



September 21, 2017

Alameda County Environmental Health Services
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

RECEIVED

By Alameda County Environmental Health 11:32 am, Jan 12, 2018

Attention: Mr. Mark Detterman

RE: Third Quarter 2017 Semi-Annual Groundwater Monitoring Report
Delong Oil, Inc.
1716 Webster Street, Alameda, California 94501
Fuel Leak Case No. RO0003140; (Global ID No. T10000005974)
(CCI Project No. 12214-1)

Dear Mr. Detterman:

Compliance & Closure, Inc. (CCI) is pleased to present the Third Quarter 2017 Quarterly Groundwater Monitoring Report for the sampling of the four on-site groundwater monitoring wells at the Delong Oil, Inc. 76 Gas Station/Circle K, located at 1716 Webster Street, Alameda, California (Figures 1 and 2). The wells were sampled on August 31, 2017.

Background

In 1983, three single-walled, fiberglass gasoline fuel tanks (12,000-gallon, 10,000-gallon and 6,000-gallon) and one waste oil tank were installed underground (USTs) at the site. In 1987, Mobil Oil Corporation replaced the waste oil tank with a 1,000-gallon tank. The site was later sold to British Petroleum, which operated the site until 1994. In 1994, the site was sold to ConocoPhillips, which operated the site until 2009. Between 1990 and 2009, several environmental site investigations and monitoring activities were conducted by several environmental consulting firms including Kaprealian Engineering, Inc., Hydro-Environmental Technologies, Inc., Fugro West and TRC Alton Geoscience.

In 2009, ConocoPhillips sold the site to United Brothers Enterprises, Inc., also doing business as Delong Oil, Inc., the current owner of the property. In early November 2009, Delong Oil converted the 6,000-gallon gasoline tank to a diesel tank. In July 2011, free-phase product was discovered in well RW-1, located adjacent to the converted diesel tank. Fingerprint analysis later identified the liquid as diesel fuel. Since Delong Oil was the only operator to sell diesel fuel at the site, the ACHE named it as a responsible party for the unauthorized release of the fuel. On September 6, 2013, the 1,000-gallon waste oil tank was removed from the site. Two soil samples

and one grab water sample were collected from the excavation. The laboratory reported the soil samples contained detectable total petroleum hydrocarbons as diesel (TPHd) at 30.9 milligrams per kilogram (mg/kg) and total petroleum hydrocarbons as motor oil (TPHmo) at 231 mg/kg. The groundwater sample was also reported to contain detectable TPHd at 18,200 micrograms per liter (ug/L) and TPHmo at 46,200 ug/L. Based on these results, Delong Oil was again named a responsible party for an unauthorized release of product in the vicinity of the former waste oil tank.

On June 10, 2014, ACEH issued a letter directing Delong Oil to prepare a scope of work to characterize the downgradient and lateral extent of the free-phase product and groundwater contamination associated with the waste oil tank. ACEH also directed Delong Oil to evaluate potential impacts from the waste oil release to adjacent downgradient residential buildings.

On January 25, 2016, CCI conducted a soil and groundwater investigation in the vicinity of the former waste oil and hydraulic lift area of the former gas station building. CCI was following the scope of work in the approved work plan from June 2014. Results from the investigation showed that the soil and groundwater samples collected from the area just north and west of the former waste oil tank and the area of the former hydraulic lifts were reported by the laboratory to contain detectable concentrations of TPHd. Soil sample SB-6-5, collected from a depth of 5 feet was reported by the laboratory to contain the highest TPHd concentration, at 32.1 mg/kg. This soil sample was also reported to contain TPHmo at 178 mg/kg and total petroleum hydrocarbons as hydraulic oil (THPho) at 34.7 mg/kg. The concentration of TPHd in the other 11 soil samples were much lower. No other compounds were detected in the soil samples.

Six groundwater samples collected from the borings were reported to contain relatively low concentrations of TPHd. All the TPHd samples were below the ESLs for groundwater where groundwater is a current or potential drinking water source. Four of the water samples, however, were reported to contain TPHmo ranging from 0.221 mg/L at SB-5-W to 0.493 mg/L at SB-6-W. All four of these water samples (SB-1-W, SB-2-W, SB-5-W and SB-6-W) exceeded the 100 ug/L ESLs for TPHmo where groundwater is a current or potential drinking water resource. The extent of the TPHmo in the groundwater to the east was not defined. The current and past groundwater gradient at the site indicates the groundwater flow direction is generally toward the north.

PID readings recorded during the investigation generally ranged from 15 to 1440 ppm in several of the soil borings. These PID readings did not correlate with results from the laboratory analysis.

On October 19, 2016, The ACEH has requested a new work plan that addresses the residential foundations of the homes to the east of the site, on site soil vapor sampling and further delineation of the groundwater diesel plume to the northwest of the site.

The ACEH issued a letter on March 17, 2017 indicating that the State Water Board (SWB) has

recommended and the ACEH concurs that the site be converted into two environmental cases. Case RO0003235 will handle only the diesel release in the northwest corner of the site associated with the conversion of the underground storage tank (UST) to a diesel UST. The other case RO0003140 will investigate the waste oil UST release on the southeast corner of the site. The new directive requested a diesel UST work plan for Case RO0003235 and an addendum work plan for Case RO0003140 by May 19, 2017. CCI has submitted both of those work plans to the ACEH. CCI has received comments on the work plan to define the extent of groundwater contamination from the waste oil tank on the east side of the site. The ACEH in its July 5, 2017 letter has requesting a report on the on and offsite investigation by October 31, 2017.

Groundwater Sampling

Groundwater samples were collected from the four site wells in accordance with CCI's Sampling Protocol, (Appendix A). The groundwater purged from the wells during sampling and equipment rinse water were placed in a properly labeled, Department of Transportation-approved drums and left at the site, adjacent to the trash enclosure on the southeast side of the site, pending laboratory results. A summary of the groundwater purge data is presented in Table 1.

Laboratory Analysis

SGS Accutest Laboratories (Accutest), located in San Jose, California, a state-certified laboratory, analyzed the water samples for the presence of total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and total xylenes (BTEX), naphthalene, fuel oxygenates and chlorinated solvents using EPA Test Method 8260B. Total petroleum hydrocarbons as diesel (TPHd, C10-C28 range) and TPHmo (C28-C40 range) were also analyzed using EPA Test Method 8015B. It should be noted that TPHd and TPHmo samples were analyzed with silica gel cleanup.

Summary of Groundwater Laboratory Results

The laboratory reported all four groundwater monitoring wells to have detectable TPHd and TPHmo. Monitoring well MW-1 was also reported to have detectable TPHg, BTEX compounds, fuel oxygenates and detectable naphthalene. Analytical results for the third quarter are summarized in Table 2. A Copy of the laboratory report and chain of custody document are attached in Appendix B. TPHd concentration map for the groundwater samples collected from the site wells during the third quarter are plotted on Figures 3.

While sampling the wells during the third quarter, the groundwater surface measurements ranged between 9.03 and 9.42 feet above mean sea level (msl). Dissolved oxygen levels ranged from 1.2.15milligram per liter (mg/L) at MW-1 to 4.75 mg/L at MW-3A. Oxygen reducing potential was ranged from -88 at MW-1 to 71 at MW-2A. The general groundwater flow direction in the

upper-aquifer wells ranged from 52°northwest to 4°northeast, at a gradient 0.004 feet per foot (Figure 2). A copy of the field logs are attached in Appendix B.

Additional Site Activity

CCI is currently preparing to conduct the on and offsite waste oil tank investigation. CCI has applied and received boring permits from the Alameda County Public Works Agency to install three temporary soil vapor wells on the east side of the site and hand auger a 10-foot boring in the backyard of the residence at 706 Buena Vista Avenue. The field work is scheduled for October 9, 2017.

The next semi-annual sample round is scheduled for March 2017. A copy of this report was uploaded to the AECH ftp data base site and the State of California Geotracker data base for review by the AECH.

Limitations

The discussion presented in this report is based on the following:

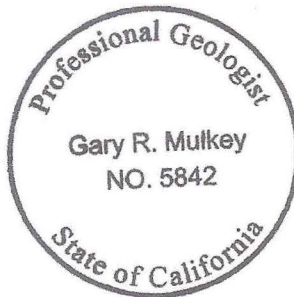

1. The observations of the field personnel;
2. The results of the laboratory analyses performed by a state-certified laboratory;
3. Our understanding of the regulations of the State of California and Alameda County.

It is possible that variations in the soil or groundwater conditions could exist beyond the points explored in this investigation. Also, changes in groundwater conditions could occur at some time in the future due to variations in rainfall, temperature, regional water usage, or other factors. The services performed by CCI have been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the Alameda area. No other warranty, express or implied, is made. Please note that contamination of soil and groundwater must be reported to the appropriate agencies in a timely manner.

CCI includes in this report chemical analytical data from a state-certified laboratory. CCI has been informed that the analyses are performed according to procedures suggested by the U.S. EPA and State of California. CCI is not responsible for laboratory errors in procedure or result reporting.

If you have any questions or require additional information, please call me at (925) 648-2008.

Sincerely,
Compliance & Closure, Inc.



Gary R. Mulkey, P.G. 5842

I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH's FTP server and the SWRCB's Geotracker Website.

