By Alameda County Environmental Health 3:35 pm, Aug 16, 2016

August 5, 2016

Quik Stop Markets, Inc. 4567 Enterprise Street Fremont, California 94538-7605

Attn: Mr. Roger Batra

RE: Soil and Groundwater Investigation Report Quik Stop Market No. 51 3130 35<sup>th</sup> Avenue, Oakland, California 94619 Fuel Leak Case No. RO0003209; (Global ID No. T10000008568) (CCI Project No. 12216-1)

"I declare, under penalty of perjury, that the information and/or recommendations contained in the attached proposal or report is true and correct to the best of my knowledge."

Quik Stop Markets, Inc.

Rega Poulra

Mr. Roger Batra

Date August 8, 2016



August 5, 2016

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

Attention: Mr. Keith Nowell

RE: Soil and Groundwater Investigation Report Quik Stop Market No. 51 3130 35<sup>th</sup> Avenue, Oakland, California 94619 Fuel Leak Case No. RO0003209; (Global ID No. T10000008568) (CCI Project No. 12216-1)

Dear Mr. Nowell:

Compliance & Closure, Inc. (CCI) is pleased to present this Soil and Groundwater Investigation Report for the Quik Stop Market site located at 3130 35<sup>th</sup> Avenue, Oakland, California. The soil and groundwater investigation was conducted in response to Alameda County Environmental Health (ACEH)'s request for a work plan in its letter dated March 3, 2016. CCI's Work Plan, dated April 20, 2016, was approved by the ACEH in a letter dated May 9, 2016. Copies of this report have been uploaded to the State's GeoTracker data base and ACEH ftp site.

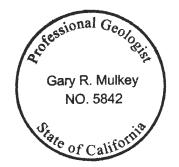
CCI appreciates your comments and if you have any questions, please contact our office at 925-648-2008 or e-mail gary@cci-envr.com.

Sincerely, Compliance & Closure, Inc.

Dang R. mulhey

Gary R. Mulkey, P.G. 5842

Cc: Mr. Roger Batra, Quik Stop Markets



# Soil and Groundwater Investigation Report

For

# Quik Stop Market No. 51 3130 35<sup>th</sup> Avenue, Oakland, California

#### Introduction

Compliance & Closure, Inc. (CCI) has prepared this soil and groundwater investigation report on behalf of Quik Stop Markets, Inc., operator of the convenience store located at 3130 35<sup>th</sup> Avenue, Oakland, Alameda, California (Figure 1). The purpose of the investigation was to determine whether a fuel leak occurred at the site which may be contributing to petroleum hydrocarbon contamination detected in a down-gradient monitoring well, MW-5, (associated with ACEH case # RO0000271), located on 35<sup>th</sup> Avenue, near the Quik Stop Market. In addition, there is another groundwater monitoring well, also designated MW-5, (associated with ACEH case # RO000014), located on Mangels Avenue on the apparent up-gradient side of the Quik Stop site. This well is also contaminated with petroleum hydrocarbons.

#### **Site Setting**

The site is currently an operating Quik Stop convenience store located on the southwest corner of 35<sup>th</sup> Avenue and Mangels Avenue in the City of Oakland, Alameda County, California. Adjacent to the property on the northeast side of Mangels Avenue are residences; across 35th Avenue to the northwest is a liquor store and additional residential properties. Directly north of the site, at the corner of Suter Street and 35<sup>th</sup> Avenue, is an existing Energy Gas and Mart. Across 35<sup>th</sup> Avenue, to the west and southwest of the site, are two vacant lots. One of the lots is located at 3055 35<sup>th</sup> Avenue and was the site of a former Exxon gasoline service station. The other vacant lot, located at 3101 35<sup>th</sup> Avenue, was occupied by a former Texaco gasoline station.

#### **Background Information**

There are currently two, 10,000-gallon gasoline storage tanks at the site. In June 1998, the fuel tanks were removed and replaced by new fuel tanks. During the removal of the fuel tanks, visible staining of the soil was noted. In addition, soil samples collected from the tank excavation were reported to contain 1,100 milligrams per kilogram (mg/kg) total petroleum hydrocarbons as gasoline (TPHg), 5.2 mg/kg benzene, and 13 mg/kg methyl tertiary butyl ether (MTBE). A monitoring well (MW-5), located down-gradient of the Quik Stop site, and associated with a fuel investigation at 3055 35<sup>th</sup> Avenue (ACEH case # RO0000271) was reported to have detectable petroleum hydrocarbons in a sample collected on July 15, 2015.

That sample was reported to contain 8,800 micrograms per liter (ug/L) TPHg, 2,200 ug/L benzene, 850 ug/L MTBE and 6,700 ug/L tertiary butyl alcohol (TBA). The contamination detected in well MW-5 may or may not be associated with a release from the Quik Stop site. There is a second groundwater monitoring well, also designated MW-5, (associated with ACEH case # RO000014), located on Mangels Avenue, up-gradient of the Quik Stop site. The most recent sample collected (8/27/2015) from that well was reported to contain 7,370 micrograms per liter (ug/L) TPHg, 803 ug/L benzene, 8.63 ug/L MTBE and 126 ug/L tertiary butyl alcohol (TBA). Based on this information, ACEH requested a work plan from Quik Stop to investigate the site for a potential fuel release.

#### Scope of Work

In response to the ACEH directive, CCI proposed to use a GeoProbe shallow soil sampling rig to collect soil and grab water samples from six locations at the subject site (Figure 2). The following activities were conducted prior to and during the investigation:

- 1) Notified Underground Service Alert (USA) of all boring locations;
- 2) Retained a private line location firm to "clear" the boring locations;
- 3) Used a GeoProbe and auger drill rig to log subsurface lithology and collected soil and grab water samples from six locations at the subject site;
- 4) Analyzed 31 soil and 6 water samples for TPHg, BTEX and fuel oxygenates and naphthalene using EPA Test Method 8260B;
- 5) Presented the results of the investigation in a report, and uploaded the report to the ACEH ftp site and state geotracker data base.

### **Pre-Field Work**

Prior to the start of field work, CCI obtained boring permits from the Alameda County Public Works Agency (Permit No. W2016-0392, Appendix A). Underground Service Alert (USA) was also notified of the drilling activity (USA # W616700230). CCI retained Cal West Concrete Cutting Inc. to core two, 5-inch diameter holes in the concrete slab prior to drilling.

### **Field Work**

The field work began on June 27, 2016 and was completed on July 12, 2016. CCI retained Cascade Drilling (Cascade) to perform the work. The original work plan called for using a GeoProbe drilling rig to collect soil and grab water samples from the site. The 6 boring locations

were located across the site (Figure 2). Borings B-1 and B-5, located on the south side of the site, were drilled to depths of approximately 22 feet; however, the GeoProbe 6600 DT rig was unable to drill below that depth due to very solid soil conditions. CCI rescheduled the remaining borings for July 5, 2016 using a large CME 75 drilling rig. Due to the height of the rig's drilling tower and nearby power lines along 35<sup>th</sup> Avenue, only two additional borings (B-4 and B-6, located in the central and northeast side of the site) could be drilled on that date. Those two borings were drilled to depths of 40 and 30 feet. CCI rescheduled the drilling of the two remaining borings for July 11 and 12, 2016 using a 8040 DT GeoProbe drilling rig. At that time, borings B-2 and B-3 were drilled to depths of 30 and 38 feet. Borings B-1 and B-5 were also redrilled to 35 feet in order to obtain grab water samples.

Soil samples collected with the GeoProbe rig were generally collected at 5-foot intervals to the depth of the boring. The exceptions were borings B-1 and B-5 in which soil samples were only collected to depths of 15 feet. After retrieval of the sample barrel, a small section of the sample tubing was cut, and the ends of the tubing were sealed with Teflon sheets and plastic caps. The samples were labeled, logged on a chain of custody form and placed into a cooler containing water ice for transport to a state certified laboratory.

Soil samples collected for laboratory analysis using the auger drilling rig were collected in the following manner: upon retrieval, the sampler was disassembled into its component parts; one or more of the stainless steel liners was selected for chemical analysis; the ends of the selected liner(s) was/were sealed with Teflon sheets, capped with plastic caps, labeled, logged on a chain-of-custody form and stored in a chilled chest containing ice for preservation in the field and during transport to the analytical laboratory. Upon completion of the drilling, Cascade then installed 1-inch diameter PVC tubing with 10 feet of machined slots into each boring to collect a grab water sample.

#### **Groundwater Sampling**

Groundwater samples were collected from each boring by inserting a 3/8-inch diameter Teflon tubing into the temporary 1-inch diameter well. The Teflon tubing was connected to a peristaltic pump and groundwater was pumped into laboratory supplied sample containers. It was noted that groundwater flowed freely into the temporary wells after a period of time and was found to be slightly cloudy with some very fine silt and sand.

Upon completion of the sampling, the six borings were grouted with Portland cement. A representative from the Alameda County Public Works Agency (Mr. Jose Ambriz) was present during the grouting of the boreholes. Cascade inserted a tremie pipe to the bottom of the boring and poured grout down the pipe into the boring. Some water was displaced from the hole and a wet/dry vacuum was used to collect the water. The excess water was placed in a 55-gallon drum and left at the site.

#### **Subsurface Soil Conditions**

The six borings drilled at the Quik Stop site ranged in depths from 30 to 40 feet. In general, the subsurface soil consisted of alternating layers of clay, sandy clay and clayey sand, with occasional rocky lenses encountered in some of the borings. This material was found to be stiff to hard and moist, with occasional rock fragments between ¼ and ½ inch in diameter. Very hard drilling conditions were encountered in borings B-5 and B-6 between 10 and 20 feet where rock fragments were observed. Iron stains were noted on many of the soil samples collected between 15 and 25 feet. Slight to moderate petroleum odor was noted in all six borings between 15 and 20 feet, with occasional petroleum odor noted at 25 feet. PID readings procured during drilling recorded the highest readings at boring locations B-4, at 498 parts per million (ppm) at a depth of 15 feet and 1340 ppm in B-3 at a depth of 20 feet. The petroleum odor dropped significantly at a depth of 25 feet and no petroleum odor was noted at depths below 25 feet in any of the six borings.

Groundwater was not readily noticeable during drilling of the borings. An increase in moisture was noted in some of the borings at about 27 feet but no free water was noted. Water entered 4 of the 6 borings after completion of the borings and the setting of temporary casings to collect grab water samples. Borings B-2 and B-3 were left open overnight with temporary casings installed in order to collect a water sample. Standing water in the two borings was measured the following day at 16.5 to 17.5 feet below the ground surface. Based on observations and soil samples collected during the drilling, groundwater is present at approximately 27 feet. This water zone, which is under hydrostatic pressure, is only approximately 2 to 3 feet thick. In general, clay was encountered at 30 to 40 feet in some of the deeper borings, with no visible water present at those depths. A copy of the boring logs are attached in Appendix B.

#### Laboratory Analysis

A total of 31 soil and 6 water samples were collected during the investigation. The samples were submitted to SGS Accutest Laboratories (Accutest), a state-certified laboratory located in San Jose, California, for chemical analysis. Accutest employed methods approved by the California Regional Water Quality Control Board (CRWQCB) and the EPA. The samples were analyzed for the presence of TPHg, BTEX, naphthalene and fuel oxygenates using EPA Test Method 8260B.

#### Laboratory Results

The laboratory reported 26 of the 31 soil samples contained detectable TPHg. The highest concentrations were detected at depths between 15 and 20 feet at all six boring locations. The highest concentration, 1,150,000 micrograms per kilogram (ug/kg), was reported at boring B-4-15. Other samples with high TPHg concentrations were B-5-15, at 1,050,000 ug/kg, B-3-15, at 640,000 ug/kg and B-6-20, at 425,000 ug/kg. Benzene was detected in 11 of the 31 soil samples, and ranged from 0.47 ug/kg in samples B-4-35, to 15,400 ug/kg in sample B-4-15 at a depth of 15 feet.

Detectable concentrations of toluene, ethylbenzene and total xylenes were also reported by the laboratory. Detectable concentrations of MTBE were detected in 19 of the 31 soil sample. TBA was detected in 14 of 31 soil samples and Naphthalene was detected in 4 soil samples, with the highest concentration reported in sample B-3-21, at a concentration of 5,830 ug/kg at a depth of 21 feet. The soil laboratory results are summarized in Table 1. CCI prepared soil concentration cross-section maps A-A' and B-B' for both THPg and Benzene. The maps are found in Figures 3, 4, 5 and 6.

All six grab water samples were reported by the laboratory to contain detectable concentrations of TPHg, BTEX, MTBE and TBA. TPHg concentrations ranged from 2,790 ug/L at B-6-W to183,000 ug/L at B-5-W. Benzene ranged from 233 ug/L at B-1-W to 1,280 ug/L at B-2-W. Relatively high concentrations of MTBE and TBA were also detected in the six water samples. The groundwater laboratory results are summarized in Table 2. The laboratory reports are attached in Appendix C.

#### Conclusion

CCI has completed the soil and groundwater investigation at Quik Stop Market No. 51 and the laboratory data collected from the investigation indicates extensive petroleum hydrocarbon contamination in the soil and groundwater throughout the site. A majority of the soil contamination is generally found between 10 and 25 feet, with the highest concentrations between 15 and 20 feet, as depicted on the TPHg soil concentrations cross-sections A-A' and B-B'(Figures 3 and 5). Some shallow soil contamination was detected at borings B-1, B-4 and B-5. Lower concentrations of THPg were detected at 5 feet in these three borings, which are located in the central and west to southwest side of the site (Figure 2).

Groundwater was generally encountered at 27 feet and the water table is under hydrostatic pressure. Static water levels were recorded at depths ranging from 16.5 feet to 23 feet. CCI assumes the groundwater flow direction at the Quik Stop Market is generally toward the westsouthwest. This assumption is based on the historical groundwater gradient data from the former Exxon gas station located at 3055 35<sup>th</sup> Avenue, which is just across 35<sup>th</sup> Avenue from the Quik Stop site. There are 3 nearby off-site wells that CCI has requested to sample. One is monitoring well MW-5-Exxon, located on the west drive-way entrance to the Quik Stop Market and is associated with the previously mentioned Exxon site (Figure 2). The other two wells are located on Mangels Avenue, near the northeast entrance to the Quik Stop Market and on 35<sup>th</sup> Avenue, near the intersection with Suter Street. These two wells are related to the former ARCO gas station, located at 3201 35<sup>th</sup> Avenue. CCI submitted a request to Arcadis (Arco's Consultant) to sample these two wells. Arcadis responded that it will only allow CCI to collect duplicate samples during Arcadis' next sample round, which is scheduled for the third quarter 2016. Existing groundwater data from well MW-5-ARCO, located on Mangels Avenue near the north east entrance to the Quik Stop Market, is contaminated with TPHg and BTEX, MTBE and TBA compounds. Results from this investigation show that the soil and groundwater petroleum

hydrocarbon contamination has been detected throughout the Quik Stop site. There is some shallow contamination found at a depth of 5 feet on the central and western side of the Quik Stop site, near the fuel pumps and tanks, which may be the result of surface spills; however, the concentrations are much lower than the petroleum contaminants found at 15 and 20-foot depths and in the water table. Integrity testing records for the fiberglass tanks installed in 1998 indicate that no releases have occurred from these tanks.

Based on the extensive soil and groundwater contamination discovered, including the apparent up-gradient north-northeast side of the site, groundwater contamination may be entering the Quik Stop site from that direction. Free product has been documented in some of the up-gradient groundwater monitoring wells associated with the former ARCO site. A review of historical groundwater flow directions at the ARCO site, located at 3201 35<sup>th</sup> Avenue from February 6, 2012 to March 28, 2016 (total of 9 reports) are incorrect, based on the orientation of the north arrow on groundwater elevation contour maps. It appears reports prior to February 6, 2012 have the correct north arrow orientation. Orienting the north arrow to the correct north direction shows the predominate groundwater flow directions to be toward the south-southwest. The only exception is the most recent report from March 28, 2016 which has an east flow direction. The Quik Stop site is located due south of the ARCO site.

