2	2	-	
	MW-04		14:40	X				11						6	2	2	-	
	DUP-01		14:50	X				11						6	2	2	-	
	MW-05		15:55	X				11						6	2	2	-	
	TB-081417			X				2	X					X				

Notes: were not
* metals filtered in the field
also email hilary.whitney@erm.com and anthony.bilecci@erm.com
doug.moberg@erm.com
& shannon.martin@erm.com

SAMPLE RECEIPT
☐ Intact
☐ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:
Hilary Whitney DATE: 8/14/17 TIME: 17:10
DATE: TIME:
DATE: TIME:

RECEIVED BY:
M DATE: 8/14/17 TIME: 17:10
DATE: TIME:
DATE: TIME:

COOLER RECEIPT CHECKLIST

ENTHALPY Berkeley

Login # 291572 Date Received 8.14.17 Number of coolers 2
Client ERM Project Brush St.

Date Opened 8.14.17 By (print) DC (sign)
Date Logged in 1 By (print) MS (sign)
Date Labelled 1 By (print) DC (sign)

1. Did cooler come with a shipping slip (airbill, etc) YES (NO)
   Shipping info
2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many Name Date
2B. Were custody seals intact upon arrival? YES NO N/A
3. Were custody papers dry and intact when received? (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe)

☐ Bubble Wrap ☒ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 5.2, 5.0

☐ Temperature blank(s) included? ☐ Thermometer# ☒ IR Gun# 4

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES (NO)
   If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? (YES) NO
10. Are there any missing / extra samples? YES (NO)
11. Are samples in the appropriate containers for indicated tests? (YES) NO
12. Are sample labels present, in good condition and complete? (YES) NO
13. Do the sample labels agree with custody papers? (YES) NO
14. Was sufficient amount of sample sent for tests requested? (YES) NO
15. Are the samples appropriately preserved? YES NO (N/A)
16. Did you check preservatives for all bottles for each sample? YES NO (N/A)
17. Did you document your preservative check? (pH strip lot#) YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? YES (NO) N/A
21. Was the client contacted concerning this sample delivery? YES (NO)
   If YES, Who was called? By Date:

COMMENTS
20) Samples 2+6: 5/6 VOAs arrived w/ bubble
Sample 5: 2/6 VOAs arrived w/ bubble

Rev 14, 8/01/17

Enthalpy Berkeley Sample Preservation for 291572

Sample	pH: <2	>9	>12	Other
-001a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[ ]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____
f	[ ]	[ ]	[ ]	_____
g	[ ]	[ ]	[ ]	_____
h	[ ]	[ ]	[ ]	_____
i	[ ]	[ ]	[ ]	_____
j	[ ]	[ ]	[ ]	_____
k	[ ]	[ ]	[ ]	_____
l	[ ]	[ ]	[ ]	_____
-002a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[ ]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____
f	[ ]	[ ]	[ ]	_____
g	[ ]	[ ]	[ ]	_____
h	[ ]	[ ]	[ ]	_____
i	[ ]	[ ]	[ ]	_____
j	[ ]	[ ]	[ ]	_____
k	[ ]	[ ]	[ ]	_____
l	[ ]	[ ]	[ ]	_____
-003a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[ ]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____
f	[ ]	[ ]	[ ]	_____
g	[ ]	[ ]	[ ]	_____
h	[ ]	[ ]	[ ]	_____
i	[ ]	[ ]	[ ]	_____
j	[ ]	[ ]	[ ]	_____
k	[ ]	[ ]	[ ]	_____
l	[ ]	[ ]	[ ]	_____
-004a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[ ]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____
f	[ ]	[ ]	[ ]	_____
g	[ ]	[ ]	[ ]	_____
h	[ ]	[ ]	[ ]	_____
i	[ ]	[ ]	[ ]	_____
j	[ ]	[ ]	[ ]	_____
k	[ ]	[ ]	[ ]	_____
l	[ ]	[ ]	[ ]	_____
-005a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[ ]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____
f	[ ]	[ ]	[ ]	_____
g	[ ]	[ ]	[ ]	_____
h	[ ]	[ ]	[ ]	_____
i	[ ]	[ ]	[ ]	_____
j	[ ]	[ ]	[ ]	_____
k	[ ]	[ ]	[ ]	_____
-006a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[ ]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____
f	[ ]	[ ]	[ ]	_____
g	[ ]	[ ]	[ ]	_____
h	[ ]	[ ]	[ ]	_____
i	[ ]	[ ]	[ ]	_____
j	[ ]	[ ]	[ ]	_____
k	[ ]	[ ]	[ ]	_____
-007a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____

Analyst: DC

Date: 8.14.17

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ENTHALPY ANALYTICAL

Detections Summary for 291572

Results for any subcontracted analyses are not included in this summary.

Client : ERM
Project : 0399889.02.05
Location : PG&E Brush Street

Client Sample ID : MW-01 Laboratory Sample ID : 291572-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	18	J	50	6.4	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Vinyl Chloride	0.1	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,1-Dichloroethene	0.6		0.5	0.2	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,1-Dichloroethane	0.7		0.5	0.2	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
2-Butanone	1.3	J	10	0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
cis-1,2-Dichloroethene	1.1		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,2-Dichloroethane	0.4	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Trichloroethene	1.6		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
bis(2-Ethylhexyl)phthalate	2.1	J	11	1.9	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C

Client Sample ID : MW-02 Laboratory Sample ID : 291572-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	420	Y	50	16	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Gasoline C7-C12	12,000		1,700	210	ug/L	As Recd	33.33	EPA 8260B	EPA 5030B
MTBE	41		17	3.7	ug/L	As Recd	33.33	EPA 8260B	EPA 5030B
2-Butanone	21	J	330	17	ug/L	As Recd	33.33	EPA 8260B	EPA 5030B
Benzene	2,500		17	3.3	ug/L	As Recd	33.33	EPA 8260B	EPA 5030B
Toluene	1,400		17	3.3	ug/L	As Recd	33.33	EPA 8260B	EPA 5030B
Ethylbenzene	210		17	3.3	ug/L	As Recd	33.33	EPA 8260B	EPA 5030B
m,p-Xylenes	520		17	4.8	ug/L	As Recd	33.33	EPA 8260B	EPA 5030B
o-Xylene	240		17	3.3	ug/L	As Recd	33.33	EPA 8260B	EPA 5030B
Isopropylbenzene	13	J	17	3.3	ug/L	As Recd	33.33	EPA 8260B	EPA 5030B
Propylbenzene	23		17	3.3	ug/L	As Recd	33.33	EPA 8260B	EPA 5030B
1,3,5-Trimethylbenzene	43		17	3.3	ug/L	As Recd	33.33	EPA 8260B	EPA 5030B
1,2,4-Trimethylbenzene	160		17	3.3	ug/L	As Recd	33.33	EPA 8260B	EPA 5030B
Naphthalene	31	J	67	3.5	ug/L	As Recd	33.33	EPA 8260B	EPA 5030B
Phenol	5.5	J	10	1.0	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
4-Methylphenol	3.4	J	10	1.7	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Naphthalene	39		10	1.9	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
2-Methylnaphthalene	11		10	1.8	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
1-Methylnaphthalene	6.0	J	10	2.0	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Phenanthrene	2.4	J	10	1.9	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C

ENTHALPY ANALYTICAL

Client Sample ID : MW-03 Laboratory Sample ID : 291572-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	41	J	50	6.4	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Bromomethane	1.1		1.0	0.2	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Acetone	12		10	3.3	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Carbon Disulfide	0.2	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
MTBE	160		1.7	0.3	ug/L	As Recd	3.333	EPA 8260B	EPA 5030B
2-Butanone	1.4	J	10	0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Chloroform	0.1	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Benzene	0.9		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Toluene	0.1	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
bis(2-Ethylhexyl)phthalate	5.2	J	9.4	1.7	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C

Client Sample ID : MW-04 Laboratory Sample ID : 291572-004

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	590	Y	50	16	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Gasoline C7-C12	1,600		310	85	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
Carbon Disulfide	1.1	J	3.1	0.8	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
MTBE	3.3		3.1	0.7	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
Benzene	460		3.1	0.9	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
Toluene	6.5		3.1	0.7	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
Ethylbenzene	81		3.1	0.7	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
m,p-Xylenes	7.0		3.1	0.7	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
o-Xylene	9.5		3.1	1.0	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
Isopropylbenzene	10		3.1	0.6	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
Propylbenzene	25		3.1	0.6	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
1,3,5-Trimethylbenzene	12		3.1	0.7	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
tert-Butylbenzene	0.6	J	3.1	0.6	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
1,2,4-Trimethylbenzene	29		3.1	0.7	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
sec-Butylbenzene	2.6	J	3.1	0.6	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
Naphthalene	16		13	1.6	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
Phenol	19		11	1.1	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Naphthalene	13		11	2.1	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
2-Methylnaphthalene	2.3	J	11	2.0	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
1-Methylnaphthalene	11		11	2.2	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Acenaphthene	4.2	J	11	2.0	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Dibenzofuran	2.1	J	11	2.1	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Fluorene	3.9	J	11	1.9	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Phenanthrene	9.8	J	11	2.1	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Anthracene	7.2	J	11	2.1	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Fluoranthene	14		11	2.2	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Pyrene	10	J	11	1.8	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C

ENTHALPY ANALYTICAL

Client Sample ID : DUP-01 Laboratory Sample ID : 291572-005

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	510	Y	50	16	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Gasoline C7-C12	1,300		310	85	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
Carbon Disulfide	1.0	J	3.1	0.8	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
MTBE	4.2		3.1	0.7	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
Benzene	530		3.1	0.9	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
Toluene	5.9		3.1	0.7	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
Ethylbenzene	55		3.1	0.7	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
m,p-Xylenes	6.2		3.1	0.7	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
o-Xylene	5.2		3.1	1.0	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
Isopropylbenzene	7.5		3.1	0.6	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
Propylbenzene	16		3.1	0.6	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
1,3,5-Trimethylbenzene	9.3		3.1	0.7	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
1,2,4-Trimethylbenzene	18		3.1	0.7	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
sec-Butylbenzene	1.8	J	3.1	0.6	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
n-Butylbenzene	1.0	J,b	3.1	0.8	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
Naphthalene	14		13	1.6	ug/L	As Recd	6.250	EPA 8260B	EPA 5030B
Phenol	1.8	J	9.4	0.96	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Naphthalene	12		9.4	1.8	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
1-Methylnaphthalene	11		9.4	1.9	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Acenaphthene	4.1	J	9.4	1.7	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Dibenzofuran	2.0	J	9.4	1.8	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Fluorene	3.6	J	9.4	1.7	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Phenanthrene	9.3	J	9.4	1.8	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Anthracene	7.8	J	9.4	1.7	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Fluoranthene	13		9.4	1.8	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
Pyrene	10		9.4	1.6	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C
bis(2-Ethylhexyl)phthalate	3.3	J	9.4	1.7	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C

Client Sample ID : MW-05 Laboratory Sample ID : 291572-006

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	27	J	50	6.4	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
MTBE	1.5		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,2-Dichloroethane	0.8		0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Trichloroethene	0.2	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Toluene	0.1	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Tetrachloroethene	0.4	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
bis(2-Ethylhexyl)phthalate	1.9	J	9.4	1.7	ug/L	As Recd	1.000	EPA 8270C	EPA 3520C

Client Sample ID : TB-081417 Laboratory Sample ID : 291572-007

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	21	J	50	6.4	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
2-Butanone	0.9	J	10	0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B

J = Estimated value
Y = Sample exhibits chromatographic pattern which does not resemble standard
b = See narrative

ENTHALPY ANALYTICAL

Total Extractable Hydrocarbons

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 3520C
Project#:	0399889.02.05	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	08/14/17
Units:	ug/L	Received:	08/14/17
Diln Fac:	1.000	Prepared:	08/16/17
Batch#:	250729		

Field ID: MW-01 Analyzed: 08/17/17
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 291572-001

Analyte	Result	RL	MDL
Diesel C10-C24	ND	50	16
Motor Oil C24-C36	ND	300	96

Surrogate	%REC	Limits
o-Terphenyl	83	52-138

Field ID: MW-02 Analyzed: 08/17/17
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 291572-002

Analyte	Result	RL	MDL
Diesel C10-C24	420 Y	50	16
Motor Oil C24-C36	ND	300	96

Surrogate	%REC	Limits
o-Terphenyl	91	52-138

Field ID: MW-03 Analyzed: 08/17/17
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 291572-003

Analyte	Result	RL	MDL
Diesel C10-C24	ND	50	16
Motor Oil C24-C36	ND	300	96

Surrogate	%REC	Limits
o-Terphenyl	87	52-138

Field ID: MW-04 Analyzed: 08/18/17
Type: SAMPLE Cleanup Method: EPA 3630C
Lab ID: 291572-004

Analyte	Result	RL	MDL
Diesel C10-C24	590 Y	50	16
Motor Oil C24-C36	ND	300	96

Surrogate	%REC	Limits
o-Terphenyl	91	52-138

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Total Extractable Hydrocarbons

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 3520C
Project#:	0399889.02.05	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	08/14/17
Units:	ug/L	Received:	08/14/17
Diln Fac:	1.000	Prepared:	08/16/17
Batch#:	250729		

Field ID:	DUP-01	Analyzed:	08/18/17
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	291572-005		

Analyte	Result	RL	MDL
Diesel C10-C24	510 Y	50	16
Motor Oil C24-C36	ND	300	96

Surrogate	%REC	Limits
o-Terphenyl	87	52-138

Field ID:	MW-05	Analyzed:	08/18/17
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	291572-006		

Analyte	Result	RL	MDL
Diesel C10-C24	ND	50	16
Motor Oil C24-C36	ND	300	96

Surrogate	%REC	Limits
o-Terphenyl	92	52-138

Type:	BLANK	Analyzed:	08/17/17
Lab ID:	QC897199	Cleanup Method:	EPA 3630C

Analyte	Result	RL	MDL
Diesel C10-C24	ND	50	16
Motor Oil C24-C36	ND	300	96

Surrogate	%REC	Limits
o-Terphenyl	91	52-138

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 3520C
Project#:	0399889.02.05	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	250729
Units:	ug/L	Prepared:	08/16/17
Diln Fac:	1.000	Analyzed:	08/17/17

Type: BS Cleanup Method: EPA 3630C
Lab ID: QC897200

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,067	83	52-124

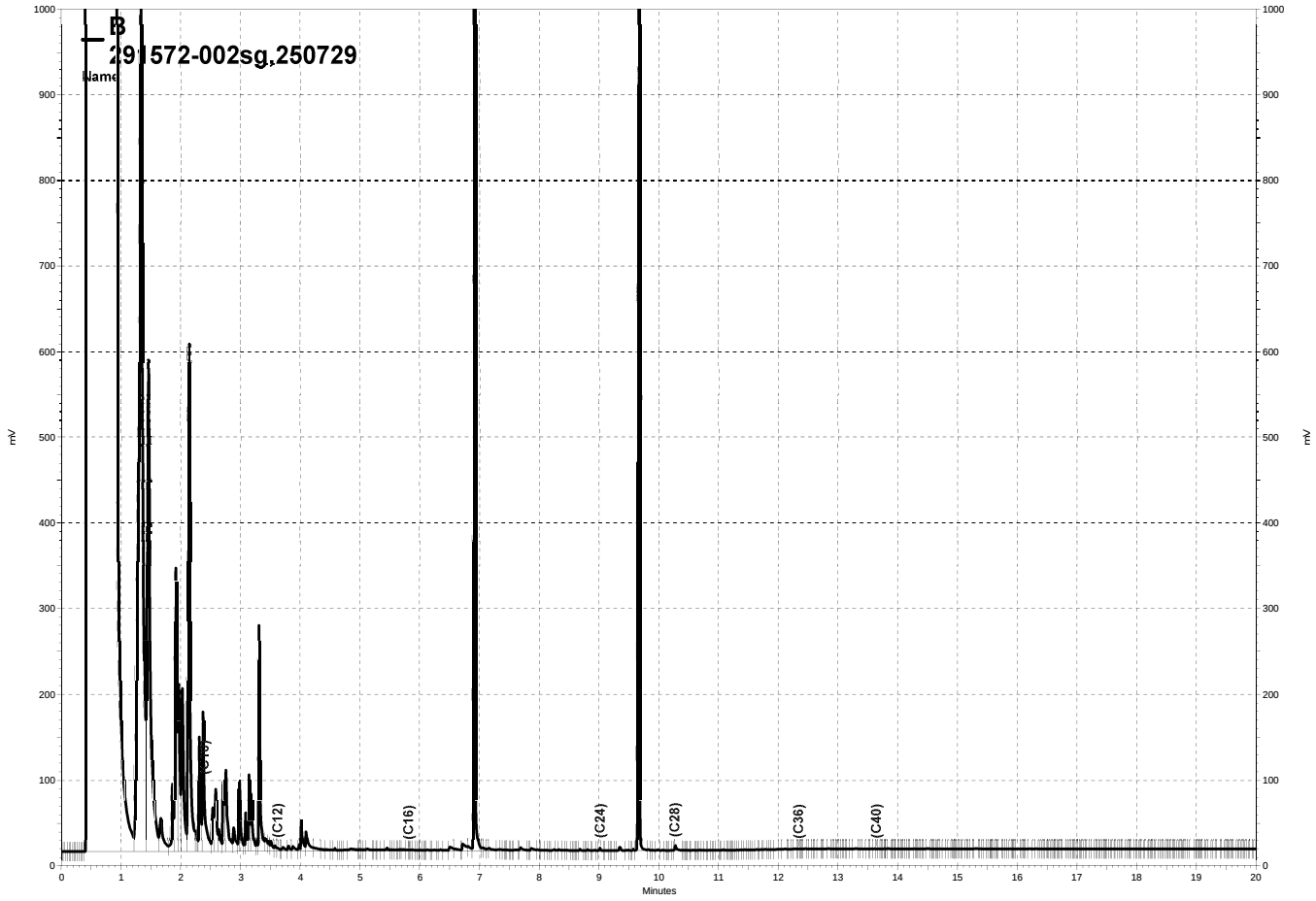
Surrogate	%REC	Limits
o-Terphenyl	89	52-138

Type: BSD Cleanup Method: EPA 3630C
Lab ID: QC897201

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	1,965	79	52-124	5	34

Surrogate	%REC	Limits
o-Terphenyl	87	52-138

RPD= Relative Percent Difference



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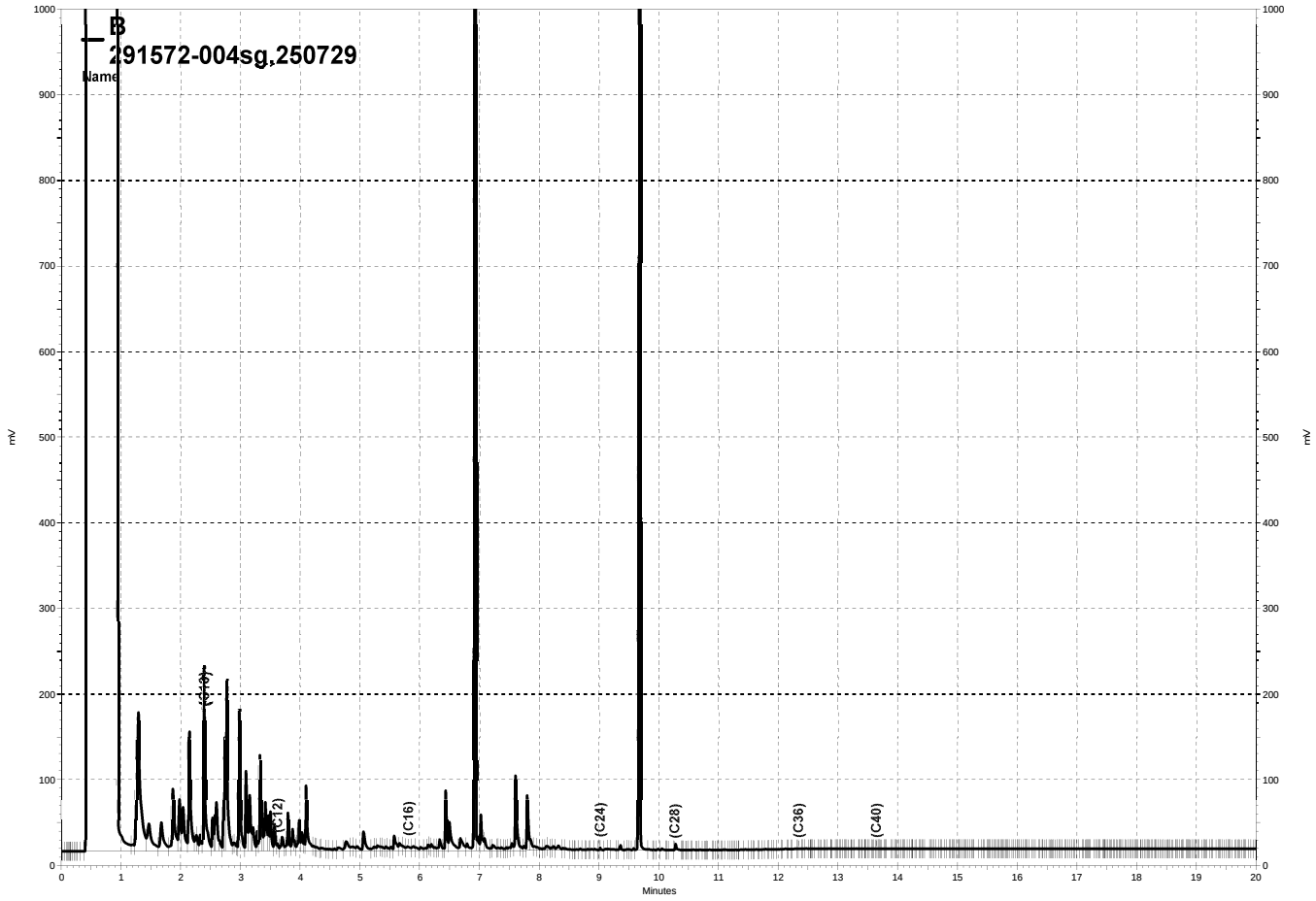

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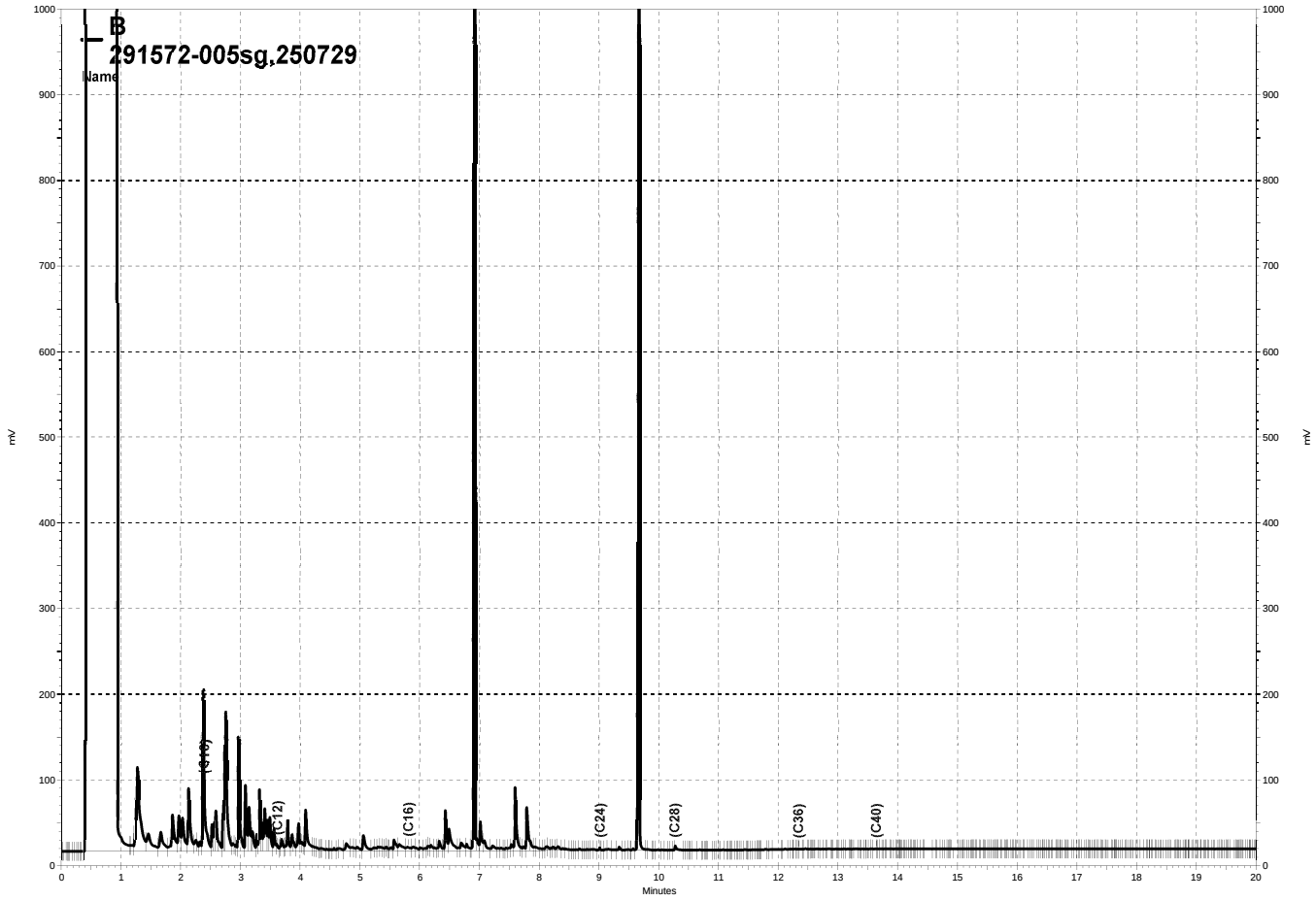

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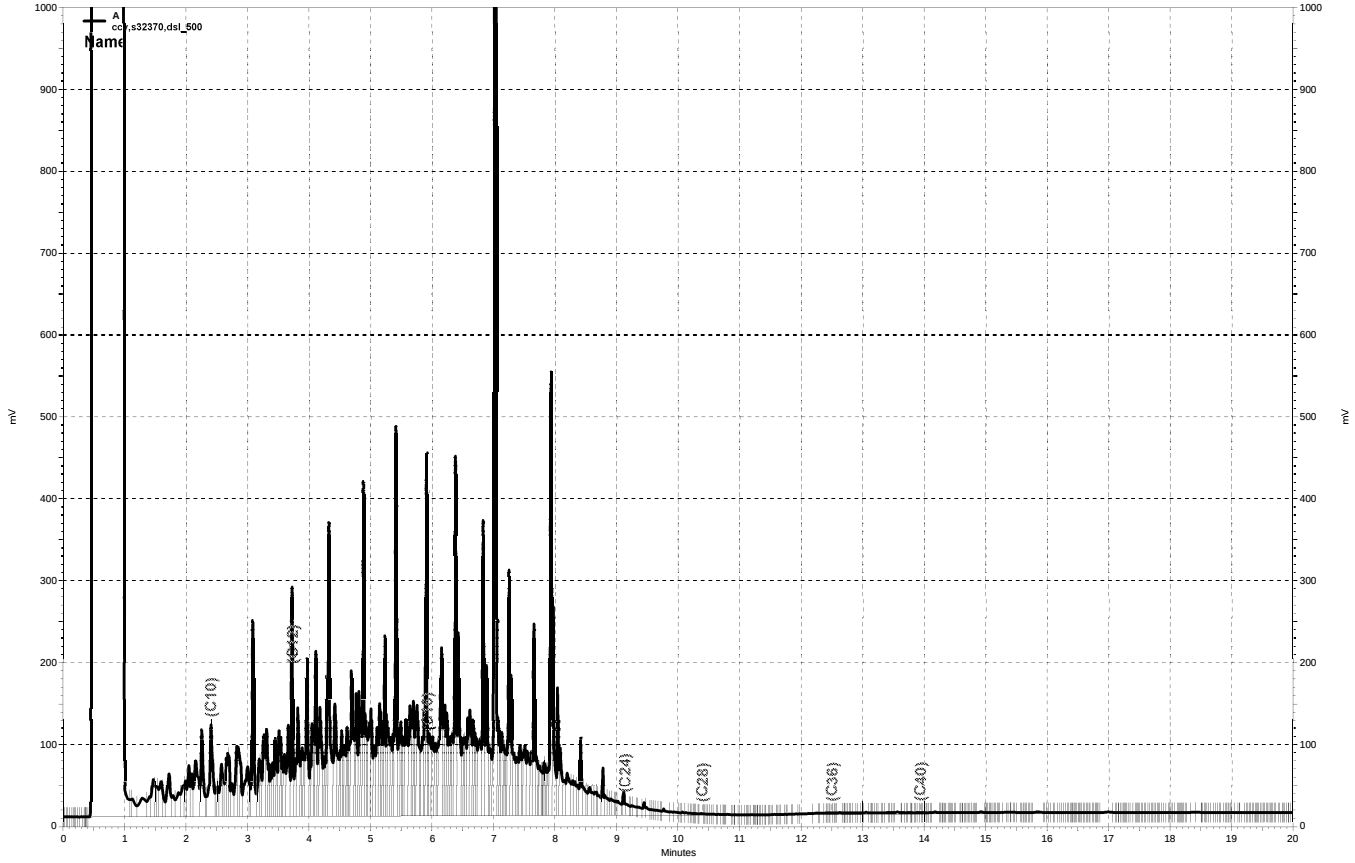