Submitted by;



Delong Liu
President

TABLE 1
Summary of Monitoring Well Groundwater Purge Data
1716 Webster Street, Alameda, CA

Well Number	Date Sampled	Depth to Water (ft)	Well Depth (ft)	LPH (Feet)	Well Elevation (M.S.L.)	Groundwater Elevation (M.S.L.)	Well Screen Interval (Feet)	Purge Volume (gallons)	Temp. (F)	Cond. (umhos/cm)	pH	Dissolved Oxygen (mg/L)	O.R.P.
MW1	2/22/2016	5.25	15.17	0.00	14.70	9.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/25/2016	5.40	15.15	Sheen		9.30		9	59.28	386	6.96	1.41	-170
	11/28/2016	6.01	15.15	0.00		9.14		5	61.39	468	6.50	3.25	-51
	3/10/2017	3.75	15.15	Sheen		10.95		7	56.43	381	7.26	2.45	-112
	8/31/2017	5.67	15.15	0.00		9.03		5	63.34	437	7.11	2.15	-88
MW2A	2/22/2016	5.49	16.95	0.00	15.16	9.67	7 to 17	12	61.17	420	6.88	2.10	95
	2/25/2016	5.54	16.85	0.00		9.62		9	61.76	426	6.85	2.00	21
	11/28/2016	6.24	16.85	0.00		8.92		10	63.77	393	7.14	2.39	87.2
	3/10/2017	4.01	16.84	0.00		11.15		8	61.12	373	7.35	3.01	79
	8/31/2017	5.70	16.84	0.00		9.46		6	64.91	380	6.58	2.21	71
MW3A	2/22/2016	5.85	16.91	0.00	15.63	9.78	7 to 17	12	59.02	413	7.15	2.61	101
	2/25/2016	6.03	16.83	0.00		9.60		9	58.96	398	7.30	2.91	90
	11/28/2016	6.66	16.82	0.00		8.97		10	61.95	361	7.67	4.67	91
	3/10/2017	3.96	16.82	0.00		11.67		7	58.32	379	7.82	1.68	85
	8/31/2017	6.21	16.82	0.00		9.42		5	61.91	341	6.69	4.75	15
RW-1	2/22/2016	5.28	22.50	0.00	14.84	9.56	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2/25/2016	5.31	22.50	0.00		9.53		9	59.18	348	6.77	2.41	-78
	11/28/2016	5.58	22.50	0.00		9.26		6	62.22	350	6.82	5.05	18.4
	3/10/2017	3.34	22.50	0.00		11.50		30	56.99	335	7.08	4.25	19.0
	8/31/2017	5.72	22.50	0.00		9.12		38	61.87	365	7.08	4.27	-15.0

ft Feet below top of PVC casing
gal Gallons
Temp. Temperature
F Degrees Fahrenheit
LPH Liquid phase hydrocarbon

N/A Not Available
mg/L Milligrams per liter
Cond. Conductivity
umhos/cm Micromhos per centimeter
M.S.L. Mean sea level

Well Elevations The old datum was NGVD29 which is 2.6 feet lower than the modern NAVD88 which is now required for the submittal to the GeoTracker.

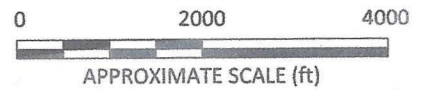
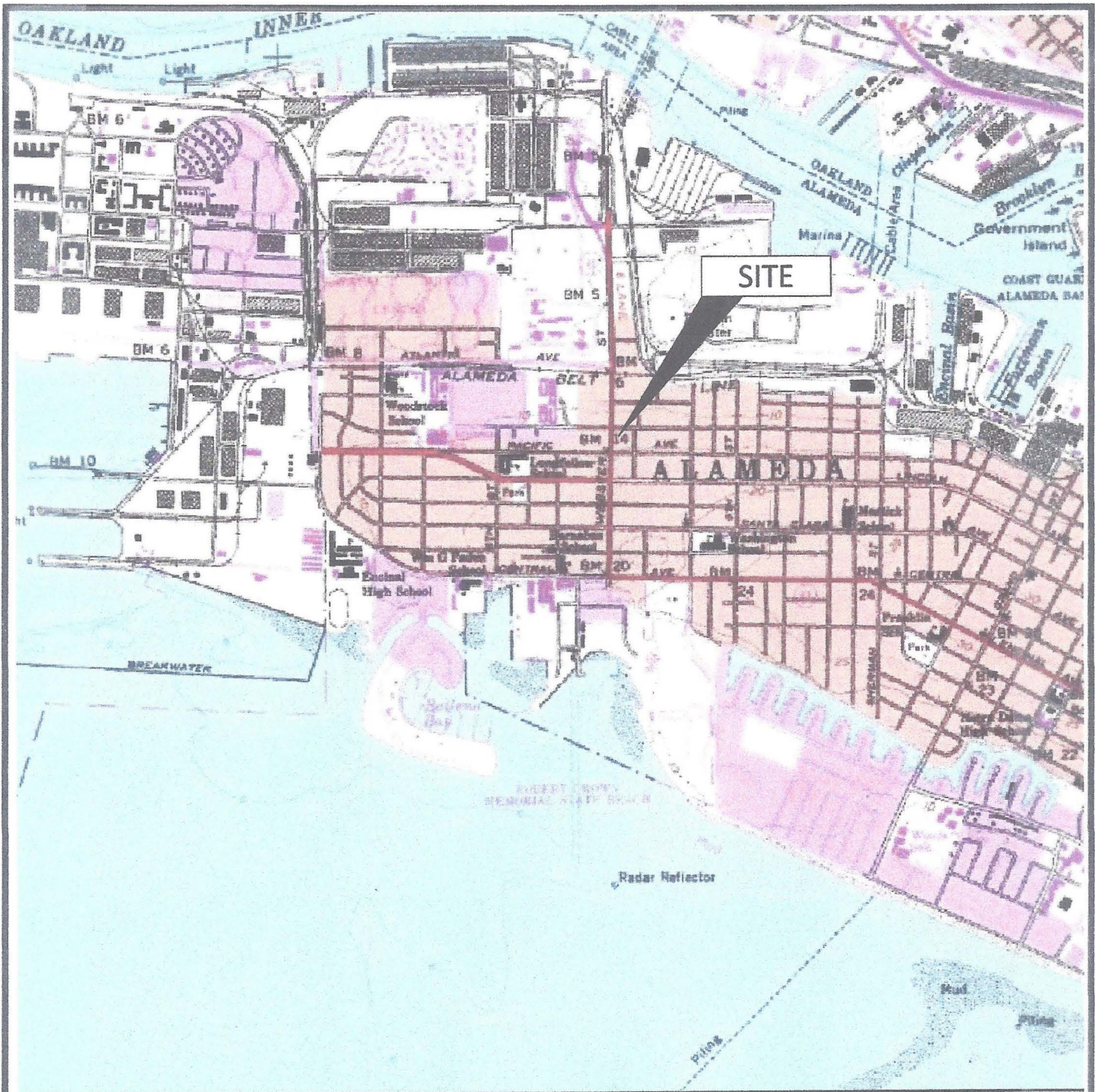
TABLE 2
Summary of Groundwater Sample Analysis
Delong Petroleum- 1716 Webster Street, Alameda, CA

Sample Number	Date Sampled	TPHg (ug/L) (C6-C10)	TPHd ⁽³⁾ (mg/L) (C10-C28)	Benzene (ug/L)	Toulene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	Napthalene (ug/L)	TPHmo ⁽³⁾ (mg/L) (C28-C40)	Acetone (ug/L)	Tetrachloroethylene (ug/L)	Trichloroethlene ⁽⁴⁾ (ug/L)
MW-1	2/25/2016	351	1.03	49.5	2.6	48.5	62.5	51.3 ⁽²⁾	56.1	0.513 ⁽³⁾	N/A	N/A	N/A
	6/6/2016	1700	1.1	3.3 ⁽¹⁾	<10	69.1	348	<10	48.7 ⁽¹⁾	0.184	45.6 ⁽¹⁾	<10	<10
	11/28/2016	742	0.586	18.6	0.72 ⁽¹⁾	9.0	6.9	10.8	69.2	0.105	<25	<1	<1
	3/10/2017	432	0.736	6.0	0.60 ⁽¹⁾	22.5	17.8	3.5	20.7	0.131	<25	<1	<1
	8/31/2017	1250	0.704	2.7	0.93 ⁽¹⁾	0.86 ⁽¹⁾	288	2.8	138	0.217	<25	<1	<1
MW-2A	2/25/2016	<50	0.0410 ⁽¹⁾	<1	<1	<1	<2	<1	<5	<0.19 ⁽³⁾	N/A	N/A	N/A
	6/6/2016	<50	<0.099	<1	<1	<1	<2	<1	<5	<0.099	<20	0.67 ⁽¹⁾	0.21 ⁽¹⁾
	11/28/2016	<100	<0.048	<1	<1	<1	<3	<1	<5	0.0413 ⁽¹⁾	<25	0.46 ⁽¹⁾	<1
	3/10/2017	<100	0.0407 ⁽¹⁾	<1	<1	<1	<3	<1	<5	0.0502	<25	0.37 ⁽¹⁾	<1
	8/31/2017	<100	0.0221 ⁽¹⁾	<1	<1	<1	<3	<1	<5	0.0343 ⁽¹⁾	<25	0.61 ⁽¹⁾	<1
MW-3A	2/25/2016	<50	0.0354 ⁽¹⁾	<1	<1	<1	<2	<1	<5	<0.19 ⁽³⁾	N/A	N/A	N/A
	6/6/2016	<50	0.0601 ⁽¹⁾	<1	<1	<1	<2	<1	<5	<0.096	<20	<1	<1
	11/28/2016	<100	0.0533	<1	<1	<1	<3	<1	<5	0.0798	<25	<1	<1
	3/10/2017	<100	0.205	<1	<1	<1	<3	<1	<5	0.144	<25	<1	<1
	8/31/2017	<100	0.232	<1	<1	<1	<3	<1	<5	0.125	<25	<1	<1
RW-1	2/25/2016	<50	1.06	0.27 ⁽¹⁾	<1	<1	<2	0.61 ⁽¹⁾	<5	0.232 ⁽³⁾	N/A	N/A	N/A
	6/6/2016	47.5 ⁽¹⁾	2.14	<1	<1	<1	<2	1.8 ⁽¹⁾	0.53 ⁽¹⁾	0.200	7.1 ⁽¹⁾	<1	<1
	11/28/2016	<100	0.111	<1	<1	<1	<2	0.38 ⁽¹⁾	<5	0.0854	<25	<1	<1
	3/10/2017	<100	0.0897	<1	<1	<1	<2	1.1	<5	0.0831	<25	<1	<1
	8/31/2017	<100	1.32	<1	<1	<1	1.4 ⁽¹⁾	1.1	1.5 ⁽¹⁾	0.4360	14.3 ⁽¹⁾	<1	<1