CCI is currently working on a site access agreement with Weber, Hayes & Associates (Exxon's consultant) to gain access to sample well MW-5, located on 35<sup>th</sup> Avenue, just west of the Quik Stop site. CCI will attempt to collect samples from that well as soon as an access agreement is completed. As previously mentioned, CCI also has contacted Arcadis to sample their well MW-5, located on Mangels Avenue. Arcadis has informed CCI that they will allow CCI to collect duplicate samples from that well during a scheduled Arcadis sample event, which will take place sometime during the third quarter 2016. Once the samples results from these two wells are received, CCI will submit the data to the County in a separate letter report.

Quik Stop No. 51 CCI Project No. 12216-1

Sample

Number

B-1-5

B-1-10

B-1-15

B-2-5

B-2-10

B-2-15

B-2-20

B-2-25

B-2-30

B-3-5

B-3-10

B-3-15

B-3-20

B-3-21

B-3-30

B-4-5

B-4-10

B-4-15

B-4-20

B-4-25

B-4-30

B-4-35

#### Quik Stop No. 51 - 3130 35th Avenue, Oakland, CA Sample<sup>(1</sup> Ethyl Total Di-TPHg Depth Benzene Toluene Benzene Xylenes MTBE тва ETBE TAME Naphthalene Isopropyl ether (Feet) (ug/kg) (ug/kg) (ug/kg) (ug/kg) . (ug/kg) (ug/kg) (ug/kg) (ug/kg) (ug/kg) (ug/kg) (ug/kg) <190 5 2130 <190 <190 <190 <370 6370 <190 <190 <190 <190 33.8<sup>(2)</sup> 102<sup>(2)</sup> 10 3180 <190 <190 <380 19300 <190 <190 <190 <190 15 70200 <440 <440 321<sup>(2)</sup> <890 3800 12900 <440 <440 <440 <440 5 <94 <4.7 <4.7 <4.7 <9.4 <4.7 <38 <4.7 <4.7 <4.7 <4.7 10 21400 <230 <230 <230 <460 <230 <1900 <230 <230 <230 <230 15 117000 <2400 <2400 <2400 <4700 <2400 <19000 <2400 <2400 <2400 <2400 407<sup>(2)</sup> 1640<sup>(2)</sup> 486<sup>(2)</sup> 20 195000 <2200 <4300 <2200 <17000 <2200 <2200 <2200 21.1<sup>(2)</sup> 25 426 16.6 <4.9 <4.9 <9.7 <4.9 <4.9 <4.9 <4.9 <4.9 30 <4.9 <4.9 <9.8 1<sup>(2)</sup> <4.9 <4.9 <4.9 <98 <4.9 <39 <4.9 5 2560<sup>(2</sup> <220 <220 <220 <450 <220 5560 <220 <220 <220 <220 2220<sup>(2)</sup> 10 <220 <220 <220 <450 <220 2980 <220 <220 <220 <220 15 640000 **307**<sup>(2)</sup> <2300 3540 <4600 2460 <18000 <2300 <2300 4010 <2300 20 150000 <2200 <2200 532<sup>(2)</sup> <4300 2580 8210<sup>(2)</sup> <2200 <2200 <2200 <2200 546<sup>(2)</sup> 6490<sup>(2)</sup> 21 386000 <2300 9110 11500 8200 <2300 <2300 5830 <2300 14.5<sup>(2)</sup> 30 97 <4.8 <4.8 <4.8 <9.6 40.2 <4.8 <4.8 <4.8 <4.8

2080

<25000

<24000

19700<sup>()</sup>

19700<sup>(i</sup>

1090

47.4

2790

<200000

<190000

<190000

21100

816<sup>(2)</sup>

20.9<sup>(2</sup>

<250

<25000

<24000

<23000

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49000

107000

<46000

<480

<490

<9.3

#### TABLE 1 Summary of Soil Sample Analysis

Date

Sampled

6/27/2016

6/27/2016

6/27/2016

7/11/2016

7/11/2016

7/11/2016

7/11/2016

7/11/2016

7/11/2016

7/11/2016

7/11/2016

7/11/2016

7/11/2016

7/11/2016

7/11/2016

7/5/2016

7/5/2016

7/5/2016

7/5/2016

7/5/2016

7/5/2016

7/5/2016

4390<sup>(2</sup>

<490000

1150000

259000

17200

<4900

73.9(2

5

10

15

20

25

30

35

<250

<25000

15400<sup>(2</sup>

3650<sup>(2</sup>

<240

<240

0.47(2)

<250

<25000

<24000

<23000

<240

<240

<4.6

7/26/2016

<250

<25000

20300<sup>(2)</sup>

3290<sup>(2</sup>

<240

<240

<4.6

Quik Stop No. 51 CCI Project No. 12216-1

#### 7/26/2016

#### TABLE 1 (Cont.)

#### Summary of Soil Sample Analysis Quik Stop No. 51 - 3130 35th Avenue, Oakland, CA

Sample Number	Date Sampled	Sample <sup>(1)</sup> Depth (Feet)	TPHg (ug/kg)	Benzene (ug/kg)	Toluene (ug/kg)	Ethyl Benzene (ug/kg)	Total Xylenes (ug/kg)	MTBE (ug/kg)	TBA (ug/kg)	ETBE (ug/kg)	TAME (ug/kg)	Naphthalene (ug/kg)	Di- Isopropyl ether (ug/kg)
B-5-5	6/27/2016	5	4440	<180	<180	<180	<360	2020	616 <sup>(2)</sup>	<180	<180	<180	<180
B-5-10	6/27/2016	10	67.6 <sup>(2)</sup>	<5	<5	<5	<10	2 <sup>(2)</sup>	<40	<5	<5	<5	<5
B-5-15	6/27/2016	15	1050000	3530 <sup>(2)</sup>	<6600	21800	22300	2830 <sup>(2)</sup>	<53000	<6600	<6600	4120 <sup>(2)</sup>	<6600
B-6-5	7/5/2016	5	115	0.74 <sup>(2)</sup>	<4.6	1.3 <sup>(2)</sup>	3.3 <sup>(2)</sup>	<b>0.98</b> <sup>(2)</sup>	<37	<4.6	<4.6	<4.6	<4.6
B-6-10	7/5/2016	10	<95	<4.7	<4.7	<4.7	<9.5	1.3 <sup>(2)</sup>	<38	<4.7	<4.7	<4.7	<4.7
B-6-15	7/5/2016	15	235	<5	<5	<5	<10	1.0 <sup>(2)</sup>	<40	<5	<5	<5	<5
B-6-20	7/5/2016	20	425000 <sup>(2)</sup>	2780 <sup>(2)</sup>	<23000	6380 <sup>(2)</sup>	6120 <sup>(2)</sup>	<23000	<180000	<23000	<23000	<23000	<23000
B-6-25	7/5/2016	25	16100	112 <sup>(2)</sup>	<230	<230	<460	<230	<1800	<230	<230	<230	<230
B-6-30	7/5/2016	30	<95	<4.8	<4.8	<4.8	<9.5	8.9 <sup>(2)</sup>	<38	<4.8	<4.8	<4.8	<4.8

#### Foot Notes:

Measured from ground surface 1

2 Indicates an estimated value below the laboratory reporting limit

Indicates analyte found in associated method blank 3

TPHg Total petroleum hydrocarbons as gasoline Methyl-tert-butyl ether

MTBE

Tert Butyl Alcohol TBA

ETBE

Ethyl tert-Butyl Ether Tert-Amyl Methyl Ether Milligrams per kilogram TAME

mg/kg

Micrograms per kilogram ug/kg

ND Not Detected

Result below laboratory detection limit <

Page 2

Quik Stop No. 51 CCI Project No. 12216-1

#### TABLE 2

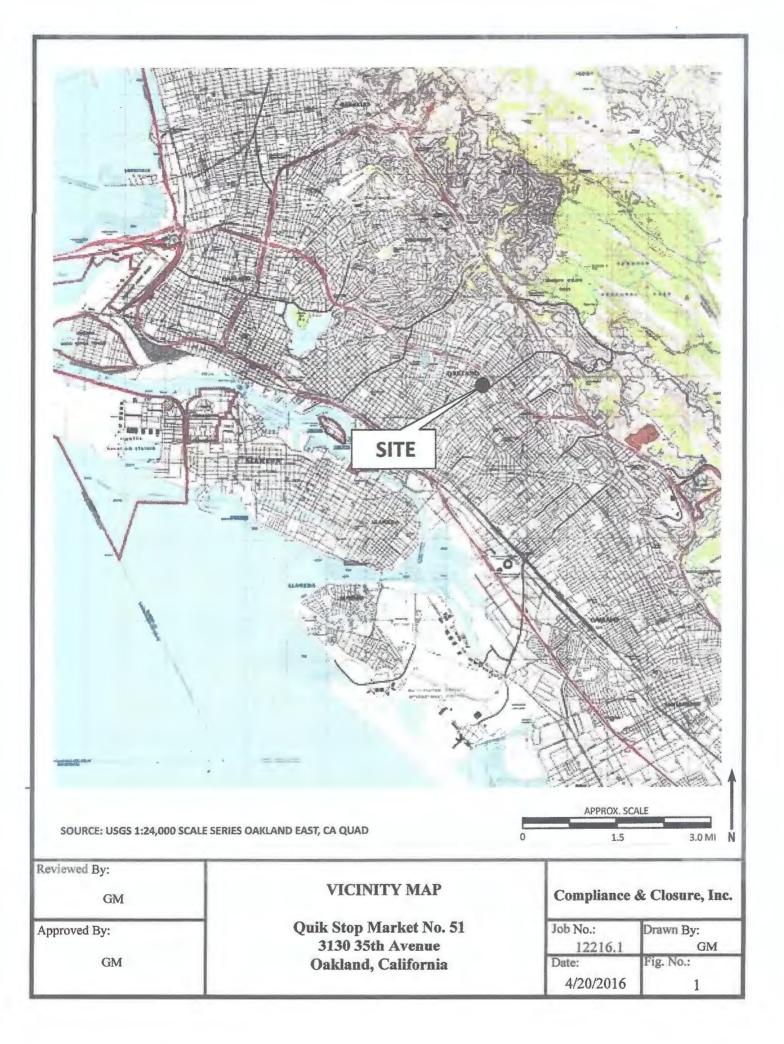
#### Summary of On-Site Grab Water Samples Quik Stop No. 51 - 3130 35th Avenue, Oakland, CA

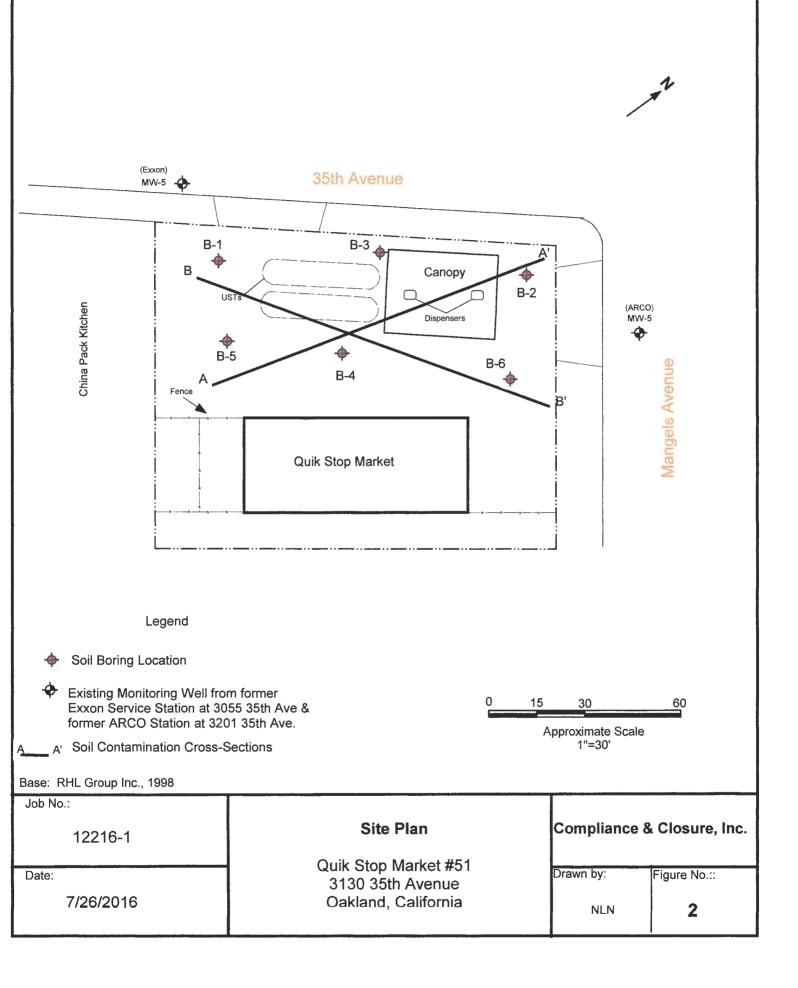
Sample Number	Date Sampled	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	TBA (ug/L)	DIPE (ug/L)	TAME (ug/L)	ETBE (ug/L)	Naphthalene (ug/L)
B-1-W	7/12/2016	71100 <sup>(2)</sup>	<b>233</b> <sup>(1,2)</sup>	3.7	<b>254</b> <sup>(1,2)</sup>	133	<b>25100</b> <sup>(2)</sup>	<b>39000<sup>(2)</sup></b>	<2	16.7	<2	5.9
		(2)	(2)	(2)	(2)	(2)					4 4	(2)
B-2-W	7/12/2016	<b>21000</b> <sup>(2)</sup>	1280 <sup>(2)</sup>	154 <sup>(2)</sup>	575 <sup>(2)</sup>	2430 <sup>(2)</sup>	2.7	51.6	<2	<2	<2	123 <sup>(2)</sup>
B-3-W	7/12/2016	72500	1140	4.4	1340	784 <sup>(1)</sup>	21100	17900	<b>0.28</b> <sup>(1)</sup>	16.5	<2	<2500
B-4-W	7/5/2016	40800	511	<200	141 <sup>(1)</sup>	316 <sup>(1)</sup>	14600	20000	<400	<400	<400	<1000
B-5-W	7/12/2016	183000	<b>404</b> <sup>(1)</sup>	5.5	613 <sup>(1)</sup>	551 <sup>(1)</sup>	70100	129000	<b>0.93</b> <sup>(1)</sup>	42.1	<b>0.39</b> <sup>(1)</sup>	12.2
B-W-6	7/5/2016	2790	365	2.9	110	153	52.8	354	<b>0.28</b> <sup>(1)</sup>	<2	<2	4.5 <sup>(1)</sup>

