



December 14, 2016

**RECEIVED**

By Alameda County Environmental Health 12:57 pm, Dec 15, 2016

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

Attention: Mr. Mark Detterman

RE: Fourth Quarter 2016 Quarterly Groundwater Monitoring Report  
Delong Oil, Inc.  
1716 Webster Street, Alameda, California 94501  
Fuel Leak Case No. RO0003140; (Global ID No. T10000005974)  
(CCI Project No. 12214-2)

Dear Mr. Detterman:

Compliance & Closure, Inc. (CCI) is pleased to present the Fourth Quarter 2016 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).

### **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.

## **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 three of the four groundwater monitoring wells to have detectable TPHd. Monitoring well MW-1 was also reported to have detectable TPHg, BTEX compounds, fuel oxygenates and detectable naphthalene. Analytical results for the fourth 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 first quarter are plotted on Figures 3.

While sampling the wells during the fourth quarter, the groundwater surface measurements ranged between 8.92 and 9.262 feet above mean sea level (msl). Dissolved oxygen levels ranged from 2.39 milligram per liter (mg/L) at MW-2A to 5.05 mg/L at RW-1. Oxygen reducing potential was ranged from -51 at MW-1 to 91 at MW-3A. The general groundwater flow direction in the upper-aquifer wells is toward the north-northwest, at a gradient between 0.002 to 0.003 feet per foot (Figure 2). A copy of the field logs are attached.

## **Additional Site Activity**

The next quarterly sampling round is scheduled for March 2017. CCI is currently waiting on comments from the AECH on CCI's recently submitted Additional Site and Off-Site Investigation Work Plan. 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:

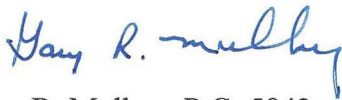
1. The observations of the field personnel;
2. The results of the laboratory analyses performed by a state-certified laboratory;
3. Our understanding of the regulations of the State of California and Alameda County.

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 declare that to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached report are true and correct.

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
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
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
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

ft	Feet below top of PVC casing	N/A	Not Available
gal	Gallons	mg/L	Milligrams per liter
Temp.	Temperature	Cond.	Conductivity
F	Degrees Fahrenheit	umhos/cm	Micromhos per centimeter
LPH	Liquid phase hydrocarbon	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.

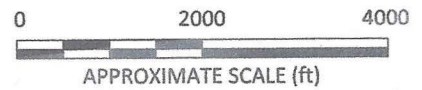
TABLE 2  
Summary of Groundwater Sample Analysis  
Delong Petroleum- 1716 Webster Street, Alameda, CA

Sample Number	Date Sampled	TPHg (ug/L) (C6-C10)	TPHd <sup>(3)</sup> (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 <sup>(3)</sup> (mg/L) (C28-C40)	Acetone (ug/L)	Tetrachloroethylene (ug/L)	Trichloroethylene <sup>(4)</sup> (ug/L)
MW-1	2/25/2016	351	1.03	49.5	2.6	48.5	62.5	51.3 <sup>(2)</sup>	56.1	0.513 <sup>(3)</sup>	N/A	N/A	N/A
	6/6/2016	1700	1.1	3.3 <sup>(1)</sup>	<10	69.1	348	<10	48.7 <sup>(1)</sup>	0.184	45.6 <sup>(1)</sup>	<10	<10
	11/28/2016	742	0.586	18.6	0.72 <sup>(1)</sup>	9.0	6.9	10.8	69.2	0.105	<25	<1	<1
MW-2A	2/25/2016	<50	0.0410 <sup>(1)</sup>	<1	<1	<1	<2	<1	<5	<0.19 <sup>(3)</sup>	N/A	N/A	N/A
	6/6/2016	<50	<0.099	<1	<1	<1	<2	<1	<5	<0.099	<20	0.67 <sup>(1)</sup>	0.21 <sup>(1)</sup>
	11/28/2016	<100	<0.048	<1	<1	<1	<3	<1	<5	0.0413 <sup>(1)</sup>	<25	0.46 <sup>(1)</sup>	<1
MW-3A	2/25/2016	<50	0.0354 <sup>(1)</sup>	<1	<1	<1	<2	<1	<5	<0.19 <sup>(3)</sup>	N/A	N/A	N/A
	6/6/2016	<50	0.0601 <sup>(1)</sup>	<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
RW-1	2/25/2016	<50	1.06	0.27 <sup>(1)</sup>	<1	<1	<2	0.61 <sup>(1)</sup>	<5	0.232 <sup>(3)</sup>	N/A	N/A	N/A
	6/6/2016	47.5 <sup>(1)</sup>	2.14	<1	<1	<1	<2	1.8 <sup>(1)</sup>	0.53 <sup>(1)</sup>	0.200	7.1 <sup>(1)</sup>	<1	<1
	11/28/2016	<100	0.111	<1	<1	<1	<2	0.38 <sup>(1)</sup>	<5	0.0854	<25	<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  
 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

9.20

Sidewalk

(9.26)

RW-1

Property Line

MW-1

(9.14)

Landscaping

UST Area

Bus Shelter

9.20

Dispensers

Canopy

Landscaping

Webster Street

Former Gas Station Building Location

MW-3A

(8.97)

9.00

MW-2A

(8.92)

9.00

Trash Enclosure

Sidewalk

Transformer

Market

Former Waste Oil Tank Excavation

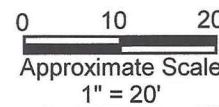
Legend



Monitoring Well Location

(8.92) Groundwater surface elevation in feet (datum: mean sea level - 11/28/2016)

Groundwater surface contour elevation in feet (datum: mean sea level - 11/28/2016)



Base: ALFA Environmental, 2014

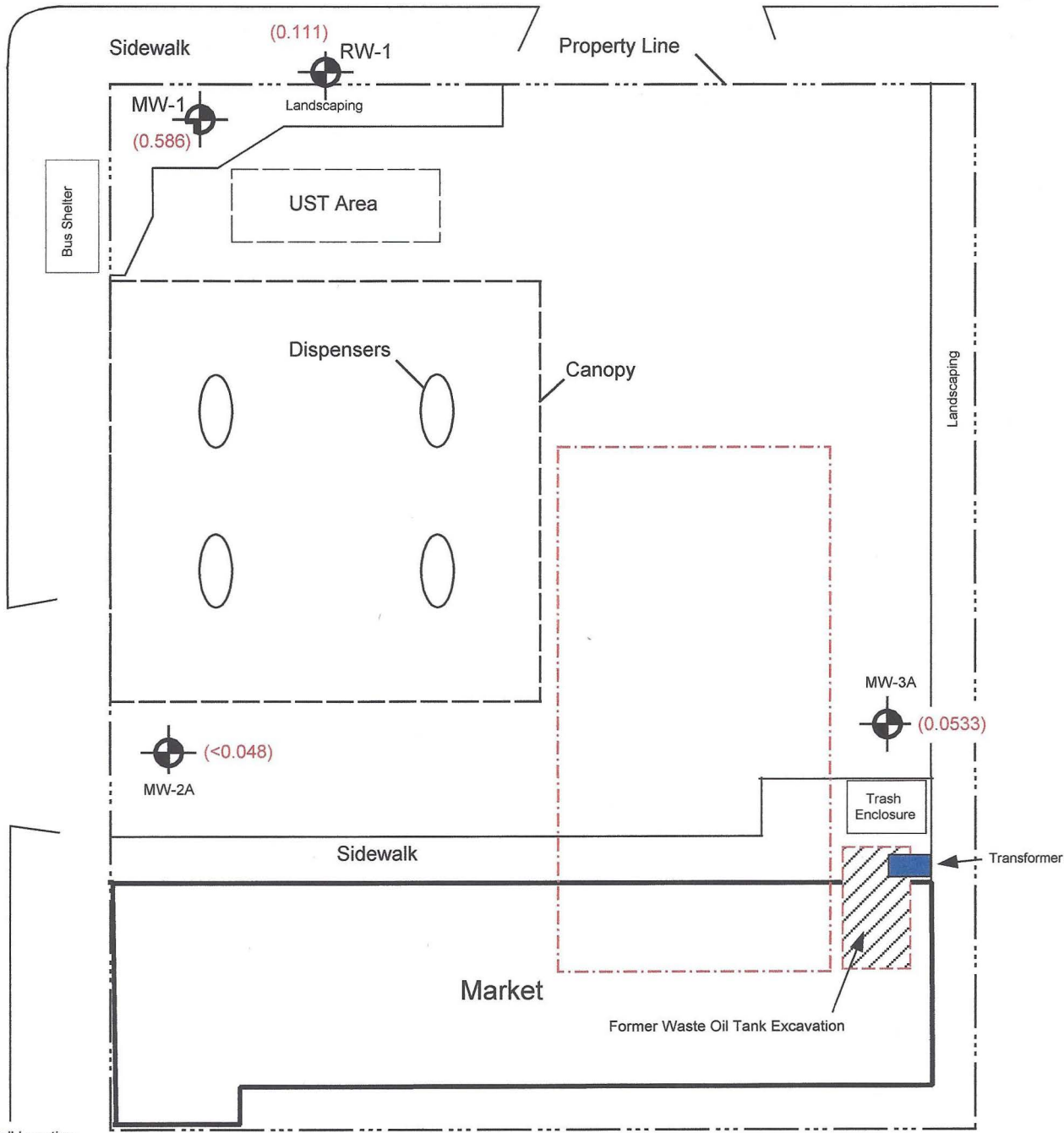
Job No.: <p style="text-align: center;">121214-1</p>	<p style="text-align: center;"><b>Groundwater Contour Map</b></p> <p style="text-align: center;">76 Gas Station/Circle K 1716 Webster Street Alameda, California</p>	<p style="text-align: center;"><b>Compliance &amp; Closure, Inc.</b></p>	
Date: <p style="text-align: center;">12/12/2016</p>		Drawn by: <p style="text-align: center;">NLN</p>	Figure No.: <p style="text-align: center;">2</p>