Foot Note:

- 1 Indicates an estimated value below the laboratory reporting limit
- 2 Tert-Amyl Methyl Ether and Tert-Butyl Alcohol were also detected. See laboratory report.
- 3 Samples were run with silica gel cleanup
- 4 Other compounds were detected in the 8260B analysis, see laboratory report

TPHg Total petroleum hydrocarbons as gasoline
 TPHd Total petroleum hydrocarbons as diesel
 TPHmo Total petroleum hydrocarbons as motor oil
 TPHho Total petroleum hydrocarbons as hydraulic oil
 mg/L Milligrams per Liter
 ug/L Micrograms per Liter
 MTBE Methyl-tert-butyl ether
 < Less than laboratory reporting limit
 ND Not Detected
 NA Not analyzed
 ESLs State of California Environmental Screening Levels for diesel and motor oil in groundwater, where groundwater is a current or potential drinking water resource = 100 ug/L.



Base Map USGS

Reviewed By:
GM

Approved By:
GM

Vicinity Map

**Delong Petroleum
1716 Webster Street
Alameda, California**

Compliance & Closure, Inc.

Job No.:
12214-1

Date:
2/3/2016

Drawn By:
GM

Fig. No.:
1



Buena Vista Avenue

Property Line

Sidewalk

9.10

(9.12)

RW-1

MW-1

(9.03)

Landscaping

UST Area

Groundwater Flow Direction
N52W to N4E at 0.004 feet per foot

9.10

Bus Shelter

9.20

9.20

Dispensers

Canopy

Landscaping

9.30

9.30

Former Gas Station Building Location

Webster Street

9.40

MW-3A

9.40

MW-2A

(9.46)

(9.42)

Trash Enclosure

Transformer

Sidewalk

Market

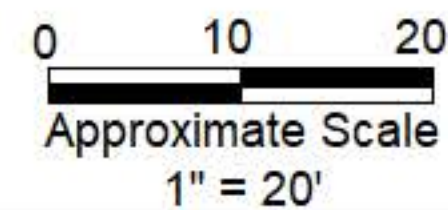
Former Waste Oil Tank Excavation

Legend

Monitoring Well Location

(9.03) Groundwater surface elevation in feet (datum: mean sea level - 8/31/2017)

Groundwater surface contour elevation in feet (datum: mean sea level - 8/31/2017)

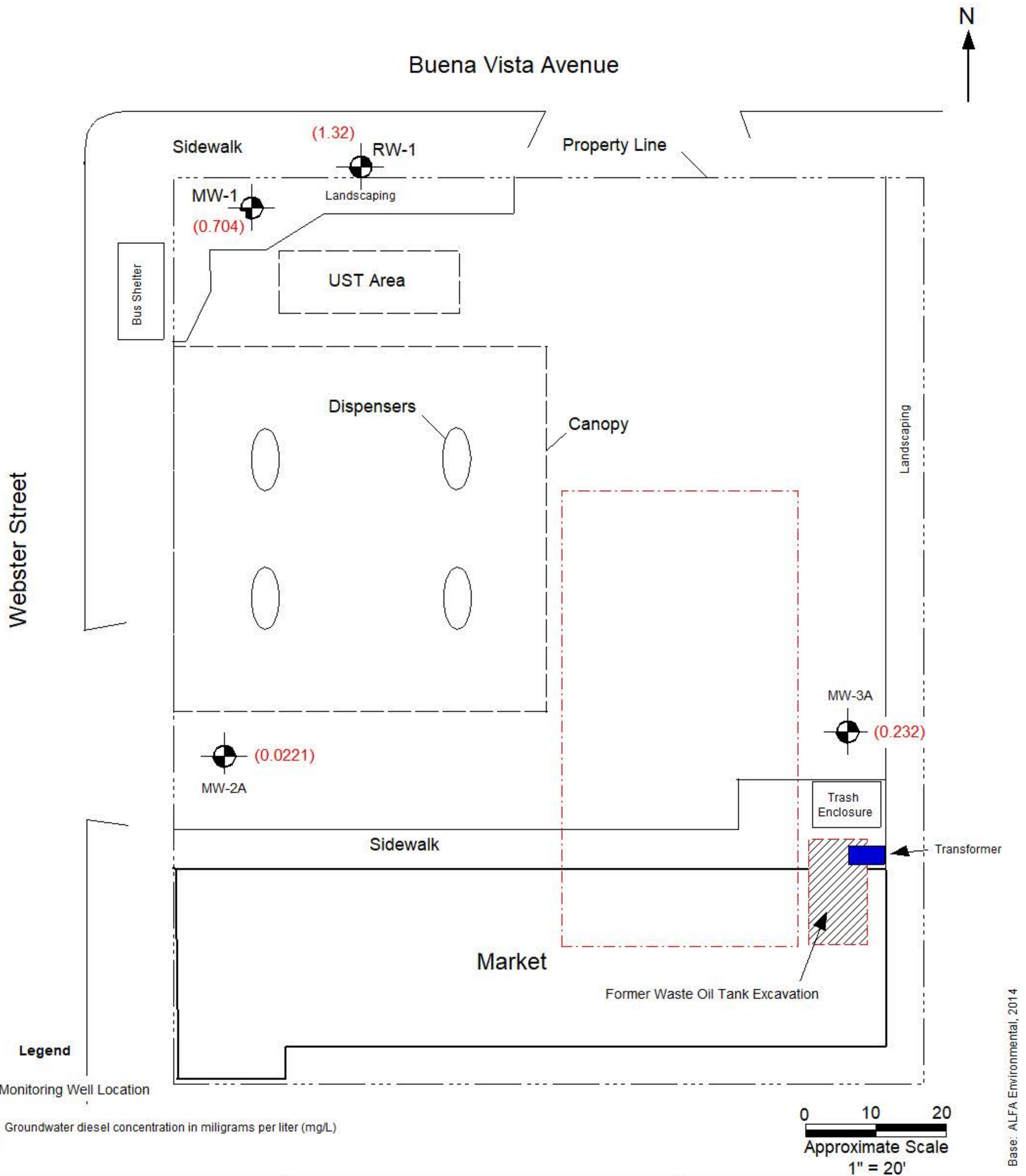


Base: ALFA Environmental, 2014

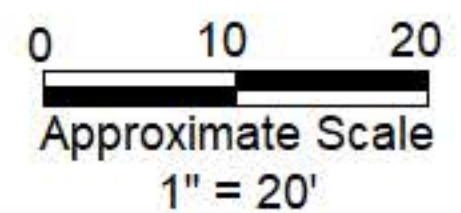
Job No.:	121214-1
Date:	9/21/2017

<p>Groundwater Contour Map</p> <p>76 Gas Station/Circle K 1716 Webster Street Alameda, California</p>
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<p>Compliance & Closure, Inc.</p>	
Drawn by:	Figure No.:
NLN	2



Legend
 Monitoring Well Location
 (0.232) Groundwater diesel concentration in milligrams per liter (mg/L)



Base: ALFA Environmental, 2014

Job No.: 121214-1	Groundwater Diesel Concentration Map 8/31/2017 76 Gas Station/Circle K 1716 Webster Street Alameda, California	Compliance & Closure, Inc.	
Date: 9/21/2017			Drawn by: NLN

APPENDIX A

CCI's Groundwater Sampling Protocol

COMPLIANCE & CLOSURE, INC.
Latest Revision: January 2017

GROUNDWATER SAMPLING PROTOCOL

Sampling of groundwater is performed by Compliance & Closure, Inc. sampling technicians. Summarized field sampling procedures are as follows:

1. Measure depth to water in all wells prior to sampling (+- 0.01')
Calibrate field equipment. Proceed to first well with clean and decontaminated equipment.
2. Measurements of liquid surface(s) in the well, and total depth of monitoring well. Note presence of silt accumulation.
3. Field check for presence of floating product; measure apparent thickness.
4. Purge well with disposable bailer prior to collecting samples; purge volume (Minimum of 3 casing volumes) calculated prior to removal.
5. Monitor groundwater for temperature, pH, and specific conductance, note turbidity during purging. Allow temperature, pH and specific conductance to stabilize. Allow well to recover.
6. Collect samples using Environmental Protection Agency (EPA) approved sample collection devices, i.e., disposable bailers. Test parameters may include EPA 8260B for fuel oxygenates requested, EPA 8015M for TPHg and BTEX with EPA 8020.
7. Transfer samples into laboratory-supplied EPA-approved containers. Minimize aeration and avoid headspace in VOAs.
8. Label samples and log onto chain-of-custody form.
9. Store samples in a chilled ice chest for shipment to a state- certified analytical laboratory. Chain-of-custody to be remain with samples.
10. Decontaminate equipment (water level sounder) prior to sampling next well. Disposable bailers to be used and discarded after each use.
11. Drum purge water collected from the site wells will be labeled and stored on site.