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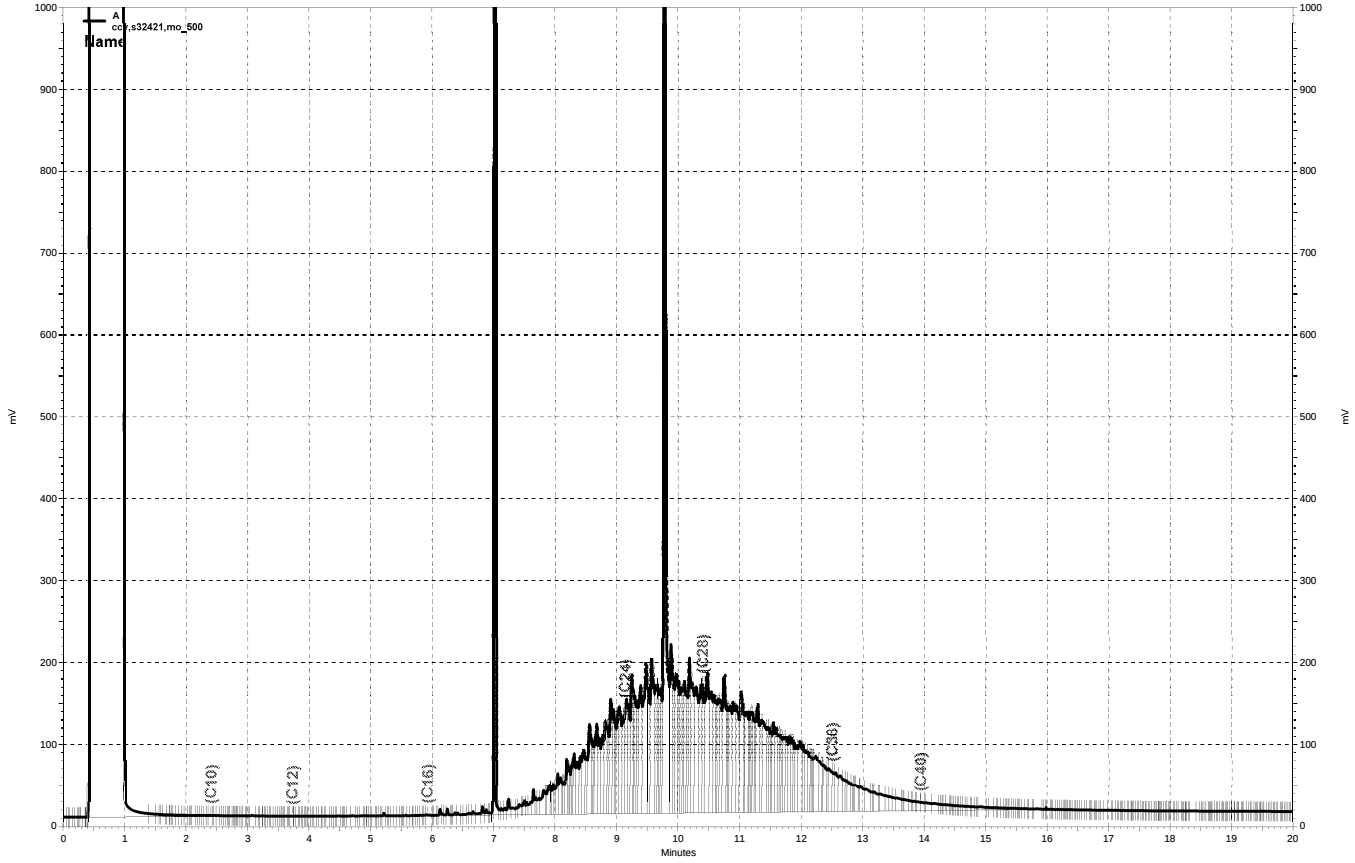

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ENTHALPY ANALYTICAL

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 5030B
Project#:	0399889.02.05	Analysis:	EPA 8260B
Field ID:	MW-01	Batch#:	250675
Lab ID:	291572-001	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17
Units:	ug/L	Analyzed:	08/15/17
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Gasoline C7-C12	18 J	50	6.4
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.3
Vinyl Chloride	0.1 J	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.3
Trichlorofluoromethane	ND	1.0	0.2
Acetone	ND	10	3.3
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	0.6	0.5	0.2
Methylene Chloride	ND	10	0.2
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	1.1
1,1-Dichloroethane	0.7	0.5	0.2
2-Butanone	1.3 J	10	0.5
cis-1,2-Dichloroethene	1.1	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	0.4 J	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	1.6	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.7
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.2
2-Hexanone	ND	10	0.5
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.2
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 5030B
Project#:	0399889.02.05	Analysis:	EPA 8260B
Field ID:	MW-01	Batch#:	250675
Lab ID:	291572-001	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17
Units:	ug/L	Analyzed:	08/15/17
Diln Fac:	1.000		

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	0.5	0.1
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.3
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.1
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-120
1,2-Dichloroethane-d4	105	73-136
Toluene-d8	108	80-120
Bromofluorobenzene	103	80-120

J= Estimated value
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RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 5030B
Project#:	0399889.02.05	Analysis:	EPA 8260B
Field ID:	MW-02	Batch#:	250675
Lab ID:	291572-002	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17
Units:	ug/L	Analyzed:	08/15/17
Diln Fac:	33.33		

Analyte	Result	RL	MDL
Gasoline C7-C12	12,000	1,700	210
Freon 12	ND	33	3.3
Chloromethane	ND	33	9.1
Vinyl Chloride	ND	17	3.3
Bromomethane	ND	33	6.1
Chloroethane	ND	33	8.9
Trichlorofluoromethane	ND	33	7.6
Acetone	ND	330	110
Freon 113	ND	67	4.4
1,1-Dichloroethene	ND	17	5.1
Methylene Chloride	ND	330	5.9
Carbon Disulfide	ND	17	3.3
MTBE	41	17	3.7
trans-1,2-Dichloroethene	ND	17	5.0
Vinyl Acetate	ND	330	38
1,1-Dichloroethane	ND	17	5.3
2-Butanone	21 J	330	17
cis-1,2-Dichloroethene	ND	17	4.2
2,2-Dichloropropane	ND	17	4.8
Chloroform	ND	17	3.3
Bromochloromethane	ND	17	4.6
1,1,1-Trichloroethane	ND	17	4.2
1,1-Dichloropropene	ND	17	4.3
Carbon Tetrachloride	ND	17	4.1
1,2-Dichloroethane	ND	17	3.6
Benzene	2,500	17	3.3
Trichloroethene	ND	17	3.3
1,2-Dichloropropane	ND	17	4.6
Bromodichloromethane	ND	17	4.0
Dibromomethane	ND	17	4.9
4-Methyl-2-Pentanone	ND	330	22
cis-1,3-Dichloropropene	ND	17	3.5
Toluene	1,400	17	3.3
trans-1,3-Dichloropropene	ND	17	4.6
1,1,2-Trichloroethane	ND	17	5.1
2-Hexanone	ND	330	17
1,3-Dichloropropane	ND	17	5.0
Tetrachloroethene	ND	17	3.3
Dibromochloromethane	ND	17	4.9
1,2-Dibromoethane	ND	17	4.5
Chlorobenzene	ND	17	4.3
1,1,1,2-Tetrachloroethane	ND	17	3.5
Ethylbenzene	210	17	3.3
m,p-Xylenes	520	17	4.8
o-Xylene	240	17	3.3
Styrene	ND	17	3.3
Bromoform	ND	33	4.8
Isopropylbenzene	13 J	17	3.3
1,1,2,2-Tetrachloroethane	ND	17	4.0
1,2,3-Trichloropropane	ND	17	5.1
Propylbenzene	23	17	3.3
Bromobenzene	ND	17	3.6

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MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 5030B
Project#:	0399889.02.05	Analysis:	EPA 8260B
Field ID:	MW-02	Batch#:	250675
Lab ID:	291572-002	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17
Units:	ug/L	Analyzed:	08/15/17
Diln Fac:	33.33		

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	43	17	3.3
2-Chlorotoluene	ND	17	3.3
4-Chlorotoluene	ND	17	3.3
tert-Butylbenzene	ND	17	3.3
1,2,4-Trimethylbenzene	160	17	3.3
sec-Butylbenzene	ND	17	3.3
para-Isopropyl Toluene	ND	17	3.3
1,3-Dichlorobenzene	ND	17	3.7
1,4-Dichlorobenzene	ND	17	3.3
n-Butylbenzene	ND	17	3.3
1,2-Dichlorobenzene	ND	17	3.3
1,2-Dibromo-3-Chloropropane	ND	67	8.3
1,2,4-Trichlorobenzene	ND	17	4.4
Hexachlorobutadiene	ND	67	4.6
Naphthalene	31 J	67	3.5
1,2,3-Trichlorobenzene	ND	17	4.7

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-120
1,2-Dichloroethane-d4	104	73-136
Toluene-d8	105	80-120
Bromofluorobenzene	104	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 5030B
Project#:	0399889.02.05	Analysis:	EPA 8260B
Field ID:	MW-03	Units:	ug/L
Lab ID:	291572-003	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17

Analyte	Result	RL	MDL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	41 J	50	6.4	1.000	250675	08/15/17
Freon 12	ND	1.0	0.1	1.000	250675	08/15/17
Chloromethane	ND	1.0	0.3	1.000	250675	08/15/17
Vinyl Chloride	ND	0.5	0.1	1.000	250675	08/15/17
Bromomethane	1.1	1.0	0.2	1.000	250675	08/15/17
Chloroethane	ND	1.0	0.3	1.000	250675	08/15/17
Trichlorofluoromethane	ND	1.0	0.2	1.000	250675	08/15/17
Acetone	12	10	3.3	1.000	250675	08/15/17
Freon 113	ND	2.0	0.1	1.000	250675	08/15/17
1,1-Dichloroethene	ND	0.5	0.2	1.000	250675	08/15/17
Methylene Chloride	ND	10	0.2	1.000	250675	08/15/17
Carbon Disulfide	0.2 J	0.5	0.1	1.000	250675	08/15/17
MTBE	160	1.7	0.3	3.333	250723	08/16/17
trans-1,2-Dichloroethene	ND	0.5	0.2	1.000	250675	08/15/17
Vinyl Acetate	ND	10	1.1	1.000	250675	08/15/17
1,1-Dichloroethane	ND	0.5	0.2	1.000	250675	08/15/17
2-Butanone	1.4 J	10	0.5	1.000	250675	08/15/17
cis-1,2-Dichloroethene	ND	0.5	0.1	1.000	250675	08/15/17
2,2-Dichloropropane	ND	0.5	0.1	1.000	250675	08/15/17
Chloroform	0.1 J	0.5	0.1	1.000	250675	08/15/17
Bromochloromethane	ND	0.5	0.1	1.000	250675	08/15/17
1,1,1-Trichloroethane	ND	0.5	0.1	1.000	250675	08/15/17
1,1-Dichloropropene	ND	0.5	0.1	1.000	250675	08/15/17
Carbon Tetrachloride	ND	0.5	0.1	1.000	250675	08/15/17
1,2-Dichloroethane	ND	0.5	0.1	1.000	250675	08/15/17
Benzene	0.9	0.5	0.1	1.000	250675	08/15/17
Trichloroethene	ND	0.5	0.1	1.000	250675	08/15/17
1,2-Dichloropropane	ND	0.5	0.1	1.000	250675	08/15/17
Bromodichloromethane	ND	0.5	0.1	1.000	250675	08/15/17
Dibromomethane	ND	0.5	0.1	1.000	250675	08/15/17
4-Methyl-2-Pentanone	ND	10	0.7	1.000	250675	08/15/17
cis-1,3-Dichloropropene	ND	0.5	0.1	1.000	250675	08/15/17
Toluene	0.1 J	0.5	0.1	1.000	250675	08/15/17
trans-1,3-Dichloropropene	ND	0.5	0.1	1.000	250675	08/15/17
1,1,2-Trichloroethane	ND	0.5	0.2	1.000	250675	08/15/17
2-Hexanone	ND	10	0.5	1.000	250675	08/15/17
1,3-Dichloropropane	ND	0.5	0.1	1.000	250675	08/15/17

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 5030B
Project#:	0399889.02.05	Analysis:	EPA 8260B
Field ID:	MW-03	Units:	ug/L
Lab ID:	291572-003	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17

Analyte	Result	RL	MDL	Diln Fac	Batch#	Analyzed
Tetrachloroethene	ND	0.5	0.1	1.000	250675	08/15/17
Dibromochloromethane	ND	0.5	0.1	1.000	250675	08/15/17
1,2-Dibromoethane	ND	0.5	0.1	1.000	250675	08/15/17
Chlorobenzene	ND	0.5	0.1	1.000	250675	08/15/17
1,1,1,2-Tetrachloroethane	ND	0.5	0.1	1.000	250675	08/15/17
Ethylbenzene	ND	0.5	0.1	1.000	250675	08/15/17
m,p-Xylenes	ND	0.5	0.1	1.000	250675	08/15/17
o-Xylene	ND	0.5	0.1	1.000	250675	08/15/17
Styrene	ND	0.5	0.1	1.000	250675	08/15/17
Bromoform	ND	1.0	0.1	1.000	250675	08/15/17
Isopropylbenzene	ND	0.5	0.1	1.000	250675	08/15/17
1,1,2,2-Tetrachloroethane	ND	0.5	0.1	1.000	250675	08/15/17
1,2,3-Trichloropropane	ND	0.5	0.2	1.000	250675	08/15/17
Propylbenzene	ND	0.5	0.1	1.000	250675	08/15/17
Bromobenzene	ND	0.5	0.1	1.000	250675	08/15/17
1,3,5-Trimethylbenzene	ND	0.5	0.1	1.000	250675	08/15/17
2-Chlorotoluene	ND	0.5	0.1	1.000	250675	08/15/17
4-Chlorotoluene	ND	0.5	0.1	1.000	250675	08/15/17
tert-Butylbenzene	ND	0.5	0.1	1.000	250675	08/15/17
1,2,4-Trimethylbenzene	ND	0.5	0.1	1.000	250675	08/15/17
sec-Butylbenzene	ND	0.5	0.1	1.000	250675	08/15/17
para-Isopropyl Toluene	ND	0.5	0.1	1.000	250675	08/15/17
1,3-Dichlorobenzene	ND	0.5	0.1	1.000	250675	08/15/17
1,4-Dichlorobenzene	ND	0.5	0.1	1.000	250675	08/15/17
n-Butylbenzene	ND	0.5	0.1	1.000	250675	08/15/17
1,2-Dichlorobenzene	ND	0.5	0.1	1.000	250675	08/15/17
1,2-Dibromo-3-Chloropropane	ND	2.0	0.3	1.000	250675	08/15/17
1,2,4-Trichlorobenzene	ND	0.5	0.1	1.000	250675	08/15/17
Hexachlorobutadiene	ND	2.0	0.1	1.000	250675	08/15/17
Naphthalene	ND	2.0	0.1	1.000	250675	08/15/17
1,2,3-Trichlorobenzene	ND	0.5	0.1	1.000	250675	08/15/17

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	107	80-120	1.000	250675	08/15/17
1,2-Dichloroethane-d4	105	73-136	1.000	250675	08/15/17
Toluene-d8	108	80-120	1.000	250675	08/15/17
Bromofluorobenzene	107	80-120	1.000	250675	08/15/17

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 5030B
Project#:	0399889.02.05	Analysis:	EPA 8260B
Field ID:	MW-04	Batch#:	250751
Lab ID:	291572-004	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17
Units:	ug/L	Analyzed:	08/17/17
Diln Fac:	6.250		

Analyte	Result	RL	MDL
Gasoline C7-C12	1,600	310	85
Freon 12	ND	6.3	0.8
Chloromethane	ND	6.3	0.8
Vinyl Chloride	ND	3.1	0.6
Bromomethane	ND	6.3	1.3
Chloroethane	ND	6.3	0.8
Trichlorofluoromethane	ND	6.3	0.7
Acetone	ND	63	21
Freon 113	ND	13	0.9
1,1-Dichloroethene	ND	3.1	0.8
Methylene Chloride	ND	63	1.1
Carbon Disulfide	1.1 J	3.1	0.8
MTBE	3.3	3.1	0.7
trans-1,2-Dichloroethene	ND	3.1	0.9
Vinyl Acetate	ND	63	3.1
1,1-Dichloroethane	ND	3.1	0.9
2-Butanone	ND	63	3.1
cis-1,2-Dichloroethene	ND	3.1	0.6
2,2-Dichloropropane	ND	3.1	0.7
Chloroform	ND	3.1	0.6
Bromochloromethane	ND	3.1	0.8
1,1,1-Trichloroethane	ND	3.1	0.9
1,1-Dichloropropene	ND	3.1	0.6
Carbon Tetrachloride	ND	3.1	1.0
1,2-Dichloroethane	ND	3.1	0.7
Benzene	460	3.1	0.9
Trichloroethene	ND	3.1	0.7
1,2-Dichloropropane	ND	3.1	0.6
Bromodichloromethane	ND	3.1	0.6
Dibromomethane	ND	3.1	0.6
4-Methyl-2-Pentanone	ND	63	0.9
cis-1,3-Dichloropropene	ND	3.1	0.6
Toluene	6.5	3.1	0.7
trans-1,3-Dichloropropene	ND	3.1	0.6
1,1,2-Trichloroethane	ND	3.1	0.8
2-Hexanone	ND	63	1.7
1,3-Dichloropropane	ND	3.1	0.9
Tetrachloroethene	ND	3.1	1.0
Dibromochloromethane	ND	3.1	0.9
1,2-Dibromoethane	ND	3.1	0.6
Chlorobenzene	ND	3.1	0.7
1,1,1,2-Tetrachloroethane	ND	3.1	0.6
Ethylbenzene	81	3.1	0.7
m,p-Xylenes	7.0	3.1	0.7
o-Xylene	9.5	3.1	1.0
Styrene	ND	3.1	0.9
Bromoform	ND	6.3	1.1
Isopropylbenzene	10	3.1	0.6
1,1,2,2-Tetrachloroethane	ND	3.1	0.6
1,2,3-Trichloropropane	ND	3.1	0.6
Propylbenzene	25	3.1	0.6
Bromobenzene	ND	3.1	0.9

J= Estimated value
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MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 5030B
Project#:	0399889.02.05	Analysis:	EPA 8260B
Field ID:	MW-04	Batch#:	250751
Lab ID:	291572-004	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17
Units:	ug/L	Analyzed:	08/17/17
Diln Fac:	6.250		

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	12	3.1	0.7
2-Chlorotoluene	ND	3.1	1.0
4-Chlorotoluene	ND	3.1	0.8
tert-Butylbenzene	0.6 J	3.1	0.6
1,2,4-Trimethylbenzene	29	3.1	0.7
sec-Butylbenzene	2.6 J	3.1	0.6
para-Isopropyl Toluene	ND	3.1	0.6
1,3-Dichlorobenzene	ND	3.1	0.9
1,4-Dichlorobenzene	ND	3.1	0.6
n-Butylbenzene	ND	3.1	0.8
1,2-Dichlorobenzene	ND	3.1	0.8
1,2-Dibromo-3-Chloropropane	ND	13	1.6
1,2,4-Trichlorobenzene	ND	3.1	0.8
Hexachlorobutadiene	ND	13	1.6
Naphthalene	16	13	1.6
1,2,3-Trichlorobenzene	ND	3.1	1.0

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-120
1,2-Dichloroethane-d4	95	73-136
Toluene-d8	99	80-120
Bromofluorobenzene	98	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 5030B
Project#:	0399889.02.05	Analysis:	EPA 8260B
Field ID:	DUP-01	Batch#:	250751
Lab ID:	291572-005	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17
Units:	ug/L	Analyzed:	08/17/17
Diln Fac:	6.250		

Analyte	Result	RL	MDL
Gasoline C7-C12	1,300	310	85
Freon 12	ND	6.3	0.8
Chloromethane	ND	6.3	0.8
Vinyl Chloride	ND	3.1	0.6
Bromomethane	ND	6.3	1.3
Chloroethane	ND	6.3	0.8
Trichlorofluoromethane	ND	6.3	0.7
Acetone	ND	63	21
Freon 113	ND	13	0.9
1,1-Dichloroethene	ND	3.1	0.8
Methylene Chloride	ND	63	1.1
Carbon Disulfide	1.0 J	3.1	0.8
MTBE	4.2	3.1	0.7
trans-1,2-Dichloroethene	ND	3.1	0.9
Vinyl Acetate	ND	63	3.1
1,1-Dichloroethane	ND	3.1	0.9
2-Butanone	ND	63	3.1
cis-1,2-Dichloroethene	ND	3.1	0.6
2,2-Dichloropropane	ND	3.1	0.7
Chloroform	ND	3.1	0.6
Bromochloromethane	ND	3.1	0.8
1,1,1-Trichloroethane	ND	3.1	0.9
1,1-Dichloropropene	ND	3.1	0.6
Carbon Tetrachloride	ND	3.1	1.0
1,2-Dichloroethane	ND	3.1	0.7
Benzene	530	3.1	0.9
Trichloroethene	ND	3.1	0.7
1,2-Dichloropropane	ND	3.1	0.6
Bromodichloromethane	ND	3.1	0.6
Dibromomethane	ND	3.1	0.6
4-Methyl-2-Pentanone	ND	63	0.9
cis-1,3-Dichloropropene	ND	3.1	0.6
Toluene	5.9	3.1	0.7
trans-1,3-Dichloropropene	ND	3.1	0.6
1,1,2-Trichloroethane	ND	3.1	0.8
2-Hexanone	ND	63	1.7
1,3-Dichloropropane	ND	3.1	0.9
Tetrachloroethene	ND	3.1	1.0
Dibromochloromethane	ND	3.1	0.9
1,2-Dibromoethane	ND	3.1	0.6
Chlorobenzene	ND	3.1	0.7
1,1,1,2-Tetrachloroethane	ND	3.1	0.6
Ethylbenzene	55	3.1	0.7
m,p-Xylenes	6.2	3.1	0.7
o-Xylene	5.2	3.1	1.0
Styrene	ND	3.1	0.9
Bromoform	ND	6.3	1.1
Isopropylbenzene	7.5	3.1	0.6
1,1,2,2-Tetrachloroethane	ND	3.1	0.6
1,2,3-Trichloropropane	ND	3.1	0.6
Propylbenzene	16	3.1	0.6

J= Estimated value
b= See narrative
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 5030B
Project#:	0399889.02.05	Analysis:	EPA 8260B
Field ID:	DUP-01	Batch#:	250751
Lab ID:	291572-005	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17
Units:	ug/L	Analyzed:	08/17/17
Diln Fac:	6.250		

Analyte	Result	RL	MDL
Bromobenzene	ND	3.1	0.9
1,3,5-Trimethylbenzene	9.3	3.1	0.7
2-Chlorotoluene	ND	3.1	1.0
4-Chlorotoluene	ND	3.1	0.8
tert-Butylbenzene	ND	3.1	0.6
1,2,4-Trimethylbenzene	18	3.1	0.7
sec-Butylbenzene	1.8 J	3.1	0.6
para-Isopropyl Toluene	ND	3.1	0.6
1,3-Dichlorobenzene	ND	3.1	0.9
1,4-Dichlorobenzene	ND	3.1	0.6
n-Butylbenzene	1.0 J b	3.1	0.8
1,2-Dichlorobenzene	ND	3.1	0.8
1,2-Dibromo-3-Chloropropane	ND	13	1.6
1,2,4-Trichlorobenzene	ND	3.1	0.8
Hexachlorobutadiene	ND	13	1.6
Naphthalene	14	13	1.6
1,2,3-Trichlorobenzene	ND	3.1	1.0

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-120
1,2-Dichloroethane-d4	96	73-136
Toluene-d8	106	80-120
Bromofluorobenzene	102	80-120

J= Estimated value
b= See narrative
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 5030B
Project#:	0399889.02.05	Analysis:	EPA 8260B
Field ID:	MW-05	Batch#:	250675
Lab ID:	291572-006	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17
Units:	ug/L	Analyzed:	08/15/17
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Gasoline C7-C12	27 J	50	6.4
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.3
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.3
Trichlorofluoromethane	ND	1.0	0.2
Acetone	ND	10	3.3
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.2
Methylene Chloride	ND	10	0.2
Carbon Disulfide	ND	0.5	0.1
MTBE	1.5	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	1.1
1,1-Dichloroethane	ND	0.5	0.2
2-Butanone	ND	10	0.5
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	0.8	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	0.2 J	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.7
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	0.1 J	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.2
2-Hexanone	ND	10	0.5
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	0.4 J	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.2
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 5030B
Project#:	0399889.02.05	Analysis:	EPA 8260B
Field ID:	MW-05	Batch#:	250675
Lab ID:	291572-006	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17
Units:	ug/L	Analyzed:	08/15/17
Diln Fac:	1.000		

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	0.5	0.1
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.3
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.1
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-120
1,2-Dichloroethane-d4	105	73-136
Toluene-d8	107	80-120
Bromofluorobenzene	108	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 5030B
Project#:	0399889.02.05	Analysis:	EPA 8260B
Field ID:	TB-081417	Batch#:	250675
Lab ID:	291572-007	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17
Units:	ug/L	Analyzed:	08/15/17
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Gasoline C7-C12	21 J	50	6.4
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.3
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.3
Trichlorofluoromethane	ND	1.0	0.2
Acetone	ND	10	3.3
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.2
Methylene Chloride	ND	10	0.2
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	1.1
1,1-Dichloroethane	ND	0.5	0.2
2-Butanone	0.9 J	10	0.5
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.7
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.2
2-Hexanone	ND	10	0.5
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.2
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 5030B
Project#:	0399889.02.05	Analysis:	EPA 8260B
Field ID:	TB-081417	Batch#:	250675
Lab ID:	291572-007	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17
Units:	ug/L	Analyzed:	08/15/17
Diln Fac:	1.000		

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	0.5	0.1
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.3
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.1
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	110	80-120
1,2-Dichloroethane-d4	104	73-136
Toluene-d8	107	80-120
Bromofluorobenzene	107	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 5030B
Project#:	0399889.02.05	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC896976	Batch#:	250675
Matrix:	Water	Analyzed:	08/15/17
Units:	ug/L		

Analyte	Result	RL	MDL
Gasoline C7-C12	19 J	50	6.4
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.3
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.3
Trichlorofluoromethane	ND	1.0	0.2
Acetone	ND	10	3.3
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.2
Methylene Chloride	ND	10	0.2
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.2
Vinyl Acetate	ND	10	1.1
1,1-Dichloroethane	ND	0.5	0.2
2-Butanone	ND	10	0.5
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.7
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.2
2-Hexanone	ND	10	0.5
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.2
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 5030B
Project#:	0399889.02.05	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC896976	Batch#:	250675
Matrix:	Water	Analyzed:	08/15/17
Units:	ug/L		

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	0.5	0.1
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.3
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.1
Naphthalene	ND	2.0	0.1
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-120
1,2-Dichloroethane-d4	103	73-136
Toluene-d8	105	80-120
Bromofluorobenzene	108	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 5030B
Project#:	0399889.02.05	Analysis:	EPA 8260B
Field ID:	MW-02	Batch#:	250675
MSS Lab ID:	291572-002	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17
Units:	ug/L	Analyzed:	08/15/17
Diln Fac:	33.33		