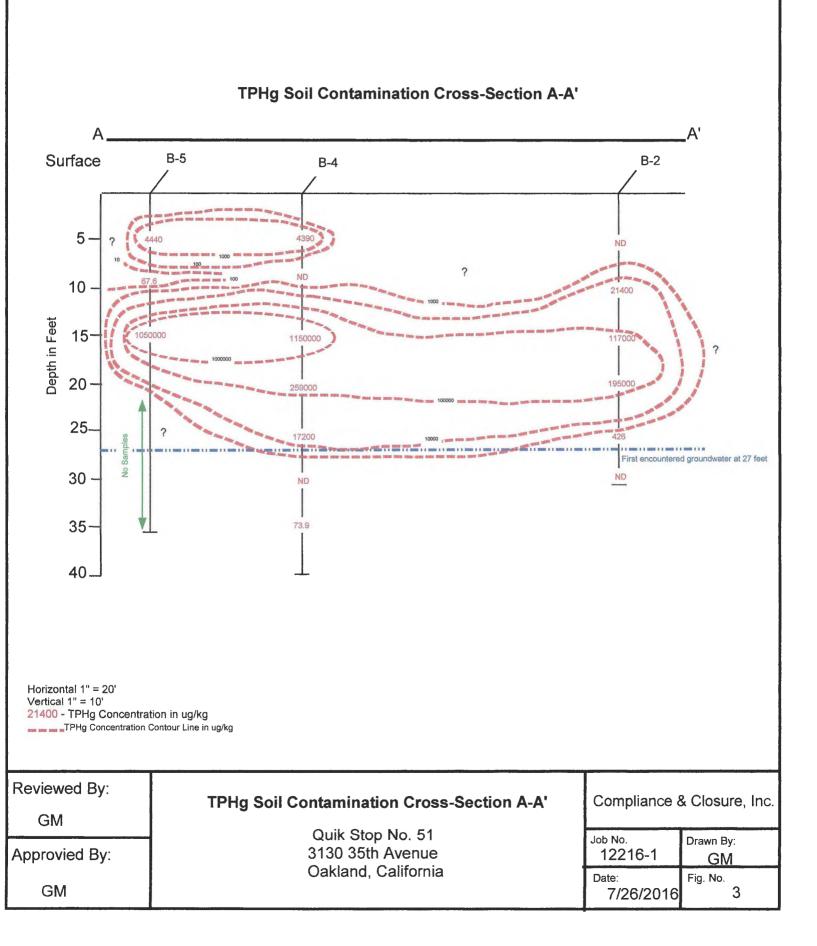
#### Foot Notes

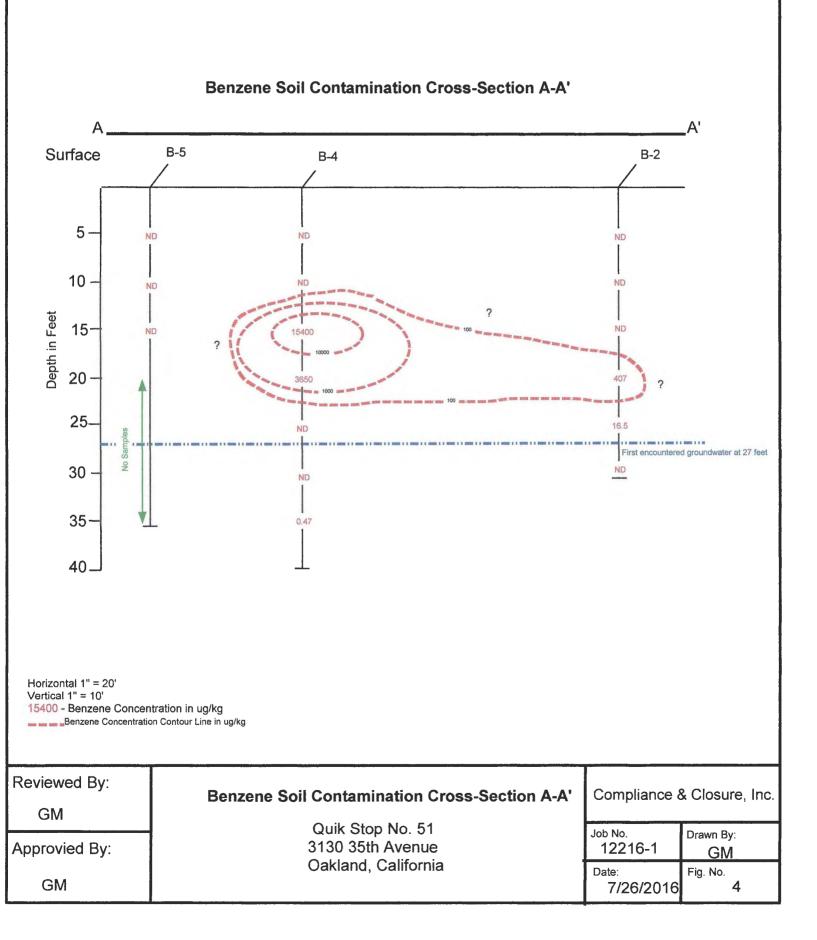
- 1 Indicates an estimated value below laboratory reporting limit
- 2 Indicates analyte found in associated method blank
- TPHg Total petroleum hydrocarbons as gasoline
- MTBE Methyl Tert Butyl Ether
- TBA Tert-Butyl Alcohol
- DIPE Di-Isopropyl ether
- ETBE Ethyl Tert Butyl Ether
- ug/L micrograms per liter
- < Less than laboratory reporting limit

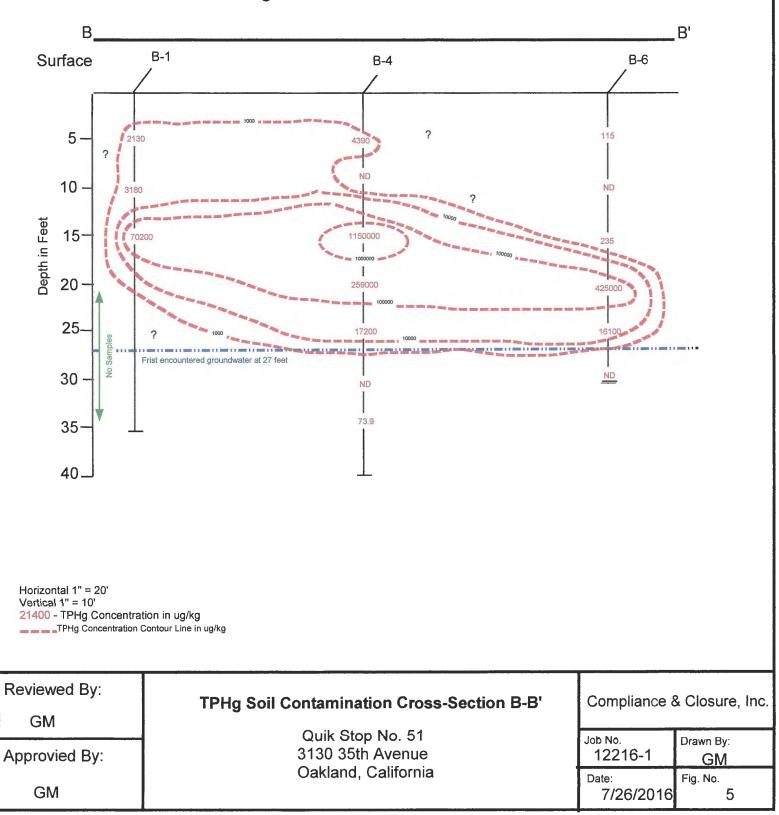
# FIGURES



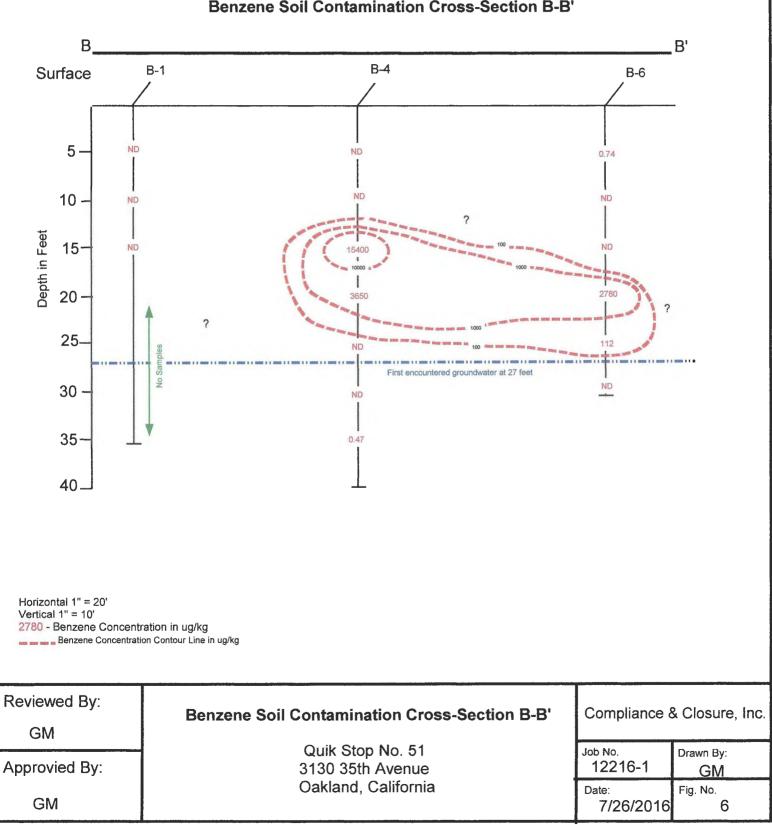








### **TPHg Soil Contamination Cross-Section B-B'**



#### **Benzene Soil Contamination Cross-Section B-B'**

# **APPENDIX A**

**Alameda County Boring Permits** 



399 Elmhurst Street Hayward, CA 94544-1395 Telephone: (510)670-6633 Fax:(510)782-1939

Public Works Agency

Application Approved	l on: 06/03/2016 By jamesy	Permit Numbers: W2016- Permits Valid from 06/07/2016 to 06/08/	
Application Id: Site Location:	1464733093661 3130 35th Avenue	City of Project Site:Oakland	
Project Start Date: Assigned Inspector:	Oakland, CA, 94619 06/07/2016 Contact Lindsay Furuyama at (925) 956-2311 or Li	<b>Completion Date:</b> 06/08/2016 furuyama@groundzonees.com	
Applicant:	Compliance & Closure - Gary Muckey 4115 Blackhawk plaza ciack, Ste 100, Danville, CA	<b>Phone:</b> 925-648-2008	
Property Owner:	Frederick D. & Geraldine G Emory Trust 257 Clearview Ct, Roseville, CA 95745	Phone:	
Client:	Quik Stop Markets 4567 Enterprise St., Fremont, CA 94538	Phone: 510-657-8500	
Contact:	Gary Muckey	Phone: 925-292-4565 Cell: 925-580-2258	
	_		

	Total Due:	\$265.00
Receipt Number: WR2016-0272		<u>\$265.00</u>
Payer Name : Compliance & Closure, Inc.	Paid By: CHECK	PAID IN FULL

#### Works Requesting Permits:

Borehole(s) for Geo Probes-Sampling 24 to 72 hours only - 6 Boreholes Driller: Cascade Drilling - Lic #: 938110 - Method: DP

Work Total: \$265.00

Specificatio	ons				
Permit	Issued Dt	Expire Dt	#	Hole Diam	Max Depth
Number			Boreholes		
W2016-	06/ <b>03</b> /2016	09/05/2016	6	2.50 in.	20.00 ft
0392					

#### **Specific Work Permit Conditions**

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

4. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

5. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled,

#### Alameda County Public Works Agency - Water Resources Well Permit

properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

6. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

#### 7. NOTE:

Under California laws, the owner/operator are responsible for reporting the contamination to the governmental regulatory agencies under Section 25295(a). The owner/operator is liable for civil penalties under Section 25299(a)(4) and criminal penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(b)(4) for knowing failure to ensure compliance with the law by the operator. These penalty provisions do not apply to a potential buyer.

8. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

9. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

# **APPENDIX B**

**Boring Logs** 

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## STANDARD SYMBOLS

## Legend

- Soil Sample Location
- Soil Sample Collected for Laboratory Analysis
- No Soil Recovery
- Disturbed or Bag Soil Sample
- First Encountered Water Level
- V Piezometric Ground Water Level

#### Unified Soil Classification System

	Major Divisions		Group Typical Names	
oils is size	5	Clean Gravels	GW Well-graded gravels, gravel-sand mixtures, little of no fines	
SO si lis size	rels of fracti aller size	Gra	GP Poorly graded gravels, gravel sand mixtures, little or no fines	
ained Soil of material is 200 sleve size	Gravels more than half of coarse fraction is smaller than no. 4 sleve size	Gravels with fines	GM Sitly gravels, garvel-sand-silt mixtures	
<b>Grained</b> lalf of mate lo. 200 slev	Se the second of	Grav	GC Claryey gravels, gravel-sand-clay mixtures	
D Haf	<u>Б</u> <u>т</u>	Clean Sands	SW Well-graded sands, gravelly sands, little or no fines	
than than	nds of fracti aller size	Cie Sar	SP Poorly graded sand, gravelly sands; little or no fines	
Coarse-Gr More than half arger than no.	Sands more than half of coarse fraction is smaller than no. 4 sleve size	Sands with fines	SM Silty sands, sandy silt mixtures	
ŭ≅⊑	si t isi si t isi	Sai w fin	SC Clayey snads, sand-clay mixtures	
Soils ateriat 200		Ţ	ML Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, or clayey silts with slight plasticity	
	Clays	Low Liquid Limit	CL Inorganic clays of low to medium plasticity, gravelly clays, sandy cla sitly clays, lean clays	y:
linec alf of t naqn n size		Lc.	CL Organic silts and organic silty clays of low plasticity	
Te-Grained ore than half of n smaller thagn n sleve size	and	lid	MH Inorganic silts, micaceous or diatomeaceous fine sandy or sitty soils elastic sitts	
smal s	Silts	High Liquid Limit	CH Inorganic clays of high plasticity, fat clays	
Fir s mo	0)	Ξ	CH Organic clays of medium to high plasticity, organic silts	
	High Organic Soils	Pt Peat and other highly organic soils		

#### NOTES:

- 1. Boundary Classification: Soil possessing characteristics of two groups are designated by combinations of group symbols. For example, GW-GC, well-graded gravel-sand mixture with clay binder
- 2. All sieve sizes on this chart are U.S. Standard
- 3. The terms "silt" and "clay" ard used respectively to distinguish materials exhibiting lower plasticity from those with higher plasticity .
- 4. For a complete description of the Unified Soil Classification System, see Technical Memorandum No. 3-357, prepared for Office Chief Engineers, by Waterways Equipment Station, Vicksburg Mississippi, March 1953. (See also Data Sheet 17.)

# Exploratory Boring Log

 Project No. 12216-1
 BORING NO. B-1

 Logged by: GM
 Date: 6/27/2016 to 7/12/2016

 Client: Quik Stop # 51
 Element of the state of the sta

Location: 3130 35th Avenue, Oakland, CA Permit: W2016-0392 Water Levels: 1st Enc: 27 feet Static: N/A feet **Drilling Method:** Flight Auger Boring Diameter: 4 " dia. Page 1 of 1

Total Depth: 35' Screen Length: N/A' Blank Length: N/A' Top Sand Pack: N/A Grout Seal: 35'

Vault Box N/A MSL N/A

Casing Depth: N/A' Slot Size: N/A

Top Bentonite: N/A

Sand Pack: N/A

Sample No.	PID (PPM)	Blow Count	Sample	Depth	Lithology Log	Well Detail/ Backfill
B-1-5	0.0			Fill	Asphalt pavement & baserock CL - Dark grey SILTY CLAY, moist, stiff, massive, medium to high plasticity, no petroleum odor.	
B-1-10	1.2			10	CL/ML - Brown SANDY CLAY to CLAYEY SAND, moist, stiff, 30% fine sand, some iron stains, rare gravel, no petroleum odor.	
B-1-15	305			15 -	SM - yellow-brown CLAYEY SAND, damp to moist, large gravel to 3/4 inch in diameter abundant fine to coarse sand, noticable petroleum odor.	
	52	No samples collected		20 -	Rocky area, no recovery	
		No		25 -	CL - Orange to grey-brown SANDY CLAY, very moist, very stiff to hard, 20% iron stains, slight petroleum odor. Groundwater at 27 feet	
				30 -	CL- Grey-brown CLAY, moist, stiff, high plasticity, < 10% fine sand, no petroleum odor.	
				35	CL- Grey-brown CLAY, moist, stiff, high plasticity, < 10% fine sand, no petroleum odor.	
					Bottom at 35 feet	
				40 -	Reviewed by PG	

# Exploratory Boring Log

Project No. 12216-1 Logged by: GM Client: Quik Stop # 51 BORING NO. B-2 Date: 7/11/2016

Location: 3130 35th Avenue, Oakland, CA Permit: W2016-0392 Water Levels: 1st Enc: 26 feet Static: 17.5 feet

e e

**Drilling Method:** GeoProbe Boring Diameter: 3 " dia. Page 1 of 1

Total Depth: 30' Screen Length: N/A' Blank Length: N/A' Top Sand Pack: N/A Grout Seal: 30'