Compliance & Closure, Inc.
Groundwater Sampling Protocol
Latest Revision: January 2017

Equipment Cleaning and Decontamination

All water samples are placed in precleaned laboratory-supplied bottles. Sample bottles and caps remain sealed until actual usage at the site. All equipment which comes in contact with the well or groundwater is thoroughly cleaned with hexane wipes then trisodium phosphate (TSP) solution and rinsed with deionized or distilled water before each use at the site. This cleaning procedure is followed between each well sampled. Wells are sampled in approximate order of increasing contamination. If a Teflon cord is used, the cord is cleaned. If a nylon or cotton cord is used, a new cord is used in each well. If equipment blanks are collected, they will be collected between monitoring wells to test decontamination procedures. The blanks are analyzed periodically to ensure proper cleaning procedures are used.

Water Level Measurements

Depth to groundwater is measured in each well using a sealed sampling tape or scaled electric sounder prior to purging or sampling. If the well is known or suspected of containing free-phase petroleum hydrocarbons, an optical interface probe is used to measure the hydrocarbon thickness and groundwater level. Measurements are collected and recorded to the nearest 0.01 foot. Each monitoring well's total depth will be measured; this will allow a relative judgment of well siltation to be made and need for redevelopment.

Bailer Sheen Check

If no measurable free-phase petroleum hydrocarbons are detected, a clear acrylic bailer is used to determine the presence of a sheen. Any observed film, as well as odor and color of the water is recorded.

Groundwater Sampling

Prior to groundwater sampling, each well is purged of "standing" groundwater. A disposable bailer is used to purge the well. The amount of purging is dependent on the well yield. In a high yield formation, samples will be collected when normal field measurement, including temperature, pH, and specific conductance stabilize, provided a minimum of three well-casing volumes of water have been removed. Field measurements will be taken after purging each well volume. Physical parameter measurements (temperature, pH, and specific

conductance) are closely monitored throughout the well purging process and are used as indicators for assessing sufficient purging. The purging parameters are measured to observe stabilization to a range of values typical for that aquifer and well. Stable field parameters are recognized as indicative of groundwater aquifer chemistry entering the well. Specific conductance (conductivity) meters are read to the nearest ± 10 umhos/cm and are checked daily. Temperature is read to the nearest 0.1F. Calibration of physical parameter meters will follow manufacturer's specifications. pH will be calibrated daily using two fresh buffer solutions. Collected field data during purging activities will be entered on the Well Sampling Field Data Sheet.

Compliance & Closure, Inc.
Groundwater Sampling Protocol
Latest Revision: January 2017

In low yield formations, the well is purged such that the "standing" water is removed and the well is allowed to recharge. (Normal field measurements will be periodically recorded during the purging process). In situations where recovery to 80% of static water level is estimated, or observed to exceed a two hour duration, a sample will be collected when sufficient volume is available for a sample for each parameter. Attempts will be made so the well is not purged dry such that the recharge rate causes the formation water to cascade into the well.

In wells where free-phase hydrocarbons are detected, the free-phase portion will be bailed from the well and the estimated volume removed and recorded. A groundwater sample will be collected if bailing reduces the amount of free-phase hydrocarbons to the point where they are not present in the well. Well sampling will be conducted using one of the aforementioned methods depending on the formation yield. However, if free-phase hydrocarbons persist throughout bailing, then a groundwater sample will not be collected.

Volatile organic groundwater samples are collected so that air passage through the sample does not occur or is minimal (to prevent volatiles from being stripped from the samples). Sample bottles are filled by slowly running the sample down the side of the bottle until there is a positive convex meniscus over the neck of the bottle; the Teflon side of the septum (in cap) is positioned against the meniscus, and the cap screwed on tightly; the sample is inverted and the bottle lightly tapped. The absence of an air bubble indicates a successful seal; if a bubble is evident, the cap is removed, more sample is added, and the bottle is resealed. If this occurs more than once in a given sample, a new sample will be collected.

Chain-of-Custody

Groundwater sample containers are labeled with a unique sample number, location, and date of collection. All samples are logged into a chain-of custody form and placed in a chilled ice chest for shipment to a laboratory certified by the State of California Department of Health Services.

Sample Storage

Groundwater samples collected in the field are stored in an ice chest cooled to 4 C while in transit to the office or analytical laboratory. Samples are stored in a refrigerator overnight and during weekends and holidays. The refrigerator is set to 4 C and is locked with access controlled by a designated sample custodi

Quality Assurance/Quality Control Objectives

The sampling and analysis procedures employed by Compliance & Closure, Inc. for groundwater sampling and monitoring follow quality assurance/quality control (QA/QC) guidelines. Quality assurance objectives have been established to develop and implement procedures for obtaining and evaluating water quality and field data in an accurate, precise, and complete manner. In this way, sampling procedures and field measurements provide information that is comparable and representative of actual field conditions. Quality control (QC) is maintained

Compliance & Closure, Inc.
Groundwater Sampling Protocol
Latest Revision: January 2017

by site-specific field protocols and requiring the analytical laboratory to perform internal and external QC checks. The goal is to provide data that are accurate, precise, complete, comparable, and representative. The definitions as developed by overseeing federal, state, and local agency guidance documents for accuracy, precision, completeness, comparability, and representativeness are:

- o **Accuracy** - the degree of agreement of a measurement with an accepted reference or true value.
- o **Precision** - a measure of agreement among individual measurements under similar conditions. Usually expressed in terms of the standard deviation.
- o **Completeness** - the amount of valid data obtained from a measurement system compared to the amount that was expected to meet the project data goals.
- o **Comparability** - express the confidence with which one data set can be compared to another.
- o **Representativeness** - a sample or group of samples that reflect the characteristics of the media at the sampling point. It also includes how well the sampling point represents the actual parameter variations which are under study.

Laboratory and field handling procedures of samples are monitored by including QC samples for analysis with every submitted sample lot from a project site. QC samples may include any combination of the following:

- o **Trip Blanks:** Periodic Trip Blank will be prepared and analyzed for purgeable organic compounds only; QC samples are collected in 40 milliliter (ml) sample vials filled in the analytical laboratory with organic-free water. Trip blanks are sent to the project site, and travel with project site samples. Trip blanks are **not** opened, and are returned from a project site with the project site samples for analysis.
- o **Duplicates:** Duplicated samples are collected "second samples" from a selected well at the project site. They are collected as either split samples or second-run samples collected from the same well. The duplicate sample will be analyzed using EPA Test Method 8260B.
- o **Equipment Blank:** Periodic QC samples collected from field equipment rinseate to verify decontamination procedures (if applicable). Equipment rinsate blanks will be collected between sampling of wells.

The number and types of QC samples are determined and analyzed on a project-specific basis.

APPENDIX B

Laboratory Reports & Chain of Custody Forms

Technical Report for

Compliance & Closure, Inc.

T10000005974-Delong Oil; 1716 Webster St, Alameda, CA

12214-2

SGS Accutest Job Number: FA47285

Sampling Date: 08/31/17

Report to:

Compliance & Closure, Inc
4115 BlackHawk Plaza Circle Suite 100
Danville, CA 94506
gary@cci-envr.com

ATTN: Gary Mulkey

Total number of pages in report: 53



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Caitlin Brice, M.S.
General Manager

Client Service contact: Elvin Kumar 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FLO02), NY(12022), SC(96038001)
DoD ELAP(L-A-B L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177),
AK, AR, GA, IA, KY, MA, NV, OK, OR, UT, WA

This report shall not be reproduced, except in its entirety, without the written approval of SGS Accutest.
Test results relate only to samples analyzed.

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Sample Summary

Compliance & Closure, Inc.