Buena Vista Avenue

Webster Street



0 10 20  
 Approximate Scale  
 1" = 20'

Base: ALFA Environmental, 2014

Job No.: 121214-1	Groundwater Diesel Concentration Map 76 Gas Station/Circle K 1716 Webster Street Alameda, California	<b>Compliance &amp; Closure, Inc.</b>	
Date: 12/13/2016		Drawn by: NLN	Figure No.: 3

# **APPENDIX A**

**CCI Groundwater Sampling Protocol**

**COMPLIANCE & CLOSURE, INC.**  
**Latest Revision: January 2016**

**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 will include EPA 8015M for TPHg, EPA 8260B for BTEX compounds and fuel oxygenates.
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 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 2016**

### **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  $\pm 10$  umhos/cm and are checked daily. Temperature is read to the nearest 0.1 F. 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 2016**

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 2016**

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 Report**

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION,  
VERIFICATION, TESTING AND CERTIFICATION COMPANY.



*e-Hardcopy 2.0*  
*Automated Report*

### Technical Report for

#### Compliance & Closure, Inc.

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

12214-2

SGS Accutest Job Number: FA39053

Sampling Date: 11/28/16

#### 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: 57



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.

**Norm Farmer**  
Technical Director

Client Service contact: Elvin Kumar 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), 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.



# Table of Contents

-1-

<b>Section 1: Sample Summary</b> .....	<b>3</b>
<b>Section 2: Summary of Hits</b> .....	<b>4</b>
<b>Section 3: Sample Results</b> .....	<b>5</b>
<b>3.1:</b> FA39053-1: MW-3A .....	6
<b>3.2:</b> FA39053-2: MW-2A .....	11
<b>3.3:</b> FA39053-3: MW-1 .....	16
<b>3.4:</b> FA39053-4: RW-1 .....	21
<b>Section 4: Misc. Forms</b> .....	<b>26</b>
<b>4.1:</b> Certification Exceptions .....	27
<b>4.2:</b> Chain of Custody .....	28
<b>Section 5: GC/MS Volatiles - QC Data Summaries</b> .....	<b>31</b>
<b>5.1:</b> Method Blank Summary .....	32
<b>5.2:</b> Blank Spike Summary .....	38
<b>5.3:</b> Matrix Spike/Matrix Spike Duplicate Summary .....	44
<b>Section 6: GC Volatiles - QC Data Summaries</b> .....	<b>50</b>
<b>6.1:</b> Method Blank Summary .....	51
<b>6.2:</b> Blank Spike Summary .....	52
<b>6.3:</b> Matrix Spike/Matrix Spike Duplicate Summary .....	53
<b>Section 7: GC Semi-volatiles - QC Data Summaries</b> .....	<b>54</b>
<b>7.1:</b> Method Blank Summary .....	55
<b>7.2:</b> Blank Spike Summary .....	56
<b>7.3:</b> Matrix Spike/Matrix Spike Duplicate Summary .....	57

1

2

3

4

5

6

7



## Sample Summary

Compliance & Closure, Inc.

**Job No:** FA39053

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	
FA39053-1	11/28/16	09:00 GM	11/29/16	AQ	Ground Water	MW-3A
FA39053-2	11/28/16	09:45 GM	11/29/16	AQ	Ground Water	MW-2A
FA39053-3	11/28/16	10:00 GM	11/29/16	AQ	Ground Water	MW-1
FA39053-4	11/28/16	10:15 GM	11/29/16	AQ	Ground Water	RW-1

## Summary of Hits

**Job Number:** FA39053  
**Account:** Compliance & Closure, Inc.  
**Project:** T10000005974-Delong Oil - 1716 Webster St, Alameda, CA  
**Collected:** 11/28/16

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
<b>FA39053-1</b>		<b>MW-3A</b>				
TPH (C10-C28)		0.0533	0.048	0.019	mg/l	SW846 8015C
TPH (> C28-C40)		0.0798	0.048	0.019	mg/l	SW846 8015C
<b>FA39053-2</b>		<b>MW-2A</b>				
Tetrachloroethylene		0.46 J	1.0	0.30	ug/l	SW846 8260B
TPH (> C28-C40)		0.0413 J	0.048	0.019	mg/l	SW846 8015C
<b>FA39053-3</b>		<b>MW-1</b>				
Benzene		18.6	1.0	0.20	ug/l	SW846 8260B
n-Butylbenzene		5.2	1.0	0.43	ug/l	SW846 8260B
sec-Butylbenzene		4.6	1.0	0.25	ug/l	SW846 8260B
tert-Butylbenzene		1.0	1.0	0.40	ug/l	SW846 8260B
Ethylbenzene		9.0	1.0	0.25	ug/l	SW846 8260B
Isopropylbenzene		16.7	1.0	0.33	ug/l	SW846 8260B
Methyl Tert Butyl Ether		10.8	1.0	0.20	ug/l	SW846 8260B
Naphthalene		69.2	5.0	1.0	ug/l	SW846 8260B
n-Propylbenzene		41.1	1.0	0.20	ug/l	SW846 8260B
Tert-Amyl Methyl Ether		3.2	2.0	0.20	ug/l	SW846 8260B
Tert-Butyl Alcohol		34.3	20	9.1	ug/l	SW846 8260B
Toluene		0.72 J	1.0	0.20	ug/l	SW846 8260B
1,2,4-Trimethylbenzene		2.3	1.0	0.20	ug/l	SW846 8260B
1,3,5-Trimethylbenzene		0.50 J	1.0	0.20	ug/l	SW846 8260B
Xylene (total)		6.9	3.0	0.56	ug/l	SW846 8260B
TPH-GRO (C6-C10)		0.742	0.10	0.050	mg/l	SW846 8015C
TPH (C10-C28)		0.586	0.048	0.019	mg/l	SW846 8015C
TPH (> C28-C40)		0.105	0.048	0.019	mg/l	SW846 8015C
<b>FA39053-4</b>		<b>RW-1</b>				
Chloroform		3.7	1.0	0.30	ug/l	SW846 8260B
Methyl Tert Butyl Ether		0.38 J	1.0	0.20	ug/l	SW846 8260B
TPH (C10-C28)		0.111	0.048	0.019	mg/l	SW846 8015C
TPH (> C28-C40)		0.0854	0.048	0.019	mg/l	SW846 8015C

Sample Results

---

Report of Analysis

---

## Report of Analysis

<b>Client Sample ID:</b> MW-3A		<b>Date Sampled:</b> 11/28/16
<b>Lab Sample ID:</b> FA39053-1		<b>Date Received:</b> 11/29/16
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T10000005974-Delong Oil - 1716 Webster St, Alameda, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I43900.D	1	12/01/16	WV	n/a	n/a	VII195
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	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	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

<b>Client Sample ID:</b> MW-3A	
<b>Lab Sample ID:</b> FA39053-1	<b>Date Sampled:</b> 11/28/16
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 11/29/16
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> 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	98%		85-112%
460-00-4	4-Bromofluorobenzene	97%		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