Sand Pack: N/A Top Bentonite: N/A Vault Box N/A MSL N/A

Casing Depth: N/A' Slot Size: N/A

Sample No.	PID (PPM)	Blow Count	Samp	Depth	Lithology Log	Well Detail/ Backfill
B-2-5	1.0			Fill Journ	Concrete pavement & baserock CL - Yellow-brown CLAY, moist, stiff, medium to high plasticity, no petroleum odor.	
B-2-10	10			10	SP - Mottled Grey-brown CLAYEY SAND with rock fragments, hard, moist. no product odor.	
B-2-15	11			15 -	CL- Mottled grey-brown SANDY CLAY, moist, stiff, slight petro odor. Static water level around 17.5 feet	
B-2-20	231			20 -	CL/SC - Mottled grey-brown SANDY CLAY TO CLAYEY SAND, moist, very stiff, 30% fine to coarse sand, some iron stains, moderated product odor.	
B-2-25	37	⊽		25 -	CL- Mottled grey-brown CLAY, moist, very stiff, high plasticity, massive < 10% fine sand, no petroleum odor. Groundwater at 26 feet	
B-2-30	0.5			30 -	Dense clay at 30 feet, high plasticity. Bottom at 30 feet	
				40	Reviewed by PG	

# Exploratory Boring Log

Project No. 12216-1 Logged by: GM Client: Quik Stop # 51

BORING NO. B-3 Date: 7/11/2016

Location: 3130 35th Avenue, Oakland, CA Permit: W2016-0392 Water Levels: 1st Enc: 26 feet Static: 16.5 feet

#### Drilling Method: GeoProbe Boring Diameter: 3 " dia.

Page 1 of 1

Casing Depth: N/A'

Slot Size: N/A

Sand Pack: N/A

Top Bentonite: N/A

Total Depth: 38' Screen Length: N/A' Blank Length: N/A' Top Sand Pack: N/A Grout Seal: 38'

Vault Box N/A MSL N/A 

Sample No.	PID (PPM)	Blow Count	Sample	Depth	Lithology Log	Well Detail/ Backfill
				Fill	Concrete pavement & baserock	
B-3-5	0.1			Hand Auger	CL - Grey-brown CLAY, moist, stiff, medium to high plasticity, no petroleum odor.	
B-3-10	0.0			10	SC - Mottled Grey-brown CLAYEY SAND with rock fragments, hard, moist. no product odor.	
					SP- Grey SILTY SAND, damp, hard, 70% fine to coarse sand, 5% rock fragments to 1/2", no petroleum odor.	
B-3-15 Static water le	113 evel arc	und 16.5	feet	15 -	SP- Grey SILTY SAND with gravel, moist, hard, fine to coarse sand with 1/2" gravel moderate product odor.	
B-3-20	1340			20 -	SC - Mottled grey-brown SANDY CLAY TO CLAYEY SAND, moist, very stiff, 30% fine to coarse sand, some iron stains, moderated product odor.	
B-3-25	2.0			25 -	CL- Mottled grey-brown CLAY, moist, very stiff, high plasticity, massive < 10% fine sand, no petroleum odor.	
		V			Groundwater at 27 feet	
B-3-30	0.7	ted		30 -	CL- Mottled grey-brown CLAY, moist, very stiff, high plasticity, massive < 10% fine sand, no petroleum odor.	
	0.0	No samples collected		35 -	SM - Brown SILTY SAND, very moist, hard, 15% iron stains, fine to coarse sand. no petroleum odor.	-
	0.0	No		- 40 -	CL- Dense CLAY at 38 feet, high plasticity. Bottom at 38 feet	
					Reviewed by PG	

Location: 3130 35th Avenue, Oakland, CA

Water Levels: 1st Enc: 32 feet Static: 23 feet

BORING NO. B-4

Date: 6/21/2016

Project No. 12216-1

Client: Quik Stop # 51

Permit: W2016-0392

Logged by: GM

# Exploratory Boring Log

Drilling Method: Hollow Stem Boring Diameter: 8 " dia. Page 1 of 1

Total Depth: 40' Screen Length: N/A' Blank Length: N/A' Top Sand Pack: N/A Grout Seal: 40'

Casing Depth: N/A' Slot Size: N/A Sand Pack: N/A Top Bentonite: N/A Vault Box N/A MSL N/A

Sample No.	PID (PPM)	Blow Count	Sample	Depth	Lithology Log	Well Detail/ Backfill
				Fill	Asphalt pavement & baserock	
B-4-5	0.2			- 5	CL - Grey-olive grey, SILTY CLAY, moist, stiff, medium to high plasticity, no petroleum odor.	
B-4-10	81			10	CL- Orange-brown SILTY CLAY, moist, hard, 25-30% fine to medium grain sand, slight petroleum odor, < 1% rock fragments to 1/4" diameter.	
B-4-15	498			15 -	Product odor around 15 feet SC/CL - Grey-brown SANDY CLAY TO CLAYEY SAND, moist, very stiff	
B-4-20	86			20 -	10% iron stains noted.	
B-4-25	6.5			25 -	Static water level around 23 feet CL - Orange to grey-brown SANDY CLAY, very moist, very stiff to hard, 20% iron stains, slight petroleum odor.	
B-4-30	4.5			30 -	CL- Grey-brown CLAY, moist, stiff, high plasticity, < 10% fine sand, no petroleum odor. Groundwater around 32 feet	
B-4-35	0.2			35 -	CL- Grey-brown CLAY, moist, stiff, high plasticity, < 10% fine sand, no petroleum odor.	
				40 -	Bottom at 40 feet	1
					Reviewed by PG	

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# Exploratory Boring Log

 Project No. 12216-1
 BORING NO. B-5

 Logged by: GM
 Date: 6/27/2016 to 7/12/2016

 Client: Quik Stop # 51
 Client: Client:

Location: 3130 35th Avenue, Oakland, CA Permit: W2016-0392 Water Levels: 1st Enc: 27 feet Static: N/A feet

ole

**Drilling Method:** Flight Auger Boring Diameter: 4 " dia. Page 1 of 1

Total Depth: 35' Screen Length: N/A' Blank Length: N/A' Top Sand Pack: N/A Grout Seal: 35'

Sand Pack: N/A Top Bentonite: N/A Vault Box N/A MSL N/A

Casing Depth: N/A'

Slot Size: N/A

Sample No.	PID (PPM)	Blow Count	Samp	Depth	Lithology Log	Well Detail/ Backfill
				Fill	Asphalt pavement & baserock	
B-5-5	0.0		20055	- 5	CL - Mottled grey-brown SANDY CLAY, very moist, stiff, massive, medium plasticity, no petroleum odor.	
B-5-10	24			10	CL/SM - Yellow-brown SANDY CLAY to CLAYEY SAND, moist, very stiff, some rock fragments, fine to coarse sand with 1/4" gravel, no petroleum odor.	
B-5-15	118			15 -	SM - yellow-brown CLAYEY SAND, damp to moist, large gravel to 3/4 inch in diameter abundant fine to coarse sand, noticable petroleum odor. Some iron stains present.	
	96			20 -	Rocky area, no recovery	
		V		25 -	CL - Orange to grey-brown SANDY CLAY, very moist, very stiff to hard, 20% iron stains, slight petroleum odor. Groundwater at 27 feet	
		es collected		30	CL- Grey-brown CLAY, moist, stiff, high plasticity, < 10% fine sand, no petroleum odor.	
		No samples		35 -	CL- Grey-brown CLAY, moist, stiff, high plasticity, < 10% fine sand, no petroleum odor.	
				- 30	Bottom at 35 feet	
				40 -		
					Reviewed by PG	

# Exploratory Boring Log

Project No. 12216-1 BORING NO. B-6 Logged by: GM Date: 7/5/2016 Client: Quik Stop # 51

Location: 3130 35th Avenue, Oakland, CA Permit: W2016-0392 Water Levels: 1st Enc: 26 feet Static: 22.7 feet

ole

Drilling Method: Hollow Stem Boring Diameter: 8 " dia.

Page 1 of 1

Total Depth: 30' Screen Length: N/A' Blank Length: N/A' Top Sand Pack: N/A Grout Seal: 30'

Slot Size: N/A Sand Pack: N/A Top Bentonite: N/A Vault Box N/A MSL N/A

Casing Depth: N/A'

Sample No.	PID (PPM)	Blow Count	Sample	Depth	Lithology Log	Well Detail/ Backfill
				Fill	Concrete pavement & baserock	
B-6-5	0.0				CL - Grey to black SILTY CLAY, moist, stiff, medium to high plasticity, no petroleum odor.	
B-6-10	0.0			10	SC - Very hard drilling Rock with CLAYEY SAND, multi-colored, red, brown, greenish, hard, no petroleum odor.	
B-6-15	15			15 -	Hard drilling around 15 feet SC - Grey-brown CLAYEY SAND with rock fragments (sandstone), moist, hard,	
B-6-20	127			20 -	fine to coarse sand with 1/2 inch green, red, yellow rock fragments with iron stains, moderate product odor.	
B-6-25	5	V			CL- Grey-brown SANDY CLAY, moist, very stiff, 30% fine to coarse sand , no petroleum odor. Groundwater at 26 feet	
B-6-30	3			30 -	Dense massive clay at 30 feet, high plasticity Bottom at 30 feet	
				35 -		
				40 -		
					Reviewed by PG	

# **APPENDIX C**

Laboratory Report



# ACCUTEST Northern California

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY. 07/11/16

e-Hardcopy 2.0 Automated Report

SGS

# **Technical Report for**

### **Quick Stop Markets**

T1000008568-CCCAD:Quik Stop #51, Oakland, CA

12216-1

SGS Accutest Job Number: C46337



Sampling Date: 06/27/16

**Report to:** 

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

**ATTN: Gary Mulkey** 

#### Total number of pages in report: 23



Jung. Much

James J. Rhudy Lab Director

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.

Client Service contact: Elvin Kumar 408-588-0200

Certifications: CA (ELAP 2910) AK (UST-092) AZ (AZ0762) NV (CA00150) OR (CA300006) WA (C925) DoD ELAP (L-A-B L2242)

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Northern California • 2105 Lundy Ave. • San Jose, CA 95131 • tel: 408-588-0200 • fax: 408-588-0201 • http://www.accutest.com



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# **Sample Summary**

Quick Stop Markets

Job No: C46337

T10000008568-CCCAD:Quik Stop #51, Oakland, CA Project No: 12216-1

Sample Number	Collected Date	Time By	Received	Matr Code		Client Sample ID
C46337-1	06/27/16	10:30 GM	06/28/16	SO	Soil	B-1-5
C46337-2	06/27/16	10:40 GM	06/28/16	SO	Soil	B-1-10
C46337-3	06/27/16	10:50 GM	06/28/16	SO	Soil	B-1-15
C46337-4	06/27/16	11:45 GM	06/28/16	SO	Soil	B-5-5
C46337-5	06/27/16	12:05 GM	06/28/16	SO	Soil	B-5-10
C46337-6	06/27/16	12:25 GM	06/28/16	SO	Soil	B-5-15

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



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C46337

# Summary of Hits

Job Number:	C46337
Account:	Quick Stop Markets
Project:	T10000008568-CCCAD: Quik Stop #51, Oakland, CA
Collected:	06/27/16

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
C46337-1	B-1-5					
Tert Butyl Alcoh TPH-GRO (C6-C		6370 2130 J	1500 3700	370 1900	ug/kg ug/kg	SW846 8260B SW846 8260B
C46337-2	<b>B-1-10</b>					
Ethylbenzene Methyl Tert Buty Tert Butyl Alcoh TPH-GRO (C6-C	ol	33.8 J 102 J 19300 3180 J	190 190 1500 3800	19 38 380 1900	ug/kg ug/kg ug/kg ug/kg	SW846 8260B SW846 8260B SW846 8260B SW846 8260B
C46337-3	B-1-15					
Ethylbenzene Methyl Tert Buty Tert Butyl Alcoh TPH-GRO (C6-C	ol	321 J 3800 12900 70200	440 440 3600 8900	44 89 890 4400	ug/kg ug/kg ug/kg ug/kg	SW846 8260B SW846 8260B SW846 8260B SW846 8260B
C46337-4	B-5-5					
Methyl Tert Buty Tert Butyl Alcoh TPH-GRO (C6-C	ol	2020 616 J 4440	180 1400 3600	36 360 1800	ug/kg ug/kg ug/kg	SW846 8260B SW846 8260B SW846 8260B
C46337-5	B-5-10					
Methyl Tert Buty TPH-GRO (C6-C		2.0 J 67.6 J	5.0 100	1.0 50	ug/kg ug/kg	SW846 8260B SW846 8260B
C46337-6	B-5-15					
Benzene Ethylbenzene Xylene (total) Methyl Tert Buty Naphthalene TPH-GRO (C6-C		3530 J 21800 22300 2830 J 4120 J 1050000	6600 6600 13000 6600 6600 130000	660 660 1300 1300 1300 66000	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	SW846 8260B SW846 8260B SW846 8260B SW846 8260B SW846 8260B SW846 8260B

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Sample Results

Report of Analysis



<b>Report of Analysis</b>							
Client San Lab Sam Matrix: Method: Project:	SO - So SW846	oil 8260B	CCCAD:Quik	Stop #51, 9	Oakland, CA		06/27/16 06/28/16 n/a <sup>a</sup>
Run #1 Run #2	<b>File ID</b> L49798.D	<b>DF</b> 1	<b>Analyzed</b> 06/28/16	By JT	<b>Prep Date</b> n/a	<b>Prep Batcl</b> n/a	h Analytical Batch VL1492
Run #1 Run #2	<b>Initial Weight</b> 6.68 g	<b>Final</b> 5.0 ml	olume	Methano 100 ul	l Aliquot		

#### **BTEX, Oxygenates**

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	190	19	ug/kg	
108-88-3	Toluene	ND	190	19	ug/kg	
100-41-4	Ethylbenzene	ND	190	19	ug/kg	
1330-20-7	Xylene (total)	ND	370	37	ug/kg	
108-20-3	Di-Isopropyl ether	ND	190	19	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	190	19	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	190	37	ug/kg	
91-20-3	Naphthalene	ND	190	37	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	190	19	ug/kg	
75-65-0	Tert Butyl Alcohol	6370	1500	370	ug/kg	
	TPH-GRO (C6-C10)	2130	3700	1900	ug/kg	J
<i></i>					•	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
1868-53-7	Dibromofluoromethane	102%		72-1	40%	
2037-26-5	Toluene-D8	96%	87-113%			
460-00-4	4-Bromofluorobenzene	98%		81-1		
400-00-4	4-Diomonuoi obenzene	9070		01-1	1.5 70	

(a) All results reported on a wet weight basis.

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

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			Rep	ort of A	Analysis		Page 1 of 1
Client San Lab Sam Matrix: Method: Project:	ple ID: C4633 SO - S SW846	7-2 oil 5 8260B	CCCAD:Quik	Stop #51, 0	Oakland, CA	Date Sampled: Date Received: Percent Solids:	
Run #1 Run #2	<b>File ID</b> L49799.D	<b>DF</b> 1	<b>Analyzed</b> 06/28/16	By JT	<b>Prep Date</b> n/a	<b>Prep Batc</b> n/a	h Analytical Batch VL1492
Run #1 Run #2	<b>Initial Weight</b> 6.59 g	<b>Final V</b> 5.0 ml	Volume	<b>Methano</b> 100 ul	l Aliquot		

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	190	19	ug/kg	
108-88-3	Toluene	ND	190	19	ug/kg	
100-41-4	Ethylbenzene	33.8	190	19	ug/kg	J
1330-20-7	Xylene (total)	ND	380	38	ug/kg	
108-20-3	Di-Isopropyl ether	ND	190	19	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	190	19	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	102	190	38	ug/kg	J
91-20-3	Naphthalene	ND	190	38	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	190	19	ug/kg	
75-65-0	Tert Butyl Alcohol	19300	1500	380	ug/kg	
	TPH-GRO (C6-C10)	3180	3800	1900	ug/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	ite	
CAS NO.	Surrogate Recoveries	Kull# 1	Kull# 2		115	
1868-53-7	Dibromofluoromethane	100%		72-1	40%	
2037-26-5	Toluene-D8	96%		87-1	13%	
460-00-4	4-Bromofluorobenzene	100%		81-1	15%	

(a) All results reported on a wet weight basis.