Job No: FA47285

T10000005974-Delong Oil; 1716 Webster St, Alameda, CA
 Project No: 12214-2

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
FA47285-1	08/31/17	08:30 GM	09/01/17	AQ	Ground Water	MW-3A
FA47285-2	08/31/17	08:55 GM	09/01/17	AQ	Ground Water	MW-2A
FA47285-3	08/31/17	09:25 GM	09/01/17	AQ	Ground Water	MW-1
FA47285-4	08/31/17	09:55 GM	09/01/17	AQ	Ground Water	RW-1

Summary of Hits

Job Number: FA47285
Account: Compliance & Closure, Inc.
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA
Collected: 08/31/17

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

FA47285-1 MW-3A

Methyl Chloride	0.58 J	2.0	0.50	ug/l	SW846 8260B
TPH (C10-C28)	0.232	0.048	0.019	mg/l	SW846 8015C
TPH (> C28-C40)	0.125	0.048	0.019	mg/l	SW846 8015C

FA47285-2 MW-2A

Tetrachloroethylene	0.61 J	1.0	0.22	ug/l	SW846 8260B
TPH (C10-C28)	0.0221 J	0.048	0.019	mg/l	SW846 8015C
TPH (> C28-C40)	0.0343 J	0.048	0.019	mg/l	SW846 8015C

FA47285-3 MW-1

Benzene	2.7	1.0	0.31	ug/l	SW846 8260B
n-Butylbenzene	2.3	1.0	0.23	ug/l	SW846 8260B
sec-Butylbenzene	3.3	1.0	0.24	ug/l	SW846 8260B
tert-Butylbenzene	0.68 J	1.0	0.31	ug/l	SW846 8260B
Chloroform	1.3	1.0	0.30	ug/l	SW846 8260B
o-Chlorotoluene	4.3	1.0	0.22	ug/l	SW846 8260B
Ethylbenzene	0.86 J	1.0	0.36	ug/l	SW846 8260B
Isopropylbenzene	19.5	1.0	0.22	ug/l	SW846 8260B
p-Isopropyltoluene	0.64 J	1.0	0.21	ug/l	SW846 8260B
Methyl Tert Butyl Ether	2.8	1.0	0.23	ug/l	SW846 8260B
Naphthalene	138	25	5.0	ug/l	SW846 8260B
n-Propylbenzene	35.4	1.0	0.29	ug/l	SW846 8260B
Tert-Amyl Methyl Ether	0.75 J	2.0	0.24	ug/l	SW846 8260B
Toluene	0.93 J	1.0	0.30	ug/l	SW846 8260B
1,2,4-Trimethylbenzene	184	5.0	1.6	ug/l	SW846 8260B
1,3,5-Trimethylbenzene	34.1	1.0	0.27	ug/l	SW846 8260B
Xylene (total)	288	15	3.6	ug/l	SW846 8260B
TPH-GRO (C6-C10)	1.25	0.50	0.25	mg/l	SW846 8015C
TPH (C10-C28)	0.704	0.048	0.019	mg/l	SW846 8015C
TPH (> C28-C40)	0.217	0.048	0.019	mg/l	SW846 8015C

FA47285-4 RW-1

Acetone	14.3 J	25	10	ug/l	SW846 8260B
Methyl Chloride	1.2 J	2.0	0.50	ug/l	SW846 8260B
Methyl Tert Butyl Ether	1.1	1.0	0.23	ug/l	SW846 8260B
Naphthalene	1.5 J	5.0	1.0	ug/l	SW846 8260B
1,2,4-Trimethylbenzene	0.47 J	1.0	0.32	ug/l	SW846 8260B
Xylene (total)	1.4 J	3.0	0.72	ug/l	SW846 8260B
TPH (C10-C28)	1.32	0.048	0.019	mg/l	SW846 8015C
TPH (> C28-C40)	0.436	0.048	0.019	mg/l	SW846 8015C

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: MW-3A		Date Sampled: 08/31/17
Lab Sample ID: FA47285-1		Date Received: 09/01/17
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260B		
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	99%		85-112%
460-00-4	4-Bromofluorobenzene	103%		83-118%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.1
3

Client Sample ID: MW-3A	Date Sampled: 08/31/17
Lab Sample ID: FA47285-1	Date Received: 09/01/17
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8015C	
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD145832.D	1	09/06/17 18:38	EG	n/a	n/a	GCD6083
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	91%		70-131%		
98-08-8	aaa-Trifluorotoluene	81%		69-143%		

ND = Not detected	MDL = Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

Report of Analysis

3.1
3

Client Sample ID: MW-3A	
Lab Sample ID: FA47285-1	Date Sampled: 08/31/17
Matrix: AQ - Ground Water	Date Received: 09/01/17
Method: SW846 8015C SW846 3510C	Percent Solids: n/a
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ016735.D	1	09/08/17 15:22	SJL	09/06/17 13:00	OP66717	GJJ704
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.232	0.048	0.019	mg/l	
	TPH (> C28-C40)	0.125	0.048	0.019	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	122%		50-131%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-2A		Date Sampled: 08/31/17
Lab Sample ID: FA47285-2		Date Received: 09/01/17
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260B		
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J0986459.D	1	09/08/17 11:44	DP	n/a	n/a	VJ5706
Run #2							

Run #1	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.37	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.23	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.24	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.31	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.22	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.31	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.24	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.34	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-2A		Date Sampled: 08/31/17
Lab Sample ID: FA47285-2		Date Received: 09/01/17
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260B		
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	103%		85-112%
460-00-4	4-Bromofluorobenzene	104%		83-118%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

32
3

Client Sample ID: MW-2A	
Lab Sample ID: FA47285-2	Date Sampled: 08/31/17
Matrix: AQ - Ground Water	Date Received: 09/01/17
Method: SW846 8015C	Percent Solids: n/a
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD145833.D	1	09/06/17 19:05	EG	n/a	n/a	GCD6083
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	88%		70-131%		
98-08-8	aaa-Trifluorotoluene	81%		69-143%		

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

32
3

Client Sample ID: MW-2A	
Lab Sample ID: FA47285-2	Date Sampled: 08/31/17
Matrix: AQ - Ground Water	Date Received: 09/01/17
Method: SW846 8015C SW846 3510C	Percent Solids: n/a
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ016736.D	1	09/08/17 15:50	SJL	09/06/17 13:00	OP66717	GJJ704
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.0221	0.048	0.019	mg/l	J
	TPH (> C28-C40)	0.0343	0.048	0.019	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	109%		50-131%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-1		Date Sampled: 08/31/17
Lab Sample ID: FA47285-3		Date Received: 09/01/17
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260B		
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J0986460.D	1	09/08/17 12:08	DP	n/a	n/a	VJ5706
Run #2	A0208812.D	5	09/13/17 19:06	TD	n/a	n/a	VA2214

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	2.7	1.0	0.31	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.37	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
104-51-8	n-Butylbenzene	2.3	1.0	0.23	ug/l	
135-98-8	sec-Butylbenzene	3.3	1.0	0.24	ug/l	
98-06-6	tert-Butylbenzene	0.68	1.0	0.31	ug/l	J
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	1.3	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	4.3	1.0	0.22	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.31	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.24	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.34	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1	Date Sampled:	08/31/17
Lab Sample ID:	FA47285-3	Date Received:	09/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	T10000005974-Delong Oil; 1716 Webster St, Alameda, CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
108-20-3	Di-Isopropyl Ether	ND	1.0	0.24	ug/l	
100-41-4	Ethylbenzene	0.86	1.0	0.36	ug/l	J
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.24	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	19.5	1.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	0.64	1.0	0.21	ug/l	J
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.37	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	2.8	1.0	0.23	ug/l	
91-20-3	Naphthalene	138 ^a	25	5.0	ug/l	
103-65-1	n-Propylbenzene	35.4	1.0	0.29	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
994-05-8	Tert-Amyl Methyl Ether	0.75	2.0	0.24	ug/l	J
75-65-0	Tert-Butyl Alcohol	ND	20	5.3	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	0.93	1.0	0.30	ug/l	J
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	184 ^a	5.0	1.6	ug/l	
108-67-8	1,3,5-Trimethylbenzene	34.1	1.0	0.27	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	288 ^a	15	3.6	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	91%	79-125%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-1		Date Sampled: 08/31/17
Lab Sample ID: FA47285-3		Date Received: 09/01/17
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260B		
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	97%	101%	85-112%
460-00-4	4-Bromofluorobenzene	98%	100%	83-118%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-1	Date Sampled: 08/31/17
Lab Sample ID: FA47285-3	Date Received: 09/01/17
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8015C	
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD145886.D	5	09/13/17 17:05	EG	n/a	n/a	GCD6086
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	1.25	0.50	0.25	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	97%		70-131%		
98-08-8	aaa-Trifluorotoluene	85%		69-143%		

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RW-1		Date Sampled: 08/31/17
Lab Sample ID: FA47285-4		Date Received: 09/01/17
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260B		
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	93%		85-112%
460-00-4	4-Bromofluorobenzene	105%		83-118%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.4
3

Client Sample ID: RW-1		Date Sampled: 08/31/17
Lab Sample ID: FA47285-4		Date Received: 09/01/17
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8015C		
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD145834.D	1	09/06/17 19:32	EG	n/a	n/a	GCD6083
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	88%		70-131%		
98-08-8	aaa-Trifluorotoluene	78%		69-143%		

ND = Not detected	MDL = Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

Report of Analysis

3.4
3

Client Sample ID: RW-1	
Lab Sample ID: FA47285-4	Date Sampled: 08/31/17
Matrix: AQ - Ground Water	Date Received: 09/01/17
Method: SW846 8015C SW846 3510C	Percent Solids: n/a
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JJ016740.D	1	09/08/17 17:45	SJL	09/06/17 13:00	OP66717	GJJ704
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	1.32	0.048	0.019	mg/l	
	TPH (> C28-C40)	0.436	0.048	0.019	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	74%		50-131%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody

Parameter Certification Exceptions

Job Number: FA47285

Account: CCCAD Compliance & Closure, Inc.

Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Di-Isopropyl Ether	108-20-3	SW846 8260B	AQ	Certified by SOP MS005

4.1
4

SGS Accutest Sample Receipt Summary

Job Number: FA47285

Client: COMPLIANCE & CLOSURE INC

Project: DELONG PETROLEUM

Date / Time Received: 9/1/2017 10:30:00 AM

Delivery Method: FedEx

Airbill #s: 7701 6079 7977

Therm ID: IR 1;

Therm CF: -0.2;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 1: (2.0);

Cooler Temps (Corrected) °C: Cooler 1: (1.8);

Cooler Information

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Custody Seals Present	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Custody Seals Intact	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Temp criteria achieved	<input checked="" type="checkbox"/>		<input type="checkbox"/>
4. Cooler temp verification	<u>IR Gun</u>		
5. Cooler media	<u>Ice (Bag)</u>		

Sample Information

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Sample labels present on bottles	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Samples preserved properly	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
3. Sufficient volume/containers recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Condition of sample	<u>Intact</u>			
5. Sample recvd within HT	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
6. Dates/Times/IDs on COC match Sample Label	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
7. VOCs have headspace	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
8. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
9. Compositing instructions clear	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. Voa Soil Kits/Jars received past 48hrs?	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
11. % Solids Jar received?	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
12. Residual Chlorine Present?	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Trip Blank Information

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<u>W</u>	<u>or</u>	<u>S</u>	<u>N/A</u>
3. Type Of TB Received	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____
 Test Strip Lot #: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____
 Residual Chlorine Test Strip Lot #: _____

Comments SAMPLE #3 2 VIALS HAVE HEADSPACE

SM001
Rev. Date 05/24/17

Technician: PETERH

Date: 9/1/2017 10:30:00 AM

Reviewer: PDS

Date: 9/2/2017

FA47285: Chain of Custody

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4.2
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MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA47285

Account: CCCAD Compliance & Closure, Inc.

Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ5706-MB	J0986455.D	1	09/08/17	DP	n/a	n/a	VJ5706

The QC reported here applies to the following samples:

Method: SW846 8260B

FA47285-1, FA47285-2, FA47285-3, FA47285-4

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.37	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.23	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.24	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.31	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.22	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.31	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.24	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
108-20-3	Di-Isopropyl Ether	ND	1.0	0.24	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	

Method Blank Summary

Job Number: FA47285

Account: CCCAD Compliance & Closure, Inc.

Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ5706-MB	J0986455.D	1	09/08/17	DP	n/a	n/a	VJ5706

The QC reported here applies to the following samples:

Method: SW846 8260B

FA47285-1, FA47285-2, FA47285-3, FA47285-4

CAS No.	Compound	Result	RL	MDL	Units	Q
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.24	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.21	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.59	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.37	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.29	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.24	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	20	5.3	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.27	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	102% 83-118%

Method Blank Summary

Job Number: FA47285

Account: CCCAD Compliance & Closure, Inc.

Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ5706-MB	J0986455.D	1	09/08/17	DP	n/a	n/a	VJ5706

The QC reported here applies to the following samples:

Method: SW846 8260B

FA47285-1, FA47285-2, FA47285-3, FA47285-4

CAS No.	Surrogate Recoveries	Limits
17060-07-0	1,2-Dichloroethane-D4	102% 79-125%
2037-26-5	Toluene-D8	103% 85-112%
460-00-4	4-Bromofluorobenzene	104% 83-118%

CAS No.	Tentatively Identified Compounds	R. T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: FA47285
Account: CCCAD Compliance & Closure, Inc.
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA2214-MB	A0208795.D	1	09/13/17	TD	n/a	n/a	VA2214

The QC reported here applies to the following samples:

Method: SW846 8260B

FA47285-3

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.32	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	95%	83-118%
17060-07-0	1,2-Dichloroethane-D4	87%	79-125%
2037-26-5	Toluene-D8	101%	85-112%
460-00-4	4-Bromofluorobenzene	101%	83-118%

Blank Spike Summary

Job Number: FA47285

Account: CCCAD Compliance & Closure, Inc.

Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ5706-BS	J0986454.D	1	09/08/17	DP	n/a	n/a	VJ5706

The QC reported here applies to the following samples:

Method: SW846 8260B

FA47285-1, FA47285-2, FA47285-3, FA47285-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	127	102	50-147
71-43-2	Benzene	25	25.2	101	81-122
108-86-1	Bromobenzene	25	26.1	104	80-121
74-97-5	Bromochloromethane	25	24.3	97	76-123
75-27-4	Bromodichloromethane	25	25.3	101	79-123
75-25-2	Bromoform	25	23.9	96	66-123
78-93-3	2-Butanone (MEK)	125	114	91	56-143
104-51-8	n-Butylbenzene	25	25.5	102	79-126
135-98-8	sec-Butylbenzene	25	26.0	104	83-133
98-06-6	tert-Butylbenzene	25	25.2	101	80-133
56-23-5	Carbon Tetrachloride	25	28.3	113	76-136
108-90-7	Chlorobenzene	25	24.3	97	82-124
75-00-3	Chloroethane	25	27.8	111	62-144
67-66-3	Chloroform	25	25.5	102	80-124
95-49-8	o-Chlorotoluene	25	28.3	113	81-127
106-43-4	p-Chlorotoluene	25	24.8	99	83-130
124-48-1	Dibromochloromethane	25	24.7	99	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	22.1	88	64-123
106-93-4	1,2-Dibromoethane	25	26.6	106	75-120
75-71-8	Dichlorodifluoromethane	25	23.0	92	42-167
95-50-1	1,2-Dichlorobenzene	25	26.4	106	82-124
541-73-1	1,3-Dichlorobenzene	25	26.8	107	84-125
106-46-7	1,4-Dichlorobenzene	25	25.2	101	78-120
75-34-3	1,1-Dichloroethane	25	26.9	108	81-122
107-06-2	1,2-Dichloroethane	25	24.2	97	75-125
75-35-4	1,1-Dichloroethylene	25	28.9	116	78-137
156-59-2	cis-1,2-Dichloroethylene	25	28.4	114	78-120
156-60-5	trans-1,2-Dichloroethylene	25	28.5	114	76-127
78-87-5	1,2-Dichloropropane	25	25.9	104	76-124
142-28-9	1,3-Dichloropropane	25	25.4	102	80-118
594-20-7	2,2-Dichloropropane	25	29.8	119	74-139
563-58-6	1,1-Dichloropropene	25	26.8	107	79-131
10061-01-5	cis-1,3-Dichloropropene	25	23.2	93	75-118
10061-02-6	trans-1,3-Dichloropropene	25	25.0	100	80-120
108-20-3	Di-Isopropyl Ether	25	23.4	94	68-123
100-41-4	Ethylbenzene	25	25.3	101	81-121

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA47285
Account: CCCAD Compliance & Closure, Inc.
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ5706-BS	J0986454.D	1	09/08/17	DP	n/a	n/a	VJ5706

The QC reported here applies to the following samples:

Method: SW846 8260B

FA47285-1, FA47285-2, FA47285-3, FA47285-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
637-92-3	Ethyl Tert Butyl Ether	25	24.7	99	71-120
87-68-3	Hexachlorobutadiene	25	27.9	112	75-142
591-78-6	2-Hexanone	125	117	94	61-129
98-82-8	Isopropylbenzene	25	27.4	110	83-132
99-87-6	p-Isopropyltoluene	25	26.3	105	79-130
74-83-9	Methyl Bromide	25	23.5	94	59-143
74-87-3	Methyl Chloride	25	22.6	90	50-159
74-95-3	Methylene Bromide	25	25.6	102	78-119
75-09-2	Methylene Chloride	25	24.7	99	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	118	94	66-122
1634-04-4	Methyl Tert Butyl Ether	25	23.6	94	72-117
91-20-3	Naphthalene	25	23.6	94	63-132
103-65-1	n-Propylbenzene	25	25.5	102	82-133
100-42-5	Styrene	25	24.7	99	78-119
994-05-8	Tert-Amyl Methyl Ether	25	22.5	90	73-122
75-65-0	Tert-Butyl Alcohol	250	215	86	63-129
630-20-6	1,1,1,2-Tetrachloroethane	25	27.6	110	77-122
79-34-5	1,1,2,2-Tetrachloroethane	25	24.9	100	72-120
127-18-4	Tetrachloroethylene	25	26.0	104	76-135
108-88-3	Toluene	25	25.8	103	80-120
87-61-6	1,2,3-Trichlorobenzene	25	24.5	98	68-131
120-82-1	1,2,4-Trichlorobenzene	25	25.1	100	73-129
71-55-6	1,1,1-Trichloroethane	25	26.5	106	75-130
79-00-5	1,1,2-Trichloroethane	25	25.3	101	76-119
79-01-6	Trichloroethylene	25	26.7	107	81-126
75-69-4	Trichlorofluoromethane	25	26.6	106	71-156
96-18-4	1,2,3-Trichloropropane	25	23.7	95	77-120
95-63-6	1,2,4-Trimethylbenzene	25	24.7	99	79-120
108-67-8	1,3,5-Trimethylbenzene	25	26.1	104	79-120
75-01-4	Vinyl Chloride	25	24.3	97	69-159
1330-20-7	Xylene (total)	75	76.7	102	80-126

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	83-118%

* = Outside of Control Limits.