Type: MS Lab ID: QC896977

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<5.063	416.7	390.0	94	67-129
Benzene	2,504	416.7	2,888	92 NM	79-124
Trichloroethene	<3.333	416.7	414.7	100	62-127
Toluene	1,365	416.7	1,752	93	80-120
Chlorobenzene	<4.320	416.7	440.3	106	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-120
1,2-Dichloroethane-d4	105	73-136
Toluene-d8	108	80-120
Bromofluorobenzene	105	80-120

Type: MSD Lab ID: QC896978

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	416.7	366.8	88	67-129	6	23
Benzene	416.7	2,776	65 NM	79-124	4	20
Trichloroethene	416.7	391.4	94	62-127	6	20
Toluene	416.7	1,690	78 *	80-120	4	20
Chlorobenzene	416.7	421.3	101	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-120
1,2-Dichloroethane-d4	106	73-136
Toluene-d8	106	80-120
Bromofluorobenzene	104	80-120

*= Value outside of QC limits; see narrative
NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 5030B
Project#:	0399889.02.05	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	250675
Units:	ug/L	Analyzed:	08/15/17
Diln Fac:	1.000		

Type: BS Lab ID: QC896984

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,120	112	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-120
1,2-Dichloroethane-d4	103	73-136
Toluene-d8	106	80-120
Bromofluorobenzene	107	80-120

Type: BSD Lab ID: QC896985

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	1,172	117	70-130	5	20

Surrogate	%REC	Limits
Dibromofluoromethane	110	80-120
1,2-Dichloroethane-d4	102	73-136
Toluene-d8	107	80-120
Bromofluorobenzene	108	80-120

RPD= Relative Percent Difference

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 5030B
Project#:	0399889.02.05	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC897072	Batch#:	250675
Matrix:	Water	Analyzed:	08/15/17
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	12.81	103	66-127
Benzene	12.50	13.34	107	78-123
Trichloroethene	12.50	13.37	107	75-120
Toluene	12.50	13.57	109	80-120
Chlorobenzene	12.50	13.34	107	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-120
1,2-Dichloroethane-d4	102	73-136
Toluene-d8	107	80-120
Bromofluorobenzene	104	80-120

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 5030B
Project#:	0399889.02.05	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	250723
Units:	ug/L	Analyzed:	08/16/17
Diln Fac:	1.000		

Type: BS Lab ID: QC897172

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	10.02	80	66-127
Benzene	12.50	11.60	93	78-123
Trichloroethene	12.50	12.74	102	75-120
Toluene	12.50	12.80	102	80-120
Chlorobenzene	12.50	12.70	102	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-120
1,2-Dichloroethane-d4	139 *	73-136
Toluene-d8	102	80-120
Bromofluorobenzene	104	80-120

Type: BSD Lab ID: QC897173

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	10.52	84	66-127	5	20
Benzene	12.50	11.70	94	78-123	1	20
Trichloroethene	12.50	13.34	107	75-120	5	20
Toluene	12.50	13.34	107	80-120	4	20
Chlorobenzene	12.50	13.09	105	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-120
1,2-Dichloroethane-d4	131	73-136
Toluene-d8	110	80-120
Bromofluorobenzene	114	80-120

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

ENTHALPY ANALYTICAL

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 5030B
Project#:	0399889.02.05	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC897174	Batch#:	250723
Matrix:	Water	Analyzed:	08/16/17
Units:	ug/L		

Analyte	Result	RL	MDL
Gasoline C7-C12	NA		
Freon 12	ND	1.0	0.2
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.2
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.2
Trichlorofluoromethane	ND	1.0	0.1
Acetone	ND	10	3.3
Freon 113	ND	2.0	0.2
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.1
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.1
Vinyl Acetate	ND	10	0.3
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	1.0
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.1
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1

J= Estimated value
NA= Not Analyzed
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 5030B
Project#:	0399889.02.05	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC897174	Batch#:	250723
Matrix:	Water	Analyzed:	08/16/17
Units:	ug/L		

Analyte	Result	RL	MDL
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	0.1 J	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.3
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.3
Naphthalene	ND	2.0	0.3
1,2,3-Trichlorobenzene	ND	0.5	0.1

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-120
1,2-Dichloroethane-d4	129	73-136
Toluene-d8	104	80-120
Bromofluorobenzene	112	80-120

J= Estimated value
NA= Not Analyzed
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 5030B
Project#:	0399889.02.05	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	250751
Units:	ug/L	Analyzed:	08/17/17
Diln Fac:	1.000		

Type: BS Lab ID: QC897276

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	12.50	9.943	80	66-127
Benzene	12.50	12.84	103	78-123
Trichloroethene	12.50	12.71	102	75-120
Toluene	12.50	12.76	102	80-120
Chlorobenzene	12.50	13.61	109	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-120
1,2-Dichloroethane-d4	97	73-136
Toluene-d8	101	80-120
Bromofluorobenzene	98	80-120

Type: BSD Lab ID: QC897277

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	12.50	9.074	73	66-127	9	20
Benzene	12.50	11.41	91	78-123	12	20
Trichloroethene	12.50	11.01	88	75-120	14	20
Toluene	12.50	12.38	99	80-120	3	20
Chlorobenzene	12.50	12.74	102	80-120	7	20

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-120
1,2-Dichloroethane-d4	91	73-136
Toluene-d8	102	80-120
Bromofluorobenzene	98	80-120

RPD= Relative Percent Difference

ENTHALPY ANALYTICAL

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 5030B
Project#:	0399889.02.05	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC897278	Batch#:	250751
Matrix:	Water	Analyzed:	08/17/17
Units:	ug/L		

Analyte	Result	RL	MDL
Gasoline C7-C12	ND	50	14
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.1
Acetone	ND	10	3.3
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.2
Carbon Disulfide	0.2 J	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.1
Vinyl Acetate	ND	10	0.5
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.5
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.1
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.2
1,2-Dichloroethane	ND	0.5	0.1
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.1
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.3
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.2
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.2
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.2
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 5030B
Project#:	0399889.02.05	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC897278	Batch#:	250751
Matrix:	Water	Analyzed:	08/17/17
Units:	ug/L		

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	0.5	0.1
2-Chlorotoluene	ND	0.5	0.2
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.2
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.3
1,2,4-Trichlorobenzene	ND	0.5	0.1
Hexachlorobutadiene	ND	2.0	0.3
Naphthalene	ND	2.0	0.3
1,2,3-Trichlorobenzene	ND	0.5	0.2

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-120
1,2-Dichloroethane-d4	94	73-136
Toluene-d8	100	80-120
Bromofluorobenzene	100	80-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 5030B
Project#:	0399889.02.05	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	250751
Units:	ug/L	Analyzed:	08/17/17
Diln Fac:	1.000		

Type: BS Lab ID: QC897294

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,135	113	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-120
1,2-Dichloroethane-d4	89	73-136
Toluene-d8	104	80-120
Bromofluorobenzene	102	80-120

Type: BSD Lab ID: QC897295

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	1,057	106	70-130	7	20

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-120
1,2-Dichloroethane-d4	89	73-136
Toluene-d8	101	80-120
Bromofluorobenzene	103	80-120

RPD= Relative Percent Difference

Data File: \\gcmsserver\DD\chem\MSVOA08.i\081517\HHF13.D

Date : 15-AUG-2017 16:59

Client ID:

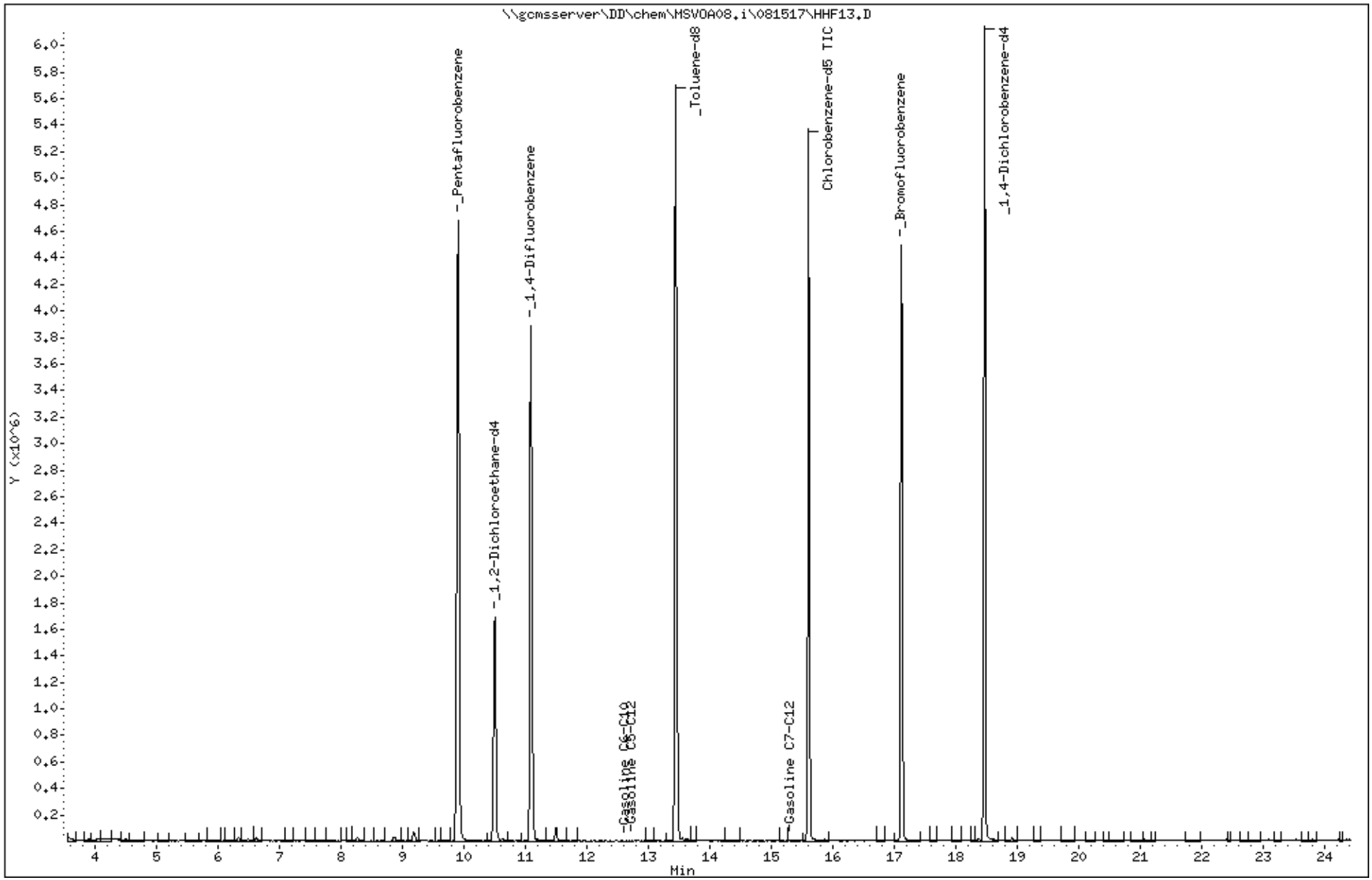
Instrument: MSVOA08.i

Sample Info: S,291572-001

Operator: VOC

Column phase:

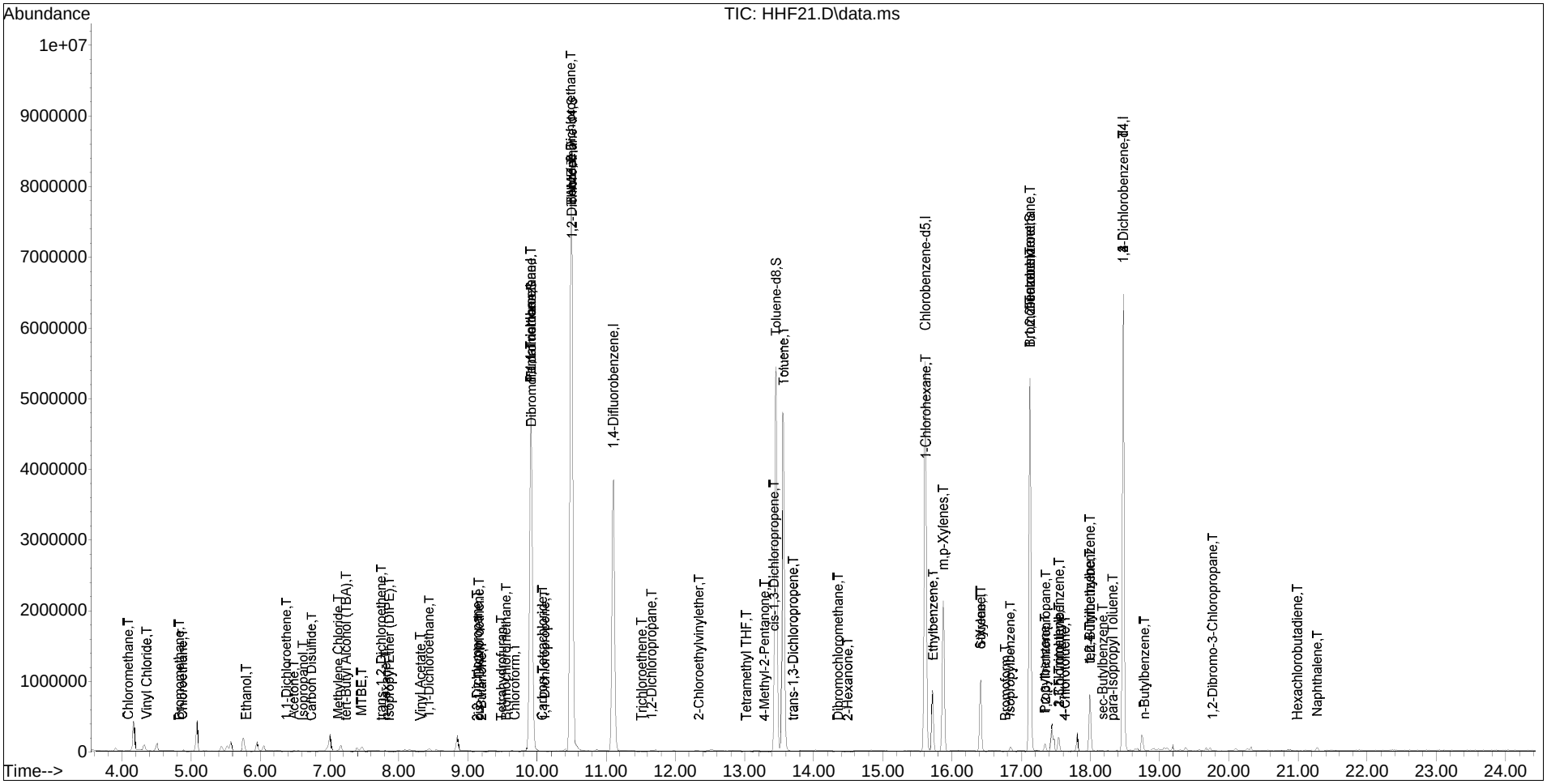
Column diameter: 2.00



Quantitation Report (QT Reviewed)

Data Path : G:\msvoa08\081517\
Data File : HHF21.D
Acq On : 15 Aug 2017 9:23 pm
Operator :
Sample : MSS,291572-002
Misc : 250675,1.5/50//HL
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 16 11:51:00 2017
Quant Method : C:\msdchem\1\METHODS\8260X08W.M
Quant Title : MSVOA08 MSVOA WATER
QLast Update : Fri Apr 21 17:51:00 2017
Response via : Initial Calibration



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Date : 15-AUG-2017 16:26

Client ID:

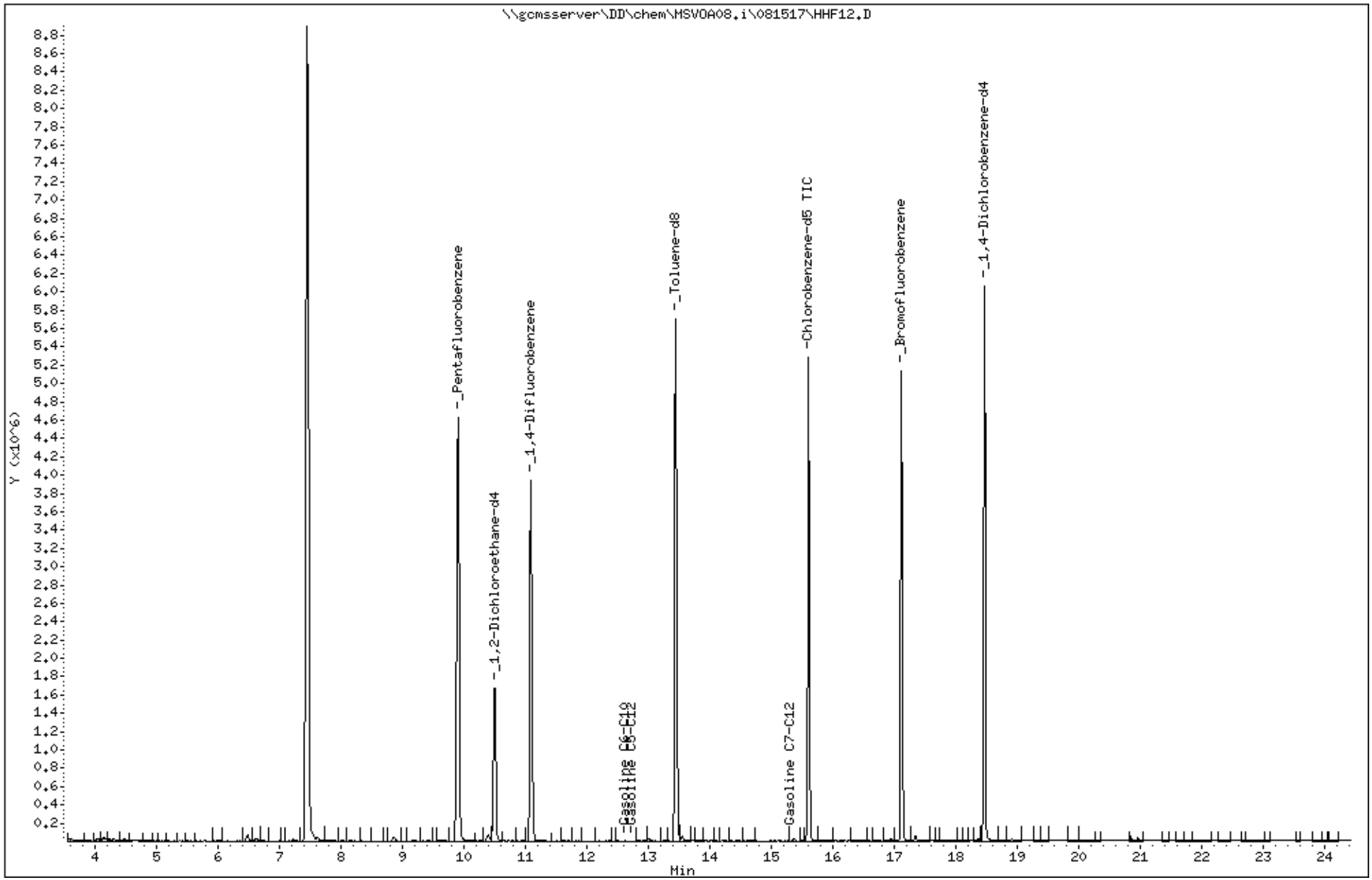
Instrument: MSVOA08.i

Sample Info: S,291572-003

Operator: VOC

Column phase:

Column diameter: 2.00



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Date : 17-AUG-2017 15:43

Client ID:

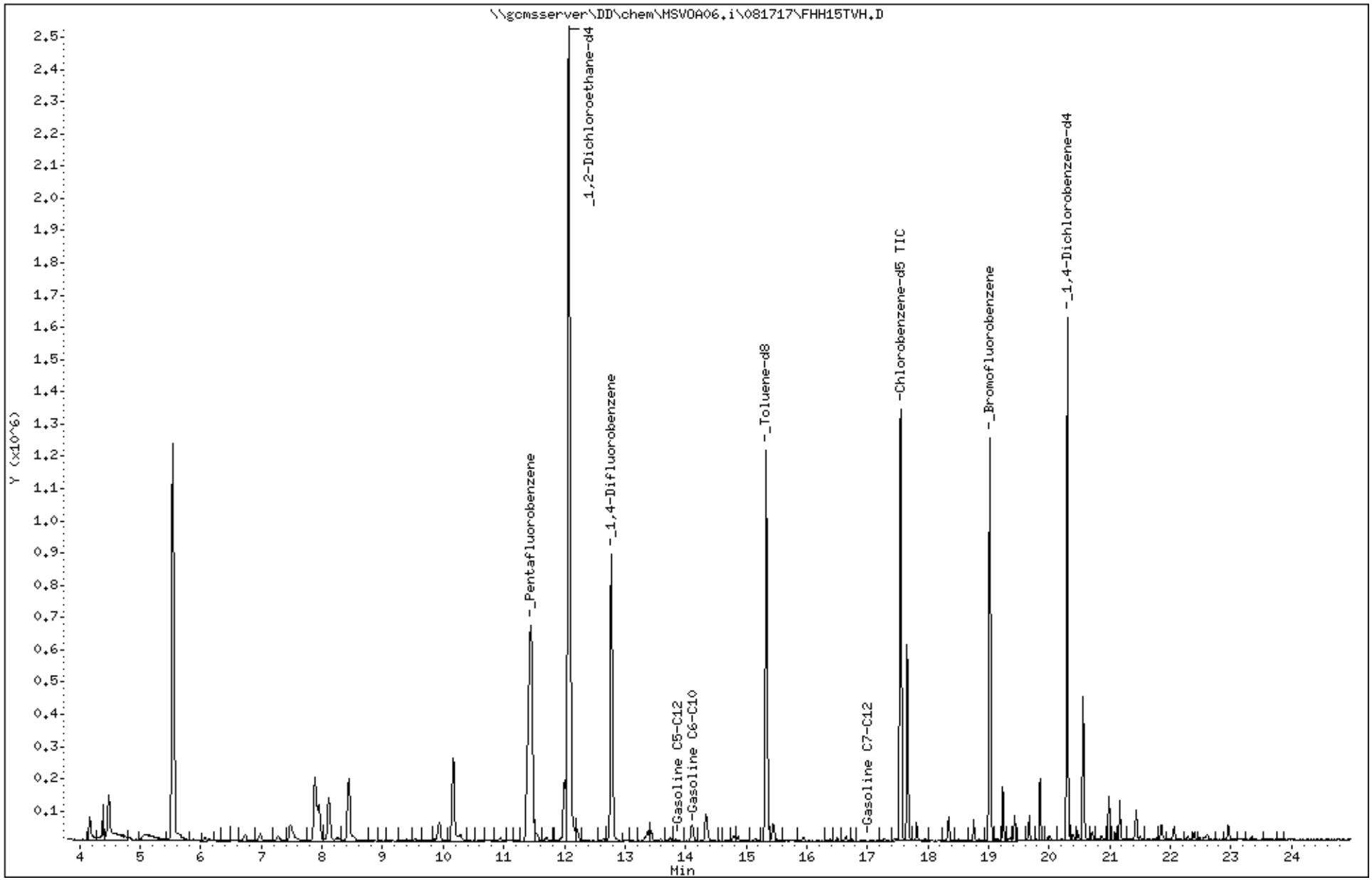
Instrument: MSVOA06.i

Sample Info: s,291604-001,

Operator: VOC

Column phase:

Column diameter: 2.00



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Date : 17-AUG-2017 16:16

Client ID:

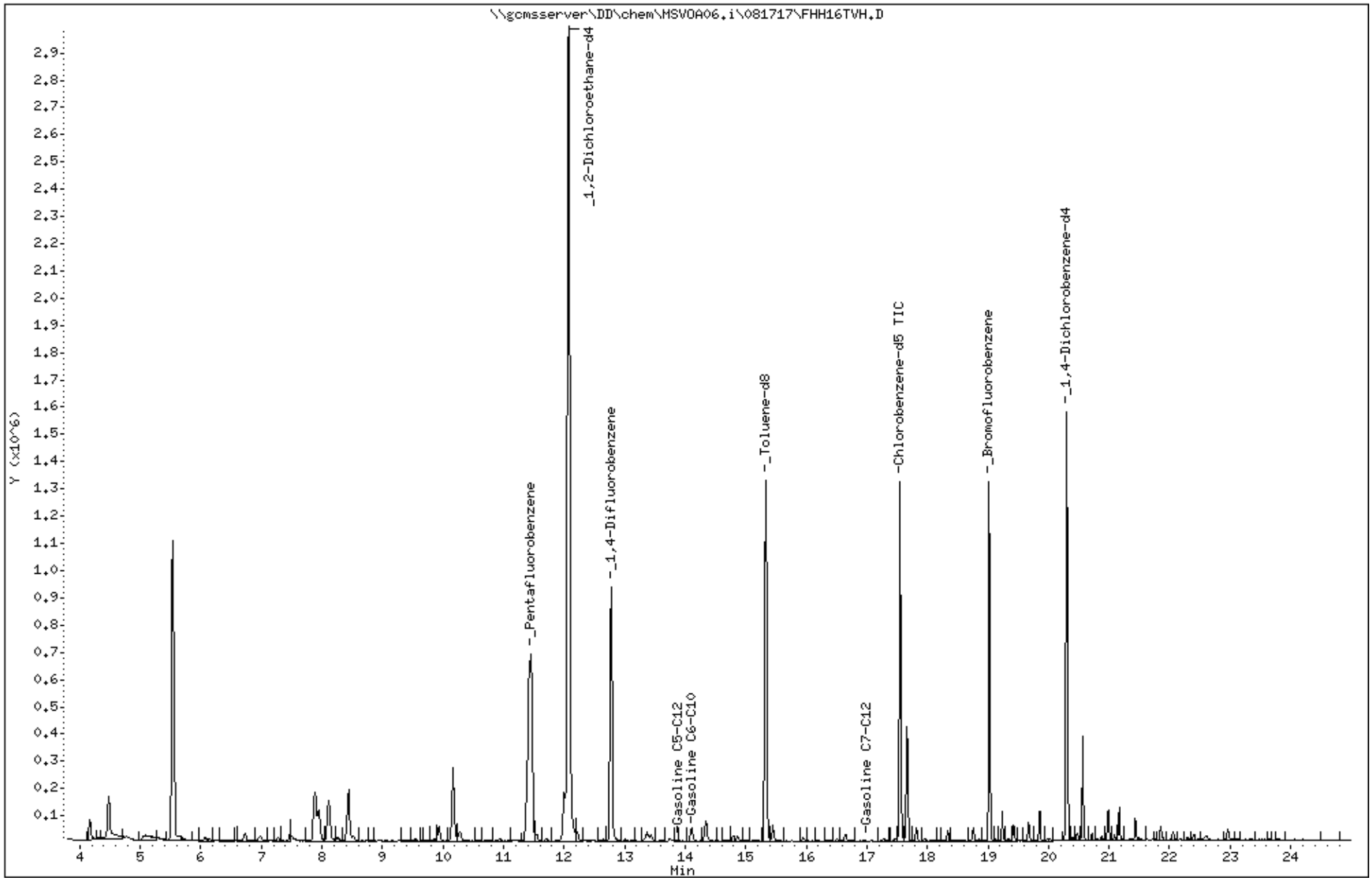
Instrument: MSVOA06.i

Sample Info: s,291572-004,

Operator: VOC

Column phase:

Column diameter: 2.00



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Date : 15-AUG-2017 15:53

Client ID:

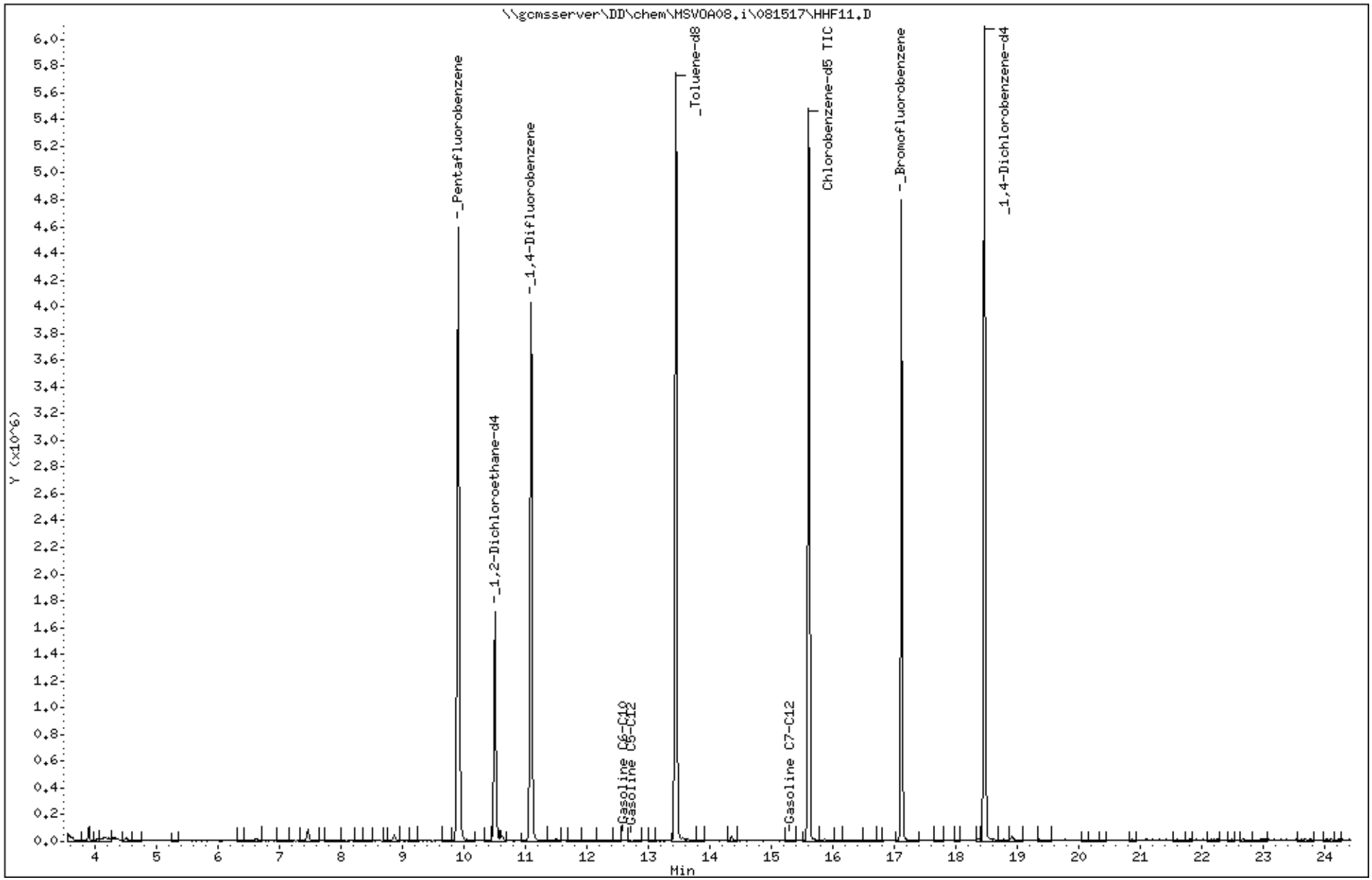
Instrument: MSVOA08.i

Sample Info: S,291572-006

Operator: VOC

Column phase:

Column diameter: 2.00



Data File: \\gcmsserver\DD\chem\MSVOA08.i\081517\HHF10.D

Date : 15-AUG-2017 15:20

Client ID:

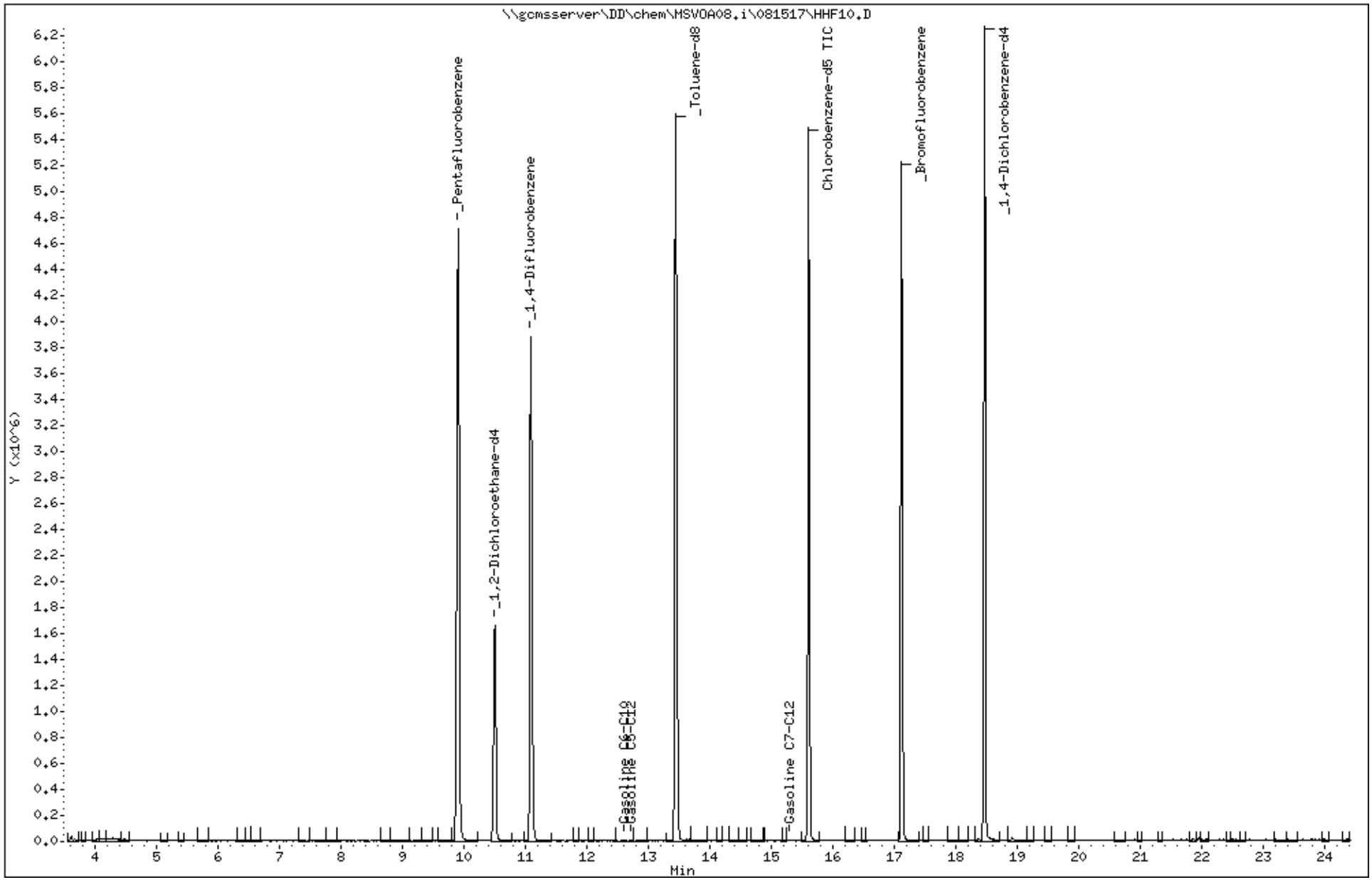
Instrument: MSVOA08.i

Sample Info: S,291572-007

Operator: VOC

Column phase:

Column diameter: 2.00



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Date : 15-AUG-2017 14:47

Client ID:

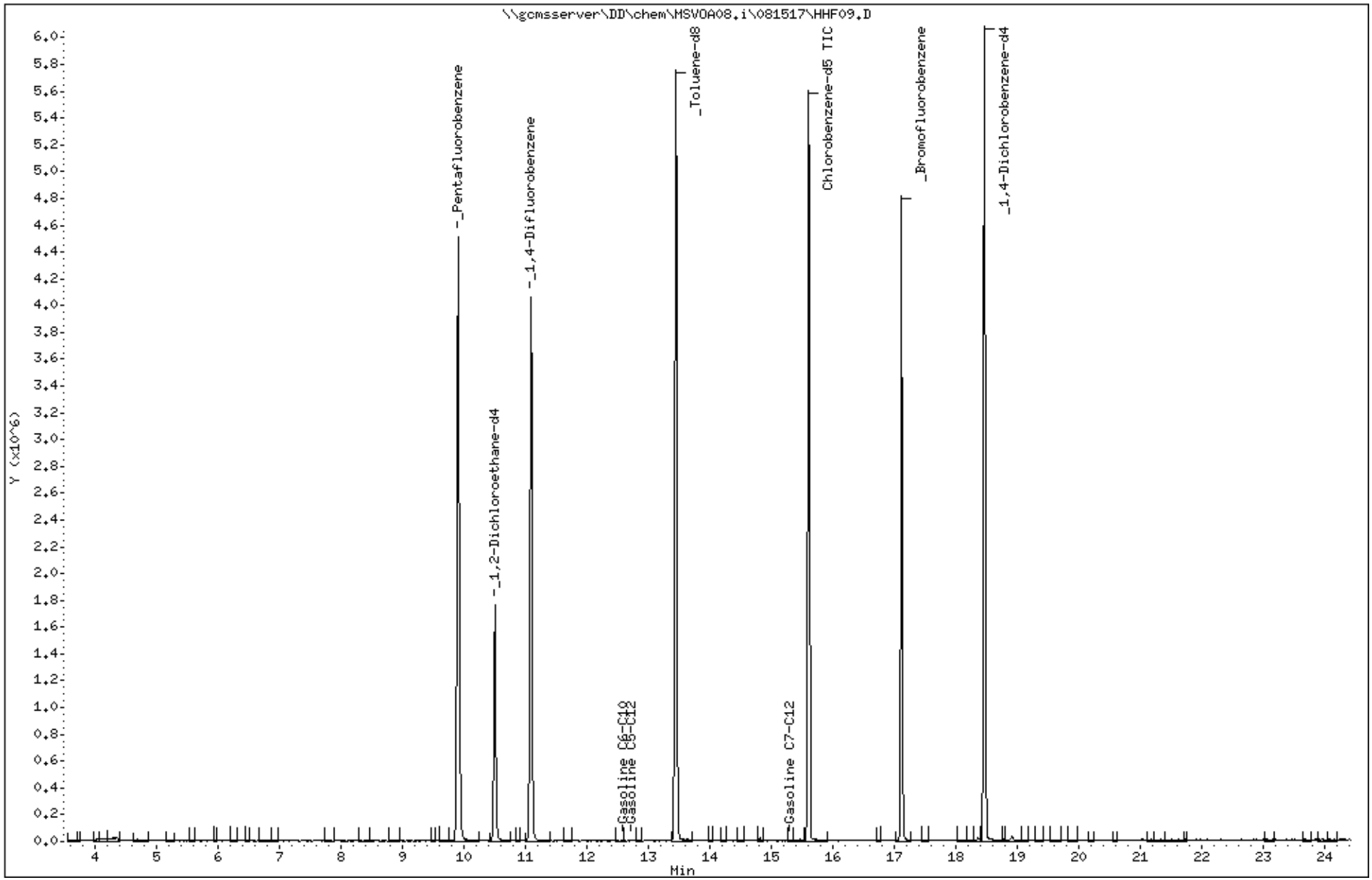
Instrument: MSVOA08.i

Sample Info: MB,QC896976

Operator: VOC

Column phase:

Column diameter: 2.00



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Date : 17-AUG-2017 11:20

Client ID:

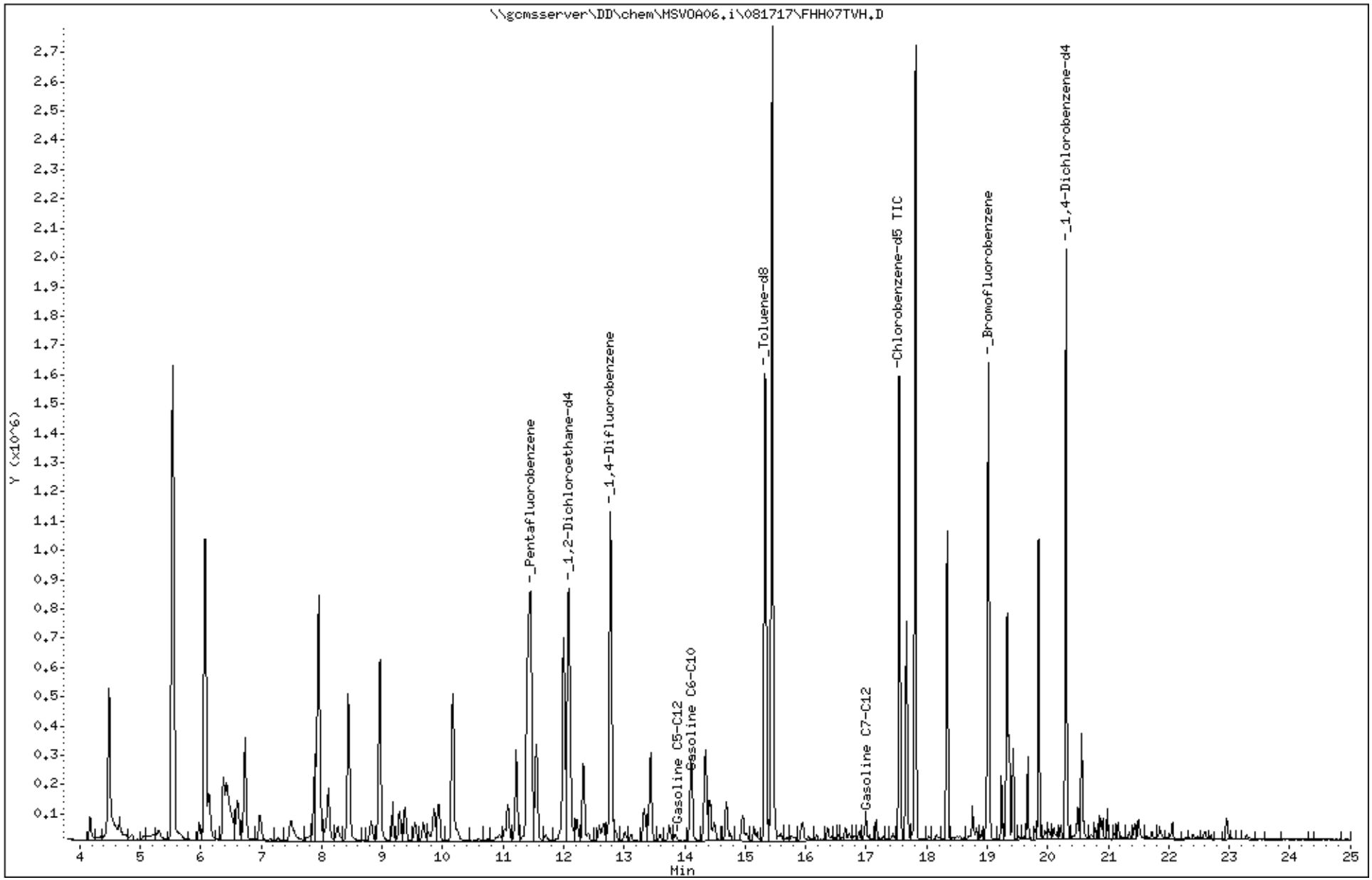
Instrument: MSVOA06.i

Sample Info: ccv/bs,qc897294,250751,

Operator: VOC

Column phase:

Column diameter: 2.00



ENTHALPY ANALYTICAL

Semivolatile Organics by GC/MS

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 3520C
Project#:	0399889.02.05	Analysis:	EPA 8270C
Field ID:	MW-01	Batch#:	250698
Lab ID:	291572-001	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17
Units:	ug/L	Prepared:	08/16/17
Diln Fac:	1.000	Analyzed:	08/21/17

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	11	1.5
Phenol	ND	11	1.1
bis(2-Chloroethyl)ether	ND	11	1.3
2-Chlorophenol	ND	11	0.86
1,3-Dichlorobenzene	ND	11	1.1
1,4-Dichlorobenzene	ND	11	1.1
Benzyl alcohol	ND	11	1.2
1,2-Dichlorobenzene	ND	11	2.2
2-Methylphenol	ND	11	2.3
bis(2-Chloroisopropyl) ether	ND	11	1.5
4-Methylphenol	ND	11	1.8
N-Nitroso-di-n-propylamine	ND	11	1.3
Hexachloroethane	ND	11	1.2
Nitrobenzene	ND	11	1.3
Isophorone	ND	11	1.4
2-Nitrophenol	ND	21	2.7
2,4-Dimethylphenol	ND	11	2.6
Benzoic acid	ND	53	17
bis(2-Chloroethoxy)methane	ND	11	1.1
2,4-Dichlorophenol	ND	11	2.2
1,2,4-Trichlorobenzene	ND	11	2.4
Naphthalene	ND	11	2.0
4-Chloroaniline	ND	11	2.2
Hexachlorobutadiene	ND	11	2.5
4-Chloro-3-methylphenol	ND	11	1.1
2-Methylnaphthalene	ND	11	1.9
1-Methylnaphthalene	ND	11	2.1
Hexachlorocyclopentadiene	ND	21	5.3
2,4,6-Trichlorophenol	ND	11	0.96
2,4,5-Trichlorophenol	ND	11	0.89
2-Chloronaphthalene	ND	11	1.9
2-Nitroaniline	ND	21	1.3
Dimethylphthalate	ND	11	2.1
Acenaphthylene	ND	11	1.8
2,6-Dinitrotoluene	ND	11	1.9
3-Nitroaniline	ND	21	2.0
Acenaphthene	ND	11	1.9
2,4-Dinitrophenol	ND	21	5.3
4-Nitrophenol	ND	21	5.3
Dibenzofuran	ND	11	2.0
2,4-Dinitrotoluene	ND	11	2.2
Diethylphthalate	ND	11	1.1
Fluorene	ND	11	1.8
4-Chlorophenyl-phenylether	ND	11	1.7
4-Nitroaniline	ND	21	2.5
4,6-Dinitro-2-methylphenol	ND	21	5.3
N-Nitrosodiphenylamine	ND	11	1.8
Azobenzene	ND	11	1.2
4-Bromophenyl-phenylether	ND	11	2.1
Hexachlorobenzene	ND	11	2.1
Pentachlorophenol	ND	21	2.0
Phenanthrene	ND	11	2.0

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Semivolatile Organics by GC/MS

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 3520C
Project#:	0399889.02.05	Analysis:	EPA 8270C
Field ID:	MW-01	Batch#:	250698
Lab ID:	291572-001	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17
Units:	ug/L	Prepared:	08/16/17
Diln Fac:	1.000	Analyzed:	08/21/17

Analyte	Result	RL	MDL
Anthracene	ND	11	1.9
Di-n-butylphthalate	ND	11	1.3
Fluoranthene	ND	11	2.0
Pyrene	ND	11	1.7
Butylbenzylphthalate	ND	11	1.1
3,3'-Dichlorobenzidine	ND	21	1.1
Benzo(a)anthracene	ND	11	1.7
Chrysene	ND	11	1.8
bis(2-Ethylhexyl)phthalate	2.1 J	11	1.9
Di-n-octylphthalate	ND	11	1.9
Benzo(b)fluoranthene	ND	11	1.8
Benzo(k)fluoranthene	ND	11	2.1
Benzo(a)pyrene	ND	11	1.7
Indeno(1,2,3-cd)pyrene	ND	11	1.9
Dibenz(a,h)anthracene	ND	11	1.9
Benzo(g,h,i)perylene	ND	11	2.0

Surrogate	%REC	Limits
2-Fluorophenol	79	38-120
Phenol-d5	81	36-120
2,4,6-Tribromophenol	100	41-120
Nitrobenzene-d5	77	44-120
2-Fluorobiphenyl	86	46-120
Terphenyl-d14	91	11-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Semivolatile Organics by GC/MS

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 3520C
Project#:	0399889.02.05	Analysis:	EPA 8270C
Field ID:	MW-02	Batch#:	250698
Lab ID:	291572-002	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17
Units:	ug/L	Prepared:	08/16/17
Diln Fac:	1.000	Analyzed:	08/18/17

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	10	1.5
Phenol	5.5 J	10	1.0
bis(2-Chloroethyl)ether	ND	10	1.2
2-Chlorophenol	ND	10	0.82
1,3-Dichlorobenzene	ND	10	1.0
1,4-Dichlorobenzene	ND	10	1.1
Benzyl alcohol	ND	10	1.1
1,2-Dichlorobenzene	ND	10	2.1
2-Methylphenol	ND	10	2.2
bis(2-Chloroisopropyl) ether	ND	10	1.4
4-Methylphenol	3.4 J	10	1.7
N-Nitroso-di-n-propylamine	ND	10	1.2
Hexachloroethane	ND	10	1.1
Nitrobenzene	ND	10	1.2
Isophorone	ND	10	1.3
2-Nitrophenol	ND	20	2.6
2,4-Dimethylphenol	ND	10	2.5
Benzoic acid	ND	50	16
bis(2-Chloroethoxy)methane	ND	10	1.1
2,4-Dichlorophenol	ND	10	2.1
1,2,4-Trichlorobenzene	ND	10	2.2
Naphthalene	39	10	1.9
4-Chloroaniline	ND	10	2.1
Hexachlorobutadiene	ND	10	2.4
4-Chloro-3-methylphenol	ND	10	1.0
2-Methylnaphthalene	11	10	1.8
1-Methylnaphthalene	6.0 J	10	2.0
Hexachlorocyclopentadiene	ND	20	5.0
2,4,6-Trichlorophenol	ND	10	0.92
2,4,5-Trichlorophenol	ND	10	0.85
2-Chloronaphthalene	ND	10	1.8
2-Nitroaniline	ND	20	1.2
Dimethylphthalate	ND	10	2.0
Acenaphthylene	ND	10	1.7
2,6-Dinitrotoluene	ND	10	1.8
3-Nitroaniline	ND	20	1.9
Acenaphthene	ND	10	1.8
2,4-Dinitrophenol	ND	20	5.0
4-Nitrophenol	ND	20	5.0
Dibenzofuran	ND	10	1.9
2,4-Dinitrotoluene	ND	10	2.1
Diethylphthalate	ND	10	1.0
Fluorene	ND	10	1.8
4-Chlorophenyl-phenylether	ND	10	1.6
4-Nitroaniline	ND	20	2.4
4,6-Dinitro-2-methylphenol	ND	20	5.0
N-Nitrosodiphenylamine	ND	10	1.7
Azobenzene	ND	10	1.2
4-Bromophenyl-phenylether	ND	10	2.0
Hexachlorobenzene	ND	10	2.0
Pentachlorophenol	ND	20	1.9
Phenanthrene	2.4 J	10	1.9

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Semivolatile Organics by GC/MS

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 3520C
Project#:	0399889.02.05	Analysis:	EPA 8270C
Field ID:	MW-02	Batch#:	250698
Lab ID:	291572-002	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17
Units:	ug/L	Prepared:	08/16/17
Diln Fac:	1.000	Analyzed:	08/18/17

Analyte	Result	RL	MDL
Anthracene	ND	10	1.8
Di-n-butylphthalate	ND	10	1.2
Fluoranthene	ND	10	1.9
Pyrene	ND	10	1.7
Butylbenzylphthalate	ND	10	1.0
3,3'-Dichlorobenzidine	ND	20	1.0
Benzo(a)anthracene	ND	10	1.6
Chrysene	ND	10	1.7
bis(2-Ethylhexyl)phthalate	ND	10	1.8
Di-n-octylphthalate	ND	10	1.8
Benzo(b)fluoranthene	ND	10	1.7
Benzo(k)fluoranthene	ND	10	2.0
Benzo(a)pyrene	ND	10	1.6
Indeno(1,2,3-cd)pyrene	ND	10	1.8
Dibenz(a,h)anthracene	ND	10	1.8
Benzo(g,h,i)perylene	ND	10	1.9

Surrogate	%REC	Limits
2-Fluorophenol	87	38-120
Phenol-d5	93	36-120
2,4,6-Tribromophenol	97	41-120
Nitrobenzene-d5	83	44-120
2-Fluorobiphenyl	92	46-120
Terphenyl-d14	78	11-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Semivolatile Organics by GC/MS

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 3520C
Project#:	0399889.02.05	Analysis:	EPA 8270C
Field ID:	MW-03	Batch#:	250698
Lab ID:	291572-003	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17
Units:	ug/L	Prepared:	08/16/17
Diln Fac:	1.000	Analyzed:	08/21/17

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	9.4	1.4
Phenol	ND	9.4	0.96
bis(2-Chloroethyl)ether	ND	9.4	1.1
2-Chlorophenol	ND	9.4	0.77
1,3-Dichlorobenzene	ND	9.4	0.97
1,4-Dichlorobenzene	ND	9.4	0.99
Benzyl alcohol	ND	9.4	1.0
1,2-Dichlorobenzene	ND	9.4	2.0
2-Methylphenol	ND	9.4	2.0
bis(2-Chloroisopropyl) ether	ND	9.4	1.4
4-Methylphenol	ND	9.4	1.6
N-Nitroso-di-n-propylamine	ND	9.4	1.1
Hexachloroethane	ND	9.4	1.0
Nitrobenzene	ND	9.4	1.2
Isophorone	ND	9.4	1.2
2-Nitrophenol	ND	19	2.5
2,4-Dimethylphenol	ND	9.4	2.3
Benzoic acid	ND	47	15
bis(2-Chloroethoxy)methane	ND	9.4	1.0
2,4-Dichlorophenol	ND	9.4	2.0
1,2,4-Trichlorobenzene	ND	9.4	2.1
Naphthalene	ND	9.4	1.8
4-Chloroaniline	ND	9.4	1.9
Hexachlorobutadiene	ND	9.4	2.3
4-Chloro-3-methylphenol	ND	9.4	0.99
2-Methylnaphthalene	ND	9.4	1.7
1-Methylnaphthalene	ND	9.4	1.9
Hexachlorocyclopentadiene	ND	19	4.7
2,4,6-Trichlorophenol	ND	9.4	0.86
2,4,5-Trichlorophenol	ND	9.4	0.80
2-Chloronaphthalene	ND	9.4	1.7
2-Nitroaniline	ND	19	1.1
Dimethylphthalate	ND	9.4	1.9
Acenaphthylene	ND	9.4	1.6
2,6-Dinitrotoluene	ND	9.4	1.7
3-Nitroaniline	ND	19	1.8
Acenaphthene	ND	9.4	1.7
2,4-Dinitrophenol	ND	19	4.7
4-Nitrophenol	ND	19	4.7
Dibenzofuran	ND	9.4	1.8
2,4-Dinitrotoluene	ND	9.4	2.0
Diethylphthalate	ND	9.4	0.96
Fluorene	ND	9.4	1.7
4-Chlorophenyl-phenylether	ND	9.4	1.5
4-Nitroaniline	ND	19	2.3
4,6-Dinitro-2-methylphenol	ND	19	4.7
N-Nitrosodiphenylamine	ND	9.4	1.6
Azobenzene	ND	9.4	1.1
4-Bromophenyl-phenylether	ND	9.4	1.9
Hexachlorobenzene	ND	9.4	1.9
Pentachlorophenol	ND	19	1.8
Phenanthrene	ND	9.4	1.8

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Semivolatile Organics by GC/MS

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 3520C
Project#:	0399889.02.05	Analysis:	EPA 8270C
Field ID:	MW-03	Batch#:	250698
Lab ID:	291572-003	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17
Units:	ug/L	Prepared:	08/16/17
Diln Fac:	1.000	Analyzed:	08/21/17

Analyte	Result	RL	MDL
Anthracene	ND	9.4	1.7
Di-n-butylphthalate	ND	9.4	1.1
Fluoranthene	ND	9.4	1.8
Pyrene	ND	9.4	1.6
Butylbenzylphthalate	ND	9.4	0.95
3,3'-Dichlorobenzidine	ND	19	0.99
Benzo(a)anthracene	ND	9.4	1.5
Chrysene	ND	9.4	1.6
bis(2-Ethylhexyl)phthalate	5.2 J	9.4	1.7
Di-n-octylphthalate	ND	9.4	1.7
Benzo(b)fluoranthene	ND	9.4	1.6
Benzo(k)fluoranthene	ND	9.4	1.8
Benzo(a)pyrene	ND	9.4	1.5
Indeno(1,2,3-cd)pyrene	ND	9.4	1.7
Dibenz(a,h)anthracene	ND	9.4	1.7
Benzo(g,h,i)perylene	ND	9.4	1.8

Surrogate	%REC	Limits
2-Fluorophenol	64	38-120
Phenol-d5	72	36-120
2,4,6-Tribromophenol	63	41-120
Nitrobenzene-d5	74	44-120
2-Fluorobiphenyl	85	46-120
Terphenyl-d14	70	11-120

J= Estimated value
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RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Semivolatile Organics by GC/MS