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



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C46337

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			Rep	ort of A	Analysis		Page 1 of 1
Client Sa	mple ID: B-1-15	5					
Lab Sam	ple ID: C4633	37-3				Date Sampled:	06/27/16
Matrix:	SO - S	Soil				Date Received:	06/28/16
Method:	SW84	6 8260B				Percent Solids:	n/a <sup>a</sup>
Project:	T1000	0008568-0	CCCAD:Quik	Stop #51, 0	Dakland, CA		
	File ID	DF	Analyzed	By	Prep Date	Prep Batc	h Analytical Batch
Run #1	L49820.D	1	06/29/16	JT	n/a	n/a	VL1493
Run #2							
	Initial Weight	Final V	olume	Methanol	Aliquot		
Run #1	7.04 g	5.0 ml		40.0 ul	-		
Run #2	2						

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7 108-20-3 637-92-3 1634-04-4 91-20-3 994-05-8 75-65-0	Benzene Toluene Ethylbenzene Xylene (total) Di-Isopropyl ether Ethyl tert-Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether Tert Butyl Alcohol	ND ND 321 ND ND 3800 ND ND 12900	440 440 890 440 440 440 440 440 440 3600	44 44 89 44 44 89 89 89 44 890	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	J
CAS No.	TPH-GRO (C6-C10) Surrogate Recoveries	70200 Run# 1	8900 Run# 2	4400 Lim		
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	103% 97% 97%		72-1 87-1 81-1	13%	

(a) All results reported on a wet weight basis.

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



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			Rep	ort of A	Analysis		Page 1 of 1
Client San Lab Samj Matrix: Method: Project:	SO - S SW840	oil 5 8260B	CCCAD:Quik	Stop #51, (	Dakland, CA	···· <b>I</b>	06/27/16 06/28/16 n/a <sup>a</sup>
Run #1 Run #2	<b>File ID</b> L49817.D	<b>DF</b> 1	<b>Analyzed</b> 06/29/16	By JT	<b>Prep Date</b> n/a	<b>Prep Batch</b> n/a	Analytical Batch VL1493
Run #1 Run #2	<b>Initial Weight</b> 6.90 g	<b>Final V</b> 5.0 ml	Volume	<b>Methanol</b> 100 ul	Aliquot		

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3	Benzene Toluene	ND ND	180 180	18 18	ug/kg ug/kg	
100-41-4 1330-20-7	Ethylbenzene Xylene (total)	ND ND	180 360	18 36	ug/kg ug/kg	
108-20-3 637-92-3 1634-04-4	Di-Isopropyl ether Ethyl tert-Butyl Ether Methyl Tert Butyl Ether	ND ND 2020	180 180 180	18 18 36	ug/kg ug/kg ug/kg	
91-20-3 994-05-8	Naphthalene Tert-Amyl Methyl Ether	ND ND	180 180 180	36 18	ug/kg ug/kg	
75-65-0	Tert Butyl Alcohol TPH-GRO (C6-C10)	616 4440	1400 3600	360 1800	ug/kg ug/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	97% 98% 96%			40% 13% 15%	

(a) All results reported on a wet weight basis.

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



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Client Sa Lab Samj Matrix:	-	337-5			···· <b>I</b> ··· ·	5/27/16 5/28/16	
Method:	SW8	46 8260B				Percent Solids: n/	'a <sup>a</sup>
Project:	T100	00008568-0	CCCAD:Quik St	op #51, C	Dakland, CA		
	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L49791.D	1	06/28/16	JT	n/a	n/a	VL1492
Run #2							
	Initial Weigl	nt					
Run #1	5.02 g						
Run #2	-						

RL

5.0

MDL

0.50

Units

ug/kg

Q

**Report of Analysis** 

### CAS No. Compound 71-43-2 Benzene 108-88-3 Toluene

108-88-3	Toluene	ND	5.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	2.0	5.0	1.0	ug/kg	J
91-20-3	Naphthalene	ND	5.0	1.0	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	40	10	ug/kg	
	TPH-GRO (C6-C10)	67.6	100	50	ug/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
1868-53-7	Dibromofluoromethane	99%		72-14	-0%	
2037-26-5	Toluene-D8	98%		87-11	3%	
460-00-4	4-Bromofluorobenzene	95%		81-11	5%	

Result

ND

(a) All results reported on a wet weight basis.

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



Page 1 of 1



				Rep	ort of A	Analysis		Page 1 of 1
Client Sa	mple ID:	B-5-15						
Lab Sam	ple ID:	C46337	-6				Date Sampled:	06/27/16
Matrix:		SO - So	il				Date Received:	06/28/16
Method:		SW846	8260B				Percent Solids:	n/a <sup>a</sup>
Project:		T10000	008568-C	CCAD:Quik	Stop #51, C	Dakland, CA		
	File ID		DF	Analyzed	By	Prep Date	Prep Batc	h Analytical Batch
Run #1	L49819	<b>D</b>	1	0.510011.5	TT		. –	
1Xuii #1	L49819	.D	1	06/29/16	JT	n/a	n/a	VL1493
Run #2	L49819	.D	1	06/29/16	JT	n/a	n/a	VL1493
	Initial		I Final V		Methanol		n/a	VL1493

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7 108-20-3 637-92-3 1634-04-4 91-20-3 994-05-8 75-65-0	Benzene Toluene Ethylbenzene Xylene (total) Di-Isopropyl ether Ethyl tert-Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether Tert Butyl Alcohol TPH-GRO (C6-C10)	3530 ND 21800 22300 ND ND 2830 4120 ND ND 1050000	6600 6600 13000 6600 6600 6600 6600 6600	660 660 1300 660 660 1300 1300 660 13000 66000	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	J J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	98% 97% 96%		72-1 87-1 81-1	13%	

(a) All results reported on a wet weight basis.

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



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**Section 4** 

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

• Chain of Custody



Compliance							2/															
Closure, Inc			1	СН	AIN (	OF CI	UST	OD	DY I	REC	COR	ND /	AND		IAL	YSI	S RI	EQL	JES	T.S	1	
	T NAME/SITE	stop Lnd,	# 5] A					S				7-	7	an.		S REO	aues	ted Ted	J.	× /	P.O. #: C 40	6337
SAMPLERS Dany Rmel	(SIGN) (PRI	NT) G	AKY			key		CONTAINERS	SAMPLE TYPE		70x 602,800	012 (SI)	\$012)	601/90 1/5520	./. 2/3							
SAMPLE IDENTIFICATION	DA	ATE	тіме	COMP	GRAB	PRES. USED	ICED	Ñ. NO.	SAMPI			100) 101 101)	100,00 100,001	1915	0100	058657	Ì	z]	/	/	, REMARKS	
\$-1-5		1/16 4			X.	NOUL	X	1	5	K	X					Å	ر ]				Get TPHE for	,4
B-1-10		7/16/10			X		X	1	5	X	X			_		4	<u> </u>		ļ		Gens	
B-1-15		7/11/10			$\frac{X}{X}$		X	1	5 5	X	X X			-	_	$\frac{x}{x}$		_				
B-5-5 B-5-10		7/16 11 1/16 10			<u>*</u> X		X X	1	5	$\frac{\chi}{\chi}$	5		-		+	X			-			
B-5-15	6/2	7/16/2	2.05		$\frac{1}{x}$		X	1	5	X	$\frac{x}{x}$		-	-		X	-		┼──			
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RELINQUISHED BY:	DATE	TIME	RE	ECEN	/ED BY	<i>t:</i>			REC				VARO Jare		TIME				(92: Fax	5) 64 (925	e, CA 94506 18-2008 5) 292-4565 cci-envr.com	
RELINQUISHED BY	DATE	TIME	RE	CEIV	ED BY	LABOR	ATOP	۹Y:	REC	CEIP	r con	NDITI	ON:					PF			ANAGER: Mr. Gary Mulkey	

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### C46337: Chain of Custody Page 1 of 2

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### SGS Accutest Sample Receipt Summary

Job Number: C463	37	Client: COMP	LIANCE & CLOSUF	Project: QUICK STOP #51 OAKLAND,CA					
Date / Time Received: 6/28/2	2016 8:10:00	M Delive	ry Method:	Client	Airbill #'s:		_		
Cooler Temps (Initial/Adjusted	l): <u>#1: (5.9/6</u>	9);							
Cooler Security Y	or N		Y or N	Sample Integrity	- Documentation	Y or N			
1. Custody Seals Present:	•	. COC Present:		1. Sample labels p	present on bottles:				
2. Custody Seals Intact:	□ 4. S	mpl Dates/Time O	К 🔽 🗌	2. Container labeli	ing complete:				
Cooler Temperature	Y or N			3. Sample contain	er label / COC agree:				
1. Temp criteria achieved:				Sample Integrit	v - Condition	Y or N			
2. Therm ID:	IR3;			1. Sample recvd w	-				
3. Cooler media:	Ice (Bag)			2. All containers a	ccounted for:				
4. No. Coolers:	1			3. Condition of sar	mple:	Intact			
Quality Control_Preservation	Y or N	<u>N/A</u>		Sample Integrit	y - Instructions	Y or N N/A			
1. Trip Blank present / cooler:		$\checkmark$		1. Analysis reque	sted is clear:				
2. Trip Blank listed on COC:		$\checkmark$		2. Bottles receive	d for unspecified tests				
3. Samples preserved properly:				3. Sufficient volur	ne recvd for analysis:				
4. VOCs headspace free:				4. Compositing in	structions clear:				
				5. Filtering instruc	ctions clear:		_		
Comments									

C46337: Chain of Custody Page 2 of 2



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### **Section 5**

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

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



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### Method Blank Summary Job Number: C46337

Account:	QSMCAF Quick Stop Markets							
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA							
Sample	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	By	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>	
VL1492-MB	L49785.D	1	06/28/16	JT	n/a	n/a	VL1492	
The QC repor	rted here applies t	o the follo	wing samples:			Method: SW84	6 8260B	

C46337-1, C46337-2, C46337-5

CAS No.	Compound	Result	RL	MDL	Units Q	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	1.0	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	40	10	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	
	TPH-GRO (C6-C10) a	50.1	100	50	ug/kg J	
CAS No.	Surrogate Recoveries		Limits			
1868-53-7	Dibromofluoromethane	95%	72-140	%		
2037-26-5	Toluene-D8	96%	87-113	%		
460-00-4	4-Bromofluorobenzene	95%	81-115	%		

(a) Gasoline pattern not present.







### Method Blank Summary Job Number: C46337

Account:	QSMCAF Quick Stop Markets								
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA								
Sample	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b> 06/29/16	By	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>		
VL1493-MB	L49815.D	1		JT	n/a	n/a	VL1493		
The QC repor	rted here applies t	to the follo	wing samples:			Method: SW84	6 8260B		

81-115%

C46337-3, C46337-4, C46337-6

CAS No.	Compound	Result	RL	MDL	Units Q
71-43-2	Benzene	ND	5.0	0.50	ug/kg
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg
91-20-3	Naphthalene	ND	5.0	1.0	ug/kg
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg
75-65-0	Tert Butyl Alcohol	ND	40	10	ug/kg
108-88-3	Toluene	ND	5.0	0.50	ug/kg
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg
	TPH-GRO (C6-C10) <sup>a</sup>	50.2	100	50	ug/kg J
CAS No.	Surrogate Recoveries		Limits		
	-				
1868-53-7	Dibromofluoromethane	98%	72-140	%	
2037-26-5	Toluene-D8	96%	87-113	%	

96%

(a) Gasoline pattern not present.

4-Bromofluorobenzene

460-00-4









### Blank Spike/Blank Spike Duplicate Summary

Job Number:	C46337
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1492-BS	L49782.D	1	06/28/16	JT	n/a	n/a	VL1492
VL1492-BSD	L49783.D	1	06/28/16	JT	n/a	n/a	VL1492

### The QC reported here applies to the following samples:

Method: SW846 8260B

C46337-1, C46337-2, C46337-5

\* = Outside of Control Limits.

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	40	34.6	87	35.4	89	2	72-122/18
108-20-3	Di-Isopropyl ether	40	32.5	81	32.9	82	1	69-122/19
100-41-4	Ethylbenzene	40	36.3	91	36.9	92	2	71-118/18
637-92-3	Ethyl tert-Butyl Ether	40	33.9	85	34.3	86	1	69-125/19
1634-04-4	Methyl Tert Butyl Ether	40	32.7	82	33.1	83	1	68-121/19
91-20-3	Naphthalene	40	36.4	91	37.9	95	4	68-129/22
994-05-8	Tert-Amyl Methyl Ether	40	35.9	90	36.4	91	1	70-129/20
75-65-0	Tert Butyl Alcohol	200	172	86	183	92	6	50-163/30
108-88-3	Toluene	40	35.2	88	35.5	89	1	72-116/18
1330-20-7	Xylene (total)	120	110	92	111	93	1	68-118/18
CAS No.	Surrogate Recoveries	BSP	BS	D	Limits			
10.00 50 7		1010/	070	,	72 1 404	.,		

1868-53-7	Dibromofluoromethane	101%	97%	72-140%
2037-26-5	Toluene-D8	96%	95%	87-113%
460-00-4	4-Bromofluorobenzene	98%	96%	81-115%

C46337



### Blank Spike/Blank Spike Duplicate Summary

Job Number:	C46337
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

### The QC reported here applies to the following samples:

Method: SW846 8260B

C46337-3, C46337-4, C46337-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	40	38.0	95	38.6	97	2	72-122/18
108-20-3	Di-Isopropyl ether	40	35.4	89	35.4	89	0	69-122/19
100-41-4	Ethylbenzene	40	40.4	101	39.9	100	1	71-118/18
637-92-3	Ethyl tert-Butyl Ether	40	36.1	90	36.4	91	1	69-125/19
1634-04-4	Methyl Tert Butyl Ether	40	33.8	85	34.3	86	1	68-121/19
91-20-3	Naphthalene	40	37.8	95	38.0	95	1	68-129/22
994-05-8	Tert-Amyl Methyl Ether	40	37.5	94	38.5	96	3	70-129/20
75-65-0	Tert Butyl Alcohol	200	188	94	185	93	2	50-163/30
108-88-3	Toluene	40	38.8	97	39.0	98	1	72-116/18
1330-20-7	Xylene (total)	120	122	102	121	101	1	68-118/18
CAS No.	Surrogate Recoveries	BSP	BSI	D	Limits			

1868-53-7 Dibromofluoromethane 101%	96%	72-140%
2037-26-5 Toluene-D8 95%	93%	87-113%
460-00-4 4-Bromofluorobenzene 96%	95%	81-115%

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ACCUTEST C46337

(J)

Page 1 of 1

Laborat Job Numbo Account: Project:	tory Control Sar er: C46337 QSMCAF Quick T10000008568-C	stop Market	s	akland, C	A		Page 1 of 1		
Sample VL1492-L0	File ID CS L49784.D	<b>DF</b> 1	<b>Analyzed</b> 06/28/16	<b>By</b> JT	<b>Prep Date</b> n/a	<b>Prep Batch</b> n/a	Analytical Batch VL1492		
The QC reported here applies to the following samples:       Method: SW846 8260B         C46337-1, C46337-2, C46337-5									
CAS No.	<b>Compound</b> TPH-GRO (C6-C10)	-	ike LCS /kg ug/kg 0 280	LCS % 112	<b>Limits</b> 70-123				

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	93%	72-140%
2037-26-5	Toluene-D8	97%	87-113%
460-00-4	4-Bromofluorobenzene	96%	81-115%



Laborat Job Numbe Account: Project:	ory Control Sa r: C46337 QSMCAF Quick T10000008568-0	s Stop Ma	rkets	U	ıkland, C	A		Page 1 of 1
Sample VL1493-LC	<b>File ID</b> S L49814.D	<b>DF</b> 1	<b>Ana</b> 06/2	<b>lyzed</b> 9/16	By JT	<b>Prep Date</b> n/a	<b>Prep Batch</b> n/a	Analytical Batch VL1493
	<b>Dorted here applies t</b> C46337-4, C46337-6	o the foll	owing sar	nples:			Method: SW84	5 8260B
CAS No.	Compound TPH-GRO (C6-C10)	I	Spike ug/kg 250	LCS ug/kg 267	<b>LCS</b> %	<b>Limits</b> 70-123		

Limits

72-140%

87-113%

81-115%

BSP

96%

94%

95%

Surrogate Recoveries

Dibromofluoromethane

4-Bromofluorobenzene

Toluene-D8

CAS No.