5.2.1
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Blank Spike Summary

Job Number: FA47285
Account: CCCAD Compliance & Closure, Inc.
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VJ5706-BS	J0986454.D	1	09/08/17	DP	n/a	n/a	VJ5706

The QC reported here applies to the following samples:

Method: SW846 8260B

FA47285-1, FA47285-2, FA47285-3, FA47285-4

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	98%	79-125%
2037-26-5	Toluene-D8	101%	85-112%
460-00-4	4-Bromofluorobenzene	102%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA47285

Account: CCCAD Compliance & Closure, Inc.

Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA2214-BS	A0208794.D	1	09/13/17	TD	n/a	n/a	VA2214

The QC reported here applies to the following samples:

Method: SW846 8260B

FA47285-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
91-20-3	Naphthalene	25	23.9	96	63-132
95-63-6	1,2,4-Trimethylbenzene	25	27.4	110	79-120
1330-20-7	Xylene (total)	75	80.8	108	80-126

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	96%	83-118%
17060-07-0	1,2-Dichloroethane-D4	87%	79-125%
2037-26-5	Toluene-D8	101%	85-112%
460-00-4	4-Bromofluorobenzene	101%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA47285

Account: CCCAD Compliance & Closure, Inc.

Project: T1000005974-Delong Oil; 1716 Webster St, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA47283-3MS	J0986472.D	20	09/08/17	DP	n/a	n/a	VJ5706
FA47283-3MSD	J0986473.D	20	09/08/17	DP	n/a	n/a	VJ5706
FA47283-3	J0986457.D	5	09/08/17	DP	n/a	n/a	VJ5706

The QC reported here applies to the following samples:

Method: SW846 8260B

FA47285-1, FA47285-2, FA47285-3, FA47285-4

CAS No.	Compound	FA47283-3 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	2500	2060	82	2500	1850	74	11	50-147/21
71-43-2	Benzene	ND	500	390	78* a	500	472	94	19* b	81-122/14
108-86-1	Bromobenzene	ND	500	382	76* a	500	452	90	17* b	80-121/14
74-97-5	Bromochloromethane	ND	500	384	77	500	464	93	19* b	76-123/14
75-27-4	Bromodichloromethane	ND	500	370	74* a	500	431	86	15	79-123/19
75-25-2	Bromoform	ND	500	275	55* a	500	300	60* a	9	66-123/21
78-93-3	2-Butanone (MEK)	ND	2500	2300	92	2500	1940	78	17	56-143/18
104-51-8	n-Butylbenzene	5.5	500	380	72* a	500	465	89	20* b	79-126/16
135-98-8	sec-Butylbenzene	6.8	500	395	74* a	500	490	93	21* b	83-133/16
98-06-6	tert-Butylbenzene	ND	500	374	75* a	500	446	89	18* b	80-133/16
56-23-5	Carbon Tetrachloride	ND	500	404	81	500	484	97	18	76-136/23
108-90-7	Chlorobenzene	ND	500	389	78* a	500	466	93	18* b	82-124/14
75-00-3	Chloroethane	ND	500	616	123	500	547	109	12	62-144/20
67-66-3	Chloroform	ND	500	393	79* a	500	479	96	20* b	80-124/15
95-49-8	o-Chlorotoluene	ND	500	483	41* a	500	742	93	42* b	81-127/15
106-43-4	p-Chlorotoluene	ND	500	371	74* a	500	440	88	17* b	83-130/15
124-48-1	Dibromochloromethane	ND	500	322	64* a	500	386	77* a	18	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	127	500	540	7* a	500	984	95	58* b	64-123/18
106-93-4	1,2-Dibromoethane	74.6	500	499	40* a	500	829	106	50* b	75-120/13
75-71-8	Dichlorodifluoromethane	ND	500	427	85	500	433	87	1	42-167/19
95-50-1	1,2-Dichlorobenzene	ND	500	402	80* a	500	484	97	19* b	82-124/14
541-73-1	1,3-Dichlorobenzene	ND	500	402	80* a	500	492	98	20* b	84-125/14
106-46-7	1,4-Dichlorobenzene	1.4	J 500	388	77* a	500	467	92	18* b	78-120/15
75-34-3	1,1-Dichloroethane	3.4	J 500	414	80* a	500	506	99	20* b	81-122/15
107-06-2	1,2-Dichloroethane	ND	500	384	77	500	453	91	16* b	75-125/14
75-35-4	1,1-Dichloroethylene	ND	500	442	88	500	529	106	18	78-137/18
156-59-2	cis-1,2-Dichloroethylene	ND	500	428	86	500	522	104	20* b	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND	500	436	87	500	517	103	17	76-127/17
78-87-5	1,2-Dichloropropane	4.4	J 500	413	79	500	491	95	17* b	76-124/14
142-28-9	1,3-Dichloropropane	ND	500	397	79* a	500	476	95	18* b	80-118/13
594-20-7	2,2-Dichloropropane	ND	500	378	76	500	458	92	19* b	74-139/17
563-58-6	1,1-Dichloropropene	ND	500	408	82	500	491	98	18* b	79-131/16
10061-01-5	cis-1,3-Dichloropropene	ND	500	307	61* a	500	359	72* a	16	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND	500	311	62* a	500	383	77* a	21	80-120/22
108-20-3	Di-Isopropyl Ether	ND	500	356	71	500	429	86	19*	68-123/16
100-41-4	Ethylbenzene	80.6	500	471	30* a	500	795	95	51* b	81-121/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA47285
Account: CCCAD Compliance & Closure, Inc.
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA47283-3MS	J0986472.D	20	09/08/17	DP	n/a	n/a	VJ5706
FA47283-3MSD	J0986473.D	20	09/08/17	DP	n/a	n/a	VJ5706
FA47283-3	J0986457.D	5	09/08/17	DP	n/a	n/a	VJ5706

The QC reported here applies to the following samples:

Method: SW846 8260B

FA47285-1, FA47285-2, FA47285-3, FA47285-4

CAS No.	Compound	FA47283-3 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
637-92-3	Ethyl Tert Butyl Ether	ND	500	377	75	500	458	92	19*	71-120/14
87-68-3	Hexachlorobutadiene	ND	500	394	79	500	477	95	19	65-142/19
591-78-6	2-Hexanone	ND	2500	2410	96	2500	2080	83	15	61-129/18
98-82-8	Isopropylbenzene	165	500	582	-16* a	500	1140	96	65* b	83-132/15
99-87-6	p-Isopropyltoluene	5.3	500	397	75* a	500	496	95	22* b	79-130/16
74-83-9	Methyl Bromide	ND	500	457	91	500	443	89	3	59-143/19
74-87-3	Methyl Chloride	ND	500	449	90	500	445	89	1	50-159/19
74-95-3	Methylene Bromide	ND	500	403	81	500	475	95	16*	78-119/14
75-09-2	Methylene Chloride	ND	500	391	78	500	441	88 b	12	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	2500	2450	98	2500	2150	86	13	66-122/16
1634-04-4	Methyl Tert Butyl Ether	ND	500	374	75	500	441	88	16* b	72-117/14
91-20-3	Naphthalene	41.8	500	420	51* a	500	639	94	41* b	63-132/25
103-65-1	n-Propylbenzene	460	500	829	-202* c	500	2180	68* c	90* b	82-133/15
100-42-5	Styrene	ND	500	378	76* a	500	440	88	15	78-119/23
994-05-8	Tert-Amyl Methyl Ether	ND	500	346	69*	500	415	83	18*	73-122/13
75-65-0	Tert-Butyl Alcohol	ND	5000	3680	74	5000	5150	103	33*	63-129/27
630-20-6	1,1,1,2-Tetrachloroethane	ND	500	422	84	500	508	102	18	77-122/19
79-34-5	1,1,2,2-Tetrachloroethane	ND	500	382	76	500	450	90	16* b	72-120/14
127-18-4	Tetrachloroethylene	ND	500	391	78	500	471	94	19* b	76-135/16
108-88-3	Toluene	6.7	500	400	75* a	500	498	94	22* b	80-120/14
87-61-6	1,2,3-Trichlorobenzene	ND	500	374	75	500	444	89	17	68-131/25
120-82-1	1,2,4-Trichlorobenzene	ND	500	380	76	500	474	95	22* b	73-129/20
71-55-6	1,1,1-Trichloroethane	1.9	J 500	405	79	500	493	97	20* b	75-130/16
79-00-5	1,1,2-Trichloroethane	ND	500	393	79	500	481	96	20* b	76-119/14
79-01-6	Trichloroethylene	ND	500	416	83	500	493	99	17*	81-126/15
75-69-4	Trichlorofluoromethane	ND	500	510	102	500	527	105	3	71-156/21
96-18-4	1,2,3-Trichloropropane	ND	500	377	75* a	500	423	85	12	77-120/16
95-63-6	1,2,4-Trimethylbenzene	ND	500	3340	668* d	500	2540	508* d	27* b	79-120/18
108-67-8	1,3,5-Trimethylbenzene	555	E 500	960	-252* c	500	2560	68* c	91* b	79-120/19
75-01-4	Vinyl Chloride	ND	500	489	98	500	464	93	5	69-159/18
1330-20-7	Xylene (total)	1290	E 1500	2520	-177* e	1500	6180	67* e	84*	80-126/15