<b>Client Sample ID:</b> MW-3A		<b>Date Sampled:</b> 11/28/16
<b>Lab Sample ID:</b> FA39053-1		<b>Date Received:</b> 11/29/16
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8015C		
<b>Project:</b> T10000005974-Delong Oil - 1716 Webster St, Alameda, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD141378.D	1	11/30/16	EG	n/a	n/a	GCD5891
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	99%		70-131%		
98-08-8	aaa-Trifluorotoluene	80%		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

<b>Client Sample ID:</b> MW-3A	
<b>Lab Sample ID:</b> FA39053-1	<b>Date Sampled:</b> 11/28/16
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 11/29/16
<b>Method:</b> SW846 8015C SW846 3510C	<b>Percent Solids:</b> n/a
<b>Project:</b> T10000005974-Delong Oil - 1716 Webster St, Alameda, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JR003901.D	1	12/02/16	SJL	11/30/16	OP62891	GJR150
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

### TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.0533	0.048	0.019	mg/l	
	TPH (> C28-C40)	0.0798	0.048	0.019	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	85%		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

<b>Client Sample ID:</b> MW-2A		
<b>Lab Sample ID:</b> FA39053-2		<b>Date Sampled:</b> 11/28/16
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 11/29/16
<b>Method:</b> SW846 8260B		<b>Percent Solids:</b> n/a
<b>Project:</b> T10000005974-Delong Oil - 1716 Webster St, Alameda, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I43901.D	1	12/01/16	WV	n/a	n/a	VII195
Run #2							

Run #	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	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	

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

<b>Client Sample ID:</b> MW-2A	
<b>Lab Sample ID:</b> FA39053-2	<b>Date Sampled:</b> 11/28/16
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 11/29/16
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> 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%		85-112%
460-00-4	4-Bromofluorobenzene	95%		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

<b>Client Sample ID:</b> MW-2A		<b>Date Sampled:</b> 11/28/16
<b>Lab Sample ID:</b> FA39053-2		<b>Date Received:</b> 11/29/16
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8015C		
<b>Project:</b> T10000005974-Delong Oil - 1716 Webster St, Alameda, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD141379.D	1	11/30/16	EG	n/a	n/a	GCD5891
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	82%		70-131%		
98-08-8	aaa-Trifluorotoluene	69%		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

<b>Client Sample ID:</b> MW-2A	
<b>Lab Sample ID:</b> FA39053-2	<b>Date Sampled:</b> 11/28/16
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 11/29/16
<b>Method:</b> SW846 8015C SW846 3510C	<b>Percent Solids:</b> n/a
<b>Project:</b> T10000005974-Delong Oil - 1716 Webster St, Alameda, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JR003902.D	1	12/02/16	SJL	11/30/16	OP62891	GJR150
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

### TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	0.048	0.019	mg/l	
	TPH (> C28-C40)	0.0413	0.048	0.019	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	82%		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

<b>Client Sample ID:</b> MW-1		<b>Date Sampled:</b> 11/28/16
<b>Lab Sample ID:</b> FA39053-3		<b>Date Received:</b> 11/29/16
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T10000005974-Delong Oil - 1716 Webster St, Alameda, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I43910.D	1	12/02/16	WV	n/a	n/a	VII196
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	18.6	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	5.2	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	4.6	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	1.0	1.0	0.40	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	

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

<b>Client Sample ID:</b> MW-1		<b>Date Sampled:</b> 11/28/16
<b>Lab Sample ID:</b> FA39053-3		<b>Date Received:</b> 11/29/16
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> 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	96%		85-112%
460-00-4	4-Bromofluorobenzene	98%		83-118%

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

<b>Client Sample ID:</b> MW-1		<b>Date Sampled:</b> 11/28/16
<b>Lab Sample ID:</b> FA39053-3		<b>Date Received:</b> 11/29/16
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8015C		
<b>Project:</b> T10000005974-Delong Oil - 1716 Webster St, Alameda, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD141385.D	1	11/30/16	EG	n/a	n/a	GCD5891
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.742	0.10	0.050	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	97%		70-131%		
98-08-8	aaa-Trifluorotoluene	150% <sup>a</sup>		69-143%		
98-08-8	aaa-Trifluorotoluene	100% <sup>b</sup>		69-143%		

- (a) Outside control limits.
- (b) Result reported from PID.

---

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

<b>Client Sample ID:</b> MW-1	
<b>Lab Sample ID:</b> FA39053-3	<b>Date Sampled:</b> 11/28/16
<b>Matrix:</b> AQ - Ground Water	<b>Date Received:</b> 11/29/16
<b>Method:</b> SW846 8015C SW846 3510C	<b>Percent Solids:</b> n/a
<b>Project:</b> T10000005974-Delong Oil - 1716 Webster St, Alameda, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JR003905.D	1	12/02/16	SJL	11/30/16	OP62891	GJR150
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

### TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.586	0.048	0.019	mg/l	
	TPH (> C28-C40)	0.105	0.048	0.019	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	82%		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

<b>Client Sample ID:</b> RW-1		<b>Date Sampled:</b> 11/28/16
<b>Lab Sample ID:</b> FA39053-4		<b>Date Received:</b> 11/29/16
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T10000005974-Delong Oil - 1716 Webster St, Alameda, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I43903.D	1	12/01/16	WV	n/a	n/a	VII195
Run #2							

Run #	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	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	3.7	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	

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

<b>Client Sample ID:</b>	RW-1	<b>Date Sampled:</b>	11/28/16
<b>Lab Sample ID:</b>	FA39053-4	<b>Date Received:</b>	11/29/16
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	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	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
108-20-3	Di-Isopropyl Ether	ND	1.0	0.23	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	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	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.38	1.0	0.20	ug/l	J
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.20	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	20	9.1	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	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	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	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		83-118%
17060-07-0	1,2-Dichloroethane-D4	113%		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

<b>Client Sample ID:</b> RW-1		<b>Date Sampled:</b> 11/28/16
<b>Lab Sample ID:</b> FA39053-4		<b>Date Received:</b> 11/29/16
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> 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	94%		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

<b>Client Sample ID:</b> RW-1		<b>Date Sampled:</b> 11/28/16
<b>Lab Sample ID:</b> FA39053-4		<b>Date Received:</b> 11/29/16
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8015C		
<b>Project:</b> T10000005974-Delong Oil - 1716 Webster St, Alameda, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD141386.D	1	11/30/16	EG	n/a	n/a	GCD5891
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	101%		70-131%		
98-08-8	aaa-Trifluorotoluene	83%		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

<b>Client Sample ID:</b> RW-1		<b>Date Sampled:</b> 11/28/16
<b>Lab Sample ID:</b> FA39053-4		<b>Date Received:</b> 11/29/16
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8015C SW846 3510C		
<b>Project:</b> T10000005974-Delong Oil - 1716 Webster St, Alameda, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	JR003906.D	1	12/02/16	SJL	11/30/16	OP62891	GJR150
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

### TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.111	0.048	0.019	mg/l	
	TPH (> C28-C40)	0.0854	0.048	0.019	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	78%		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:** FA39053

**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



UPLD 2/14

ACCUTEST

CHAIN OF CUSTODY

2105 Lundy Ave, San Jose, CA 95131  
(408) 588-0200 FAX: (408) 588-0201

FED-EX Tracking #  
Bottle Order Control # **FA39053**  
SGS Accutest Quote #  
SGS Accutest NC Job #: C

Client / Reporting Information			Project Information												Requested Analysis					Matrix Codes
Company Name <b>Compliance &amp; Closure, INC.</b>			Project Name: <b>DeLong Oil</b>												8260 - Petro + 8TEX + Oxygens 8260 - Full Scan TP40 - silica gel cleanup TP40 - silica gel cleanup TP40 - 8015					WW- Wastewater GW- Ground Water SW- Surface Water SO- Soil OI- Oil WP- Wipe LIQ - Non-aqueous Liquid AIR DW- Drinking Water (Perchlorate Only)
Address <b>4115 Blackhawk Plaza Circle, Ste. 100</b>			Street <b>1716 Webster Street</b>																	
City <b>Danville, California 94506</b>			City <b>Alameda, CA</b>																	
Project Contact: <b>Gary Mulkey</b>			Project # <b>12214-2</b>																	
Phone # <b>925-580-2258</b>			EMAIL: <b>gary@CCI-ENVR.COM</b>																	
Sampler's Name <b>Gary Mulkey</b>			Client Purchase Order # <b>12214-2</b>												LAB USE ONLY					
SGS Accutest Sample ID	Sample ID / Field Point / Point of Collection	Date	Time	Sampled by	Matrix	# of bottles	PC	NO <sub>3</sub> <sup>-</sup>	NO <sub>2</sub> <sup>-</sup>	RESOX	PERO <sub>2</sub>	AMPH	ENDURE	Requested Analysis					Matrix Codes	
1	MW-34	11/28/16	9:00	GM	GW	7	X							X	X	X	X	X		
2	MW-2A	11/28/16	9:45	GM	GW	7	X							X	X	X	X	X		
3	MW-1	11/28/16	10:00	GM	GW	7	X							X	X	X	X	X		
4	RW-1	11/28/16	10:15	GM	GW	7	X							X	X	X	X	X		