1868-53-7

2037-26-5

460-00-4





5.3.2

G

### Matrix Spike/Matrix Spike Duplicate Summary

Job Number:	C46337
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

~ .				-			
Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C46337-5MS	L49802.D	1	06/28/16	JT	n/a	n/a	VL1492
C46337-5MSD	L49803.D	1	06/28/16	JT	n/a	n/a	VL1492
C46337-5	L49791.D	1	06/28/16	JT	n/a	n/a	VL1492

### The QC reported here applies to the following samples:

Method: SW846 8260B

C46337-1, C46337-2, C46337-5

CAS No.	Compound	C46337-5 ug/kg Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2 108-20-3 100-41-4 637-92-3 1634-04-4 91-20-3 994-05-8 75-65-0 108-88-3 1330-20-7	Benzene Di-Isopropyl ether Ethylbenzene Ethyl tert-Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether Tert Butyl Alcohol Toluene Xylene (total)	ND ND ND 2.0 J ND ND ND ND ND	38.8 38.8 38.8 38.8 38.8 38.8 38.8 38.8	41.2 34.8 39.9 36.5 36.7 33.3 37.5 188 39.8 120	106 90 103 94 89 86 97 97 102 103	39.5 39.5 39.5 39.5 39.5 39.5 39.5 198 39.5 119	42.8 35.7 41.0 37.8 38.4 40.0 39.2 227 40.8 124	108 90 104 96 92 101 99 115 103 105	4 3 3 5 18 4 19 2 3	72-122/18 69-122/19 71-118/18 69-125/19 68-121/19 68-129/22 70-129/20 50-163/30 72-116/18 68-118/18
CAS No. 1868-53-7 2037-26-5 460-00-4	Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	MS 103% 97% 97%	MSD 100% 94% 98%		5 <b>337-5</b>	Limits 72-1409 87-1139 81-1159	% %	103	5	00 110, 10



### Matrix Spike/Matrix Spike Duplicate Summary

Job Number:	C46337
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C46337-4MS	L49821.D	1	06/29/16	JT	n/a	n/a	VL1493
C46337-4MSD	L49822.D	1	06/29/16	JT	n/a	n/a	VL1493
C46337-4	L49817.D	1	06/29/16	JT	n/a	n/a	VL1493

### The QC reported here applies to the following samples:

Method: SW846 8260B

C46337-3, C46337-4, C46337-6

CAS No.	Compound	C46337-4 ug/kg Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2 108-20-3	Benzene Di-Isopropyl ether	ND ND	1450 1450	1310 1200	90 83	1450 1450	1270 1210	88 83	3 1	72-122/18 69-122/19
100-41-4	Ethylbenzene	ND	1450	1360	94	1450	1320	91	3	71-118/18
637-92-3 1634-04-4	Ethyl tert-Butyl Ether Methyl Tert Butyl Ether	ND 2020	1450 1450	1230 3070	85 72	1450 1450	1230 3100	85 75	0 1	69-125/19 68-121/19
91-20-3 994-05-8	Naphthalene Tert-Amyl Methyl Ether	ND ND	1450 1450	1330 1290	92 89	1450 1450	1310 1280	90 88	2 1	68-129/22 70-129/20
75-65-0	Tert Butyl Alcohol	616 J	7250	7500	95	7250	7550	96	1	50-163/30
108-88-3 1330-20-7	Toluene Xylene (total)	ND ND	1450 4350	1310 4150	90 95	1450 4350	1290 4040	89 93	2 3	72-116/18 68-118/18
CAS No.	Surrogate Recoveries	MS	MSD	C40	6337-4	Limits				
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	96% 95% 96%	97% 96% 97%	97% 98% 96%	6	72-1409 87-1139 81-1159	%			

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### ACCUTEST Northern California

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e-Hardcopy 2.0 Automated Report

SG:

Technical Report for

Quick Stop Markets

T10000008568-CCCAD: Quik Stop #51, Oakland, CA

12216-1

SGS Accutest Job Number: C46413



Sampling Date: 07/05/16

Report to:

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

ATTN: Gary Mulkey

Total number of pages in report: 47



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James J. Rhudy Lab Director

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.

Client Service contact: Elvin Kumar 408-588-0200

Certifications: CA (ELAP 2910) AK (UST-092) AZ (AZ0762) NV (CA00150) OR (CA300006) WA (C925) DoD ELAP (L-A-B L2242)

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### **Sample Summary**

Quick Stop Markets

**Job No:** C46413

T10000008568-CCCAD:Quik Stop #51, Oakland, CA Project No: 12216-1

Sample	Collected			Matri	ix	Client
Number	Date	Time By	Received			Sample ID
C46413-1	07/05/16	08:55 MR	07/06/16	SO	Soil	B-4-5
C46413-2	07/05/16	09:10 MR	07/06/16	SO	Soil	B-4-10
C46413-3	07/05/16	09:15 MR	07/06/16	SO	Soil	B-4-15
C46413-4	07/05/16	09:25 MR	07/06/16	SO	Soil	B-4-20
C46413-5	07/05/16	09:35 MR	07/06/16	SO	Soil	B-4-25
C46413-6	07/05/16	09:45 MR	07/06/16	SO	Soil	B-4-30
C46413-7	07/05/16	09:55 MR	07/06/16	SO	Soil	B-4-35
C46413-8	07/05/16	10:35 MR	07/06/16	AQ	Ground Water	B-4-W
C46413-9	07/05/16	12:50 MR	07/06/16	SO	Soil	B-6-5
C46413-10	07/05/16	13:05 MR	07/06/16	SO	Soil	B-6-10
C46413-11	07/05/16	13:12 MR	07/06/16	SO	Soil	B-6-15
C46413-12	07/05/16	13:22 MR	07/06/16	SO	Soil	B-6-20
C46413-13	07/05/16	13:35 MR	07/06/16	SO	Soil	B-6-25

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



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# Sample Summary (continued)

**Quick Stop Markets** 

Job No: C46413

T10000008568-CCCAD:Quik Stop #51, Oakland, CA Project No: 12216-1

Sample	Collected			Matrix		Client
Number	Date	Time By	Received	Code	Туре	Sample ID
C46413-14	07/05/16	13:50 MR	07/06/16	SO	Soil	B-6-30
C46413-15	07/05/16	14:30 MR	07/06/16	AQ	Ground Water	B-6-W

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



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C46413

### Summary of Hits

Job Number:	C46413
Account:	Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA
Collected:	07/05/16

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
C46413-1	B-4-5					
Methyl Tert Buty Tert Butyl Alcoh TPH-GRO (C6-C	ol	2080 2790 4390 J	250 2000 5000	50 500 2500	ug/kg ug/kg ug/kg	SW846 8260B SW846 8260B SW846 8260B
C46413-2	B-4-10					
No hits reported	in this sample.					
C46413-3	B-4-15					
Benzene Ethylbenzene Xylene (total) TPH-GRO (C6-C	210)	15400 J 20300 J 107000 1150000	24000 24000 48000 480000	2400 2400 4800 240000	ug/kg ug/kg ug/kg ug/kg	SW846 8260B SW846 8260B SW846 8260B SW846 8260B
C46413-4	B-4-20					
Benzene Ethylbenzene Methyl Tert Buty TPH-GRO (C6-C		3650 J 3290 J 19700 J 259000 J	23000 23000 23000 460000	2300 2300 4600 230000	ug/kg ug/kg ug/kg ug/kg	SW846 8260B SW846 8260B SW846 8260B SW846 8260B
C46413-5	B-4-25					
Methyl Tert Buty Tert Butyl Alcoh TPH-GRO (C6-C	ol	12700 21100 17200	970 1900 4800	190 480 2400	ug/kg ug/kg ug/kg	SW846 8260B SW846 8260B SW846 8260B
C46413-6	B-4-30					
Methyl Tert Buty Tert Butyl Alcoho		1090 816 J	240 1900	49 490	ug/kg ug/kg	SW846 8260B SW846 8260B
C46413-7	B-4-35					
Benzene Methyl Tert Buty Tert Butyl Alcoh TPH-GRO (C6-C	ol	0.47 J 47.4 20.9 J 73.9 J	4.6 4.6 37 93	0.46 0.93 9.3 46	ug/kg ug/kg ug/kg ug/kg	SW846 8260B SW846 8260B SW846 8260B SW846 8260B
C46413-8	B-4-W					
Benzene <sup>a</sup>		511	200	40	ug/l	SW846 8260B

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## Summary of Hits

Job Number:	C46413
Account:	Quick Stop Markets
Project:	T10000008568-CCCAD: Quik Stop #51, Oakland, CA
Collected:	07/05/16

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Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Ethylbenzene <sup>a</sup>		141 J	200	40	ug/l	SW846 8260B
Xylene (total) <sup>a</sup>		316 J	400	40 92	ug/l	SW846 8260B
Methyl Tert But	ul Ethor a	14600	200	92 40	-	SW846 8260B
			2000		ug/l	
Tert-Butyl Alcoh TPH-GRO (C6-0		20000 40800		480	ug/l	SW846 8260B
IPH-GRU (CO-		40800	10000	5000	ug/l	SW846 8260B
C46413-9	B-6-5					
Benzene		0.74 J	4.6	0.46	ug/kg	SW846 8260B
Ethylbenzene		1.3 J	4.6	0.46	ug/kg	SW846 8260B
Xylene (total)		3.3 J	9.3	0.40	ug/kg	SW846 8260B
Methyl Tert But	ul Ethor	0.98 J	9.3 4.6	0.93	ug/kg	SW846 8260B
TPH-GRO (C6-		115	4.0 93	0.93 46		SW846 8260B
1PH-0K0 (C0-0		115	95	40	ug/kg	SW 840 8200B
C46413-10	B-6-10					
Methyl Tert But	yl Ether	1.3 J	4.7	0.95	ug/kg	SW846 8260B
C46413-11	B-6-15					
Methyl Tert But	yl Ether	1.0 J	5.0	1.0	ug/kg	SW846 8260B
TPH-GRO (C6-0		235	100	50	ug/kg	SW846 8260B
(	/				000	
C46413-12	B-6-20					
-						
Benzene		2780 J	23000	2300	ug/kg	SW846 8260B
Ethylbenzene		6380 J	23000	2300	ug/kg	SW846 8260B
Xylene (total)		6120 J	45000	4500	ug/kg	SW846 8260B
TPH-GRO (C6-0	C10)	425000 J	450000	230000	ug/kg	SW846 8260B
C46413-13	B-6-25					
D		110 T	220	22	(1	
Benzene	310	112 J	230	23	ug/kg	SW846 8260B
TPH-GRO (C6-0	C10)	16100	4600	2300	ug/kg	SW846 8260B
C46413-14	B-6-30					
Methyl Tert But	yl Ether	8.9	4.8	0.95	ug/kg	SW846 8260B
C46413-15	B-6-W					
Benzene <sup>b</sup>		365	10	2.0	ug/l	SW846 8260B
Toluene <sup>c</sup>		2.9	1.0	0.20	ug/l	SW846 8260B
Ethylbenzene <sup>b</sup>		110	10	2.0	ug/l	SW846 8260B
Xylene (total) <sup>c</sup>		153	2.0	0.46	ug/l	SW846 8260B
Lightene (total)		100	2.0	0.10	~B' 1	5

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### **Summary of Hits**

Job Number: C46413 Account: Quick Stop Markets T10000008568-CCCAD: Quik Stop #51, Oakland, CA **Project:** 07/05/16 **Collected:** 

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
Di-Isopropyl ether <sup>c</sup>	0.28 J	2.0	0.22	ug/l	SW846 8260B
Methyl Tert Butyl Ether <sup>c</sup>	52.8	1.0	0.20	ug/l	SW846 8260B
Naphthalene <sup>c</sup>	4.5 J	5.0	0.50	ug/l	SW846 8260B
Tert-Butyl Alcohol <sup>c</sup>	354	10	2.4	ug/l	SW846 8260B
TPH-GRO (C6-C10) <sup>b</sup>	2790	500	250	ug/l	SW846 8260B

(a) Sample vial contained more than 0.5cm of sediment.

(b) (pH= 5) Sample pH did not satisfy field preservation criteria. Sample was analyzed within 7 day holding time. Sample vial contained more than 0.5cm of sediment.

(c) Sample vial contained more than 0.5cm of sediment and significant headspace.

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Sample Results

Report of Analysis



			Rep	ort of A	Analysis		Page 1 of 1
Client San Lab Sam Matrix: Method: Project:	ole ID: C464 SO - S SW84	13-1 Soil 6 8260B	CCCAD:Quik	Stop #51, (	Dakland, CA	···· <b>I</b>	07/05/16 07/06/16 n/a <sup>a</sup>
Run #1 Run #2	<b>File ID</b> L49919.D	<b>DF</b> 1	<b>Analyzed</b> 07/07/16	By JT	<b>Prep Date</b> n/a	<b>Prep Batch</b> n/a	n Analytical Batch VL1497
Run #1 Run #2	<b>Initial Weight</b> 5.01 g	t <b>Final V</b> 5.0 ml	olume	<b>Methanol</b> 100 ul	Aliquot		

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	250	25	ug/kg	
108-88-3	Toluene	ND	250	25	ug/kg	
100-41-4	Ethylbenzene	ND	250	25	ug/kg	
1330-20-7	Xylene (total)	ND	500	50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	250	25	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	250	25	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	2080	250	50	ug/kg	
91-20-3	Naphthalene	ND	250	50	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	250	25	ug/kg	
75-65-0	Tert Butyl Alcohol	2790	2000	500	ug/kg	
	TPH-GRO (C6-C10)	4390	5000	2500	ug/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	ite	
CAB III.	Surrogate Recoveries	Kull# 1	Kull# 2	Lim	11.5	
1868-53-7	Dibromofluoromethane	94%		72-1	40%	
2037-26-5	Toluene-D8	90%		87-1	13%	
460-00-4	4-Bromofluorobenzene	96%		81-1	15%	

(a) All results reported on a wet weight basis.

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



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			Rep	ort of A	Analysis		Page 1 of 1
Client San Lab Samj Matrix: Method: Project:	ple ID: C4641 SO - S SW846	3-2 oil 5 8260B	CCCAD:Quik	Stop #51, 0	]	···· · · · · · ·	07/05/16 07/06/16 n/a <sup>a</sup>
	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 Run #2	L49920.D	1	07/07/16	JT	n/a	n/a	VL1497
	Initial Weight	Final V	Volume	Methano	Aliquot		
Run #1	5.08 g	5.0 ml		1.0 ul			

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7 108-20-3 637-92-3 1634-04-4 91-20-3 994-05-8 75-65-0	Benzene Toluene Ethylbenzene Xylene (total) Di-Isopropyl ether Ethyl tert-Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether Tert Butyl Alcohol	ND ND ND ND ND ND ND ND ND	25000 25000 25000 25000 25000 25000 25000 25000 25000 25000 200000	2500 2500 4900 2500 2500 2500 4900 4900 2500 49000	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	
10 00 0	TPH-GRO (C6-C10)	ND	490000	250000	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts	
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	99% 90% 98%		72-14 87-12 81-12	13%	

(a) All results reported on a wet weight basis.

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



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			Rep	ort of A	Analysis		Page 1 of 1
Client Sa Lab Sam Matrix: Method: Project:	ple ID: C4641 SO - S SW840	3-3 oil 6 8260B	CCCAD:Quik	Stop #51, C	Dakland, CA	Date Sampled: Date Received: Percent Solids:	07/05/16 07/06/16 n/a <sup>a</sup>
Run #1 Run #2	<b>File ID</b> L49921.D	<b>DF</b> 1	<b>Analyzed</b> 07/07/16	By JT	<b>Prep Date</b> n/a	<b>Prep Batcl</b> n/a	h Analytical Batch VL1497
Run #1 Run #2	<b>Initial Weight</b> 5.23 g	<b>Final V</b> 5.0 ml	Volume	<b>Methanol</b> 1.0 ul	Aliquot		

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7 108-20-3 637-92-3 1634-04-4 91-20-3 994-05-8 75-65-0	Benzene Toluene Ethylbenzene Xylene (total) Di-Isopropyl ether Ethyl tert-Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether Tert Butyl Alcohol	15400 ND 20300 107000 ND ND ND ND ND	24000 24000 24000 24000 24000 24000 24000 24000 24000 24000 190000	2400 2400 2400 4800 2400 2400 4800 2400 4800 2400 48000 24000	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	1
CAS No. 1868-53-7 2037-26-5 460-00-4	TPH-GRO (C6-C10) Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	1150000 <b>Run# 1</b> 102% 90% 97%	480000 Run# 2	240000 Limi 72-14 87-12 81-12	40% 13%	

(a) All results reported on a wet weight basis.