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 3520C
Project#:	0399889.02.05	Analysis:	EPA 8270C
Field ID:	MW-04	Batch#:	250698
Lab ID:	291572-004	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17
Units:	ug/L	Prepared:	08/16/17
Diln Fac:	1.000	Analyzed:	08/21/17

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	11	1.6
Phenol	19	11	1.1
bis(2-Chloroethyl)ether	ND	11	1.3
2-Chlorophenol	ND	11	0.91
1,3-Dichlorobenzene	ND	11	1.1
1,4-Dichlorobenzene	ND	11	1.2
Benzyl alcohol	ND	11	1.2
1,2-Dichlorobenzene	ND	11	2.3
2-Methylphenol	ND	11	2.4
bis(2-Chloroisopropyl) ether	ND	11	1.6
4-Methylphenol	ND	11	1.9
N-Nitroso-di-n-propylamine	ND	11	1.3
Hexachloroethane	ND	11	1.2
Nitrobenzene	ND	11	1.4
Isophorone	ND	11	1.4
2-Nitrophenol	ND	22	2.9
2,4-Dimethylphenol	ND	11	2.8
Benzoic acid	ND	56	17
bis(2-Chloroethoxy)methane	ND	11	1.2
2,4-Dichlorophenol	ND	11	2.4
1,2,4-Trichlorobenzene	ND	11	2.5
Naphthalene	13	11	2.1
4-Chloroaniline	ND	11	2.3
Hexachlorobutadiene	ND	11	2.7
4-Chloro-3-methylphenol	ND	11	1.2
2-Methylnaphthalene	2.3 J	11	2.0
1-Methylnaphthalene	11	11	2.2
Hexachlorocyclopentadiene	ND	22	5.6
2,4,6-Trichlorophenol	ND	11	1.0
2,4,5-Trichlorophenol	ND	11	0.94
2-Chloronaphthalene	ND	11	2.0
2-Nitroaniline	ND	22	1.3
Dimethylphthalate	ND	11	2.2
Acenaphthylene	ND	11	1.9
2,6-Dinitrotoluene	ND	11	2.0
3-Nitroaniline	ND	22	2.1
Acenaphthene	4.2 J	11	2.0
2,4-Dinitrophenol	ND	22	5.6
4-Nitrophenol	ND	22	5.6
Dibenzofuran	2.1 J	11	2.1
2,4-Dinitrotoluene	ND	11	2.3
Diethylphthalate	ND	11	1.1
Fluorene	3.9 J	11	1.9
4-Chlorophenyl-phenylether	ND	11	1.8
4-Nitroaniline	ND	22	2.7
4,6-Dinitro-2-methylphenol	ND	22	5.6
N-Nitrosodiphenylamine	ND	11	1.9
Azobenzene	ND	11	1.3
4-Bromophenyl-phenylether	ND	11	2.2
Hexachlorobenzene	ND	11	2.2
Pentachlorophenol	ND	22	2.1
Phenanthrene	9.8 J	11	2.1

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Semivolatile Organics by GC/MS

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 3520C
Project#:	0399889.02.05	Analysis:	EPA 8270C
Field ID:	MW-04	Batch#:	250698
Lab ID:	291572-004	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17
Units:	ug/L	Prepared:	08/16/17
Diln Fac:	1.000	Analyzed:	08/21/17

Analyte	Result	RL	MDL
Anthracene	7.2 J	11	2.1
Di-n-butylphthalate	ND	11	1.3
Fluoranthene	14	11	2.2
Pyrene	10 J	11	1.8
Butylbenzylphthalate	ND	11	1.1
3,3'-Dichlorobenzidine	ND	22	1.2
Benzo(a)anthracene	ND	11	1.8
Chrysene	ND	11	1.9
bis(2-Ethylhexyl)phthalate	ND	11	2.0
Di-n-octylphthalate	ND	11	2.0
Benzo(b)fluoranthene	ND	11	1.9
Benzo(k)fluoranthene	ND	11	2.2
Benzo(a)pyrene	ND	11	1.7
Indeno(1,2,3-cd)pyrene	ND	11	2.0
Dibenz(a,h)anthracene	ND	11	2.0
Benzo(g,h,i)perylene	ND	11	2.1

Surrogate	%REC	Limits
2-Fluorophenol	76	38-120
Phenol-d5	81	36-120
2,4,6-Tribromophenol	98	41-120
Nitrobenzene-d5	72	44-120
2-Fluorobiphenyl	84	46-120
Terphenyl-d14	74	11-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Semivolatile Organics by GC/MS

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 3520C
Project#:	0399889.02.05	Analysis:	EPA 8270C
Field ID:	DUP-01	Batch#:	250698
Lab ID:	291572-005	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17
Units:	ug/L	Prepared:	08/16/17
Diln Fac:	1.000	Analyzed:	08/21/17

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	9.4	1.4
Phenol	1.8 J	9.4	0.96
bis(2-Chloroethyl)ether	ND	9.4	1.1
2-Chlorophenol	ND	9.4	0.77
1,3-Dichlorobenzene	ND	9.4	0.97
1,4-Dichlorobenzene	ND	9.4	0.99
Benzyl alcohol	ND	9.4	1.0
1,2-Dichlorobenzene	ND	9.4	2.0
2-Methylphenol	ND	9.4	2.0
bis(2-Chloroisopropyl) ether	ND	9.4	1.4
4-Methylphenol	ND	9.4	1.6
N-Nitroso-di-n-propylamine	ND	9.4	1.1
Hexachloroethane	ND	9.4	1.0
Nitrobenzene	ND	9.4	1.2
Isophorone	ND	9.4	1.2
2-Nitrophenol	ND	19	2.5
2,4-Dimethylphenol	ND	9.4	2.3
Benzoic acid	ND	47	15
bis(2-Chloroethoxy)methane	ND	9.4	1.0
2,4-Dichlorophenol	ND	9.4	2.0
1,2,4-Trichlorobenzene	ND	9.4	2.1
Naphthalene	12	9.4	1.8
4-Chloroaniline	ND	9.4	1.9
Hexachlorobutadiene	ND	9.4	2.3
4-Chloro-3-methylphenol	ND	9.4	0.99
2-Methylnaphthalene	ND	9.4	1.7
1-Methylnaphthalene	11	9.4	1.9
Hexachlorocyclopentadiene	ND	19	4.7
2,4,6-Trichlorophenol	ND	9.4	0.86
2,4,5-Trichlorophenol	ND	9.4	0.80
2-Chloronaphthalene	ND	9.4	1.7
2-Nitroaniline	ND	19	1.1
Dimethylphthalate	ND	9.4	1.9
Acenaphthylene	ND	9.4	1.6
2,6-Dinitrotoluene	ND	9.4	1.7
3-Nitroaniline	ND	19	1.8
Acenaphthene	4.1 J	9.4	1.7
2,4-Dinitrophenol	ND	19	4.7
4-Nitrophenol	ND	19	4.7
Dibenzofuran	2.0 J	9.4	1.8
2,4-Dinitrotoluene	ND	9.4	2.0
Diethylphthalate	ND	9.4	0.96
Fluorene	3.6 J	9.4	1.7
4-Chlorophenyl-phenylether	ND	9.4	1.5
4-Nitroaniline	ND	19	2.3
4,6-Dinitro-2-methylphenol	ND	19	4.7
N-Nitrosodiphenylamine	ND	9.4	1.6
Azobenzene	ND	9.4	1.1
4-Bromophenyl-phenylether	ND	9.4	1.9
Hexachlorobenzene	ND	9.4	1.9
Pentachlorophenol	ND	19	1.8
Phenanthrene	9.3 J	9.4	1.8

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Semivolatile Organics by GC/MS

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 3520C
Project#:	0399889.02.05	Analysis:	EPA 8270C
Field ID:	DUP-01	Batch#:	250698
Lab ID:	291572-005	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17
Units:	ug/L	Prepared:	08/16/17
Diln Fac:	1.000	Analyzed:	08/21/17

Analyte	Result	RL	MDL
Anthracene	7.8 J	9.4	1.7
Di-n-butylphthalate	ND	9.4	1.1
Fluoranthene	13	9.4	1.8
Pyrene	10	9.4	1.6
Butylbenzylphthalate	ND	9.4	0.95
3,3'-Dichlorobenzidine	ND	19	0.99
Benzo(a)anthracene	ND	9.4	1.5
Chrysene	ND	9.4	1.6
bis(2-Ethylhexyl)phthalate	3.3 J	9.4	1.7
Di-n-octylphthalate	ND	9.4	1.7
Benzo(b)fluoranthene	ND	9.4	1.6
Benzo(k)fluoranthene	ND	9.4	1.8
Benzo(a)pyrene	ND	9.4	1.5
Indeno(1,2,3-cd)pyrene	ND	9.4	1.7
Dibenz(a,h)anthracene	ND	9.4	1.7
Benzo(g,h,i)perylene	ND	9.4	1.8

Surrogate	%REC	Limits
2-Fluorophenol	75	38-120
Phenol-d5	79	36-120
2,4,6-Tribromophenol	91	41-120
Nitrobenzene-d5	70	44-120
2-Fluorobiphenyl	82	46-120
Terphenyl-d14	78	11-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Semivolatile Organics by GC/MS

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 3520C
Project#:	0399889.02.05	Analysis:	EPA 8270C
Field ID:	MW-05	Batch#:	250698
Lab ID:	291572-006	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17
Units:	ug/L	Prepared:	08/16/17
Diln Fac:	1.000	Analyzed:	08/21/17

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	9.4	1.4
Phenol	ND	9.4	0.96
bis(2-Chloroethyl)ether	ND	9.4	1.1
2-Chlorophenol	ND	9.4	0.77
1,3-Dichlorobenzene	ND	9.4	0.97
1,4-Dichlorobenzene	ND	9.4	0.99
Benzyl alcohol	ND	9.4	1.0
1,2-Dichlorobenzene	ND	9.4	2.0
2-Methylphenol	ND	9.4	2.0
bis(2-Chloroisopropyl) ether	ND	9.4	1.4
4-Methylphenol	ND	9.4	1.6
N-Nitroso-di-n-propylamine	ND	9.4	1.1
Hexachloroethane	ND	9.4	1.0
Nitrobenzene	ND	9.4	1.2
Isophorone	ND	9.4	1.2
2-Nitrophenol	ND	19	2.5
2,4-Dimethylphenol	ND	9.4	2.3
Benzoic acid	ND	47	15
bis(2-Chloroethoxy)methane	ND	9.4	1.0
2,4-Dichlorophenol	ND	9.4	2.0
1,2,4-Trichlorobenzene	ND	9.4	2.1
Naphthalene	ND	9.4	1.8
4-Chloroaniline	ND	9.4	1.9
Hexachlorobutadiene	ND	9.4	2.3
4-Chloro-3-methylphenol	ND	9.4	0.99
2-Methylnaphthalene	ND	9.4	1.7
1-Methylnaphthalene	ND	9.4	1.9
Hexachlorocyclopentadiene	ND	19	4.7
2,4,6-Trichlorophenol	ND	9.4	0.86
2,4,5-Trichlorophenol	ND	9.4	0.80
2-Chloronaphthalene	ND	9.4	1.7
2-Nitroaniline	ND	19	1.1
Dimethylphthalate	ND	9.4	1.9
Acenaphthylene	ND	9.4	1.6
2,6-Dinitrotoluene	ND	9.4	1.7
3-Nitroaniline	ND	19	1.8
Acenaphthene	ND	9.4	1.7
2,4-Dinitrophenol	ND	19	4.7
4-Nitrophenol	ND	19	4.7
Dibenzofuran	ND	9.4	1.8
2,4-Dinitrotoluene	ND	9.4	2.0
Diethylphthalate	ND	9.4	0.96
Fluorene	ND	9.4	1.7
4-Chlorophenyl-phenylether	ND	9.4	1.5
4-Nitroaniline	ND	19	2.3
4,6-Dinitro-2-methylphenol	ND	19	4.7
N-Nitrosodiphenylamine	ND	9.4	1.6
Azobenzene	ND	9.4	1.1
4-Bromophenyl-phenylether	ND	9.4	1.9
Hexachlorobenzene	ND	9.4	1.9
Pentachlorophenol	ND	19	1.8
Phenanthrene	ND	9.4	1.8

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Semivolatile Organics by GC/MS

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 3520C
Project#:	0399889.02.05	Analysis:	EPA 8270C
Field ID:	MW-05	Batch#:	250698
Lab ID:	291572-006	Sampled:	08/14/17
Matrix:	Water	Received:	08/14/17
Units:	ug/L	Prepared:	08/16/17
Diln Fac:	1.000	Analyzed:	08/21/17

Analyte	Result	RL	MDL
Anthracene	ND	9.4	1.7
Di-n-butylphthalate	ND	9.4	1.1
Fluoranthene	ND	9.4	1.8
Pyrene	ND	9.4	1.6
Butylbenzylphthalate	ND	9.4	0.95
3,3'-Dichlorobenzidine	ND	19	0.99
Benzo(a)anthracene	ND	9.4	1.5
Chrysene	ND	9.4	1.6
bis(2-Ethylhexyl)phthalate	1.9 J	9.4	1.7
Di-n-octylphthalate	ND	9.4	1.7
Benzo(b)fluoranthene	ND	9.4	1.6
Benzo(k)fluoranthene	ND	9.4	1.8
Benzo(a)pyrene	ND	9.4	1.5
Indeno(1,2,3-cd)pyrene	ND	9.4	1.7
Dibenz(a,h)anthracene	ND	9.4	1.7
Benzo(g,h,i)perylene	ND	9.4	1.8

Surrogate	%REC	Limits
2-Fluorophenol	86	38-120
Phenol-d5	88	36-120
2,4,6-Tribromophenol	107	41-120
Nitrobenzene-d5	83	44-120
2-Fluorobiphenyl	96	46-120
Terphenyl-d14	97	11-120

J= Estimated value
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 3520C
Project#:	0399889.02.05	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC897063	Batch#:	250698
Matrix:	Water	Prepared:	08/15/17
Units:	ug/L	Analyzed:	08/16/17

Analyte	Result	RL	MDL
N-Nitrosodimethylamine	ND	10	2.2
Phenol	ND	10	0.80
bis(2-Chloroethyl)ether	ND	10	1.5
2-Chlorophenol	ND	10	0.91
1,3-Dichlorobenzene	ND	10	1.5
1,4-Dichlorobenzene	ND	10	1.5
Benzyl alcohol	ND	10	1.5
1,2-Dichlorobenzene	ND	10	1.5
2-Methylphenol	ND	10	0.70
bis(2-Chloroisopropyl) ether	ND	10	1.5
4-Methylphenol	ND	10	1.2
N-Nitroso-di-n-propylamine	ND	10	1.3
Hexachloroethane	ND	10	1.5
Nitrobenzene	ND	10	1.3
Isophorone	ND	10	1.7
2-Nitrophenol	ND	20	2.0
2,4-Dimethylphenol	ND	10	0.70
Benzoic acid	ND	50	10
bis(2-Chloroethoxy)methane	ND	10	1.3
2,4-Dichlorophenol	ND	10	0.80
1,2,4-Trichlorobenzene	ND	10	1.4
Naphthalene	ND	10	1.4
4-Chloroaniline	ND	10	1.4
Hexachlorobutadiene	ND	10	1.4
4-Chloro-3-methylphenol	ND	10	1.5
2-Methylnaphthalene	ND	10	1.3
1-Methylnaphthalene	ND	10	1.3
Hexachlorocyclopentadiene	ND	20	2.0
2,4,6-Trichlorophenol	ND	10	0.94
2,4,5-Trichlorophenol	ND	10	1.1
2-Chloronaphthalene	ND	10	1.3
2-Nitroaniline	ND	20	1.6
Dimethylphthalate	ND	10	1.6
Acenaphthylene	ND	10	1.3
2,6-Dinitrotoluene	ND	10	1.7
3-Nitroaniline	ND	20	3.8
Acenaphthene	ND	10	1.4
2,4-Dinitrophenol	ND	20	5.0
4-Nitrophenol	ND	20	1.4
Dibenzofuran	ND	10	1.5
2,4-Dinitrotoluene	ND	10	1.4
Diethylphthalate	ND	10	1.5
Fluorene	ND	10	1.4
4-Chlorophenyl-phenylether	ND	10	1.4
4-Nitroaniline	ND	20	2.2
4,6-Dinitro-2-methylphenol	ND	20	1.6
N-Nitrosodiphenylamine	ND	10	1.3
Azobenzene	ND	10	1.4
4-Bromophenyl-phenylether	ND	10	1.3
Hexachlorobenzene	ND	10	1.4
Pentachlorophenol	ND	20	1.4
Phenanthrene	ND	10	1.4
Anthracene	ND	10	1.3

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 3520C
Project#:	0399889.02.05	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC897063	Batch#:	250698
Matrix:	Water	Prepared:	08/15/17
Units:	ug/L	Analyzed:	08/16/17

Analyte	Result	RL	MDL
Di-n-butylphthalate	ND	10	1.3
Fluoranthene	ND	10	1.4
Pyrene	ND	10	1.3
Butylbenzylphthalate	ND	10	1.3
3,3'-Dichlorobenzidine	ND	20	1.5
Benzo(a)anthracene	ND	10	1.3
Chrysene	ND	10	1.3
bis(2-Ethylhexyl)phthalate	ND	10	1.9
Di-n-octylphthalate	ND	10	1.4
Benzo(b)fluoranthene	ND	10	1.4
Benzo(k)fluoranthene	ND	10	1.5
Benzo(a)pyrene	ND	10	1.1
Indeno(1,2,3-cd)pyrene	ND	10	1.3
Dibenz(a,h)anthracene	ND	10	1.4
Benzo(g,h,i)perylene	ND	10	1.3

Surrogate	%REC	Limits
2-Fluorophenol	81	38-120
Phenol-d5	72	36-120
2,4,6-Tribromophenol	87	41-120
Nitrobenzene-d5	83	44-120
2-Fluorobiphenyl	88	46-120
Terphenyl-d14	63	11-120

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Batch QC Report

Semivolatile Organics by GC/MS

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	EPA 3520C
Project#:	0399889.02.05	Analysis:	EPA 8270C
Matrix:	Water	Batch#:	250698
Units:	ug/L	Prepared:	08/15/17
Diln Fac:	2.000	Analyzed:	08/16/17

Type: BS Lab ID: QC897064

Analyte	Spiked	Result	%REC	Limits
Phenol	80.00	65.33	82	60-120
2-Chlorophenol	80.00	66.08	83	63-120
1,4-Dichlorobenzene	80.00	56.91	71	52-120
N-Nitroso-di-n-propylamine	80.00	63.52	79	40-120
1,2,4-Trichlorobenzene	80.00	52.85	66	52-120
4-Chloro-3-methylphenol	80.00	66.18	83	63-120
Acenaphthene	30.00	23.41	78	56-120
4-Nitrophenol	80.00	78.60	98	49-120
2,4-Dinitrotoluene	80.00	74.80	93	65-120
Pentachlorophenol	80.00	74.16	93	52-120
Pyrene	30.00	21.70	72	61-120

Surrogate	%REC	Limits
2-Fluorophenol	75	38-120
Phenol-d5	80	36-120
2,4,6-Tribromophenol	87	41-120
Nitrobenzene-d5	77	44-120
2-Fluorobiphenyl	72	46-120
Terphenyl-d14	76	11-120

Type: BSD Lab ID: QC897065

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Phenol	80.00	66.94	84	60-120	2	28
2-Chlorophenol	80.00	66.72	83	63-120	1	26
1,4-Dichlorobenzene	80.00	57.94	72	52-120	2	27
N-Nitroso-di-n-propylamine	80.00	66.49	83	40-120	5	27
1,2,4-Trichlorobenzene	80.00	54.40	68	52-120	3	25
4-Chloro-3-methylphenol	80.00	70.07	88	63-120	6	23
Acenaphthene	30.00	24.30	81	56-120	4	24
4-Nitrophenol	80.00	82.78	103	49-120	5	28
2,4-Dinitrotoluene	80.00	77.86	97	65-120	4	24
Pentachlorophenol	80.00	78.66	98	52-120	6	35
Pyrene	30.00	23.03	77	61-120	6	24

Surrogate	%REC	Limits
2-Fluorophenol	75	38-120
Phenol-d5	82	36-120
2,4,6-Tribromophenol	92	41-120
Nitrobenzene-d5	78	44-120
2-Fluorobiphenyl	74	46-120
Terphenyl-d14	78	11-120

RPD= Relative Percent Difference

ENTHALPY ANALYTICAL

Dissolved Mercury by Cold Vapor AA

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	METHOD
Project#:	0399889.02.05	Analysis:	EPA 7470A
Analyte:	Mercury	Sampled:	08/14/17
Matrix:	Filtrate	Received:	08/14/17
Units:	ug/L	Prepared:	08/17/17
Diln Fac:	1.000	Analyzed:	08/17/17
Batch#:	250761		

Field ID	Type	Lab ID	Result	RL	MDL
MW-01	SAMPLE	291572-001	ND	0.25	0.050
MW-02	SAMPLE	291572-002	ND	0.20	0.040
MW-03	SAMPLE	291572-003	ND	0.20	0.040
MW-04	SAMPLE	291572-004	ND	0.20	0.040
DUP-01	SAMPLE	291572-005	ND	0.20	0.040
MW-05	SAMPLE	291572-006	ND	0.20	0.040
	BLANK	QC897375	ND	0.20	0.040

ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

ENTHALPY ANALYTICAL

Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	291572	Location:	PG&E Brush Street
Client:	ERM	Prep:	METHOD
Project#:	0399889.02.05	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	250761
Field ID:	ZZZZZZZZZZ	Sampled:	08/14/17
MSS Lab ID:	291583-001	Received:	08/15/17
Matrix:	Water	Prepared:	08/17/17
Units:	ug/L	Analyzed:	08/17/17
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC897320		2.500	2.456	98	80-120		
BSD	QC897321		2.500	2.500	100	80-120	2	20
MS	QC897322	<0.04000	2.500	2.510	100	63-120		
MSD	QC897323		2.500	2.434	97	63-120	3	42

RPD= Relative Percent Difference

Laboratory Job Number 291572

Subcontracted Products

Enthalpy Analytical (Orange)

Enthalpy Analytical, LLC
931 W. Barkley Ave - Orange, CA 92868
Tel: (714)771-6900 Fax: (714)538-1209
www.enthalpy.com
info-sc@enthalpy.com

MONTROSE ENVIRONMENTAL

Client: Enthalpy - Berkeley
Address: 2323 Fifth Street
Berkeley, CA 94710

Attn: Dina Ali

Comments: Project Number: 291572
Site: PG&E Brush Street

Lab Request: 393697
Report Date: 08/24/2017
Date Received: 08/17/2017
Client ID: 15279

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

Sample #	Client Sample ID
393697-001	MW-01
393697-002	MW-02
393697-003	MW-03
393697-004	MW-04
393697-005	DUP-01
393697-006	MW-05

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

Report Review performed by: Chris Myrter, Project Specialist

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 60 days from date received.

Matrix: Water **Client:** Enthalpy - Berkeley **Collector:** Client
Sampled: 08/14/2017 12:05 **Site:**
Sample #: 393697-001 **Client Sample #:** MW-01 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B NELAC	Prep Method: EPA 3010A/Filtered						QCBatchID: QC1181720		
Antimony	ND	1	0.016	0.02	mg/L	08/18/17	08/18/17	KLN	
Arsenic	**0.007 J**	1	0.004	0.01	mg/L	08/18/17	08/21/17	KLN	
Barium	**0.033**	1	0.001	0.01	mg/L	08/18/17	08/18/17	KLN	
Beryllium	ND	1	0.001	0.005	mg/L	08/18/17	08/18/17	KLN	
Cadmium	ND	1	0.001	0.005	mg/L	08/18/17	08/18/17	KLN	
Chromium	ND	1	0.002	0.01	mg/L	08/18/17	08/18/17	KLN	
Cobalt	ND	1	0.001	0.005	mg/L	08/18/17	08/18/17	KLN	
Copper	**0.006 J**	1	0.001	0.01	mg/L	08/18/17	08/18/17	KLN	
Lead	ND	1	0.004	0.005	mg/L	08/18/17	08/18/17	KLN	
Molybdenum	**0.023**	1	0.002	0.01	mg/L	08/18/17	08/18/17	KLN	
Nickel	ND	1	0.001	0.02	mg/L	08/18/17	08/18/17	KLN	
Selenium	**0.006 J**	1	0.004	0.01	mg/L	08/18/17	08/20/17	KLN	
Silver	ND	1	0.001	0.005	mg/L	08/18/17	08/18/17	KLN	
Thallium	**0.024**	1	0.003	0.005	mg/L	08/18/17	08/18/17	KLN	
Vanadium	ND	1	0.003	0.005	mg/L	08/18/17	08/18/17	KLN	
Zinc	**0.010 J**	1	0.002	0.02	mg/L	08/18/17	08/18/17	KLN	

Matrix: Water **Client:** Enthalpy - Berkeley **Collector:** Client
Sampled: 08/14/2017 13:30 **Site:**
Sample #: 393697-002 **Client Sample #:** MW-02 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B NELAC	Prep Method: EPA 3010A/Filtered						QCBatchID: QC1181720		
Antimony	**0.022**	1	0.016	0.02	mg/L	08/18/17	08/21/17	KLN	
Arsenic	ND	1	0.004	0.01	mg/L	08/18/17	08/20/17	KLN	
Barium	**0.107**	1	0.001	0.01	mg/L	08/18/17	08/18/17	KLN	
Beryllium	ND	1	0.001	0.005	mg/L	08/18/17	08/18/17	KLN	
Cadmium	ND	1	0.001	0.005	mg/L	08/18/17	08/18/17	KLN	
Chromium	ND	1	0.002	0.01	mg/L	08/18/17	08/18/17	KLN	
Cobalt	**0.006**	1	0.001	0.005	mg/L	08/18/17	08/18/17	KLN	
Copper	**0.006 J**	1	0.001	0.01	mg/L	08/18/17	08/18/17	KLN	
Lead	**0.010**	1	0.004	0.005	mg/L	08/18/17	08/18/17	KLN	
Molybdenum	**0.015**	1	0.002	0.01	mg/L	08/18/17	08/18/17	KLN	
Nickel	**0.022**	1	0.001	0.02	mg/L	08/18/17	08/18/17	KLN	
Selenium	ND	1	0.004	0.01	mg/L	08/18/17	08/18/17	KLN	
Silver	ND	1	0.001	0.005	mg/L	08/18/17	08/18/17	KLN	
Thallium	**0.012**	1	0.003	0.005	mg/L	08/18/17	08/18/17	KLN	
Vanadium	ND	1	0.003	0.005	mg/L	08/18/17	08/18/17	KLN	
Zinc	**0.129**	1	0.002	0.02	mg/L	08/18/17	08/18/17	KLN	

Matrix: Water **Client:** Enthalpy - Berkeley **Collector:** Client
Sampled: 08/14/2017 16:45 **Site:**
Sample #: 393697-003 **Client Sample #:** MW-03 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B NELAC	Prep Method: EPA 3010A/Filtered						QCBatchID: QC1181720		
Antimony	ND	1	0.016	0.02	mg/L	08/18/17	08/21/17	KLN	
Arsenic	ND	1	0.004	0.01	mg/L	08/18/17	08/20/17	KLN	
Barium	**0.010**	1	0.001	0.01	mg/L	08/18/17	08/18/17	KLN	
Beryllium	ND	1	0.001	0.005	mg/L	08/18/17	08/18/17	KLN	
Cadmium	ND	1	0.001	0.005	mg/L	08/18/17	08/18/17	KLN	
Chromium	**0.098**	1	0.002	0.01	mg/L	08/18/17	08/18/17	KLN	
Cobalt	ND	1	0.001	0.005	mg/L	08/18/17	08/18/17	KLN	
Copper	**0.007 J**	1	0.001	0.01	mg/L	08/18/17	08/18/17	KLN	
Lead	**0.010**	1	0.004	0.005	mg/L	08/18/17	08/18/17	KLN	
Molybdenum	**0.011**	1	0.002	0.01	mg/L	08/18/17	08/18/17	KLN	
Nickel	**0.010 J**	1	0.001	0.02	mg/L	08/18/17	08/18/17	KLN	
Selenium	ND	1	0.004	0.01	mg/L	08/18/17	08/18/17	KLN	
Silver	ND	1	0.001	0.005	mg/L	08/18/17	08/18/17	KLN	
Thallium	**0.020**	1	0.003	0.005	mg/L	08/18/17	08/18/17	KLN	
Vanadium	**0.010**	1	0.003	0.005	mg/L	08/18/17	08/18/17	KLN	
Zinc	**0.062**	1	0.002	0.02	mg/L	08/18/17	08/18/17	KLN	