Turnaround Time (Business days)	Approved By/ Date:	Data Deliverable Information	Comments / Remarks
<input checked="" type="checkbox"/> 10 Day <input type="checkbox"/> 5 Day <input type="checkbox"/> 3 Day <input type="checkbox"/> 2 Day <input type="checkbox"/> 1 Day <input type="checkbox"/> Same Day	_____	<input type="checkbox"/> Commercial "A" - Results only <input type="checkbox"/> Commercial "B" - Results with QC summaries <input type="checkbox"/> Commercial "B+" - Results, QC, and chromatograms <input type="checkbox"/> FULT1 - Level 4 data package <input type="checkbox"/> EDF for Geotracker <input type="checkbox"/> EDD Format Provide EDF Global ID _____ Provide EDF Logcode: _____	

Emergency T/A data available VIA Lablink

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler: <b>Gary R. Mulkey</b>	Date Time: <b>11/28/16 11:10</b>	Received By: <b>Lee Banta</b>	Relinquished By: <b>Lee Banta</b>	Date Time: <b>11/29/16 1500</b>	Received By: <b>FEDEX</b>		
Relinquished by: <b>FX</b>	Date Time: <b>11-29-16</b>	Received By: <b>J. Espal (A/E) P.19</b>	Relinquished By:	Date Time:	Received By:		
Relinquished by:	Date Time:	Received By:	Custody Seal #	Appropriate Bottle / Pres. Y / N	Headspace Y / N	On Ice Y / N	Cooler Temp.
5		5		Labels match Coc? Y / N	Separate Receiving Check List used: Y / N		<b>3.6</b> °C

FA39053: Chain of Custody

Page 1 of 3

4.2  
4

**SGS ACCUTEST - ORLANDO SAMPLE RECEIPT CONFIRMATION**

SGS ACCUTEST'S JOB NUMBER: FA39053 CLIENT: COMPLIANCE PROJECT: DE ZONE OIL  
 DATE/TIME RECEIVED: 11-29-16 10:15 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1  
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER DELIVERY OTHER: \_\_\_\_\_  
 AIRBILL NUMBERS: 778 0491 0150

**COOLER INFORMATION**

- CUSTODY SEAL NOT PRESENT OR NOT INTACT
- CHAIN OF CUSTODY NOT RECEIVED (COC)
- ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- TEMPERATURE CRITERIA NOT MET

**TRIP BLANK INFORMATION**

- TRIP BLANK PROVIDED
- TRIP BLANK NOT PROVIDED
- TRIP BLANK NOT ON COC
- TRIP BLANK INTACT
- TRIP BLANK NOT INTACT
- RECEIVED WATER TRIP BLANK
- RECEIVED SOIL TRIP BLANK

**MISC. INFORMATION**

NUMBER OF ENCORES? 25-GRAM \_\_\_\_\_ 5-GRAM \_\_\_\_\_  
 NUMBER OF 5035 FIELD KITS? \_\_\_\_\_  
 NUMBER OF LAB FILTERED METALS? \_\_\_\_\_  
 TEST STRIP LOT#s pH 0-3 230315 pH 10-12 219813A OTHER (specify) \_\_\_\_\_  
 SUMMARY OF COMMENTS: RECEIVED 2 VIALS 8015 PER SAMPLE

**TEMPERATURE INFORMATION**

- IR THERM ID 1 CORR. FACTOR -0.4
- OBSERVED TEMPS: 4.0
- CORRECTED TEMPS: 3.6 (USED FOR LIMS)

**SAMPLE INFORMATION**

- INCORRECT NUMBER OF CONTAINERS USED
- SAMPLE RECEIVED IMPROPERLY PRESERVED
- INSUFFICIENT VOLUME FOR ANALYSIS
- DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- ID'S ON COC DO NOT MATCH LABEL
- VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- SAMPLE CONTAINER(S) RECEIVED BROKEN
- 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- % SOLIDS JAR NOT RECEIVED
- RESIDUAL CHLORINE PRESENT LOT# \_\_\_\_\_

(APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS)

TECHNICIAN SIGNATURE/DATE Je 11-29-16 REVIEWER SIGNATURE/DATE \_\_\_\_\_

NF 02/16

receipt confirmation 020116.xls

**FA39053: Chain of Custody**

**Page 2 of 3**

TRK# 7778 0491 0150  
0201

TUE - 29 NOV 10:00A  
PRIORITY OVERNIGHT

**XH ORLA**

32811  
FL-US MCO

GC/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:** FA39053

**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
VI1195-MB	I43881.D	1	12/01/16	WV	n/a	n/a	VI1195

The QC reported here applies to the following samples:

Method: SW846 8260B

FA39053-1, FA39053-2, FA39053-4

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
108-20-3	Di-Isopropyl Ether	ND	1.0	0.23	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	

## Method Blank Summary

**Job Number:** FA39053  
**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
VI1195-MB	I43881.D	1	12/01/16	WV	n/a	n/a	VI1195

The QC reported here applies to the following samples:

Method: SW846 8260B

FA39053-1, FA39053-2, FA39053-4

CAS No.	Compound	Result	RL	MDL	Units	Q
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	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	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.20	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	20	9.1	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	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	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	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	97% 83-118%



## Method Blank Summary

**Job Number:** FA39053  
**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
VI1195-MB	I43881.D	1	12/01/16	WV	n/a	n/a	VI1195

The QC reported here applies to the following samples:

Method: SW846 8260B

FA39053-1, FA39053-2, FA39053-4

CAS No.	Surrogate Recoveries	Limits
17060-07-0	1,2-Dichloroethane-D4	105% 79-125%
2037-26-5	Toluene-D8	98% 85-112%
460-00-4	4-Bromofluorobenzene	98% 83-118%

5.1.1  
5

## Method Blank Summary

**Job Number:** FA39053

**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
VI1196-MB	I43909.D	1	12/02/16	WV	n/a	n/a	VI1196

The QC reported here applies to the following samples:

Method: SW846 8260B

FA39053-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.42	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.42	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.46	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.6	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.43	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.25	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.40	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.30	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.63	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.24	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.36	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.26	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	0.81	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.33	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.27	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.39	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.26	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.28	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.22	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.31	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.33	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.34	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.27	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.29	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.26	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
108-20-3	Di-Isopropyl Ether	ND	1.0	0.23	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l	

## Method Blank Summary

**Job Number:** FA39053

**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
VI1196-MB	I43909.D	1	12/02/16	WV	n/a	n/a	VI1196

The QC reported here applies to the following samples:

Method: SW846 8260B

FA39053-3

CAS No.	Compound	Result	RL	MDL	Units	Q
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.57	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.33	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.28	ug/l	
74-83-9	Methyl Bromide	ND	2.0	0.50	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.36	ug/l	
75-09-2	Methylene Chloride	2.5	5.0	2.0	ug/l	J
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.4	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.24	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.20	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	20	9.1	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	0.33	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.51	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	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.37	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.27	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.66	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.20	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.31	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.56	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	99% 83-118%

## Method Blank Summary

**Job Number:** FA39053

**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
VI1196-MB	I43909.D	1	12/02/16	WV	n/a	n/a	VI1196

The QC reported here applies to the following samples:

Method: SW846 8260B

FA39053-3

CAS No.	Surrogate Recoveries	Limits
17060-07-0	1,2-Dichloroethane-D4	107% 79-125%
2037-26-5	Toluene-D8	98% 85-112%
460-00-4	4-Bromofluorobenzene	99% 83-118%

5.1.2  
5

# Blank Spike Summary

**Job Number:** FA39053  
**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
VI1195-BS	I43880.D	1	12/01/16	WV	n/a	n/a	VI1195

The QC reported here applies to the following samples:

Method: SW846 8260B

FA39053-1, FA39053-2, FA39053-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	135	108	50-147
71-43-2	Benzene	25	27.0	108	81-122
108-86-1	Bromobenzene	25	26.2	105	80-121
74-97-5	Bromochloromethane	25	26.0	104	76-123
75-27-4	Bromodichloromethane	25	25.3	101	79-123
75-25-2	Bromoform	25	24.7	99	66-123
78-93-3	2-Butanone (MEK)	125	137	110	56-143
104-51-8	n-Butylbenzene	25	25.6	102	79-126
135-98-8	sec-Butylbenzene	25	28.4	114	83-133
98-06-6	tert-Butylbenzene	25	27.2	109	80-133
56-23-5	Carbon Tetrachloride	25	28.1	112	76-136
108-90-7	Chlorobenzene	25	26.4	106	82-124
75-00-3	Chloroethane	25	31.5	126	62-144
67-66-3	Chloroform	25	27.4	110	80-124
95-49-8	o-Chlorotoluene	25	27.6	110	81-127
106-43-4	p-Chlorotoluene	25	27.8	111	83-130
124-48-1	Dibromochloromethane	25	22.9	92	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	19.9	80	64-123
106-93-4	1,2-Dibromoethane	25	25.5	102	75-120
75-71-8	Dichlorodifluoromethane	25	24.7	99	42-167
95-50-1	1,2-Dichlorobenzene	25	25.6	102	82-124
541-73-1	1,3-Dichlorobenzene	25	27.0	108	84-125
106-46-7	1,4-Dichlorobenzene	25	25.6	102	78-120
75-34-3	1,1-Dichloroethane	25	28.5	114	81-122
107-06-2	1,2-Dichloroethane	25	26.5	106	75-125
75-35-4	1,1-Dichloroethylene	25	27.0	108	78-137
156-59-2	cis-1,2-Dichloroethylene	25	25.5	102	78-120
156-60-5	trans-1,2-Dichloroethylene	25	29.9	120	76-127
78-87-5	1,2-Dichloropropane	25	26.8	107	76-124
142-28-9	1,3-Dichloropropane	25	24.5	98	80-118
594-20-7	2,2-Dichloropropane	25	29.3	117	74-139
563-58-6	1,1-Dichloropropene	25	26.8	107	79-131
10061-01-5	cis-1,3-Dichloropropene	25	24.6	98	75-118
10061-02-6	trans-1,3-Dichloropropene	25	26.1	104	80-120
108-20-3	Di-Isopropyl Ether	25	26.3	105	68-123
100-41-4	Ethylbenzene	25	26.7	107	81-121

\* = Outside of Control Limits.

5.2.1  
 5

# Blank Spike Summary

**Job Number:** FA39053  
**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
VII195-BS	I43880.D	1	12/01/16	WV	n/a	n/a	VII195

The QC reported here applies to the following samples:

Method: SW846 8260B

FA39053-1, FA39053-2, FA39053-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
637-92-3	Ethyl Tert Butyl Ether	25	25.6	102	71-120
87-68-3	Hexachlorobutadiene	25	27.1	108	75-142
591-78-6	2-Hexanone	125	133	106	61-129
98-82-8	Isopropylbenzene	25	27.5	110	83-132
99-87-6	p-Isopropyltoluene	25	28.5	114	79-130
74-83-9	Methyl Bromide	25	29.7	119	59-143
74-87-3	Methyl Chloride	25	25.9	104	50-159
74-95-3	Methylene Bromide	25	26.3	105	78-119
75-09-2	Methylene Chloride	25	27.2	109	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	131	105	66-122
1634-04-4	Methyl Tert Butyl Ether	25	25.2	101	72-117
91-20-3	Naphthalene	25	23.6	94	63-132
103-65-1	n-Propylbenzene	25	28.6	114	82-133
100-42-5	Styrene	25	23.4	94	78-119
994-05-8	Tert-Amyl Methyl Ether	25	25.3	101	73-122
75-65-0	Tert-Butyl Alcohol	250	299	120	63-129
630-20-6	1,1,1,2-Tetrachloroethane	25	26.9	108	77-122
79-34-5	1,1,2,2-Tetrachloroethane	25	25.6	102	72-120
127-18-4	Tetrachloroethylene	25	24.5	98	76-135
108-88-3	Toluene	25	25.6	102	80-120
87-61-6	1,2,3-Trichlorobenzene	25	26.3	105	68-131
120-82-1	1,2,4-Trichlorobenzene	25	26.5	106	73-129
71-55-6	1,1,1-Trichloroethane	25	25.8	103	75-130
79-00-5	1,1,2-Trichloroethane	25	25.7	103	76-119
79-01-6	Trichloroethylene	25	27.3	109	81-126
75-69-4	Trichlorofluoromethane	25	30.4	122	71-156
96-18-4	1,2,3-Trichloropropane	25	26.5	106	77-120
95-63-6	1,2,4-Trimethylbenzene	25	27.2	109	79-120
108-67-8	1,3,5-Trimethylbenzene	25	27.0	108	79-120
75-01-4	Vinyl Chloride	25	28.2	113	69-159
1330-20-7	Xylene (total)	75	80.5	107	80-126

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	83-118%

\* = Outside of Control Limits.

5.2.1  
 5

# Blank Spike Summary

**Job Number:** FA39053  
**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
VI1195-BS	I43880.D	1	12/01/16	WV	n/a	n/a	VI1195

The QC reported here applies to the following samples:

Method: SW846 8260B

FA39053-1, FA39053-2, FA39053-4

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	105%	79-125%
2037-26-5	Toluene-D8	98%	85-112%
460-00-4	4-Bromofluorobenzene	101%	83-118%

\* = Outside of Control Limits.

# Blank Spike Summary

**Job Number:** FA39053

**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
VI1196-BS	I43908.D	1	12/02/16	WV	n/a	n/a	VI1196

The QC reported here applies to the following samples:

Method: SW846 8260B

FA39053-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	166	133	50-147
71-43-2	Benzene	25	25.9	104	81-122
108-86-1	Bromobenzene	25	24.2	97	80-121
74-97-5	Bromochloromethane	25	24.6	98	76-123
75-27-4	Bromodichloromethane	25	23.4	94	79-123
75-25-2	Bromoform	25	22.0	88	66-123
78-93-3	2-Butanone (MEK)	125	147	118	56-143
104-51-8	n-Butylbenzene	25	24.8	99	79-126
135-98-8	sec-Butylbenzene	25	27.1	108	83-133
98-06-6	tert-Butylbenzene	25	26.4	106	80-133
56-23-5	Carbon Tetrachloride	25	25.7	103	76-136
108-90-7	Chlorobenzene	25	25.0	100	82-124
75-00-3	Chloroethane	25	28.2	113	62-144
67-66-3	Chloroform	25	25.4	102	80-124
95-49-8	o-Chlorotoluene	25	26.3	105	81-127
106-43-4	p-Chlorotoluene	25	25.6	102	83-130
124-48-1	Dibromochloromethane	25	21.1	84	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	18.6	74	64-123
106-93-4	1,2-Dibromoethane	25	24.5	98	75-120
75-71-8	Dichlorodifluoromethane	25	23.4	94	42-167
95-50-1	1,2-Dichlorobenzene	25	24.8	99	82-124
541-73-1	1,3-Dichlorobenzene	25	25.6	102	84-125
106-46-7	1,4-Dichlorobenzene	25	24.4	98	78-120
75-34-3	1,1-Dichloroethane	25	26.5	106	81-122
107-06-2	1,2-Dichloroethane	25	25.0	100	75-125
75-35-4	1,1-Dichloroethylene	25	24.0	96	78-137
156-59-2	cis-1,2-Dichloroethylene	25	24.0	96	78-120
156-60-5	trans-1,2-Dichloroethylene	25	27.4	110	76-127
78-87-5	1,2-Dichloropropane	25	25.5	102	76-124
142-28-9	1,3-Dichloropropane	25	23.2	93	80-118
594-20-7	2,2-Dichloropropane	25	27.3	109	74-139
563-58-6	1,1-Dichloropropene	25	25.0	100	79-131
10061-01-5	cis-1,3-Dichloropropene	25	22.8	91	75-118
10061-02-6	trans-1,3-Dichloropropene	25	23.8	95	80-120
108-20-3	Di-Isopropyl Ether	25	24.7	99	68-123
100-41-4	Ethylbenzene	25	25.3	101	81-121

\* = Outside of Control Limits.