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



				Rep	ort of	Analysis		Page 1 of 1
Client San Lab Sam Matrix: Method: Project:	ple ID:	B-4-20 C46413-4 SO - Soil SW846 826 T10000008		CAD:Quik	Stop #51,	Oakland, CA	Date Sampled: Date Received: Percent Solids:	07/05/16 07/06/16 n/a <sup>a</sup>
Run #1 Run #2	<b>File ID</b> L49923.	<b>D</b> D 1	F	<b>Analyzed</b> 07/07/16	By JT	<b>Prep Date</b> n/a	<b>Prep Batc</b> n/a	h Analytical Batch VL1497
Run #1 Run #2	<b>Initial V</b> 5.40 g	0	<b>inal Vol</b> .0 ml	ume	Methano 1.0 ul	ol Aliquot		

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7 108-20-3 637-92-3 1634-04-4 91-20-3 994-05-8 75.65 0	Benzene Toluene Ethylbenzene Xylene (total) Di-Isopropyl ether Ethyl tert-Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether	3650 ND 3290 ND ND ND 19700 ND ND	23000 23000 23000 46000 23000 23000 23000 23000 23000	2300 2300 2300 4600 2300 2300 4600 4600 2300	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	1 1 1
75-65-0 CAS No.	Tert Butyl Alcohol TPH-GRO (C6-C10) <b>Surrogate Recoveries</b>	ND 259000 Run# 1	190000 460000 Run# 2	46000 230000 Limi	ug/kg ug/kg <b>ts</b>	J
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	102% 90% 98%		72-14 87-12 81-12	13%	

(a) All results reported on a wet weight basis.

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



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3.4

Lab Sam	mple ID: B-4-25 ple ID: C4641	3-5			Da	ate Sampled: 0	07/05/16	
Matrix:	SO - S	oil			<b>Date Received:</b> 07/06/16			
Method:	SW846	5 8260B			Pe	ercent Solids: n/	/a <sup>a</sup>	
Project:	T1000	0008568-C	CCAD:Quik	Stop #51, C	Dakland, CA			
	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch	
Run #1	L49918.D	1	07/07/16	JŤ	n/a	n/a	VL1497	
Run #1 Run #2		1 1	07/07/16 07/11/16	•	-	-	•	
	L49918.D	1 1 Final Vo	07/11/16	JT	n/a n/a	n/a	VL1497	
	L49918.D L49963.D	1 1 <b>Final Vo</b> 5.0 ml	07/11/16	JT JT	n/a n/a	n/a	VL1497	

**Report of Analysis** 

### **BTEX, Oxygenates**

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7 108-20-3 637-92-3 1634-04-4 91-20-3 994-05-8	Benzene Toluene Ethylbenzene Xylene (total) Di-Isopropyl ether Ethyl tert-Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether	ND ND ND ND ND 12700 <sup>b</sup> ND	240 240 240 480 240 240 240 970 240 240	24 24 24 48 24 24 24 190 48 24	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	
75-65-0 CAS No.	Tert Butyl Alcohol TPH-GRO (C6-C10) Surrogate Recoveries	21100 17200 Run# 1	1900 4800 <b>Run# 2</b>	480 2400 Limi	ug/kg ug/kg	
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	95% 90% 97%	98% 96% 93%	72-1- 87-1 81-1	13%	

(a) All results reported on a wet weight basis.

(b) Result is from Run# 2

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Lab Sam Matrix: Method:	SO - S				Da	<b>I</b>	7/05/16 7/06/16 a <sup>a</sup>
Project:	T1000	0008568-0	CCCAD:Quik S	Stop #51, C	Dakland, CA		
	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 Run #2	M61717.D	1	07/06/16	JT	n/a	n/a	VM1856
Kull #2							
KUII #2	Initial Weight	Final V	olume	Methanol	Aliquot		

**Report of Analysis** 

#### **BTEX, Oxygenates**

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4	Benzene Toluene Ethylbenzene	ND ND ND	240 240 240	24 24 24	ug/kg ug/kg ug/kg	
1330-20-7 108-20-3 637-92-3 1634-04-4 91-20-3	Xylene (total) Di-Isopropyl ether Ethyl tert-Butyl Ether Methyl Tert Butyl Ether Naphthalene	ND ND ND 1090 ND	490 240 240 240 240 240	49 24 24 49 49	ug/kg ug/kg ug/kg ug/kg ug/kg	
994-05-8 75-65-0 CAS No.	Tert-Amyl Methyl Ether Tert Butyl Alcohol TPH-GRO (C6-C10) Surrogate Recoveries	ND 816 ND <b>Run# 1</b>	240 1900 4900 Run# 2	24 490 2400 Limi	ug/kg ug/kg ug/kg its	J
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	104% 100% 102%		72-1 87-1 81-1	13%	

(a) All results reported on a wet weight basis.

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



#### SGS Accutest

Lab Samj Matrix: Method:	SO - 3 SW84	13-7 Soil 46 8260B				···· <b>I</b>	07/05/16 07/06/16 n/a <sup>a</sup>
Project:	1100	00008568-0	CCCAD:Quik St	op #51, C	Dakland, CA		
	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 Run #2	M61718.D	1	07/06/16	JT	n/a	n/a	VM1856
	Initial Weigh	t					
Run #1	5.39 g						
Run #2							

**Report of Analysis** 

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.47	4.6	0.46	ug/kg	J
108-88-3	Toluene	ND	4.6	0.46	ug/kg	
100-41-4	Ethylbenzene	ND	4.6	0.46	ug/kg	
1330-20-7	Xylene (total)	ND	9.3	0.93	ug/kg	
108-20-3	Di-Isopropyl ether	ND	4.6	0.46	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	4.6	0.46	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	47.4	4.6	0.93	ug/kg	
91-20-3	Naphthalene	ND	4.6	0.93	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	4.6	0.46	ug/kg	
75-65-0	Tert Butyl Alcohol	20.9	37	9.3	ug/kg	J
	TPH-GRO (C6-C10)	73.9	93	46	ug/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
1868-53-7	Dibromofluoromethane	109%		72-1	40%	
2037-26-5	Toluene-D8	98%			40% 13%	
460-00-4	4-Bromofluorobenzene	98% 100%			15%	
400-00-4	4-BIOINOINUOI ODEIIZEIIE	100%		01-1	1.J 70	

(a) All results reported on a wet weight basis.

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



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### **Report of Analysis**

Client San Lab Samp Matrix: Method: Project:	ole ID: C464 AQ - SW84	13-8 Ground Wa 46 8260B	tter CCAD:Quik St	op #51, C	I F	···· · · · ·	07/05/16 07/06/16 n/a
Run #1 <sup>a</sup> Run #2	<b>File ID</b> R40968.D	<b>DF</b> 200	<b>Analyzed</b> 07/08/16	By CV	<b>Prep Date</b> n/a	<b>Prep Batch</b> n/a	<b>Analytical Batch</b> VR1577
Run #1 Run #2	<b>Purge Volum</b> 10.0 ml	e					

#### **BTEX, Oxygenates**

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7 108-20-3 637-92-3 1634-04-4 91-20-3 994-05-8 75-65-0	Benzene Toluene Ethylbenzene Xylene (total) Di-Isopropyl ether Ethyl Tert Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether Tert-Butyl Alcohol TPH-GRO (C6-C10)	511 ND 141 316 ND ND 14600 ND ND 20000 40800	200 200 200 400 400 200 1000 400 2000 10000	40 40 92 44 44 40 100 80 480 5000	ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l	J J
CAS No. 1868-53-7 2037-26-5 460-00-4	Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	<b>Run# 1</b> 108% 104% 95%	Run# 2	Lim 80-1 88-1	ug/l its 23% 12% 14%	

(a) Sample vial contained more than 0.5cm of sediment.

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



#### SGS Accutest

Lab Samp Matrix: Method: Project:	SO - 3 SW84	Soil 46 8260B	CCAD:Quik St	op #51, C	Dakland, CA	Date Sampled: Date Received: Percent Solids:	
Run #1 Run #2	<b>File ID</b> M61728.D	<b>DF</b> 1	<b>Analyzed</b> 07/06/16	By JT	<b>Prep Date</b> n/a	<b>Prep Batch</b> n/a	Analytical Batch VM1856
Run #1 Run #2	<b>Initial Weigh</b> 5.38 g	t					

**Report of Analysis** 

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7 108-20-3 637-92-3 1634-04-4	Benzene Toluene Ethylbenzene Xylene (total) Di-Isopropyl ether Ethyl tert-Butyl Ether Methyl Tert Butyl Ether	0.74 ND 1.3 3.3 ND ND 0.98	4.6 4.6 9.3 4.6 4.6 4.6	0.46 0.46 0.93 0.46 0.46 0.46 0.93	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	] ]
91-20-3 994-05-8 75-65-0	Naphthalene Tert-Amyl Methyl Ether Tert Butyl Alcohol TPH-GRO (C6-C10)	ND ND ND 115	4.6 4.6 37 93	0.93 0.46 9.3 46	ug/kg ug/kg ug/kg ug/kg	5
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	un# 2 Limits		
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	90% 99% 98%	72-140% 87-113% 81-115%			

(a) All results reported on a wet weight basis.

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

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C46413

Lab Sample ID: Matrix: Method: Project:		SO - Soil			Date Sampled:07/05/16Date Received:07/06/16Percent Solids:n/a a		
Run #1 Run #2	<b>File ID</b> L49913.I	DF	<b>Analyzed</b> 07/07/16	By JT	<b>Prep Date</b> n/a	<b>Prep Batcl</b> n/a	n Analytical Batch VL1497
Run #1 Run #2	<b>Initial W</b> 5.28 g	eight					

**Report of Analysis** 

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7 108-20-3 637-92-3 1634-04-4 91-20-3 994-05-8	Benzene Toluene Ethylbenzene Xylene (total) Di-Isopropyl ether Ethyl tert-Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether	ND ND ND ND 1.3 ND ND	4.7 4.7 9.5 4.7 4.7 4.7 4.7 4.7	$\begin{array}{c} 0.47 \\ 0.47 \\ 0.95 \\ 0.47 \\ 0.95 \\ 0.47 \\ 0.95 \\ 0.95 \\ 0.47 \end{array}$	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	J
75-65-0	Tert Butyl Alcohol TPH-GRO (C6-C10)	ND ND	38 95	9.5 47	ug/kg ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2 Limits		its	
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	102% 89% 96%	72-140% 87-113% 81-115%			

(a) All results reported on a wet weight basis.

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



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C46413

3.10 **3** 

Client San Lab Samj Matrix: Method: Project:	ple ID: C46 SO - SW8	413-11 Soil 346 8260B	CCCAD:Quik St	on #51 (		···· <b>I</b>	7/05/16 7/06/16 /a <sup>a</sup>
Run #1 Run #2	<b>File ID</b> L49914.D	<b>DF</b> 1	<b>Analyzed</b> 07/07/16	By JT	Prep Date n/a	<b>Prep Batch</b> n/a	Analytical Batch VL1497
Run #1 Run #2	<b>Initial Weig</b> 5.01 g	ht					

**Report of Analysis** 

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7 108-20-3 637-92-3 1634-04-4	Benzene Toluene Ethylbenzene Xylene (total) Di-Isopropyl ether Ethyl tert-Butyl Ether Methyl Tert Butyl Ether	ND ND ND ND ND 1.0	5.0 5.0 5.0 10 5.0 5.0 5.0	0.50 0.50 1.0 0.50 0.50 1.0	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	J
91-20-3 994-05-8 75-65-0	Naphthalene Tert-Amyl Methyl Ether Tert Butyl Alcohol TPH-GRO (C6-C10)	ND ND ND 235	5.0 5.0 40 100	1.0 0.50 10 50	ug/kg ug/kg ug/kg ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2 Limits		its	
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	105% 90% 102%	72-140% 87-113% 81-115%			

(a) All results reported on a wet weight basis.

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



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3.11 **3** 

Lab Sam Matrix: Method:	SO - S	3-12			Da	L	7/05/16 7/06/16 a <sup>a</sup>
Project:	T1000	0008568-0	CCAD:Quik	Stop #51, C	Dakland, CA		
	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L49925.D	1	07/07/16	JT	n/a	n/a	VL1497
	L49925.D	1	07/07/16	JT	n/a	n/a	VL1497
Run #1 Run #2	L49925.D Initial Weight	1 Final V		JT Methanol		n/a	VL1497

**Report of Analysis** 

#### **BTEX, Oxygenates**

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7 108-20-3 637-92-3 1634-04-4 91-20-3 994-05-8	Benzene Toluene Ethylbenzene Xylene (total) Di-Isopropyl ether Ethyl tert-Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether	2780 ND 6380 6120 ND ND ND ND ND	23000 23000 23000 45000 23000 23000 23000 23000 23000 23000	2300 2300 2300 4500 2300 2300 4500 4500 2300	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	] J
75-65-0 CAS No.	Tert Butyl Alcohol TPH-GRO (C6-C10) Surrogate Recoveries	ND 425000 Run# 1	180000 450000 Run# 2	45000 230000 Limi	ug/kg ug/kg <b>ts</b>	J
1868-53-7 2037-26-5 460-00-4	37-26-5 Toluene-D8			72-14 87-11 81-11	13%	

(a) All results reported on a wet weight basis.

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

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ACCUTEST C46413

Lab Sam Matrix:	mple ID: B-6-2 ple ID: C464 SO - S	13-13				I I I I	7/05/16 7/06/16
Method:	SW84	6 8260B			Pe	ercent Solids: n/	a <sup>a</sup>
Project:	T1000	00008568-0	CCAD:Quik S	Stop #51, C	Dakland, CA		
	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
			•	•	-		
Run #1	L49917.D	1	07/07/16	JT	n/a	n/a	VL1497
Run #1 Run #2	L49917.D	1	07/07/16	JT	n/a	n/a	VL1497
	L49917.D Initial Weight	1 Final V		JT Methanol		n/a	VL1497
		1 <b>Final V</b> 5.0 ml				n/a	VL1497

**Report of Analysis** 

#### **BTEX, Oxygenates**

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7 108-20-3 637-92-3 1634-04-4 91-20-3 994-05-8 75-65-0	Benzene Toluene Ethylbenzene Xylene (total) Di-Isopropyl ether Ethyl tert-Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether Tert Butyl Alcohol	112 ND ND ND ND ND ND ND ND	230 230 230 460 230 230 230 230 230 230 1800	23 23 23 46 23 23 46 46 23 46 46 23 460	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	J
73-03-0	TPH-GRO (C6-C10)	16100	4600	2300	ug/kg ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
1868-53-7 2037-26-5 460-00-4	26-5 Toluene-D8			72-1 87-1 81-1	13%	

(a) All results reported on a wet weight basis.

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

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#### SGS Accutest

Client Sa Lab Samj Matrix: Method:	ple ID: C464 SO -	13-14			-	L	7/05/16 7/06/16 a <sup>a</sup>
Project:	T100	00008568-0	CCCAD:Quik St	op #51, C	Dakland, CA		
	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 Run #2	M61719.D	1	07/06/16	JT	n/a	n/a	VM1856
	Initial Weigh	t					
Run #1 Run #2	5.25 g						

**Report of Analysis** 

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.8	0.48	ug/kg	
108-88-3	Toluene	ND	4.8	0.48	ug/kg	
100-41-4	Ethylbenzene	ND	4.8	0.48	ug/kg	
1330-20-7	Xylene (total)	ND	9.5	0.95	ug/kg	
108-20-3	Di-Isopropyl ether	ND	4.8	0.48	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	4.8	0.48	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	8.9	4.8	0.95	ug/kg	
91-20-3	Naphthalene	ND	4.8	0.95	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	4.8	0.48	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	38	9.5	ug/kg	
	TPH-GRO (C6-C10)	ND	95	48	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
1868-53-7	Dibromofluoromethane	108%		72-1	40%	
2037-26-5	Toluene-D8	98%		87-1	13%	
460-00-4	4-Bromofluorobenzene	101%		81-1	15%	

(a) All results reported on a wet weight basis.