Matrix: Water **Client:** Enthalpy - Berkeley **Collector:** Client
Sampled: 08/14/2017 14:40 **Site:**
Sample #: 393697-004 **Client Sample #:** MW-04 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B NELAC	Prep Method: EPA 3010A/Filtered						QCBatchID: QC1181720		
Antimony	ND	1	0.016	0.02	mg/L	08/18/17	08/21/17	KLN	
Arsenic	**0.030**	1	0.004	0.01	mg/L	08/18/17	08/18/17	KLN	
Barium	**0.062**	1	0.001	0.01	mg/L	08/18/17	08/18/17	KLN	
Beryllium	ND	1	0.001	0.005	mg/L	08/18/17	08/18/17	KLN	
Cadmium	ND	1	0.001	0.005	mg/L	08/18/17	08/18/17	KLN	
Chromium	ND	1	0.002	0.01	mg/L	08/18/17	08/18/17	KLN	
Cobalt	**0.002 J**	1	0.001	0.005	mg/L	08/18/17	08/18/17	KLN	
Copper	**0.004 J**	1	0.001	0.01	mg/L	08/18/17	08/18/17	KLN	
Lead	**0.013**	1	0.004	0.005	mg/L	08/18/17	08/18/17	KLN	
Molybdenum	**0.007 J**	1	0.002	0.01	mg/L	08/18/17	08/18/17	KLN	
Nickel	**0.004 J**	1	0.001	0.02	mg/L	08/18/17	08/18/17	KLN	
Selenium	ND	1	0.004	0.01	mg/L	08/18/17	08/18/17	KLN	
Silver	ND	1	0.001	0.005	mg/L	08/18/17	08/18/17	KLN	
Thallium	**0.008**	1	0.003	0.005	mg/L	08/18/17	08/18/17	KLN	
Vanadium	ND	1	0.003	0.005	mg/L	08/18/17	08/18/17	KLN	
Zinc	**0.008 J**	1	0.002	0.02	mg/L	08/18/17	08/18/17	KLN	

Matrix: Water **Client:** Enthalpy - Berkeley **Collector:** Client
Sampled: 08/14/2017 14:50 **Site:**
Sample #: 393697-005 **Client Sample #:** DUP-01 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B NELAC	Prep Method: EPA 3010A/Filtered						QCBatchID: QC1181720		
Antimony	ND	1	0.016	0.02	mg/L	08/18/17	08/18/17	KLN	
Arsenic	**0.020**	1	0.004	0.01	mg/L	08/18/17	08/20/17	KLN	
Barium	**0.079**	1	0.001	0.01	mg/L	08/18/17	08/18/17	KLN	
Beryllium	ND	1	0.001	0.005	mg/L	08/18/17	08/18/17	KLN	
Cadmium	ND	1	0.001	0.005	mg/L	08/18/17	08/18/17	KLN	
Chromium	ND	1	0.002	0.01	mg/L	08/18/17	08/18/17	KLN	
Cobalt	**0.002 J**	1	0.001	0.005	mg/L	08/18/17	08/18/17	KLN	
Copper	**0.004 J**	1	0.001	0.01	mg/L	08/18/17	08/18/17	KLN	
Lead	**0.012**	1	0.004	0.005	mg/L	08/18/17	08/18/17	KLN	
Molybdenum	**0.007 J**	1	0.002	0.01	mg/L	08/18/17	08/18/17	KLN	
Nickel	**0.006 J**	1	0.001	0.02	mg/L	08/18/17	08/18/17	KLN	
Selenium	ND	1	0.004	0.01	mg/L	08/18/17	08/18/17	KLN	
Silver	ND	1	0.001	0.005	mg/L	08/18/17	08/18/17	KLN	
Thallium	**0.010**	1	0.003	0.005	mg/L	08/18/17	08/18/17	KLN	
Vanadium	ND	1	0.003	0.005	mg/L	08/18/17	08/18/17	KLN	
Zinc	**0.007 J**	1	0.002	0.02	mg/L	08/18/17	08/18/17	KLN	

Matrix: Water **Client:** Enthalpy - Berkeley **Collector:** Client
Sampled: 08/14/2017 15:55 **Site:**
Sample #: 393697-006 **Client Sample #:** MW-05 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Prepared	Analyzed	By	Notes
Method: EPA 6010B NELAC	Prep Method: EPA 3010A/Filtered						QCBatchID: QC1181720		
Antimony	ND	1	0.016	0.02	mg/L	08/18/17	08/18/17	KLN	
Arsenic	**0.025**	1	0.004	0.01	mg/L	08/18/17	08/20/17	KLN	
Barium	**0.032**	1	0.001	0.01	mg/L	08/18/17	08/18/17	KLN	
Beryllium	ND	1	0.001	0.005	mg/L	08/18/17	08/18/17	KLN	
Cadmium	ND	1	0.001	0.005	mg/L	08/18/17	08/18/17	KLN	
Chromium	ND	1	0.002	0.01	mg/L	08/18/17	08/18/17	KLN	
Cobalt	**0.003 J**	1	0.001	0.005	mg/L	08/18/17	08/18/17	KLN	
Copper	**0.004 J**	1	0.001	0.01	mg/L	08/18/17	08/18/17	KLN	
Lead	**0.014**	1	0.004	0.005	mg/L	08/18/17	08/18/17	KLN	
Molybdenum	**0.010**	1	0.002	0.01	mg/L	08/18/17	08/18/17	KLN	
Nickel	**0.007 J**	1	0.001	0.02	mg/L	08/18/17	08/18/17	KLN	
Selenium	ND	1	0.004	0.01	mg/L	08/18/17	08/18/17	KLN	
Silver	ND	1	0.001	0.005	mg/L	08/18/17	08/18/17	KLN	
Thallium	**0.015**	1	0.003	0.005	mg/L	08/18/17	08/18/17	KLN	
Vanadium	ND	1	0.003	0.005	mg/L	08/18/17	08/18/17	KLN	
Zinc	**0.016 J**	1	0.002	0.02	mg/L	08/18/17	08/18/17	KLN	

QCBatchID: QC1181720 **Analyst:** dswafford **Method:** EPA 6010B

Matrix: Water **Analyzed:** 08/18/2017 **Instrument:** AAICP (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1181720MB1					
Aluminum	ND	mg/L	0.009	0.05	
Antimony	ND	mg/L	0.016	0.02	
Arsenic	ND	mg/L	0.004	0.01	
Barium	ND	mg/L	0.001	0.01	
Beryllium	ND	mg/L	0.001	0.005	
Cadmium	ND	mg/L	0.001	0.005	
Chromium	ND	mg/L	0.002	0.01	
Cobalt	ND	mg/L	0.001	0.005	
Copper	**0.004 J**	mg/L	0.001	0.01	
Iron	ND	mg/L	0.012	0.02	
Lead	ND	mg/L	0.004	0.005	
Molybdenum	ND	mg/L	0.002	0.01	
Nickel	ND	mg/L	0.001	0.02	
Selenium	ND	mg/L	0.004	0.01	
Silver	ND	mg/L	0.001	0.005	
Thallium	ND	mg/L	0.003	0.005	
Vanadium	ND	mg/L	0.003	0.005	
Zinc	ND	mg/L	0.002	0.02	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount LCS	Spike Amount LCSD	Spike Result LCS	Spike Result LCSD	Units	Recoveries LCS	Recoveries LCSD	RPD	Limits %Rec	Limits RPD	Notes
QC1181720LCS1											
Antimony	2		2.05		mg/L	103			80-120		
Arsenic	2		1.96		mg/L	98			80-120		
Barium	2		2.08		mg/L	104			80-120		
Beryllium	2		2.05		mg/L	103			80-120		
Cadmium	2		1.95		mg/L	98			80-120		
Chromium	2		1.95		mg/L	98			80-120		
Cobalt	2		2.02		mg/L	101			80-120		
Copper	2		1.96		mg/L	98			80-120		
Lead	2		1.98		mg/L	99			80-120		
Molybdenum	2		2.08		mg/L	104			80-120		
Nickel	2		1.99		mg/L	100			80-120		
Selenium	2		1.87		mg/L	94			80-120		
Silver	2		1.89		mg/L	95			80-120		
Thallium	2		1.91		mg/L	96			80-120		
Vanadium	2		2.04		mg/L	102			80-120		
Zinc	2		1.98		mg/L	99			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1181720MS1, QC1181720MSD1												**Source: 393686-001**
Antimony	ND	1	1	1.05	1.000	mg/L	105	100	4.9	75-125	20	
Arsenic	ND	1	1	1.03	0.952	mg/L	103	95	7.9	75-125	20	
Barium	0.008	1	1	1.06	1.03	mg/L	105	102	2.9	75-125	20	
Beryllium	ND	1	1	1.05	1.02	mg/L	105	102	2.9	75-125	20	
Cadmium	ND	1	1	0.978	0.956	mg/L	98	96	2.3	75-125	20	
Chromium	ND	1	1	0.994	0.962	mg/L	99	96	3.3	75-125	20	
Cobalt	ND	1	1	1.05	1.02	mg/L	105	102	2.9	75-125	20	

QCBatchID: QC1181720 **Analyst:** dswafford **Method:** EPA 6010B

Matrix: Water **Analyzed:** 08/18/2017 **Instrument:** AAICP (group)

Analyte	Sample Amount	Spike Amount MS	Spike Amount MSD	Spike Result MS	Spike Result MSD	Units	Recoveries MS	Recoveries MSD	RPD	Limits %Rec	Limits RPD	Notes
QC1181720MS1, QC1181720MSD1												**Source: 393686-001**
Copper	0.020	1	1	1.06	1.02	mg/L	104	100	3.8	75-125	20	
Lead	0.004	1	1	1.02	0.951	mg/L	102	95	7.0	75-125	20	
Molybdenum	0.003	1	1	1.06	1.000	mg/L	106	100	5.8	75-125	20	
Nickel	0.351	1	1	1.46	1.39	mg/L	111	104	4.9	75-125	20	
Selenium	ND	1	1	0.950	0.868	mg/L	95	87	9.0	75-125	20	
Silver	ND	1	1	0.963	0.929	mg/L	96	93	3.6	75-125	20	
Thallium	0.004	1	1	0.988	0.929	mg/L	98	93	6.2	75-125	20	
Vanadium	ND	1	1	1.09	1.06	mg/L	109	106	2.8	75-125	20	
Zinc	0.009	1	1	1.02	0.989	mg/L	101	98	3.1	75-125	20	

Data Qualifiers and Definitions

Qualifiers

A	See Report Comments.
B	Analyte was present in an associated method blank.
B1	Analyte was present in a sample and associated method blank greater than MDL but less than RDL.
BQ1	No valid test replicates. Sample Toxicity is possible. Best result was reported.
BQ2	No valid test replicates.
BQ3	No valid test replicates. Final DO is less than 1.0 mg/L. Result may be greater.
C	Possible laboratory contamination.
D	RPD was not within control limits. The sample data was reported without further clarification.
D1	Lesser amount of sample was used due to insufficient amount of sample supplied.
D2	Reporting limit is elevated due to sample matrix. Target analyte was not detected above the elevated reporting limit.
D3	Insufficient sample was supplied for TCLP. Client was notified. TCLP was performed per the Client's instructions.
DW	Sample result is calculated on a dry weigh basis.
E	Concentration is estimated because it exceeds the quantification limits of the method.
I	The sample was read outside of the method required incubation period.
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
M1	The matrix spike (MS) or matrix spike duplicate (MSD) is not within control limits due to matrix interference.
M2	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits. The associated LCS and/or LCSD was not within control limits. Sample result is estimated.
N1	Sample chromatography does not match the specified TPH standard pattern.
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
P	Sample was received without proper preservation according to EPA guidelines.
P1	Temperature of sample storage refrigerator was out of acceptance limits.
P2	The sample was preserved within 24 hours of collection in accordance with EPA 218.6.
P3	Per Client request, sample was composited for volatile analysis. Sample compositing for volatile analysis is not recommended due to potential loss of target analytes. Results may be biased low.
Q1	Analyte Calibration Verification exceeds criteria. The result is estimated.
Q2	Analyte calibration was not verified and the result was estimated.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated.
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
S1	The associated surrogate recovery was out of control limits; result is estimated.
S2	The surrogate was diluted out due to the presence of high concentrations of target and/or non-target compounds. Surrogate recoveries in the associated batch QC met recovery criteria.
S3	Internal Standard did not meet recovery limits. Analyte concentration is estimated.
T	Sample was extracted/analyzed past the holding time.
T1	Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only).
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
T3	Sample received and analyzed out of hold time per client's request.
T4	Sample was analyzed out of hold time per client's request.
T5	Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable.
T6	Hold time is indeterminable due to unspecified sampling time.
T7	Sample was analyzed past hold time due to insufficient time remaining at time of receipt.

Definitions

DF	Dilution Factor
MDL	Method Detection Limit. Result is reported ND when it is less than or equal to MDL.
ND	Analyte was not detected or was less than the detection limit.
NR	Not Reported. See Report Comments.
RDL	Reporting Detection Limit
TIC	Tentatively Identified Compounds

Enthalpy Berkeley

2323 Fifth Street
Berkeley, CA 94710
(510) 486-0900
(510) 486-0532

3936697

Project Number: 291572
Site: PG&E Brush Street

Subcontract Laboratory:
Enthalpy Analytical (Orange)
931 W Barkley Avenue
Orange, CA 92868
(714) 771-6900
ATTN: Winston Yu

Results due: 8/24/17 Report Level: II

Please send report to: Dina Ali (dina.ali@enthalpy.com)
*** Please report using Sample ID rather than Enthalpy Lab #.

Sample ID	Sampled	Matrix	Analysis	Lab #	Comments
MW-01	08/14 12:05	Filtrate	6010-T22 MET-SUB	291572-001	NO MERCURY
MW-02	08/14 13:30	Filtrate	6010-T22 MET-SUB	291572-002	NO MERCURY
MW-03	08/14 16:45	Filtrate	6010-T22 MET-SUB	291572-003	NO MERCURY
MW-04	08/14 14:40	Filtrate	6010-T22 MET-SUB	291572-004	NO MERCURY
DUP-01	08/14 14:50	Filtrate	6010-T22 MET-SUB	291572-005	NO MERCURY
MW-05	08/14 15:55	Filtrate	6010-T22 MET-SUB	291572-006	NO MERCURY

Notes:	Relinquished By:	Received By:
-need EDD -J to MDL	bp	
	Date/Time: 8-16-17 @ 16:00	Date/Time: 08/17/17 1053
	Date/Time:	Date/Time:

Signature on this form constitutes a firm Purchase Order for the services requested above.

ENTHALPY ANALYTICAL

SAMPLE ACCEPTANCE CHECKLIST

Section 1

Client: Enthalpy Berkeley Project: 291572

Date Received: 08/17/17 Sampler's Name Present: ☐ Yes ☑ No

Section 2

Sample(s) received in a cooler? ☑ Yes, How many? 1 ☐ No (skip section 2) Sample Temp (°C) (No Cooler): _____

Sample Temp (°C), One from each cooler: #1: 5.7 #2: _____ #3: _____ #4: _____

(Acceptance range is < 6°C but not frozen (for Microbiology samples, acceptance range is < 10°C but not frozen). It is acceptable for samples collected the same day as sample receipt to have a higher temperature as long as there is evidence that cooling has begun.)

Shipping Information: _____

Section 3

Was the cooler packed with: ☑ Ice ☑ Ice Packs ☑ Bubble Wrap ☐ Styrofoam ☐ Paper ☐ None ☐ Other _____

Cooler Temp (°C): #1: 0.6 #2: _____ #3: _____ #4: _____

Section 4	YES	NO	N/A
Was a COC received?	✓		
Are sample IDs present?	✓		
Are sampling dates & times present?	✓		
Is a relinquished signature present?	✓		
Are the tests required clearly indicated on the COC?	✓		
Are custody seals present?		✓	
If custody seals are present, were they intact?			✓
Are all samples sealed in plastic bags? (Recommended for Microbiology samples)			✓
Did all samples arrive intact? If no, indicate in Section 4 below.	✓		
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were the samples collected in the correct containers for the required tests?	✓	✓	
Are the containers labeled with the correct preservatives?		✓	
Is there headspace in the VOA vials greater than 5-6 mm in diameter?			✓
Was a sufficient amount of sample submitted for the requested tests?	✓		

Section 5 Explanations/Comments

Not preserved w/ nitric acid

Section 6

For discrepancies, how was the Project Manager notified? ☐ Verbal PM Initials: _____ Date/Time _____

☑ Email (email sent to/on): CM / 08/17/17 @ 1244

Project Manager's response:

Completed By: _____ Date: 08/17/17

GSO
GOLDEN STATE OVERNIGHT

800-322-5555 www.gso.com

Ship From
CURTIS & TOMPKINS
MICHAEL DAHLQUIST
2323 FIFTH STREET
BERKELEY, CA 94710

Ship To
ENTHALPY ANALYTICAL
METALS DEPARTMENT
931 W. BARKLEY
ORANGE, CA 92868

COD: $0.00
Weight: 0 lb(s)
Reference:

Delivery Instructions:

Signature Type: REQUIRED

Tracking #: 537262259

PDS

ORC
ORANGE

D

D92865A

70950942

Print Date: 8/16/2017 3:59 PM

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8/28/2017
Mr. Doug Moberg
ERM-West
1277 Treat Blvd
Suite 500
Walnut Creek CA 94597

Project Name: PG&E Brush St.
Project #:
Workorder #: 1708298A

Dear Mr. Doug Moberg

The following report includes the data for the above referenced project for sample(s) received on 8/16/2017 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Rachel Selenis at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Rachel Selenis

Project Manager

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WORK ORDER #: 1708298A

Work Order Summary

CLIENT:	Mr. Doug Moberg ERM-West 1277 Treat Blvd Suite 500 Walnut Creek, CA 94597	**BILL TO:**	Mr. Doug Moberg ERM-West 1277 Treat Blvd Suite 500 Walnut Creek, CA 94597
PHONE:	925-946-0455	**P.O. #**	0399889
FAX:	925-946-9968	**PROJECT #**	PG&E Brush St.
DATE RECEIVED:	08/16/2017	**CONTACT:**	Rachel Selenis
DATE COMPLETED:	08/28/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SV-1	TO-15	3.5 "Hg	15 psi
02A	SV-2	TO-15	4.0 "Hg	15 psi
03A	SV-3	TO-15	4.0 "Hg	15 psi
04A	SV-4	TO-15	4.0 "Hg	15 psi
05A	SV-4-DUP	TO-15	4.0 "Hg	15 psi
06A	SV-5	TO-15	2.5 "Hg	15 psi
07A	SV-6	TO-15	2.5 "Hg	15 psi
08A	Lab Blank	TO-15	NA	NA
08B	Lab Blank	TO-15	NA	NA
08C	Lab Blank	TO-15	NA	NA
09A	CCV	TO-15	NA	NA
09B	CCV	TO-15	NA	NA
09C	CCV	TO-15	NA	NA
10A	LCS	TO-15	NA	NA
10AA	LCSD	TO-15	NA	NA
10B	LCS	TO-15	NA	NA
10BB	LCSD	TO-15	NA	NA
10C	LCS	TO-15	NA	NA
10CC	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Rayos DATE: 08/28/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

LABORATORY NARRATIVE
EPA Method TO-15
ERM-West
Workorder# 1708298A

Seven 1 Liter Summa Canister samples were received on August 16, 2017. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Dilution was performed on samples SV-4, SV-4-DUP and SV-5 due to the presence of high level target species.

The recovery of surrogate 1,2-Dichloroethane-d4 in sample SV-5 was outside laboratory control limits due to high level hydrocarbon matrix interference. The surrogate recovery is flagged.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SV-1

Lab ID#: 1708298A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	1.1	5.4	5.6	26

Client Sample ID: SV-2

Lab ID#: 1708298A-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	1.2	4.8	5.7	24

Client Sample ID: SV-3

Lab ID#: 1708298A-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	1.2	4.9	7.9	33

Client Sample ID: SV-4

Lab ID#: 1708298A-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	4.7	30	25	160
Tetrachloroethene	4.7	950	32	6400

Client Sample ID: SV-4-DUP

Lab ID#: 1708298A-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1,1-Trichloroethane	4.7	30	25	160
Tetrachloroethene	4.7	930	32	6300

Client Sample ID: SV-5

Lab ID#: 1708298A-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS

Client Sample ID: SV-5

Lab ID#: 1708298A-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Hexane	55	22000	190	79000
Cyclohexane	55	7500	190	26000
2,2,4-Trimethylpentane	55	140000 E	260	650000 E
Heptane	55	2500	220	10000

Client Sample ID: SV-6

Lab ID#: 1708298A-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Carbon Disulfide	4.4	6.1	14	19
Chloroform	1.1	3.4	5.4	17
1,1,1-Trichloroethane	1.1	6.5	6.0	36
Benzene	1.1	2.2	3.5	7.2
Tetrachloroethene	1.1	24	7.5	160

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Client Sample ID: SV-1

Lab ID#: 1708298A-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3081809**	**Date of Collection:**	**8/15/17 11:10:00 AM**
Dil. Factor:	**2.29**	**Date of Analysis:**	**8/18/17 03:37 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.1	Not Detected	5.7	Not Detected
Freon 114	1.1	Not Detected	8.0	Not Detected
Chloromethane	11	Not Detected	24	Not Detected
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,3-Butadiene	1.1	Not Detected	2.5	Not Detected
Bromomethane	11	Not Detected	44	Not Detected
Chloroethane	4.6	Not Detected	12	Not Detected
Freon 11	1.1	Not Detected	6.4	Not Detected
Ethanol	4.6	Not Detected	8.6	Not Detected
Freon 113	1.1	Not Detected	8.8	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Acetone	11	Not Detected	27	Not Detected
2-Propanol	4.6	Not Detected	11	Not Detected
Carbon Disulfide	4.6	Not Detected	14	Not Detected
3-Chloropropene	4.6	Not Detected	14	Not Detected
Methylene Chloride	11	Not Detected	40	Not Detected
Methyl tert-butyl ether	4.6	Not Detected	16	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Hexane	1.1	Not Detected	4.0	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.6	Not Detected	14	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.4	Not Detected
Chloroform	1.1	5.4	5.6	26
1,1,1-Trichloroethane	1.1	Not Detected	6.2	Not Detected
Cyclohexane	1.1	Not Detected	3.9	Not Detected
Carbon Tetrachloride	1.1	Not Detected	7.2	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.3	Not Detected
Benzene	1.1	Not Detected	3.6	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.6	Not Detected
Heptane	1.1	Not Detected	4.7	Not Detected
Trichloroethene	1.1	Not Detected	6.2	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.3	Not Detected
1,4-Dioxane	4.6	Not Detected	16	Not Detected
Bromodichloromethane	1.1	Not Detected	7.7	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	5.2	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.7	Not Detected
Toluene	1.1	Not Detected	4.3	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	5.2	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.2	Not Detected
Tetrachloroethene	1.1	Not Detected	7.8	Not Detected
2-Hexanone	4.6	Not Detected	19	Not Detected

eurofins | Air Toxics

Client Sample ID: SV-1

Lab ID#: 1708298A-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3081809**	**Date of Collection:**	**8/15/17 11:10:00 AM**
Dil. Factor:	**2.29**	**Date of Analysis:**	**8/18/17 03:37 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.1	Not Detected	9.8	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.8	Not Detected
Chlorobenzene	1.1	Not Detected	5.3	Not Detected
Ethyl Benzene	1.1	Not Detected	5.0	Not Detected
m,p-Xylene	1.1	Not Detected	5.0	Not Detected
o-Xylene	1.1	Not Detected	5.0	Not Detected
Styrene	1.1	Not Detected	4.9	Not Detected
Bromoform	1.1	Not Detected	12	Not Detected
Cumene	1.1	Not Detected	5.6	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.9	Not Detected
Propylbenzene	1.1	Not Detected	5.6	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.6	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.9	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.9	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.9	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.9	Not Detected
1,2,4-Trichlorobenzene	4.6	Not Detected	34	Not Detected
Hexachlorobutadiene	4.6	Not Detected	49	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	91	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: SV-2

Lab ID#: 1708298A-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3081810**	**Date of Collection:**	**8/15/17 11:20:00 AM**
Dil. Factor:	**2.33**	**Date of Analysis:**	**8/18/17 04:03 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.2	Not Detected	5.8	Not Detected
Freon 114	1.2	Not Detected	8.1	Not Detected
Chloromethane	12	Not Detected	24	Not Detected
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,3-Butadiene	1.2	Not Detected	2.6	Not Detected
Bromomethane	12	Not Detected	45	Not Detected
Chloroethane	4.7	Not Detected	12	Not Detected
Freon 11	1.2	Not Detected	6.5	Not Detected
Ethanol	4.7	Not Detected	8.8	Not Detected
Freon 113	1.2	Not Detected	8.9	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Acetone	12	Not Detected	28	Not Detected
2-Propanol	4.7	Not Detected	11	Not Detected
Carbon Disulfide	4.7	Not Detected	14	Not Detected
3-Chloropropene	4.7	Not Detected	14	Not Detected
Methylene Chloride	12	Not Detected	40	Not Detected
Methyl tert-butyl ether	4.7	Not Detected	17	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Hexane	1.2	Not Detected	4.1	Not Detected
1,1-Dichloroethane	1.2	Not Detected	4.7	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.7	Not Detected	14	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrahydrofuran	1.2	Not Detected	3.4	Not Detected
Chloroform	1.2	4.8	5.7	24
1,1,1-Trichloroethane	1.2	Not Detected	6.4	Not Detected
Cyclohexane	1.2	Not Detected	4.0	Not Detected
Carbon Tetrachloride	1.2	Not Detected	7.3	Not Detected
2,2,4-Trimethylpentane	1.2	Not Detected	5.4	Not Detected
Benzene	1.2	Not Detected	3.7	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.7	Not Detected
Heptane	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
1,2-Dichloropropane	1.2	Not Detected	5.4	Not Detected
1,4-Dioxane	4.7	Not Detected	17	Not Detected
Bromodichloromethane	1.2	Not Detected	7.8	Not Detected
cis-1,3-Dichloropropene	1.2	Not Detected	5.3	Not Detected
4-Methyl-2-pentanone	1.2	Not Detected	4.8	Not Detected
Toluene	1.2	Not Detected	4.4	Not Detected
trans-1,3-Dichloropropene	1.2	Not Detected	5.3	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.4	Not Detected
Tetrachloroethene	1.2	Not Detected	7.9	Not Detected
2-Hexanone	4.7	Not Detected	19	Not Detected

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Client Sample ID: SV-2

Lab ID#: 1708298A-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3081810**	**Date of Collection:**	**8/15/17 11:20:00 AM**
Dil. Factor:	**2.33**	**Date of Analysis:**	**8/18/17 04:03 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.2	Not Detected	9.9	Not Detected
1,2-Dibromoethane (EDB)	1.2	Not Detected	9.0	Not Detected
Chlorobenzene	1.2	Not Detected	5.4	Not Detected
Ethyl Benzene	1.2	Not Detected	5.0	Not Detected
m,p-Xylene	1.2	Not Detected	5.0	Not Detected
o-Xylene	1.2	Not Detected	5.0	Not Detected
Styrene	1.2	Not Detected	5.0	Not Detected
Bromoform	1.2	Not Detected	12	Not Detected
Cumene	1.2	Not Detected	5.7	Not Detected
1,1,2,2-Tetrachloroethane	1.2	Not Detected	8.0	Not Detected
Propylbenzene	1.2	Not Detected	5.7	Not Detected
4-Ethyltoluene	1.2	Not Detected	5.7	Not Detected
1,3,5-Trimethylbenzene	1.2	Not Detected	5.7	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.7	Not Detected
1,3-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected
1,4-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected
alpha-Chlorotoluene	1.2	Not Detected	6.0	Not Detected
1,2-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected
1,2,4-Trichlorobenzene	4.7	Not Detected	34	Not Detected
Hexachlorobutadiene	4.7	Not Detected	50	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: SV-3