# Blank Spike Summary

**Job Number:** FA39053

**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
V11196-BS	I43908.D	1	12/02/16	WV	n/a	n/a	V11196

The QC reported here applies to the following samples:

Method: SW846 8260B

FA39053-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
637-92-3	Ethyl Tert Butyl Ether	25	24.4	98	71-120
87-68-3	Hexachlorobutadiene	25	27.4	110	75-142
591-78-6	2-Hexanone	125	131	105	61-129
98-82-8	Isopropylbenzene	25	26.0	104	83-132
99-87-6	p-Isopropyltoluene	25	27.1	108	79-130
74-83-9	Methyl Bromide	25	27.7	111	59-143
74-87-3	Methyl Chloride	25	24.7	99	50-159
74-95-3	Methylene Bromide	25	25.0	100	78-119
75-09-2	Methylene Chloride	25	26.6	106	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	129	103	66-122
1634-04-4	Methyl Tert Butyl Ether	25	24.0	96	72-117
91-20-3	Naphthalene	25	23.4	94	63-132
103-65-1	n-Propylbenzene	25	26.6	106	82-133
100-42-5	Styrene	25	22.3	89	78-119
994-05-8	Tert-Amyl Methyl Ether	25	24.7	99	73-122
75-65-0	Tert-Butyl Alcohol	250	283	113	63-129
630-20-6	1,1,1,2-Tetrachloroethane	25	25.8	103	77-122
79-34-5	1,1,2,2-Tetrachloroethane	25	23.8	95	72-120
127-18-4	Tetrachloroethylene	25	23.8	95	76-135
108-88-3	Toluene	25	24.2	97	80-120
87-61-6	1,2,3-Trichlorobenzene	25	24.6	98	68-131
120-82-1	1,2,4-Trichlorobenzene	25	25.2	101	73-129
71-55-6	1,1,1-Trichloroethane	25	24.9	100	75-130
79-00-5	1,1,2-Trichloroethane	25	24.5	98	76-119
79-01-6	Trichloroethylene	25	25.7	103	81-126
75-69-4	Trichlorofluoromethane	25	28.7	115	71-156
96-18-4	1,2,3-Trichloropropane	25	24.9	100	77-120
95-63-6	1,2,4-Trimethylbenzene	25	26.2	105	79-120
108-67-8	1,3,5-Trimethylbenzene	25	26.1	104	79-120
75-01-4	Vinyl Chloride	25	26.6	106	69-159
1330-20-7	Xylene (total)	75	76.3	102	80-126

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	83-118%

\* = Outside of Control Limits.

# Blank Spike Summary

**Job Number:** FA39053  
**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
VI1196-BS	I43908.D	1	12/02/16	WV	n/a	n/a	VI1196

The QC reported here applies to the following samples:

Method: SW846 8260B

FA39053-3

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	103%	79-125%
2037-26-5	Toluene-D8	97%	85-112%
460-00-4	4-Bromofluorobenzene	98%	83-118%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** FA39053

**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
FA38893-5MS	I43892.D	50	12/01/16	WV	n/a	n/a	VI1195
FA38893-5MSD	I43893.D	50	12/01/16	WV	n/a	n/a	VI1195
FA38893-5	I43885.D	50	12/01/16	WV	n/a	n/a	VI1195

The QC reported here applies to the following samples:

Method: SW846 8260B

FA39053-1, FA39053-2, FA39053-4

CAS No.	Compound	FA38893-5 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	6250	6320	101	6250	6300	101	0	50-147/21
71-43-2	Benzene	ND	1250	1170	94	1250	1290	103	10	81-122/14
108-86-1	Bromobenzene	ND	1250	1100	88	1250	1180	94	7	80-121/14
74-97-5	Bromochloromethane	ND	1250	1050	84	1250	1170	94	11	76-123/14
75-27-4	Bromodichloromethane	ND	1250	1030	82	1250	1160	93	12	79-123/19
75-25-2	Bromoform	ND	1250	991	79	1250	1100	88	10	66-123/21
78-93-3	2-Butanone (MEK)	ND	6250	6710	107	6250	6650	106	1	56-143/18
104-51-8	n-Butylbenzene	ND	1250	1080	86	1250	1180	94	9	79-126/16
135-98-8	sec-Butylbenzene	ND	1250	1200	96	1250	1330	106	10	83-133/16
98-06-6	tert-Butylbenzene	ND	1250	1180	94	1250	1300	104	10	80-133/16
56-23-5	Carbon Tetrachloride	ND	1250	1180	94	1250	1300	104	10	76-136/23
108-90-7	Chlorobenzene	ND	1250	1130	90	1250	1250	100	10	82-124/14
75-00-3	Chloroethane	ND	1250	1760	141	1250	1600	128	10	62-144/20
67-66-3	Chloroform	ND	1250	1140	91	1250	1260	101	10	80-124/15
95-49-8	o-Chlorotoluene	ND	1250	1190	95	1250	1310	105	10	81-127/15
106-43-4	p-Chlorotoluene	ND	1250	1180	94	1250	1270	102	7	83-130/15
124-48-1	Dibromochloromethane	ND	1250	933	75*	1250	1040	83	11	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	ND	1250	840	67	1250	919	74	9	64-123/18
106-93-4	1,2-Dibromoethane	ND	1250	1090	87	1250	1200	96	10	75-120/13
75-71-8	Dichlorodifluoromethane	ND	1250	1220	98	1250	1180	94	3	42-167/19
95-50-1	1,2-Dichlorobenzene	ND	1250	1100	88	1250	1220	98	10	82-124/14
541-73-1	1,3-Dichlorobenzene	ND	1250	1140	91	1250	1260	101	10	84-125/14
106-46-7	1,4-Dichlorobenzene	ND	1250	1100	88	1250	1200	96	9	78-120/15
75-34-3	1,1-Dichloroethane	ND	1250	1210	97	1250	1340	107	10	81-122/15
107-06-2	1,2-Dichloroethane	ND	1250	1160	93	1250	1270	102	9	75-125/14
75-35-4	1,1-Dichloroethylene	ND	1250	1120	90	1250	1240	99	10	78-137/18
156-59-2	cis-1,2-Dichloroethylene	1730	1250	2840	89	1250	2830	88	0	78-120/15
156-60-5	trans-1,2-Dichloroethylene	113	1250	1380	101	1250	1490	110	8	76-127/17
78-87-5	1,2-Dichloropropane	ND	1250	1130	90	1250	1270	102	12	76-124/14
142-28-9	1,3-Dichloropropane	ND	1250	1030	82	1250	1170	94	13	80-118/13
594-20-7	2,2-Dichloropropane	ND	1250	1210	97	1250	1350	108	11	74-139/17
563-58-6	1,1-Dichloropropene	ND	1250	1110	89	1250	1230	98	10	79-131/16
10061-01-5	cis-1,3-Dichloropropene	ND	1250	980	78	1250	1100	88	12	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND	1250	1030	82	1250	1190	95	14	80-120/22
108-20-3	Di-Isopropyl Ether	ND	1250	1140	91	1250	1270	102	11	68-123/16
100-41-4	Ethylbenzene	ND	1250	1160	93	1250	1270	102	9	81-121/14

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** FA39053

**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
FA38893-5MS	I43892.D	50	12/01/16	WV	n/a	n/a	VI1195
FA38893-5MSD	I43893.D	50	12/01/16	WV	n/a	n/a	VI1195
FA38893-5	I43885.D	50	12/01/16	WV	n/a	n/a	VI1195

The QC reported here applies to the following samples:

Method: SW846 8260B

FA39053-1, FA39053-2, FA39053-4

CAS No.	Compound	FA38893-5 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	1250	1070	86	1250	1210	97	12	71-120/14
87-68-3	Hexachlorobutadiene	ND	1250	1140	91	1250	1210	97	6	75-142/19
591-78-6	2-Hexanone	ND	6250	6640	106	6250	6450	103	3	61-129/18
98-82-8	Isopropylbenzene	ND	1250	1180	94	1250	1300	104	10	83-132/15
99-87-6	p-Isopropyltoluene	ND	1250	1210	97	1250	1290	103	6	79-130/16
74-83-9	Methyl Bromide	ND	1250	1560	125	1250	1460	117	7	59-143/19
74-87-3	Methyl Chloride	ND	1250	1300	104	1250	1260	101	3	50-159/19
74-95-3	Methylene Bromide	ND	1250	1100	88	1250	1220	98	10	78-119/14
75-09-2	Methylene Chloride	104	J 1250	1190	87	1250	1300	96	9	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	6250	6850	110	6250	6770	108	1	66-122/16
1634-04-4	Methyl Tert Butyl Ether	ND	1250	1020	82	1250	1150	92	12	72-117/14
91-20-3	Naphthalene	ND	1250	972	78	1250	1080	86	11	63-132/25
103-65-1	n-Propylbenzene	ND	1250	1220	98	1250	1320	106	8	82-133/15
100-42-5	Styrene	ND	1250	993	79	1250	1140	91	14	78-119/23
994-05-8	Tert-Amyl Methyl Ether	ND	1250	1040	83	1250	1170	94	12	73-122/13
75-65-0	Tert-Butyl Alcohol	ND	12500	12900	103	12500	14300	114	10	63-129/27
630-20-6	1,1,1,2-Tetrachloroethane	ND	1250	1150	92	1250	1280	102	11	77-122/19
79-34-5	1,1,2,2-Tetrachloroethane	ND	1250	1090	87	1250	1180	94	8	72-120/14
127-18-4	Tetrachloroethylene	ND	1250	1030	82	1250	1180	94	14	76-135/16
108-88-3	Toluene	ND	1250	1090	87	1250	1250	100	14	80-120/14
87-61-6	1,2,3-Trichlorobenzene	ND	1250	1100	88	1250	1160	93	5	68-131/25
120-82-1	1,2,4-Trichlorobenzene	ND	1250	1090	87	1250	1180	94	8	73-129/20
71-55-6	1,1,1-Trichloroethane	ND	1250	1120	90	1250	1230	98	9	75-130/16
79-00-5	1,1,2-Trichloroethane	ND	1250	1140	91	1250	1250	100	9	76-119/14
79-01-6	Trichloroethylene	278	1250	1460	95	1250	1540	101	5	81-126/15
75-69-4	Trichlorofluoromethane	ND	1250	1600	128	1250	1490	119	7	71-156/21
96-18-4	1,2,3-Trichloropropane	ND	1250	1100	88	1250	1220	98	10	77-120/16
95-63-6	1,2,4-Trimethylbenzene	ND	1250	1170	94	1250	1290	103	10	79-120/18
108-67-8	1,3,5-Trimethylbenzene	ND	1250	1150	92	1250	1280	102	11	79-120/19
75-01-4	Vinyl Chloride	ND	1250	1520	122	1250	1420	114	7	69-159/18
1330-20-7	Xylene (total)	ND	3750	3490	93	3750	3970	106	13	80-126/15

CAS No.	Surrogate Recoveries	MS	MSD	FA38893-5	Limits
1868-53-7	Dibromofluoromethane	102%	102%	99%	83-118%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** FA39053  
**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
FA38893-5MS	I43892.D	50	12/01/16	WV	n/a	n/a	VI1195
FA38893-5MSD	I43893.D	50	12/01/16	WV	n/a	n/a	VI1195
FA38893-5	I43885.D	50	12/01/16	WV	n/a	n/a	VI1195

The QC reported here applies to the following samples:

Method: SW846 8260B

FA39053-1, FA39053-2, FA39053-4

CAS No.	Surrogate Recoveries	MS	MSD	FA38893-5	Limits
17060-07-0	1,2-Dichloroethane-D4	108%	108%	110%	79-125%
2037-26-5	Toluene-D8	98%	101%	99%	85-112%
460-00-4	4-Bromofluorobenzene	99%	96%	96%	83-118%

\* = Outside of Control Limits.

5.3.1  
 5

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** FA39053

**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
FA39128-7MS	I43920.D	1	12/02/16	WV	n/a	n/a	VI1196
FA39128-7MSD	I43921.D	1	12/02/16	WV	n/a	n/a	VI1196
FA39128-7	I43917.D	1	12/02/16	WV	n/a	n/a	VI1196

The QC reported here applies to the following samples:

Method: SW846 8260B

FA39053-3

CAS No.	Compound	FA39128-7 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	25 U	125	118	94	125	119	95	1	50-147/21
71-43-2	Benzene	1.0 U	25	26.2	105	25	25.6	102	2	81-122/14
108-86-1	Bromobenzene	1.0 U	25	24.7	99	25	24.9	100	1	80-121/14
74-97-5	Bromochloromethane	1.0 U	25	23.5	94	25	23.4	94	0	76-123/14
75-27-4	Bromodichloromethane	1.0 U	25	23.0	92	25	22.9	92	0	79-123/19
75-25-2	Bromoform	1.0 U	25	18.7	75	25	18.7	75	0	66-123/21
78-93-3	2-Butanone (MEK)	5.0 U	125	134	107	125	133	106	1	56-143/18
104-51-8	n-Butylbenzene	1.0 U	25	24.8	99	25	23.6	94	5	79-126/16
135-98-8	sec-Butylbenzene	1.0 U	25	27.6	110	25	27.1	108	2	83-133/16
98-06-6	tert-Butylbenzene	1.0 U	25	26.9	108	25	26.0	104	3	80-133/16
56-23-5	Carbon Tetrachloride	1.0 U	25	25.7	103	25	25.1	100	2	76-136/23
108-90-7	Chlorobenzene	1.0 U	25	26.2	105	25	25.5	102	3	82-124/14
75-00-3	Chloroethane	2.0 U	25	32.2	129	25	30.1	120	7	62-144/20
67-66-3	Chloroform	1.0 U	25	26.1	104	25	25.1	100	4	80-124/15
95-49-8	o-Chlorotoluene	1.0 U	25	27.5	110	25	26.4	106	4	81-127/15
106-43-4	p-Chlorotoluene	1.0 U	25	26.5	106	25	26.4	106	0	83-130/15
124-48-1	Dibromochloromethane	1.0 U	25	19.7	79	25	19.5	78	1	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U	25	18.2	73	25	17.8	71	2	64-123/18
106-93-4	1,2-Dibromoethane	2.0 U	25	24.3	97	25	24.3	97	0	75-120/13
75-71-8	Dichlorodifluoromethane	2.0 U	25	22.4	90	25	23.6	94	5	42-167/19
95-50-1	1,2-Dichlorobenzene	1.0 U	25	25.1	100	25	24.8	99	1	82-124/14
541-73-1	1,3-Dichlorobenzene	1.0 U	25	26.5	106	25	25.2	101	5	84-125/14
106-46-7	1,4-Dichlorobenzene	1.0 U	25	25.3	101	25	25.1	100	1	78-120/15
75-34-3	1,1-Dichloroethane	1.0 U	25	27.0	108	25	26.4	106	2	81-122/15
107-06-2	1,2-Dichloroethane	1.0 U	25	26.8	107	25	25.4	102	5	75-125/14
75-35-4	1,1-Dichloroethylene	1.0 U	25	23.9	96	25	23.7	95	1	78-137/18
156-59-2	cis-1,2-Dichloroethylene	1.0 U	25	23.6	94	25	22.9	92	3	78-120/15
156-60-5	trans-1,2-Dichloroethylene	1.0 U	25	28.1	112	25	27.0	108	4	76-127/17
78-87-5	1,2-Dichloropropane	1.0 U	25	26.0	104	25	25.2	101	3	76-124/14
142-28-9	1,3-Dichloropropane	1.0 U	25	24.0	96	25	23.5	94	2	80-118/13
594-20-7	2,2-Dichloropropane	1.0 U	25	27.1	108	25	26.7	107	1	74-139/17
563-58-6	1,1-Dichloropropene	1.0 U	25	25.0	100	25	24.3	97	3	79-131/16
10061-01-5	cis-1,3-Dichloropropene	1.0 U	25	20.2	81	25	19.4	78	4	75-118/23
10061-02-6	trans-1,3-Dichloropropene	1.0 U	25	22.2	89	25	22.2	89	0	80-120/22
108-20-3	Di-Isopropyl Ether	1.0 U	25	26.1	104	25	25.3	101	3	68-123/16
100-41-4	Ethylbenzene	1.0 U	25	26.6	106	25	26.0	104	2	81-121/14

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** FA39053  
**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
FA39128-7MS	I43920.D	1	12/02/16	WV	n/a	n/a	VI1196
FA39128-7MSD	I43921.D	1	12/02/16	WV	n/a	n/a	VI1196
FA39128-7	I43917.D	1	12/02/16	WV	n/a	n/a	VI1196

The QC reported here applies to the following samples:

Method: SW846 8260B

FA39053-3

CAS No.	Compound	FA39128-7 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	2.0 U	25	24.6	98	25	24.0	96	2	71-120/14
87-68-3	Hexachlorobutadiene	2.0 U	25	24.2	97	25	23.5	94	3	75-142/19
591-78-6	2-Hexanone	10 U	125	136	109	125	131	105	4	61-129/18
98-82-8	Isopropylbenzene	1.0 U	25	26.9	108	25	26.6	106	1	83-132/15
99-87-6	p-Isopropyltoluene	1.0 U	25	26.8	107	25	26.6	106	1	79-130/16
74-83-9	Methyl Bromide	2.0 U	25	28.3	113	25	27.9	112	1	59-143/19
74-87-3	Methyl Chloride	2.0 U	25	25.7	103	25	25.8	103	0	50-159/19
74-95-3	Methylene Bromide	2.0 U	25	25.0	100	25	24.0	96	4	78-119/14
75-09-2	Methylene Chloride	5.0 U	25	25.6	102	25	24.8	99	3	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U	125	139	111	125	139	111	0	66-122/16
1634-04-4	Methyl Tert Butyl Ether	1.0 U	25	23.1	92	25	22.6	90	2	72-117/14
91-20-3	Naphthalene	5.0 U	25	21.9	88	25	21.3	85	3	63-132/25
103-65-1	n-Propylbenzene	1.0 U	25	27.7	111	25	27.5	110	1	82-133/15
100-42-5	Styrene	1.0 U	25	22.6	90	25	22.7	91	0	78-119/23
994-05-8	Tert-Amyl Methyl Ether	2.0 U	25	23.6	94	25	23.4	94	1	73-122/13
75-65-0	Tert-Butyl Alcohol	20 U	250	326	130*	250	325	130*	0	63-129/27
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U	25	26.3	105	25	26.0	104	1	77-122/19
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U	25	24.8	99	25	24.4	98	2	72-120/14
127-18-4	Tetrachloroethylene	1.0 U	25	23.7	95	25	23.2	93	2	76-135/16
108-88-3	Toluene	1.0 U	25	25.1	100	25	24.8	99	1	80-120/14
87-61-6	1,2,3-Trichlorobenzene	2.0 U	25	23.2	93	25	23.5	94	1	68-131/25
120-82-1	1,2,4-Trichlorobenzene	2.0 U	25	23.7	95	25	23.2	93	2	73-129/20
71-55-6	1,1,1-Trichloroethane	1.0 U	25	24.8	99	25	24.7	99	0	75-130/16
79-00-5	1,1,2-Trichloroethane	1.0 U	25	25.6	102	25	25.4	102	1	76-119/14
79-01-6	Trichloroethylene	1.0 U	25	26.9	108	25	25.7	103	5	81-126/15
75-69-4	Trichlorofluoromethane	2.0 U	25	29.4	118	25	29.6	118	1	71-156/21
96-18-4	1,2,3-Trichloropropane	2.0 U	25	25.5	102	25	24.7	99	3	77-120/16
95-63-6	1,2,4-Trimethylbenzene	1.0 U	25	26.9	108	25	25.9	104	4	79-120/18
108-67-8	1,3,5-Trimethylbenzene	1.0 U	25	26.9	108	25	25.9	104	4	79-120/19
75-01-4	Vinyl Chloride	1.0 U	25	29.3	117	25	29.2	117	0	69-159/18
1330-20-7	Xylene (total)	3.0 U	75	80.0	107	75	79.2	106	1	80-126/15

CAS No.	Surrogate Recoveries	MS	MSD	FA39128-7	Limits
1868-53-7	Dibromofluoromethane	103%	100%	100%	83-118%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** FA39053  
**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
FA39128-7MS	I43920.D	1	12/02/16	WV	n/a	n/a	VI1196
FA39128-7MSD	I43921.D	1	12/02/16	WV	n/a	n/a	VI1196
FA39128-7	I43917.D	1	12/02/16	WV	n/a	n/a	VI1196

The QC reported here applies to the following samples:

Method: SW846 8260B

FA39053-3

CAS No.	Surrogate Recoveries	MS	MSD	FA39128-7	Limits
17060-07-0	1,2-Dichloroethane-D4	111%	107%	111%	79-125%
2037-26-5	Toluene-D8	97%	100%	98%	85-112%
460-00-4	4-Bromofluorobenzene	96%	94%	98%	83-118%

\* = Outside of Control Limits.

5.3.2  
 5



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:** FA39053  
**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
GCD5891-MB	CD141374.D	1	11/30/16	EG	n/a	n/a	GCD5891

The QC reported here applies to the following samples:

Method: SW846 8015C

FA39053-1, FA39053-2, FA39053-3, FA39053-4

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	102%	70-131%
98-08-8	aaa-Trifluorotoluene	80%	69-143%

# Blank Spike Summary

**Job Number:** FA39053  
**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
GCD5891-BS	CD141373.D	1	11/30/16	EG	n/a	n/a	GCD5891

The QC reported here applies to the following samples:

Method: SW846 8015C

FA39053-1, FA39053-2, FA39053-3, FA39053-4

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.380	95	75-138

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	106%	70-131%
98-08-8	aaa-Trifluorotoluene	102%	69-143%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** FA39053  
**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
FA39040-2MS	CD141381.D	1	11/30/16	EG	n/a	n/a	GCD5891
FA39040-2MSD	CD141382.D	1	11/30/16	EG	n/a	n/a	GCD5891
FA39040-2	CD141376.D	1	11/30/16	EG	n/a	n/a	GCD5891

The QC reported here applies to the following samples:

Method: SW846 8015C

FA39053-1, FA39053-2, FA39053-3, FA39053-4

CAS No.	Compound	FA39040-2 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)	0.10 U	0.4	0.361	90	0.4	0.373	93	3	75-138/13

CAS No.	Surrogate Recoveries	MS	MSD	FA39040-2	Limits
460-00-4	4-Bromofluorobenzene	91%	91%	95%	70-131%
98-08-8	aaa-Trifluorotoluene	83%	88%	79%	69-143%

\* = Outside of Control Limits.

6.3.1  
6

---

**GC 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:** FA39053  
**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
OP62891-MB	JR003900.D	1	12/02/16	SJL	11/30/16	OP62891	GJR150

The QC reported here applies to the following samples:

Method: SW846 8015C

FA39053-1, FA39053-2, FA39053-3, FA39053-4

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	81% 50-131%

7.1.1  
7

# Blank Spike Summary

**Job Number:** FA39053  
**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
OP62891-BS	JR003899.D	1	12/02/16	SJL	11/30/16	OP62891	GJR150

The QC reported here applies to the following samples:

Method: SW846 8015C

FA39053-1, FA39053-2, FA39053-3, FA39053-4

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH (C10-C28)	0.5	0.522	104 <sup>a</sup>	60-128
	TPH (> C28-C40)	1	0.802	80	51-138

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	88%	50-131%

(a) Spike recoveries corrected for actual spike amount.

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** FA39053  
**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
OP62891-MS	JR003903.D	1	12/02/16	SJL	11/30/16	OP62891	GJR150
OP62891-MSD	JR003904.D	1	12/02/16	SJL	11/30/16	OP62891	GJR150
FA39053-2	JR003902.D	1	12/02/16	SJL	11/30/16	OP62891	GJR150

The QC reported here applies to the following samples:

Method: SW846 8015C

FA39053-1, FA39053-2, FA39053-3, FA39053-4

CAS No.	Compound	FA39053-2 mg/l	Spike Q	mg/l	MS mg/l	MS %	Spike mg/l	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	ND		0.96	0.969	101 <sup>a</sup>	0.96	0.975	102 <sup>a</sup>	1	60-128/33
	TPH (> C28-C40)	0.0413	J	1.92	1.43	72	1.92	1.48	75	3	51-138/18

CAS No.	Surrogate Recoveries	MS	MSD	FA39053-2	Limits
84-15-1	o-Terphenyl	83%	83%	82%	50-131%

(a) Spike recoveries corrected for actual spike amount.

\* = Outside of Control Limits.



COMPLIANCE & CLOSURE WELL DEVELOPMENT LOG

JOB # 12214-2

DATE: 11/28/16

TIME: 9:00

WELL #	VOLUME	TD	DTW	Ph	TEMP	COND	COMMENTS
D.O. = 4.67 mg/l MW-3A ORP = 96.4	10-502	<del>14.82</del> 16.82	6.66	7.67	61.95	361	cloudy, no petro odor,
D.O. = 2.39 mg/l MW-2A ORP = 87.2	10-540	16.85	6.24	7.14	63.77	393	clear to slightly cloudy, no petro odor
D.O. = 3.25 mg/l MW-1 ORP = -51	5-5015	<del>14.82</del> 15.15	6.01	6.50	61.39	468	clear to slightly cloudy, some shear, slight petro odor.
D.O. = 5.05 mg/l RW-1 ORP = 10.4	6-501	22.50	5.58	6.82	62.22	350	clear, no petro odor.

PAW/ # 4 & # 7 bottles

EQUIPMENT CALIBRATION DATE: 11/27/16

SERIAL No. 75E 556