CAS No.	Surrogate Recoveries	MS	MSD	FA47283-3	Limits
1868-53-7	Dibromofluoromethane	100%	98%	103%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA47285
Account: CCCAD Compliance & Closure, Inc.
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA47283-3MS	J0986472.D	20	09/08/17	DP	n/a	n/a	VJ5706
FA47283-3MSD	J0986473.D	20	09/08/17	DP	n/a	n/a	VJ5706
FA47283-3	J0986457.D	5	09/08/17	DP	n/a	n/a	VJ5706

The QC reported here applies to the following samples:

Method: SW846 8260B

FA47285-1, FA47285-2, FA47285-3, FA47285-4

CAS No.	Surrogate Recoveries	MS	MSD	FA47283-3	Limits
17060-07-0	1,2-Dichloroethane-D4	99%	95%	102%	79-125%
2037-26-5	Toluene-D8	101%	101%	100%	85-112%
460-00-4	4-Bromofluorobenzene	99%	97%	93%	83-118%

- (a) AZ:M2
- (b) AZ:R9
- (c) Outside control limits due to high level in sample relative to spike amount. AZ:M3
- (d) AZ:M1
- (e) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA47285
Account: CCCAD Compliance & Closure, Inc.
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA47260-6MS	A0208820.D	1	09/13/17	TD	n/a	n/a	VA2214
FA47260-6MSD	A0208821.D	1	09/13/17	TD	n/a	n/a	VA2214
FA47260-6 ^a	A0208819.D	1	09/13/17	TD	n/a	n/a	VA2214

The QC reported here applies to the following samples:

Method: SW846 8260B

FA47285-3

CAS No.	Compound	FA47260-6 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
91-20-3	Naphthalene	ND	25	22.5	90	25	23.1	92	3	63-132/25
95-63-6	1,2,4-Trimethylbenzene	ND	25	26.5	106	25	25.8	103	3	79-120/18
1330-20-7	Xylene (total)	ND	75	79.9	107	75	77.9	104	3	80-126/15

CAS No.	Surrogate Recoveries	MS	MSD	FA47260-6	Limits
1868-53-7	Dibromofluoromethane	99%	99%	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	95%	94%	96%	79-125%
2037-26-5	Toluene-D8	99%	99%	100%	85-112%
460-00-4	4-Bromofluorobenzene	97%	99%	100%	83-118%

(a) Sample re-analyzed beyond hold time; reported results are considered minimum values.

* = Outside of Control Limits.

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA47285
Account: CCCAD Compliance & Closure, Inc.
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD6083-MB	CD145822.D	1	09/06/17	EG	n/a	n/a	GCD6083

The QC reported here applies to the following samples:

Method: SW846 8015C

FA47285-1, FA47285-2, FA47285-4

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	84%	70-131%
98-08-8	aaa-Trifluorotoluene	78%	69-143%

Method Blank Summary

Job Number: FA47285
Account: CCCAD Compliance & Closure, Inc.
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD6086-MB	CD145880.D	1	09/13/17	EG	n/a	n/a	GCD6086

The QC reported here applies to the following samples:

Method: SW846 8015C

FA47285-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	0.050	mg/l	

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	84%	70-131%
98-08-8	aaa-Trifluorotoluene	79%	69-143%

Blank Spike Summary

Job Number: FA47285
Account: CCCAD Compliance & Closure, Inc.
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD6083-BS	CD145821.D	1	09/06/17	EG	n/a	n/a	GCD6083

The QC reported here applies to the following samples:

Method: SW846 8015C

FA47285-1, FA47285-2, FA47285-4

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.410	103	75-138

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	96%	70-131%
98-08-8	aaa-Trifluorotoluene	93%	69-143%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA47285
Account: CCCAD Compliance & Closure, Inc.
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD6086-BS	CD145879.D	1	09/13/17	EG	n/a	n/a	GCD6086

The QC reported here applies to the following samples:

Method: SW846 8015C

FA47285-3

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.358	90	75-138

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	92%	70-131%
98-08-8	aaa-Trifluorotoluene	91%	69-143%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA47285
Account: CCCAD Compliance & Closure, Inc.
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA47261-1MS	CD145828.D	10	09/06/17	EG	n/a	n/a	GCD6083
FA47261-1MSD	CD145829.D	10	09/06/17	EG	n/a	n/a	GCD6083
FA47261-1 ^a	CD145826.D	10	09/06/17	EG	n/a	n/a	GCD6083

The QC reported here applies to the following samples:

Method: SW846 8015C

FA47285-1, FA47285-2, FA47285-4

CAS No.	Compound	FA47261-1 mg/l	Spike Q mg/l	MS mg/l	MS %	Spike mg/l	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	4.83	4	9.04	105	4	8.94	103	1	75-138/13

CAS No.	Surrogate Recoveries	MS	MSD	FA47261-1	Limits
460-00-4	4-Bromofluorobenzene	103%	105%	96%	70-131%
98-08-8	aaa-Trifluorotoluene	97%	99%	82%	69-143%

(a) Sample was not preserved to a pH < 2.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA47285
Account: CCCAD Compliance & Closure, Inc.
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA47409-1MS	CD145887.D	1	09/13/17	EG	n/a	n/a	GCD6086
FA47409-1MSD	CD145888.D	1	09/13/17	EG	n/a	n/a	GCD6086
FA47409-1	CD145881.D	1	09/13/17	EG	n/a	n/a	GCD6086

The QC reported here applies to the following samples:

Method: SW846 8015C

FA47285-3

CAS No.	Compound	FA47409-1 mg/l	Spike Q mg/l	MS mg/l	MS %	Spike mg/l	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	0.4	0.401	100	0.4	0.389	97	3	75-138/13

CAS No.	Surrogate Recoveries	MS	MSD	FA47409-1	Limits
460-00-4	4-Bromofluorobenzene	95%	92%	85%	70-131%
98-08-8	aaa-Trifluorotoluene	92%	93%	79%	69-143%

* = Outside of Control Limits.

GC/LC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA47285
Account: CCCAD Compliance & Closure, Inc.
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP66717-MB	JJ016734.D	1	09/08/17	SJL	09/06/17	OP66717	GJJ704

The QC reported here applies to the following samples:

Method: SW846 8015C

FA47285-1, FA47285-2, FA47285-3, FA47285-4

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	0.050	0.020	mg/l	
	TPH (> C28-C40)	ND	0.050	0.020	mg/l	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	129% 50-131%

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Blank Spike Summary

Job Number: FA47285
Account: CCCAD Compliance & Closure, Inc.
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP66717-BS	JJ016733.D	1	09/08/17	SJL	09/06/17	OP66717	GJJ704

The QC reported here applies to the following samples:

Method: SW846 8015C

FA47285-1, FA47285-2, FA47285-3, FA47285-4

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH (C10-C28)	1	1.08	108	60-128
	TPH (> C28-C40)	1	0.750	75	51-138

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	99%	50-131%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA47285
Account: CCCAD Compliance & Closure, Inc.
Project: T10000005974-Delong Oil; 1716 Webster St, Alameda, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP66717-MS	JJ016738.D	1	09/08/17	SJL	09/06/17	OP66717	GJJ704
OP66717-MSD	JJ016739.D	1	09/08/17	SJL	09/06/17	OP66717	GJJ704
FA47285-3	JJ016737.D	1	09/08/17	SJL	09/06/17	OP66717	GJJ704

The QC reported here applies to the following samples:

Method: SW846 8015C

FA47285-1, FA47285-2, FA47285-3, FA47285-4

CAS No.	Compound	FA47285-3 mg/l	Spike Q mg/l	MS mg/l	MS %	Spike mg/l	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	0.704	1.9	2.56	97	1.9	2.48	93	3	60-128/33
	TPH (> C28-C40)	0.217	1.9	1.51	68	1.9	1.51	68	0	51-138/18

CAS No.	Surrogate Recoveries	MS	MSD	FA47285-3	Limits
84-15-1	o-Terphenyl	93%	92%	103%	50-131%

* = Outside of Control Limits.

COMPLIANCE & CLOSURE WELL DEVELOPMENT LOG
3rd Qtr 2017 Semi-Annual Rpt

JOB # 12214/1221B

DATE: 8/31/17

TIME: 8:15

WELL #	VOLUME	TD	DTW	Ph	TEMP	COND	COMMENTS
D.O. = 2.15 mg/l MW-1 ORP = -88	2/3 = 5	15.15	5.67	7.11	63.34	437	clear to very slightly cloudy; moderate product odor
D.O. = 2.21 mg/l ORP = 71 MW-2A	2/4 = 6	16.84	5.70	6.56 6.58	64.90 64.91	381 380	clear to slightly cloudy, no petro odor,
D.O. = 4.75 mg/l ORP = 15 MW-3A	2/3 = 5	16.82	6.21	6.68 6.69	61.93 61.91	341 341	clear to slightly cloudy, no petro odor
D.O. = 4.27 mg/l ORP = -15 RW-1	38 gal	22.50	5.72	7.08 7.08	61.89 61.87	367 365	clear to slightly cloudy, slight petro odor well downers, written for recharge

pk w/ # 4 & # 7 buffers

EQUIPMENT CALIBRATION DATE: 8/30/17

SERIAL No. XSI-556