Lab ID#: 1708298A-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3081823**	**Date of Collection:**	**8/15/17 11:49:00 AM**
Dil. Factor:	**2.33**	**Date of Analysis:**	**8/18/17 11:40 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.2	Not Detected	5.8	Not Detected
Freon 114	1.2	Not Detected	8.1	Not Detected
Chloromethane	12	Not Detected	24	Not Detected
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,3-Butadiene	1.2	Not Detected	2.6	Not Detected
Bromomethane	12	Not Detected	45	Not Detected
Chloroethane	4.7	Not Detected	12	Not Detected
Freon 11	1.2	Not Detected	6.5	Not Detected
Ethanol	4.7	Not Detected	8.8	Not Detected
Freon 113	1.2	Not Detected	8.9	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Acetone	12	Not Detected	28	Not Detected
2-Propanol	4.7	Not Detected	11	Not Detected
Carbon Disulfide	4.7	Not Detected	14	Not Detected
3-Chloropropene	4.7	Not Detected	14	Not Detected
Methylene Chloride	12	Not Detected	40	Not Detected
Methyl tert-butyl ether	4.7	Not Detected	17	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Hexane	1.2	Not Detected	4.1	Not Detected
1,1-Dichloroethane	1.2	Not Detected	4.7	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.7	Not Detected	14	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Tetrahydrofuran	1.2	Not Detected	3.4	Not Detected
Chloroform	1.2	Not Detected	5.7	Not Detected
1,1,1-Trichloroethane	1.2	Not Detected	6.4	Not Detected
Cyclohexane	1.2	Not Detected	4.0	Not Detected
Carbon Tetrachloride	1.2	Not Detected	7.3	Not Detected
2,2,4-Trimethylpentane	1.2	Not Detected	5.4	Not Detected
Benzene	1.2	Not Detected	3.7	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.7	Not Detected
Heptane	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
1,2-Dichloropropane	1.2	Not Detected	5.4	Not Detected
1,4-Dioxane	4.7	Not Detected	17	Not Detected
Bromodichloromethane	1.2	Not Detected	7.8	Not Detected
cis-1,3-Dichloropropene	1.2	Not Detected	5.3	Not Detected
4-Methyl-2-pentanone	1.2	Not Detected	4.8	Not Detected
Toluene	1.2	Not Detected	4.4	Not Detected
trans-1,3-Dichloropropene	1.2	Not Detected	5.3	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.4	Not Detected
Tetrachloroethene	1.2	4.9	7.9	33
2-Hexanone	4.7	Not Detected	19	Not Detected

eurofins | Air Toxics

Client Sample ID: SV-3

Lab ID#: 1708298A-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3081823**	**Date of Collection:**	**8/15/17 11:49:00 AM**
Dil. Factor:	**2.33**	**Date of Analysis:**	**8/18/17 11:40 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.2	Not Detected	9.9	Not Detected
1,2-Dibromoethane (EDB)	1.2	Not Detected	9.0	Not Detected
Chlorobenzene	1.2	Not Detected	5.4	Not Detected
Ethyl Benzene	1.2	Not Detected	5.0	Not Detected
m,p-Xylene	1.2	Not Detected	5.0	Not Detected
o-Xylene	1.2	Not Detected	5.0	Not Detected
Styrene	1.2	Not Detected	5.0	Not Detected
Bromoform	1.2	Not Detected	12	Not Detected
Cumene	1.2	Not Detected	5.7	Not Detected
1,1,2,2-Tetrachloroethane	1.2	Not Detected	8.0	Not Detected
Propylbenzene	1.2	Not Detected	5.7	Not Detected
4-Ethyltoluene	1.2	Not Detected	5.7	Not Detected
1,3,5-Trimethylbenzene	1.2	Not Detected	5.7	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.7	Not Detected
1,3-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected
1,4-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected
alpha-Chlorotoluene	1.2	Not Detected	6.0	Not Detected
1,2-Dichlorobenzene	1.2	Not Detected	7.0	Not Detected
1,2,4-Trichlorobenzene	4.7	Not Detected	34	Not Detected
Hexachlorobutadiene	4.7	Not Detected	50	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	90	70-130
4-Bromofluorobenzene	107	70-130

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Client Sample ID: SV-4

Lab ID#: 1708298A-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3082619**	**Date of Collection:**	**8/15/17 11:09:00 PM**
Dil. Factor:	**9.32**	**Date of Analysis:**	**8/26/17 10:07 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	4.7	Not Detected	23	Not Detected
Freon 114	4.7	Not Detected	32	Not Detected
Chloromethane	47	Not Detected	96	Not Detected
Vinyl Chloride	4.7	Not Detected	12	Not Detected
1,3-Butadiene	4.7	Not Detected	10	Not Detected
Bromomethane	47	Not Detected	180	Not Detected
Chloroethane	19	Not Detected	49	Not Detected
Freon 11	4.7	Not Detected	26	Not Detected
Ethanol	19	Not Detected	35	Not Detected
Freon 113	4.7	Not Detected	36	Not Detected
1,1-Dichloroethene	4.7	Not Detected	18	Not Detected
Acetone	47	Not Detected	110	Not Detected
2-Propanol	19	Not Detected	46	Not Detected
Carbon Disulfide	19	Not Detected	58	Not Detected
3-Chloropropene	19	Not Detected	58	Not Detected
Methylene Chloride	47	Not Detected	160	Not Detected
Methyl tert-butyl ether	19	Not Detected	67	Not Detected
trans-1,2-Dichloroethene	4.7	Not Detected	18	Not Detected
Hexane	4.7	Not Detected	16	Not Detected
1,1-Dichloroethane	4.7	Not Detected	19	Not Detected
2-Butanone (Methyl Ethyl Ketone)	19	Not Detected	55	Not Detected
cis-1,2-Dichloroethene	4.7	Not Detected	18	Not Detected
Tetrahydrofuran	4.7	Not Detected	14	Not Detected
Chloroform	4.7	Not Detected	23	Not Detected
1,1,1-Trichloroethane	4.7	30	25	160
Cyclohexane	4.7	Not Detected	16	Not Detected
Carbon Tetrachloride	4.7	Not Detected	29	Not Detected
2,2,4-Trimethylpentane	4.7	Not Detected	22	Not Detected
Benzene	4.7	Not Detected	15	Not Detected
1,2-Dichloroethane	4.7	Not Detected	19	Not Detected
Heptane	4.7	Not Detected	19	Not Detected
Trichloroethene	4.7	Not Detected	25	Not Detected
1,2-Dichloropropane	4.7	Not Detected	22	Not Detected
1,4-Dioxane	19	Not Detected	67	Not Detected
Bromodichloromethane	4.7	Not Detected	31	Not Detected
cis-1,3-Dichloropropene	4.7	Not Detected	21	Not Detected
4-Methyl-2-pentanone	4.7	Not Detected	19	Not Detected
Toluene	4.7	Not Detected	18	Not Detected
trans-1,3-Dichloropropene	4.7	Not Detected	21	Not Detected
1,1,2-Trichloroethane	4.7	Not Detected	25	Not Detected
Tetrachloroethene	4.7	950	32	6400
2-Hexanone	19	Not Detected	76	Not Detected

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Client Sample ID: SV-4

Lab ID#: 1708298A-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3082619**	**Date of Collection: 8/15/17 11:09:00 PM**	
Dil. Factor:	**9.32**	**Date of Analysis: 8/26/17 10:07 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	4.7	Not Detected	40	Not Detected
1,2-Dibromoethane (EDB)	4.7	Not Detected	36	Not Detected
Chlorobenzene	4.7	Not Detected	21	Not Detected
Ethyl Benzene	4.7	Not Detected	20	Not Detected
m,p-Xylene	4.7	Not Detected	20	Not Detected
o-Xylene	4.7	Not Detected	20	Not Detected
Styrene	4.7	Not Detected	20	Not Detected
Bromoform	4.7	Not Detected	48	Not Detected
Cumene	4.7	Not Detected	23	Not Detected
1,1,2,2-Tetrachloroethane	4.7	Not Detected	32	Not Detected
Propylbenzene	4.7	Not Detected	23	Not Detected
4-Ethyltoluene	4.7	Not Detected	23	Not Detected
1,3,5-Trimethylbenzene	4.7	Not Detected	23	Not Detected
1,2,4-Trimethylbenzene	4.7	Not Detected	23	Not Detected
1,3-Dichlorobenzene	4.7	Not Detected	28	Not Detected
1,4-Dichlorobenzene	4.7	Not Detected	28	Not Detected
alpha-Chlorotoluene	4.7	Not Detected	24	Not Detected
1,2-Dichlorobenzene	4.7	Not Detected	28	Not Detected
1,2,4-Trichlorobenzene	19	Not Detected	140	Not Detected
Hexachlorobutadiene	19	Not Detected	200	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	87	70-130
4-Bromofluorobenzene	94	70-130

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Client Sample ID: SV-4-DUP

Lab ID#: 1708298A-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3082620**	**Date of Collection:**	**8/15/17 1:09:00 PM**
Dil. Factor:	**9.32**	**Date of Analysis:**	**8/26/17 10:32 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	4.7	Not Detected	23	Not Detected
Freon 114	4.7	Not Detected	32	Not Detected
Chloromethane	47	Not Detected	96	Not Detected
Vinyl Chloride	4.7	Not Detected	12	Not Detected
1,3-Butadiene	4.7	Not Detected	10	Not Detected
Bromomethane	47	Not Detected	180	Not Detected
Chloroethane	19	Not Detected	49	Not Detected
Freon 11	4.7	Not Detected	26	Not Detected
Ethanol	19	Not Detected	35	Not Detected
Freon 113	4.7	Not Detected	36	Not Detected
1,1-Dichloroethene	4.7	Not Detected	18	Not Detected
Acetone	47	Not Detected	110	Not Detected
2-Propanol	19	Not Detected	46	Not Detected
Carbon Disulfide	19	Not Detected	58	Not Detected
3-Chloropropene	19	Not Detected	58	Not Detected
Methylene Chloride	47	Not Detected	160	Not Detected
Methyl tert-butyl ether	19	Not Detected	67	Not Detected
trans-1,2-Dichloroethene	4.7	Not Detected	18	Not Detected
Hexane	4.7	Not Detected	16	Not Detected
1,1-Dichloroethane	4.7	Not Detected	19	Not Detected
2-Butanone (Methyl Ethyl Ketone)	19	Not Detected	55	Not Detected
cis-1,2-Dichloroethene	4.7	Not Detected	18	Not Detected
Tetrahydrofuran	4.7	Not Detected	14	Not Detected
Chloroform	4.7	Not Detected	23	Not Detected
1,1,1-Trichloroethane	4.7	30	25	160
Cyclohexane	4.7	Not Detected	16	Not Detected
Carbon Tetrachloride	4.7	Not Detected	29	Not Detected
2,2,4-Trimethylpentane	4.7	Not Detected	22	Not Detected
Benzene	4.7	Not Detected	15	Not Detected
1,2-Dichloroethane	4.7	Not Detected	19	Not Detected
Heptane	4.7	Not Detected	19	Not Detected
Trichloroethene	4.7	Not Detected	25	Not Detected
1,2-Dichloropropane	4.7	Not Detected	22	Not Detected
1,4-Dioxane	19	Not Detected	67	Not Detected
Bromodichloromethane	4.7	Not Detected	31	Not Detected
cis-1,3-Dichloropropene	4.7	Not Detected	21	Not Detected
4-Methyl-2-pentanone	4.7	Not Detected	19	Not Detected
Toluene	4.7	Not Detected	18	Not Detected
trans-1,3-Dichloropropene	4.7	Not Detected	21	Not Detected
1,1,2-Trichloroethane	4.7	Not Detected	25	Not Detected
Tetrachloroethene	4.7	930	32	6300
2-Hexanone	19	Not Detected	76	Not Detected

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Client Sample ID: SV-4-DUP

Lab ID#: 1708298A-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3082620**	**Date of Collection: 8/15/17 1:09:00 PM**	
Dil. Factor:	**9.32**	**Date of Analysis: 8/26/17 10:32 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	4.7	Not Detected	40	Not Detected
1,2-Dibromoethane (EDB)	4.7	Not Detected	36	Not Detected
Chlorobenzene	4.7	Not Detected	21	Not Detected
Ethyl Benzene	4.7	Not Detected	20	Not Detected
m,p-Xylene	4.7	Not Detected	20	Not Detected
o-Xylene	4.7	Not Detected	20	Not Detected
Styrene	4.7	Not Detected	20	Not Detected
Bromoform	4.7	Not Detected	48	Not Detected
Cumene	4.7	Not Detected	23	Not Detected
1,1,2,2-Tetrachloroethane	4.7	Not Detected	32	Not Detected
Propylbenzene	4.7	Not Detected	23	Not Detected
4-Ethyltoluene	4.7	Not Detected	23	Not Detected
1,3,5-Trimethylbenzene	4.7	Not Detected	23	Not Detected
1,2,4-Trimethylbenzene	4.7	Not Detected	23	Not Detected
1,3-Dichlorobenzene	4.7	Not Detected	28	Not Detected
1,4-Dichlorobenzene	4.7	Not Detected	28	Not Detected
alpha-Chlorotoluene	4.7	Not Detected	24	Not Detected
1,2-Dichlorobenzene	4.7	Not Detected	28	Not Detected
1,2,4-Trichlorobenzene	19	Not Detected	140	Not Detected
Hexachlorobutadiene	19	Not Detected	200	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	87	70-130
4-Bromofluorobenzene	91	70-130

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Client Sample ID: SV-5

Lab ID#: 1708298A-06A

EPA METHOD TO-15 GC/MS

File Name:	**14082431**	**Date of Collection:**	**8/15/17 10:16:00 AM**
Dil. Factor:	**11.0**	**Date of Analysis:**	**8/25/17 12:26 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	55	Not Detected	270	Not Detected
Freon 114	55	Not Detected	380	Not Detected
Chloromethane	220	Not Detected	450	Not Detected
Vinyl Chloride	55	Not Detected	140	Not Detected
1,3-Butadiene	55	Not Detected	120	Not Detected
Bromomethane	220	Not Detected	850	Not Detected
Chloroethane	220	Not Detected	580	Not Detected
Freon 11	55	Not Detected	310	Not Detected
Ethanol	220	Not Detected	410	Not Detected
Freon 113	55	Not Detected	420	Not Detected
1,1-Dichloroethene	55	Not Detected	220	Not Detected
Acetone	220	Not Detected	520	Not Detected
2-Propanol	220	Not Detected	540	Not Detected
Carbon Disulfide	220	Not Detected	680	Not Detected
3-Chloropropene	220	Not Detected	690	Not Detected
Methylene Chloride	220	Not Detected	760	Not Detected
Methyl tert-butyl ether	55	Not Detected	200	Not Detected
trans-1,2-Dichloroethene	55	Not Detected	220	Not Detected
Hexane	55	22000	190	79000
1,1-Dichloroethane	55	Not Detected	220	Not Detected
2-Butanone (Methyl Ethyl Ketone)	220	Not Detected	650	Not Detected
cis-1,2-Dichloroethene	55	Not Detected	220	Not Detected
Tetrahydrofuran	55	Not Detected	160	Not Detected
Chloroform	55	Not Detected	270	Not Detected
1,1,1-Trichloroethane	55	Not Detected	300	Not Detected
Cyclohexane	55	7500	190	26000
Carbon Tetrachloride	55	Not Detected	350	Not Detected
2,2,4-Trimethylpentane	55	140000 E	260	650000 E
Benzene	55	Not Detected	180	Not Detected
1,2-Dichloroethane	55	Not Detected	220	Not Detected
Heptane	55	2500	220	10000
Trichloroethene	55	Not Detected	300	Not Detected
1,2-Dichloropropane	55	Not Detected	250	Not Detected
1,4-Dioxane	220	Not Detected	790	Not Detected
Bromodichloromethane	55	Not Detected	370	Not Detected
cis-1,3-Dichloropropene	55	Not Detected	250	Not Detected
4-Methyl-2-pentanone	55	Not Detected	220	Not Detected
Toluene	55	Not Detected	210	Not Detected
trans-1,3-Dichloropropene	55	Not Detected	250	Not Detected
1,1,2-Trichloroethane	55	Not Detected	300	Not Detected
Tetrachloroethene	55	Not Detected	370	Not Detected
2-Hexanone	220	Not Detected	900	Not Detected

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Client Sample ID: SV-5

Lab ID#: 1708298A-06A

EPA METHOD TO-15 GC/MS

File Name:	**14082431**	**Date of Collection: 8/15/17 10:16:00 AM**	
Dil. Factor:	**11.0**	**Date of Analysis: 8/25/17 12:26 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	55	Not Detected	470	Not Detected
1,2-Dibromoethane (EDB)	55	Not Detected	420	Not Detected
Chlorobenzene	55	Not Detected	250	Not Detected
Ethyl Benzene	55	Not Detected	240	Not Detected
m,p-Xylene	55	Not Detected	240	Not Detected
o-Xylene	55	Not Detected	240	Not Detected
Styrene	55	Not Detected	230	Not Detected
Bromoform	55	Not Detected	570	Not Detected
Cumene	55	Not Detected	270	Not Detected
1,1,2,2-Tetrachloroethane	55	Not Detected	380	Not Detected
Propylbenzene	55	Not Detected	270	Not Detected
4-Ethyltoluene	55	Not Detected	270	Not Detected
1,3,5-Trimethylbenzene	55	Not Detected	270	Not Detected
1,2,4-Trimethylbenzene	55	Not Detected	270	Not Detected
1,3-Dichlorobenzene	55	Not Detected	330	Not Detected
1,4-Dichlorobenzene	55	Not Detected	330	Not Detected
alpha-Chlorotoluene	55	Not Detected	280	Not Detected
1,2-Dichlorobenzene	55	Not Detected	330	Not Detected
1,2,4-Trichlorobenzene	220	Not Detected	1600	Not Detected
Hexachlorobutadiene	220	Not Detected	2300	Not Detected

E = Exceeds instrument calibration range.
Q = Exceeds Quality Control limits of 70% to 130%, due to matrix effects.
Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	150 Q	70-130
Toluene-d8	92	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: SV-6

Lab ID#: 1708298A-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3081826**	**Date of Collection: 8/15/17 1:50:00 PM**	
Dil. Factor:	**2.20**	**Date of Analysis: 8/19/17 12:52 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	1.1	Not Detected	5.4	Not Detected
Freon 114	1.1	Not Detected	7.7	Not Detected
Chloromethane	11	Not Detected	23	Not Detected
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
1,3-Butadiene	1.1	Not Detected	2.4	Not Detected
Bromomethane	11	Not Detected	43	Not Detected
Chloroethane	4.4	Not Detected	12	Not Detected
Freon 11	1.1	Not Detected	6.2	Not Detected
Ethanol	4.4	Not Detected	8.3	Not Detected
Freon 113	1.1	Not Detected	8.4	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Acetone	11	Not Detected	26	Not Detected
2-Propanol	4.4	Not Detected	11	Not Detected
Carbon Disulfide	4.4	6.1	14	19
3-Chloropropene	4.4	Not Detected	14	Not Detected
Methylene Chloride	11	Not Detected	38	Not Detected
Methyl tert-butyl ether	4.4	Not Detected	16	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Hexane	1.1	Not Detected	3.9	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.4	Not Detected	13	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.2	Not Detected
Chloroform	1.1	3.4	5.4	17
1,1,1-Trichloroethane	1.1	6.5	6.0	36
Cyclohexane	1.1	Not Detected	3.8	Not Detected
Carbon Tetrachloride	1.1	Not Detected	6.9	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.1	Not Detected
Benzene	1.1	2.2	3.5	7.2
1,2-Dichloroethane	1.1	Not Detected	4.4	Not Detected
Heptane	1.1	Not Detected	4.5	Not Detected
Trichloroethene	1.1	Not Detected	5.9	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.1	Not Detected
1,4-Dioxane	4.4	Not Detected	16	Not Detected
Bromodichloromethane	1.1	Not Detected	7.4	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	5.0	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.5	Not Detected
Toluene	1.1	Not Detected	4.1	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	5.0	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.0	Not Detected
Tetrachloroethene	1.1	24	7.5	160
2-Hexanone	4.4	Not Detected	18	Not Detected

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Client Sample ID: SV-6

Lab ID#: 1708298A-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3081826**	**Date of Collection: 8/15/17 1:50:00 PM**	
Dil. Factor:	**2.20**	**Date of Analysis: 8/19/17 12:52 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.1	Not Detected	9.4	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.4	Not Detected
Chlorobenzene	1.1	Not Detected	5.1	Not Detected
Ethyl Benzene	1.1	Not Detected	4.8	Not Detected
m,p-Xylene	1.1	Not Detected	4.8	Not Detected
o-Xylene	1.1	Not Detected	4.8	Not Detected
Styrene	1.1	Not Detected	4.7	Not Detected
Bromoform	1.1	Not Detected	11	Not Detected
Cumene	1.1	Not Detected	5.4	Not Detected
1,1,2,2-Tetrachloroethane	1.1	Not Detected	7.6	Not Detected
Propylbenzene	1.1	Not Detected	5.4	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.4	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.7	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.6	Not Detected
1,2,4-Trichlorobenzene	4.4	Not Detected	33	Not Detected
Hexachlorobutadiene	4.4	Not Detected	47	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	90	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1708298A-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3081805**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/18/17 11:20 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	5.0	Not Detected	10	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected

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Client Sample ID: Lab Blank

Lab ID#: 1708298A-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3081805**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/18/17 11:20 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1708298A-08B

EPA METHOD TO-15 GC/MS

File Name:	**14082406**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/24/17 04:36 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	5.0	Not Detected	25	Not Detected
Freon 114	5.0	Not Detected	35	Not Detected
Chloromethane	20	Not Detected	41	Not Detected
Vinyl Chloride	5.0	Not Detected	13	Not Detected
1,3-Butadiene	5.0	Not Detected	11	Not Detected
Bromomethane	20	Not Detected	78	Not Detected
Chloroethane	20	Not Detected	53	Not Detected
Freon 11	5.0	Not Detected	28	Not Detected
Ethanol	20	Not Detected	38	Not Detected
Freon 113	5.0	Not Detected	38	Not Detected
1,1-Dichloroethene	5.0	Not Detected	20	Not Detected
Acetone	20	Not Detected	48	Not Detected
2-Propanol	20	Not Detected	49	Not Detected
Carbon Disulfide	20	Not Detected	62	Not Detected
3-Chloropropene	20	Not Detected	63	Not Detected
Methylene Chloride	20	Not Detected	69	Not Detected
Methyl tert-butyl ether	5.0	Not Detected	18	Not Detected
trans-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Hexane	5.0	Not Detected	18	Not Detected
1,1-Dichloroethane	5.0	Not Detected	20	Not Detected
2-Butanone (Methyl Ethyl Ketone)	20	Not Detected	59	Not Detected
cis-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Tetrahydrofuran	5.0	Not Detected	15	Not Detected
Chloroform	5.0	Not Detected	24	Not Detected
1,1,1-Trichloroethane	5.0	Not Detected	27	Not Detected
Cyclohexane	5.0	Not Detected	17	Not Detected
Carbon Tetrachloride	5.0	Not Detected	31	Not Detected
2,2,4-Trimethylpentane	5.0	Not Detected	23	Not Detected
Benzene	5.0	Not Detected	16	Not Detected
1,2-Dichloroethane	5.0	Not Detected	20	Not Detected
Heptane	5.0	Not Detected	20	Not Detected
Trichloroethene	5.0	Not Detected	27	Not Detected
1,2-Dichloropropane	5.0	Not Detected	23	Not Detected
1,4-Dioxane	20	Not Detected	72	Not Detected
Bromodichloromethane	5.0	Not Detected	34	Not Detected
cis-1,3-Dichloropropene	5.0	Not Detected	23	Not Detected
4-Methyl-2-pentanone	5.0	Not Detected	20	Not Detected
Toluene	5.0	Not Detected	19	Not Detected
trans-1,3-Dichloropropene	5.0	Not Detected	23	Not Detected
1,1,2-Trichloroethane	5.0	Not Detected	27	Not Detected
Tetrachloroethene	5.0	Not Detected	34	Not Detected
2-Hexanone	20	Not Detected	82	Not Detected

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Client Sample ID: Lab Blank

Lab ID#: 1708298A-08B

EPA METHOD TO-15 GC/MS

File Name:	**14082406**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/24/17 04:36 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	5.0	Not Detected	42	Not Detected
1,2-Dibromoethane (EDB)	5.0	Not Detected	38	Not Detected
Chlorobenzene	5.0	Not Detected	23	Not Detected
Ethyl Benzene	5.0	Not Detected	22	Not Detected
m,p-Xylene	5.0	Not Detected	22	Not Detected
o-Xylene	5.0	Not Detected	22	Not Detected
Styrene	5.0	Not Detected	21	Not Detected
Bromoform	5.0	Not Detected	52	Not Detected
Cumene	5.0	Not Detected	24	Not Detected
1,1,2,2-Tetrachloroethane	5.0	Not Detected	34	Not Detected
Propylbenzene	5.0	Not Detected	24	Not Detected
4-Ethyltoluene	5.0	Not Detected	24	Not Detected
1,3,5-Trimethylbenzene	5.0	Not Detected	24	Not Detected
1,2,4-Trimethylbenzene	5.0	Not Detected	24	Not Detected
1,3-Dichlorobenzene	5.0	Not Detected	30	Not Detected
1,4-Dichlorobenzene	5.0	Not Detected	30	Not Detected
alpha-Chlorotoluene	5.0	Not Detected	26	Not Detected
1,2-Dichlorobenzene	5.0	Not Detected	30	Not Detected
1,2,4-Trichlorobenzene	20	Not Detected	150	Not Detected
Hexachlorobutadiene	20	Not Detected	210	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	89	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	96	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1708298A-08C

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3082606**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/26/17 01:54 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	5.0	Not Detected	10	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.2	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected

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Client Sample ID: Lab Blank

Lab ID#: 1708298A-08C

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3082606**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/26/17 01:54 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	88	70-130
4-Bromofluorobenzene	97	70-130

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Client Sample ID: CCV

Lab ID#: 1708298A-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3081802**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 8/18/17 08:36 AM**

Compound	%Recovery
Freon 12	90
Freon 114	100
Chloromethane	91
Vinyl Chloride	95
1,3-Butadiene	89
Bromomethane	103
Chloroethane	92
Freon 11	91
Ethanol	91
Freon 113	98
1,1-Dichloroethene	94
Acetone	86
2-Propanol	85
Carbon Disulfide	90
3-Chloropropene	93
Methylene Chloride	88
Methyl tert-butyl ether	84
trans-1,2-Dichloroethene	108
Hexane	90
1,1-Dichloroethane	94
2-Butanone (Methyl Ethyl Ketone)	94
cis-1,2-Dichloroethene	89
Tetrahydrofuran	84
Chloroform	95
1,1,1-Trichloroethane	92
Cyclohexane	93
Carbon Tetrachloride	95
2,2,4-Trimethylpentane	90
Benzene	103
1,2-Dichloroethane	94
Heptane	101
Trichloroethene	104
1,2-Dichloropropane	103
1,4-Dioxane	100
Bromodichloromethane	103
cis-1,3-Dichloropropene	104
4-Methyl-2-pentanone	89
Toluene	104
trans-1,3-Dichloropropene	96
1,1,2-Trichloroethane	105
Tetrachloroethene	106
2-Hexanone	98

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Client Sample ID: CCV

Lab ID#: 1708298A-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3081802**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/18/17 08:36 AM**	

Compound	%Recovery
Dibromochloromethane	105
1,2-Dibromoethane (EDB)	104
Chlorobenzene	103
Ethyl Benzene	102
m,p-Xylene	102
o-Xylene	101
Styrene	112
Bromoform	108
Cumene	101
1,1,2,2-Tetrachloroethane	102
Propylbenzene	100
4-Ethyltoluene	106
1,3,5-Trimethylbenzene	106
1,2,4-Trimethylbenzene	101
1,3-Dichlorobenzene	107
1,4-Dichlorobenzene	106
alpha-Chlorotoluene	102
1,2-Dichlorobenzene	106
1,2,4-Trichlorobenzene	108
Hexachlorobutadiene	109

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	84	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: CCV

Lab ID#: 1708298A-09B

EPA METHOD TO-15 GC/MS

File Name:	**14082402**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/24/17 02:34 PM**	

Compound	%Recovery
Freon 12	97
Freon 114	103
Chloromethane	101
Vinyl Chloride	110
1,3-Butadiene	96
Bromomethane	102
Chloroethane	112
Freon 11	108
Ethanol	102
Freon 113	107
1,1-Dichloroethene	106
Acetone	106
2-Propanol	116
Carbon Disulfide	100
3-Chloropropene	108
Methylene Chloride	104
Methyl tert-butyl ether	105
trans-1,2-Dichloroethene	99
Hexane	110
1,1-Dichloroethane	107
2-Butanone (Methyl Ethyl Ketone)	94
cis-1,2-Dichloroethene	102
Tetrahydrofuran	108
Chloroform	103
1,1,1-Trichloroethane	107
Cyclohexane	111
Carbon Tetrachloride	104
2,2,4-Trimethylpentane	112
Benzene	112
1,2-Dichloroethane	101
Heptane	106
Trichloroethene	106
1,2-Dichloropropane	100
1,4-Dioxane	99
Bromodichloromethane	107
cis-1,3-Dichloropropene	107
4-Methyl-2-pentanone	102
Toluene	104
trans-1,3-Dichloropropene	102
1,1,2-Trichloroethane	93
Tetrachloroethene	107
2-Hexanone	104

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Client Sample ID: CCV

Lab ID#: 1708298A-09B

EPA METHOD TO-15 GC/MS

File Name:	**14082402**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/24/17 02:34 PM**	

Compound	%Recovery
Dibromochloromethane	107
1,2-Dibromoethane (EDB)	106
Chlorobenzene	105
Ethyl Benzene	113
m,p-Xylene	105
o-Xylene	107
Styrene	105
Bromoform	103
Cumene	102
1,1,2,2-Tetrachloroethane	102
Propylbenzene	101
4-Ethyltoluene	100
1,3,5-Trimethylbenzene	104
1,2,4-Trimethylbenzene	103
1,3-Dichlorobenzene	97
1,4-Dichlorobenzene	98
alpha-Chlorotoluene	101
1,2-Dichlorobenzene	98
1,2,4-Trichlorobenzene	94
Hexachlorobutadiene	89

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	105	70-130

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Client Sample ID: CCV

Lab ID#: 1708298A-09C

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3082602**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 8/26/17 10:15 AM**

Compound	%Recovery
Freon 12	89
Freon 114	100
Chloromethane	91
Vinyl Chloride	92
1,3-Butadiene	90
Bromomethane	98
Chloroethane	91
Freon 11	90
Ethanol	91
Freon 113	96
1,1-Dichloroethene	92
Acetone	86
2-Propanol	84
Carbon Disulfide	89
3-Chloropropene	93
Methylene Chloride	91
Methyl tert-butyl ether	81
trans-1,2-Dichloroethene	106
Hexane	89
1,1-Dichloroethane	95
2-Butanone (Methyl Ethyl Ketone)	90
cis-1,2-Dichloroethene	89
Tetrahydrofuran	88
Chloroform	95
1,1,1-Trichloroethane	91
Cyclohexane	91
Carbon Tetrachloride	94
2,2,4-Trimethylpentane	88
Benzene	106
1,2-Dichloroethane	94
Heptane	101
Trichloroethene	103
1,2-Dichloropropane	107
1,4-Dioxane	98
Bromodichloromethane	105
cis-1,3-Dichloropropene	104
4-Methyl-2-pentanone	91
Toluene	107
trans-1,3-Dichloropropene	95
1,1,2-Trichloroethane	107
Tetrachloroethene	106
2-Hexanone	98

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Client Sample ID: CCV

Lab ID#: 1708298A-09C

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3082602**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/26/17 10:15 AM**	

Compound	%Recovery
Dibromochloromethane	105
1,2-Dibromoethane (EDB)	104
Chlorobenzene	105
Ethyl Benzene	102
m,p-Xylene	102
o-Xylene	99
Styrene	111
Bromoform	106
Cumene	100
1,1,2,2-Tetrachloroethane	104
Propylbenzene	101
4-Ethyltoluene	106
1,3,5-Trimethylbenzene	107
1,2,4-Trimethylbenzene	99
1,3-Dichlorobenzene	106
1,4-Dichlorobenzene	107
alpha-Chlorotoluene	100
1,2-Dichlorobenzene	106
1,2,4-Trichlorobenzene	108
Hexachlorobutadiene	110

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	84	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: LCS

Lab ID#: 1708298A-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3081803**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/18/17 08:59 AM**	

Compound	%Recovery	Method Limits
Freon 12	95	70-130
Freon 114	107	70-130
Chloromethane	90	70-130
Vinyl Chloride	100	70-130
1,3-Butadiene	92	70-130
Bromomethane	106	70-130
Chloroethane	98	70-130
Freon 11	97	70-130
Ethanol	95	70-130
Freon 113	100	70-130
1,1-Dichloroethene	96	70-130
Acetone	88	70-130
2-Propanol	88	70-130
Carbon Disulfide	82	70-130
3-Chloropropene	92	70-130
Methylene Chloride	91	70-130
Methyl tert-butyl ether	87	70-130
trans-1,2-Dichloroethene	98	70-130
Hexane	93	70-130
1,1-Dichloroethane	97	70-130
2-Butanone (Methyl Ethyl Ketone)	95	70-130
cis-1,2-Dichloroethene	102	70-130
Tetrahydrofuran	86	70-130
Chloroform	97	70-130
1,1,1-Trichloroethane	94	70-130
Cyclohexane	95	70-130
Carbon Tetrachloride	97	70-130
2,2,4-Trimethylpentane	93	70-130
Benzene	105	70-130
1,2-Dichloroethane	96	70-130
Heptane	103	70-130
Trichloroethene	105	70-130
1,2-Dichloropropane	105	70-130
1,4-Dioxane	100	70-130
Bromodichloromethane	106	70-130
cis-1,3-Dichloropropene	99	70-130
4-Methyl-2-pentanone	90	70-130
Toluene	105	70-130
trans-1,3-Dichloropropene	98	70-130
1,1,2-Trichloroethane	107	70-130
Tetrachloroethene	107	70-130
2-Hexanone	96	70-130

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Client Sample ID: LCS

Lab ID#: 1708298A-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3081803**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/18/17 08:59 AM**	

Compound	%Recovery	Method Limits
Dibromochloromethane	106	70-130
1,2-Dibromoethane (EDB)	106	70-130
Chlorobenzene	103	70-130
Ethyl Benzene	102	70-130
m,p-Xylene	102	70-130
o-Xylene	102	70-130
Styrene	110	70-130
Bromoform	112	70-130
Cumene	101	70-130
1,1,2,2-Tetrachloroethane	103	70-130
Propylbenzene	103	70-130
4-Ethyltoluene	106	70-130
1,3,5-Trimethylbenzene	106	70-130
1,2,4-Trimethylbenzene	100	70-130
1,3-Dichlorobenzene	108	70-130
1,4-Dichlorobenzene	106	70-130
alpha-Chlorotoluene	103	70-130
1,2-Dichlorobenzene	107	70-130
1,2,4-Trichlorobenzene	110	70-130
Hexachlorobutadiene	111	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	86	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: LCSD

Lab ID#: 1708298A-10AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3081804**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/18/17 09:22 AM**	

Compound	%Recovery	Method Limits
Freon 12	95	70-130
Freon 114	109	70-130
Chloromethane	91	70-130
Vinyl Chloride	101	70-130
1,3-Butadiene	93	70-130
Bromomethane	106	70-130
Chloroethane	99	70-130
Freon 11	98	70-130
Ethanol	95	70-130
Freon 113	100	70-130
1,1-Dichloroethene	98	70-130
Acetone	89	70-130
2-Propanol	89	70-130
Carbon Disulfide	83	70-130
3-Chloropropene	92	70-130
Methylene Chloride	92	70-130
Methyl tert-butyl ether	88	70-130
trans-1,2-Dichloroethene	98	70-130
Hexane	93	70-130
1,1-Dichloroethane	97	70-130
2-Butanone (Methyl Ethyl Ketone)	98	70-130
cis-1,2-Dichloroethene	102	70-130
Tetrahydrofuran	87	70-130
Chloroform	98	70-130
1,1,1-Trichloroethane	96	70-130
Cyclohexane	96	70-130
Carbon Tetrachloride	99	70-130
2,2,4-Trimethylpentane	93	70-130
Benzene	105	70-130
1,2-Dichloroethane	95	70-130
Heptane	101	70-130
Trichloroethene	105	70-130
1,2-Dichloropropane	104	70-130
1,4-Dioxane	100	70-130
Bromodichloromethane	106	70-130
cis-1,3-Dichloropropene	99	70-130
4-Methyl-2-pentanone	89	70-130
Toluene	104	70-130
trans-1,3-Dichloropropene	96	70-130
1,1,2-Trichloroethane	106	70-130
Tetrachloroethene	106	70-130
2-Hexanone	96	70-130

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Client Sample ID: LCSD

Lab ID#: 1708298A-10AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3081804**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/18/17 09:22 AM**	

Compound	%Recovery	Method Limits
Dibromochloromethane	106	70-130
1,2-Dibromoethane (EDB)	105	70-130
Chlorobenzene	104	70-130
Ethyl Benzene	102	70-130
m,p-Xylene	102	70-130
o-Xylene	102	70-130
Styrene	109	70-130
Bromoform	112	70-130
Cumene	101	70-130
1,1,2,2-Tetrachloroethane	103	70-130
Propylbenzene	102	70-130
4-Ethyltoluene	105	70-130
1,3,5-Trimethylbenzene	106	70-130
1,2,4-Trimethylbenzene	100	70-130
1,3-Dichlorobenzene	107	70-130
1,4-Dichlorobenzene	106	70-130
alpha-Chlorotoluene	102	70-130
1,2-Dichlorobenzene	106	70-130
1,2,4-Trichlorobenzene	112	70-130
Hexachlorobutadiene	113	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	85	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: LCS

Lab ID#: 1708298A-10B

EPA METHOD TO-15 GC/MS

File Name:	**14082403**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/24/17 03:09 PM**	

Compound	%Recovery	Method Limits
Freon 12	100	70-130
Freon 114	107	70-130
Chloromethane	98	70-130
Vinyl Chloride	108	70-130
1,3-Butadiene	95	70-130
Bromomethane	110	70-130
Chloroethane	105	70-130
Freon 11	110	70-130
Ethanol	130	70-130
Freon 113	108	70-130
1,1-Dichloroethene	103	70-130
Acetone	113	70-130
2-Propanol	118	70-130
Carbon Disulfide	93	70-130
3-Chloropropene	96	70-130
Methylene Chloride	104	70-130
Methyl tert-butyl ether	103	70-130
trans-1,2-Dichloroethene	85	70-130
Hexane	102	70-130
1,1-Dichloroethane	104	70-130
2-Butanone (Methyl Ethyl Ketone)	102	70-130
cis-1,2-Dichloroethene	117	70-130
Tetrahydrofuran	108	70-130
Chloroform	105	70-130
1,1,1-Trichloroethane	103	70-130
Cyclohexane	110	70-130
Carbon Tetrachloride	105	70-130
2,2,4-Trimethylpentane	108	70-130
Benzene	106	70-130
1,2-Dichloroethane	102	70-130
Heptane	100	70-130
Trichloroethene	106	70-130
1,2-Dichloropropane	104	70-130
1,4-Dioxane	110	70-130
Bromodichloromethane	103	70-130
cis-1,3-Dichloropropene	102	70-130
4-Methyl-2-pentanone	102	70-130
Toluene	102	70-130
trans-1,3-Dichloropropene	101	70-130
1,1,2-Trichloroethane	94	70-130
Tetrachloroethene	114	70-130
2-Hexanone	107	70-130

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Client Sample ID: LCS

Lab ID#: 1708298A-10B

EPA METHOD TO-15 GC/MS

File Name:	**14082403**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/24/17 03:09 PM**	

Compound	%Recovery	Method Limits
Dibromochloromethane	108	70-130
1,2-Dibromoethane (EDB)	107	70-130
Chlorobenzene	104	70-130
Ethyl Benzene	109	70-130
m,p-Xylene	107	70-130
o-Xylene	107	70-130
Styrene	107	70-130
Bromoform	102	70-130
Cumene	104	70-130
1,1,2,2-Tetrachloroethane	100	70-130
Propylbenzene	104	70-130
4-Ethyltoluene	98	70-130
1,3,5-Trimethylbenzene	103	70-130
1,2,4-Trimethylbenzene	103	70-130
1,3-Dichlorobenzene	99	70-130
1,4-Dichlorobenzene	102	70-130
alpha-Chlorotoluene	107	70-130
1,2-Dichlorobenzene	100	70-130
1,2,4-Trichlorobenzene	107	70-130
Hexachlorobutadiene	98	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: LCSD

Lab ID#: 1708298A-10BB

EPA METHOD TO-15 GC/MS

File Name:	**14082404**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/24/17 03:39 PM**	

Compound	%Recovery	Method Limits
Freon 12	100	70-130
Freon 114	109	70-130
Chloromethane	103	70-130
Vinyl Chloride	112	70-130
1,3-Butadiene	100	70-130
Bromomethane	99	70-130
Chloroethane	108	70-130
Freon 11	113	70-130
Ethanol	122	70-130
Freon 113	111	70-130
1,1-Dichloroethene	103	70-130
Acetone	108	70-130
2-Propanol	117	70-130
Carbon Disulfide	92	70-130
3-Chloropropene	109	70-130
Methylene Chloride	94	70-130
Methyl tert-butyl ether	106	70-130
trans-1,2-Dichloroethene	85	70-130
Hexane	110	70-130
1,1-Dichloroethane	102	70-130
2-Butanone (Methyl Ethyl Ketone)	113	70-130
cis-1,2-Dichloroethene	120	70-130
Tetrahydrofuran	106	70-130
Chloroform	111	70-130
1,1,1-Trichloroethane	107	70-130
Cyclohexane	111	70-130
Carbon Tetrachloride	107	70-130
2,2,4-Trimethylpentane	112	70-130
Benzene	108	70-130
1,2-Dichloroethane	96	70-130
Heptane	98	70-130
Trichloroethene	102	70-130
1,2-Dichloropropane	99	70-130
1,4-Dioxane	121	70-130
Bromodichloromethane	106	70-130
cis-1,3-Dichloropropene	99	70-130
4-Methyl-2-pentanone	95	70-130
Toluene	105	70-130
trans-1,3-Dichloropropene	106	70-130
1,1,2-Trichloroethane	97	70-130
Tetrachloroethene	112	70-130
2-Hexanone	114	70-130

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Client Sample ID: LCSD

Lab ID#: 1708298A-10BB

EPA METHOD TO-15 GC/MS

File Name:	**14082404**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/24/17 03:39 PM**	

Compound	%Recovery	Method Limits
Dibromochloromethane	111	70-130
1,2-Dibromoethane (EDB)	110	70-130
Chlorobenzene	104	70-130
Ethyl Benzene	108	70-130
m,p-Xylene	106	70-130
o-Xylene	107	70-130
Styrene	108	70-130
Bromoform	106	70-130
Cumene	106	70-130
1,1,2,2-Tetrachloroethane	101	70-130
Propylbenzene	106	70-130
4-Ethyltoluene	102	70-130
1,3,5-Trimethylbenzene	106	70-130
1,2,4-Trimethylbenzene	107	70-130
1,3-Dichlorobenzene	101	70-130
1,4-Dichlorobenzene	104	70-130
alpha-Chlorotoluene	107	70-130
1,2-Dichlorobenzene	106	70-130
1,2,4-Trichlorobenzene	107	70-130
Hexachlorobutadiene	104	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: LCS

Lab ID#: 1708298A-10C

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3082603**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/26/17 10:41 AM**	

Compound	%Recovery	Method Limits
Freon 12	95	70-130
Freon 114	108	70-130
Chloromethane	89	70-130
Vinyl Chloride	101	70-130
1,3-Butadiene	92	70-130
Bromomethane	99	70-130
Chloroethane	99	70-130
Freon 11	96	70-130
Ethanol	97	70-130
Freon 113	100	70-130
1,1-Dichloroethene	95	70-130
Acetone	90	70-130
2-Propanol	89	70-130
Carbon Disulfide	81	70-130
3-Chloropropene	91	70-130
Methylene Chloride	93	70-130
Methyl tert-butyl ether	85	70-130
trans-1,2-Dichloroethene	97	70-130
Hexane	94	70-130
1,1-Dichloroethane	100	70-130
2-Butanone (Methyl Ethyl Ketone)	99	70-130
cis-1,2-Dichloroethene	103	70-130
Tetrahydrofuran	89	70-130
Chloroform	99	70-130
1,1,1-Trichloroethane	95	70-130
Cyclohexane	97	70-130
Carbon Tetrachloride	98	70-130
2,2,4-Trimethylpentane	94	70-130
Benzene	108	70-130
1,2-Dichloroethane	97	70-130
Heptane	104	70-130
Trichloroethene	107	70-130
1,2-Dichloropropane	111	70-130
1,4-Dioxane	99	70-130
Bromodichloromethane	110	70-130
cis-1,3-Dichloropropene	102	70-130
4-Methyl-2-pentanone	94	70-130
Toluene	110	70-130
trans-1,3-Dichloropropene	98	70-130
1,1,2-Trichloroethane	110	70-130
Tetrachloroethene	109	70-130
2-Hexanone	98	70-130

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Client Sample ID: LCS

Lab ID#: 1708298A-10C

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3082603**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/26/17 10:41 AM**	

Compound	%Recovery	Method Limits
Dibromochloromethane	108	70-130
1,2-Dibromoethane (EDB)	108	70-130
Chlorobenzene	107	70-130
Ethyl Benzene	105	70-130
m,p-Xylene	106	70-130
o-Xylene	104	70-130
Styrene	112	70-130
Bromoform	112	70-130
Cumene	104	70-130
1,1,2,2-Tetrachloroethane	108	70-130
Propylbenzene	106	70-130
4-Ethyltoluene	108	70-130
1,3,5-Trimethylbenzene	110	70-130
1,2,4-Trimethylbenzene	102	70-130
1,3-Dichlorobenzene	111	70-130
1,4-Dichlorobenzene	111	70-130
alpha-Chlorotoluene	101	70-130
1,2-Dichlorobenzene	110	70-130
1,2,4-Trichlorobenzene	117	70-130
Hexachlorobutadiene	118	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	86	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: LCSD

Lab ID#: 1708298A-10CC

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3082604**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/26/17 11:07 AM**	

Compound	%Recovery	Method Limits
Freon 12	96	70-130
Freon 114	109	70-130
Chloromethane	89	70-130
Vinyl Chloride	101	70-130
1,3-Butadiene	93	70-130
Bromomethane	101	70-130
Chloroethane	99	70-130
Freon 11	96	70-130
Ethanol	97	70-130
Freon 113	102	70-130
1,1-Dichloroethene	97	70-130
Acetone	91	70-130
2-Propanol	90	70-130
Carbon Disulfide	82	70-130
3-Chloropropene	92	70-130
Methylene Chloride	93	70-130
Methyl tert-butyl ether	86	70-130
trans-1,2-Dichloroethene	98	70-130
Hexane	94	70-130
1,1-Dichloroethane	101	70-130
2-Butanone (Methyl Ethyl Ketone)	98	70-130
cis-1,2-Dichloroethene	104	70-130
Tetrahydrofuran	89	70-130
Chloroform	100	70-130
1,1,1-Trichloroethane	96	70-130
Cyclohexane	97	70-130
Carbon Tetrachloride	99	70-130
2,2,4-Trimethylpentane	95	70-130
Benzene	106	70-130
1,2-Dichloroethane	96	70-130
Heptane	104	70-130
Trichloroethene	107	70-130
1,2-Dichloropropane	111	70-130
1,4-Dioxane	100	70-130
Bromodichloromethane	108	70-130
cis-1,3-Dichloropropene	102	70-130
4-Methyl-2-pentanone	94	70-130
Toluene	108	70-130
trans-1,3-Dichloropropene	97	70-130
1,1,2-Trichloroethane	109	70-130
Tetrachloroethene	109	70-130
2-Hexanone	98	70-130

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Client Sample ID: LCSD

Lab ID#: 1708298A-10CC

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3082604**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/26/17 11:07 AM**	

Compound	%Recovery	Method Limits
Dibromochloromethane	108	70-130
1,2-Dibromoethane (EDB)	107	70-130
Chlorobenzene	107	70-130
Ethyl Benzene	104	70-130
m,p-Xylene	105	70-130
o-Xylene	106	70-130
Styrene	111	70-130
Bromoform	114	70-130
Cumene	104	70-130
1,1,2,2-Tetrachloroethane	106	70-130
Propylbenzene	105	70-130
4-Ethyltoluene	108	70-130
1,3,5-Trimethylbenzene	109	70-130
1,2,4-Trimethylbenzene	102	70-130
1,3-Dichlorobenzene	111	70-130
1,4-Dichlorobenzene	110	70-130
alpha-Chlorotoluene	101	70-130
1,2-Dichlorobenzene	111	70-130
1,2,4-Trichlorobenzene	118	70-130
Hexachlorobutadiene	118	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	84	70-130
4-Bromofluorobenzene	103	70-130

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8/29/2017
Mr. Doug Moberg
ERM-West
1277 Treat Blvd
Suite 500
Walnut Creek CA 94597

Project Name: PG&E Brush St.
Project #:
Workorder #: 1708298B

Dear Mr. Doug Moberg

The following report includes the data for the above referenced project for sample(s) received on 8/16/2017 at Air Toxics Ltd.

The data and associated QC analyzed by Modified ASTM D-1946 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Rachel Selenis at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Rachel Selenis

Project Manager

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WORK ORDER #: 1708298B

Work Order Summary

CLIENT:	Mr. Doug Moberg ERM-West 1277 Treat Blvd Suite 500 Walnut Creek, CA 94597	**BILL TO:**	Mr. Doug Moberg ERM-West 1277 Treat Blvd Suite 500 Walnut Creek, CA 94597
PHONE:	925-946-0455	**P.O. #**	0399889
FAX:	925-946-9968	**PROJECT #**	PG&E Brush St.
DATE RECEIVED:	08/16/2017	**CONTACT:**	Rachel Selenis
DATE COMPLETED:	08/29/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SV-1	Modified ASTM D-1946	3.5 "Hg	15 psi
02A	SV-2	Modified ASTM D-1946	4.0 "Hg	15 psi
03A	SV-3	Modified ASTM D-1946	4.0 "Hg	15 psi
04A	SV-4	Modified ASTM D-1946	4.0 "Hg	15 psi
05A	SV-4-DUP	Modified ASTM D-1946	4.0 "Hg	15 psi
06A	SV-5	Modified ASTM D-1946	2.5 "Hg	15 psi
07A	SV-6	Modified ASTM D-1946	2.5 "Hg	15 psi
08A	Lab Blank	Modified ASTM D-1946	NA	NA
09A	LCS	Modified ASTM D-1946	NA	NA
09AA	LCSD	Modified ASTM D-1946	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 08/29/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

LABORATORY NARRATIVE
Modified ASTM D-1946
ERM-West
Workorder# 1708298B

Seven 1 Liter Summa Canister samples were received on August 16, 2017. The laboratory performed analysis via Modified ASTM Method D-1946 for Methane and fixed gases in air using GC/FID or GC/TCD. The method involves direct injection of 1.0 mL of sample.

On the analytical column employed for this analysis, Oxygen coelutes with Argon. The corresponding peak is quantitated as Oxygen.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***ASTM D-1946***	***ATL Modifications***
Calibration	A single point calibration is performed using a reference standard closely matching the composition of the unknown.	A minimum of 5-point calibration curve is performed. Quantitation is based on average Response Factor.
Reference Standard	The composition of any reference standard must be known to within 0.01 mol % for any component.	The standards used by ATL are blended to a >/= 95% accuracy.
Sample Injection Volume	Components whose concentrations are in excess of 5 % should not be analyzed by using sample volumes greater than 0.5 mL.	The sample container is connected directly to a fixed volume sample loop of 1.0 mL on the GC. Linear range is defined by the calibration curve. Bags are loaded by vacuum.
Normalization	Normalize the mole percent values by multiplying each value by 100 and dividing by the sum of the original values. The sum of the original values should not differ from 100% by more than 1.0%.	Results are not normalized. The sum of the reported values can differ from 100% by as much as 15%, either due to analytical variability or an unusual sample matrix.
Precision	Precision requirements established at each concentration level.	Duplicates should agree within 25% RPD for detections > 5 X's the RL.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.
File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

Client Sample ID: SV-1

Lab ID#: 1708298B-01A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	12
Carbon Dioxide	0.023	11

Client Sample ID: SV-2

Lab ID#: 1708298B-02A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	14
Carbon Dioxide	0.023	8.4

Client Sample ID: SV-3

Lab ID#: 1708298B-03A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	16
Carbon Dioxide	0.023	4.1

Client Sample ID: SV-4

Lab ID#: 1708298B-04A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	14
Carbon Dioxide	0.023	6.0

Client Sample ID: SV-4-DUP

Lab ID#: 1708298B-05A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	14
Carbon Dioxide	0.023	6.0

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Summary of Detected Compounds
MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

Client Sample ID: SV-5

Lab ID#: 1708298B-06A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	1.6
Methane	0.00022	0.30
Carbon Dioxide	0.022	16

Client Sample ID: SV-6

Lab ID#: 1708298B-07A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	16
Carbon Dioxide	0.022	2.8

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Client Sample ID: SV-1

Lab ID#: 1708298B-01A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**10082105**	**Date of Collection: 8/15/17 11:10:00 AM**	
Dil. Factor:	**2.29**	**Date of Analysis: 8/21/17 11:06 AM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	12
Methane	0.00023	Not Detected
Carbon Dioxide	0.023	11

Container Type: 1 Liter Summa Canister

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Client Sample ID: SV-2

Lab ID#: 1708298B-02A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**10082106**	**Date of Collection: 8/15/17 11:20:00 AM**	
Dil. Factor:	**2.33**	**Date of Analysis: 8/21/17 11:30 AM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	14
Methane	0.00023	Not Detected
Carbon Dioxide	0.023	8.4

Container Type: 1 Liter Summa Canister

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Client Sample ID: SV-3

Lab ID#: 1708298B-03A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**10082107**	**Date of Collection: 8/15/17 11:49:00 AM**	
Dil. Factor:	**2.33**	**Date of Analysis: 8/21/17 11:59 AM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	16
Methane	0.00023	Not Detected
Carbon Dioxide	0.023	4.1

Container Type: 1 Liter Summa Canister

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Client Sample ID: SV-4

Lab ID#: 1708298B-04A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**10082108**	**Date of Collection: 8/15/17 11:09:00 PM**	
Dil. Factor:	**2.33**	**Date of Analysis: 8/21/17 12:22 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	14
Methane	0.00023	Not Detected
Carbon Dioxide	0.023	6.0

Container Type: 1 Liter Summa Canister

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Client Sample ID: SV-4-DUP

Lab ID#: 1708298B-05A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**10082109**	**Date of Collection: 8/15/17 1:09:00 PM**	
Dil. Factor:	**2.33**	**Date of Analysis: 8/21/17 12:46 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Oxygen	0.23	14
Methane	0.00023	Not Detected
Carbon Dioxide	0.023	6.0

Container Type: 1 Liter Summa Canister

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Client Sample ID: SV-5

Lab ID#: 1708298B-06A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**10082110**	**Date of Collection: 8/15/17 10:16:00 AM**	
Dil. Factor:	**2.20**	**Date of Analysis: 8/21/17 01:10 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	1.6
Methane	0.00022	0.30
Carbon Dioxide	0.022	16

Container Type: 1 Liter Summa Canister

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Client Sample ID: SV-6

Lab ID#: 1708298B-07A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**10082111**	**Date of Collection: 8/15/17 1:50:00 PM**	
Dil. Factor:	**2.20**	**Date of Analysis: 8/21/17 01:33 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	16
Methane	0.00022	Not Detected
Carbon Dioxide	0.022	2.8

Container Type: 1 Liter Summa Canister

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Client Sample ID: Lab Blank

Lab ID#: 1708298B-08A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**10082103**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/21/17 09:42 AM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.10	Not Detected
Methane	0.00010	Not Detected
Carbon Dioxide	0.010	Not Detected

Container Type: NA - Not Applicable

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Client Sample ID: LCS

Lab ID#: 1708298B-09A

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**10082102**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/21/17 09:09 AM**	

Compound	%Recovery	Method Limits
Oxygen	113	85-115
Methane	102	85-115
Carbon Dioxide	98	85-115

Container Type: NA - Not Applicable

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Client Sample ID: LCSD

Lab ID#: 1708298B-09AA

MODIFIED NATURAL GAS ANALYSIS BY ASTM D-1946

File Name:	**10082113**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 8/21/17 02:21 PM**	

Compound	%Recovery	Method Limits
Oxygen	103	85-115
Methane	99	85-115
Carbon Dioxide	99	85-115

Container Type: NA - Not Applicable