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



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## **Report of Analysis**

Client Sar Lab Samp Matrix: Method: Project:	ple ID: C464 AQ - SW84	13-15 Ground Wa 46 8260B	ater CCCAD:Quik St	op #51, O	D Pe	ate Sampled: 07 ate Received: 07 ercent Solids: n/	
	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	U35738.D	1	07/06/16	MV	n/a	n/a	VU1472
Run #2 <sup>b</sup>	R40967.D	10	07/08/16	CV	n/a	n/a	VR1577
	Purge Volum	e					
Run #1	10.0 ml						
Run #2	10.0 ml						

#### **BTEX, Oxygenates**

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	365 <sup>c</sup>	10	2.0	ug/l	
108-88-3	Toluene	2.9	1.0		ug/l	
100-41-4	Ethylbenzene	110 c	10	2.0	ug/l	
1330-20-7	Xylene (total)	153	2.0	0.46	ug/l	
108-20-3	Di-Isopropyl ether	0.28	2.0	0.22	ug/l	J
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	
1634-04-4	Methyl Tert Butyl Ether	52.8	1.0	0.20	ug/l	
91-20-3	Naphthalene	4.5	5.0	0.50	ug/l	J
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	354	10	2.4	ug/l	
	TPH-GRO (C6-C10)	2790 c	500	250	ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	105% 101% 105%	110% 103% 98%	80-1 88-1 79-1		

(a) Sample vial contained more than 0.5cm of sediment and significant headspace.

(b) (pH= 5) Sample pH did not satisfy field preservation criteria. Sample was analyzed within 7 day holding time. Sample vial contained more than 0.5cm of sediment.

(c) Result is from Run# 2

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

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**Section 4** 

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

• Chain of Custody



}																			-	-			
	Complian	ce										-						-		$\mathcal{C}^{i}$	44	1413	
	Closure, I	nc.			CH	AIN	OF C	USI	ΓΟΙ	DY	RE	COF	RD A	ND	AN.	ALYS	sis	RE	QL	JES	πŞ		
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	SAMPLERS, Davy R. m.	Oby/	(PRINT)	Gmy	R.	M	rkay		CONTAINERS	ΥP			5 S S	5	2			/.;	X	/	/		
	SAMPLE IDENTIFICATI	ON	DATE	TIME	COMP	GRAB	PRES. USED	CED	NO. CO	SAMPLE TYPE	/.	PLEX (602mg	10 (S)		501/8010 1/5520	62416240 62619			12			REMARKS	
ι	B-4-5		7/5/16	8:5		X	Neve	X	1	5	T	$\langle x$	$ \begin{bmatrix} 1 \end{bmatrix} $	ſ	-f-	$\uparrow$	X	x	ſ	ſ	ſ	Get TPHS	
2	B-4-10		7/5/16			X		X	1	S	X	X					X	イ			1	from GCMS	
Z	B-4-15		7/5/11	2:15		X		X	1	5	X	X					ĸ	x					
4	B-4-20		1/5/16	9:25		X	}	X	l	5	X	X					x	x					
5	B-4-25		7/5/16	9:35		X		X	ſ	5	X	' X					X	X					
6	B-4-30	,	1/5/16	9:45		X		X	(	5	X	X					X	X					
7	<u>B-4-35</u>		7/5/11_	9:55		X		X	١	5	x	X					X	X					
Z	B-4-W		7/5/16	10:35		X	HCL	X	3	ω	X	X					X	X					
9	B-6-5		7/5/16	12:50		x	Nowe	x	۱	5	x	$\boldsymbol{\chi}$					X	4					
(0	B-6-10		15/16			x		X	1	s	x	X					X,	*					
- ( (	B-6-15		7/5/16	13:12		x		X		5	X	x					+	+				Prepare EDF	
-12	B-6-20	7	1/5/11	13:22	!	×		X		5	X.	X			_		$\frac{1}{2}$	×				GLOBAL I.D. #	
13	B-6-25		7/5/16			r		X		5	X	X					χ.	X				71000000 8568	
13	13-6-30		7/5/16			r		Y		5	X	X					X	$ \mathcal{X} $					
15	B-6-W		<u> </u>	14:38		<u>.</u>		X	3	w	×	X				<u> </u>	x	7					
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ŀ	RELINOVI SHED BY	DATE	TIME		FCEN/	-0.81	LABOR	4109	y.	950			DITIO					+			<u> </u>		
	RELINGUI SHEU BI		1 mil	"			. CABON	ALC/A					= 21	- 1	รส	)						Mr. Gary Mulkey	. [
L			<u>_</u>	I								<u> </u>	- (m)	-	5.1							ISA2	

C46413: Chain of Custody Page 1 of 2



SGS

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#### SGS Accutest Sample Receipt Summary

Job Number: C46413	Client: COMPLIANCE & CLOSUR	E Project: QUIK STOP #15	OAKLAND,CA
Date / Time Received: 7/6/2016 8:05:00	AM Delivery Method:	Client Airbill #'s:	
Cooler Temps (Initial/Adjusted): #1: (2/3	<u>):</u>		
Cooler Security Y or N	<u>Y or N</u>	Sample Integrity - Documentation	<u>Y or N</u>
1. Custody Seals Present:	3. COC Present:	1. Sample labels present on bottles:	
2. Custody Seals Intact: 4.	Smpl Dates/Time OK	2. Container labeling complete:	
Cooler Temperature Y or N	L	3. Sample container label / COC agree:	
1. Temp criteria achieved:		Sample Integrity - Condition	<u>Y or N</u>
2. Therm ID: IR3;		1. Sample recvd within HT:	
3. Cooler media: Ice (Bag	3)	2. All containers accounted for:	
4. No. Coolers: 1		3. Condition of sample:	Intact
Quality Control Preservation Y or I	N N/A	Sample Integrity - Instructions	<u>Y or N N/A</u>
1. Trip Blank present / cooler:		1. Analysis requested is clear:	
2. Trip Blank listed on COC:		2. Bottles received for unspecified tests	
3. Samples preserved properly:		3. Sufficient volume recvd for analysis:	
4. VOCs headspace free:		4. Compositing instructions clear:	
		5. Filtering instructions clear:	
Comments		•	
Comments			
Comments		•	

C46413: Chain of Custody Page 2 of 2



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4



## **Section 5**

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

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

S



Account:	QSMCAF Quick Stop Markets										
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA										
<b>Sample</b>	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	By	<b>Prep Date</b>	<b>Prep Batch</b>	Analytical Batch				
VU1472-MB	U35723.D	1	07/06/16	MV	n/a	n/a	VU1472				
The QC repor	ted here applies t	o the follo			Method: SW84	6 8260B					

C46413-15

108-20-3 Di-Isopropyl ether ND 2.0 0.22 ug/l	s Q
637-92-3Ethyl Tert Butyl EtherND2.00.22ug/l1634-04-4Methyl Tert Butyl EtherND1.00.20ug/l91-20-3NaphthaleneND5.00.50ug/l994-05-8Tert-Amyl Methyl EtherND2.00.40ug/l75-65-0Tert-Butyl AlcoholND102.4ug/l108-88-3TolueneND1.00.20ug/l1330-20-7Xylene (total)ND2.00.46ug/l	s x

CAS No.	Surrogate Recoveries		Limits
	Dibromofluoromethane Toluene-D8	108% 101%	80-123% 88-112%
460-00-4	4-Bromofluorobenzene	93%	79-114%



Page 1 of 1



Account: Project:	QSMCAF Quick T10000008568-0	•		akland,	CA		
Sample	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	By	<b>Prep Date</b>	<b>Prep Batch</b>	Analytical Batch
VM1856-MB	M61714.D	1	07/06/16	JT	n/a	n/a	VM1856

#### The QC reported here applies to the following samples:

Method: SW846 8260B

C46413-6, C46413-7, C46413-9, C46413-14

CAS No.	Compound	Result	RL	MDL	Units Q
71-43-2	Benzene	ND	5.0	0.50	ug/kg
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg
91-20-3	Naphthalene	ND	5.0	1.0	ug/kg
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg
75-65-0	Tert Butyl Alcohol	ND	40	10	ug/kg
108-88-3	Toluene	ND	5.0	0.50	ug/kg
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg
	TPH-GRO (C6-C10)	ND	100	50	ug/kg
CAS No.	Surrogate Recoveries		Limits		
1868-53-7	Dibromofluoromethane	102%	72-140	%	
2037-26-5	Toluene-D8	100%	87-113	%	
460-00-4	4-Bromofluorobenzene	101%	81-115	%	



5.1.2

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<b>Sample</b>	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	By	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
VL1497-MB	L49908.D	1	07/07/16	JT	n/a	n/a	VL1497

C46413-1, C46413-2, C46413-3, C46413-4, C46413-5, C46413-10, C46413-11, C46413-12, C46413-13

CAS No.	Compound	Result	RL	MDL	Units Q
71-43-2 108-20-3 100-41-4 637-92-3 1634-04-4 91-20-3 994-05-8 75-65-0 108-88-3 1330-20-7	Benzene Di-Isopropyl ether Ethylbenzene Ethyl tert-Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether Tert Butyl Alcohol Toluene Xylene (total) TPH-GRO (C6-C10)	ND ND ND ND ND ND ND ND ND ND	$5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 40 \\ 5.0 \\ 10 \\ 100$	$\begin{array}{c} 0.50\\ 0.50\\ 0.50\\ 1.0\\ 1.0\\ 1.0\\ 0.50\\ 10\\ 0.50\\ 1.0\\ 50\\ \end{array}$	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg
CAS No.	Surrogate Recoveries		Limits		
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	99% 90% 95%	72-140 87-113 81-115	%	

Page 1 of 1

5.1.3

G



SGS

/R1577-MB R40959.D 1 07/08/16 CV n/a n/a VR	
	R1577

C46413-8, C46413-15

CAS No.	Compound	Result	RL	MDL	Units Q
71-43-2 108-20-3 100-41-4 637-92-3 1634-04-4 91-20-3 994-05-8 75-65-0 108-88-3	Benzene Di-Isopropyl ether Ethylbenzene Ethyl Tert Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether Tert-Butyl Alcohol Toluene	ND ND ND ND ND ND ND ND	$ \begin{array}{c} 1.0\\ 2.0\\ 1.0\\ 2.0\\ 1.0\\ 5.0\\ 2.0\\ 10\\ 1.0\\ \end{array} $	$\begin{array}{c} 0.20\\ 0.22\\ 0.20\\ 0.22\\ 0.20\\ 0.50\\ 0.40\\ 2.4\\ 0.20\\ \end{array}$	ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l
1330-20-7 CAS No.	Xylene (total) TPH-GRO (C6-C10) Surrogate Recoveries	ND ND	2.0 50 Limits	0.46 25	ug/l ug/l
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	103% 106% 94%	80-123 88-112 79-114	%	





## Method Blank Summary

Job Number Account: Project:	er: C46413 QSMCAF Quick Sto T10000008568-CCC	<u>^</u>	9 #51, Oakl	and, CA			
<b>Sample</b> VL1498-M			•	By Pr T n/a	<b>ep Date</b> ו	<b>Prep Batch</b> n/a	<b>Analytical Batch</b> VL1498
<b>The QC re</b> C46413-5	ported here applies to th	e following sa	mples:			Method: SW840	5 8260B
CAS No.	Compound	Result	RL	MDL	Units	Q	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg		
CAS No.	Surrogate Recoveries		Lim	its			
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	89% 95% 90%	87-1	40% 13% 15%			

5.1.5 S



Job Number:	C46413
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VU1472-BS	U35719.D	1	07/06/16	MV	n/a	n/a	VU1472
VU1472-BSD	U35721.D	1	07/06/16	MV	n/a	n/a	VU1472

#### The QC reported here applies to the following samples:

**Method:** SW846 8260B

C46413-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
108-20-3 637-92-3 1634-04-4 91-20-3 994-05-8 75-65-0 108-88-3 1330-20-7	Di-Isopropyl ether Ethyl Tert Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether Tert-Butyl Alcohol Toluene Xylene (total)	20 20 20 20 20 100 20 60	18.5 18.9 18.4 16.6 19.6 84.2 17.4 49.3	93 95 92 83 98 84 87 82	20.0 20.4 20.0 17.9 21.2 90.7 19.9 56.0	100 102 100 90 106 91 100 93	8 8 8 8 7 13* a 13* a	69-126/10 75-126/11 73-120/10 66-120/12 77-126/10 52-148/18 78-121/10 78-122/10
CAS No. 1868-53-7 2037-26-5 460-00-4	Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	BSP 105% 100% 102%	49.3 BS 101 999 100	<b>D</b> 1% %	Limits 80-1239 88-1129 79-1149	6 6	15	/8-122/10

(a) RPD exceeded laboratory acceptance limit; BS/BSD recoveries met acceptance criteria. AZ:R7



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Job Number:	C46413
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

Batch Analytical Batch	Prep Batch	Prep Date	By	Analyzed	DF	File ID	Sample
VM1856	n/a	n/a	JT	07/06/16	1	M61711.D	VM1856-BS
VM1856	n/a	n/a	JT	07/06/16	1	M61712.D	VM1856-BSD
	n/a	n/a	JT	07/06/16	1	M61712.D	VM1856-BSD

#### The QC reported here applies to the following samples:

Method: SW846 8260B

C46413-6, C46413-7, C46413-9, C46413-14

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	40	32.6	82	33.2	83	2	72-122/18
108-20-3	Di-Isopropyl ether	40	31.6	79	32.0	80	1	69-122/19
100-41-4	Ethylbenzene	40	33.1	83	33.4	84	1	71-118/18
637-92-3	Ethyl tert-Butyl Ether	40	32.5	81	33.4	84	3	69-125/19
1634-04-4	Methyl Tert Butyl Ether	40	31.7	79	32.8	82	3	68-121/19
91-20-3	Naphthalene	40	32.1	80	33.0	83	3	68-129/22
994-05-8	Tert-Amyl Methyl Ether	40	33.4	84	34.8	87	4	70-129/20
75-65-0	Tert Butyl Alcohol	200	169	85	202	101	18	50-163/30
108-88-3	Toluene	40	32.4	81	32.3	81	0	72-116/18
1330-20-7	Xylene (total)	120	98.0	82	99.9	83	2	68-118/18
CAS No.	Surrogate Recoveries	BSP	BS	SD	Limits			
1868-53-7	Dibromofluoromethane	99%	98	%	72-1409	%		

98%

101%

87-113%

81-115%

100%

101%

2037-26-5 Toluene-D8

4-Bromofluorobenzene

460-00-4





Job Number:	C46413
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

Sample	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	By	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
VL1497-BS	L49905.D	1	07/07/16	JT	n/a	n/a	VL1497
VL1497-BSD	L49906.D	1	07/07/16	JT	n/a	n/a	VL1497

#### The QC reported here applies to the following samples:

Method: SW846 8260B

C46413-1, C46413-2, C46413-3, C46413-4, C46413-5, C46413-10, C46413-11, C46413-12, C46413-13

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
71-43-2 108-20-3 100-41-4 637-92-3 1634-04-4 91-20-3 994-05-8 75-65-0	Benzene Di-Isopropyl ether Ethylbenzene Ethyl tert-Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether Tert Butyl Alcohol	40 40 40 40 40 40 40 200	31.4 29.6 29.6 30.7 29.1 29.1 32.1 157 28.5	79 74 74 77 73 73 80 79	33.1 32.2 31.3 33.5 32.7 33.7 35.9 182 20.5	<ul> <li>83</li> <li>81</li> <li>78</li> <li>84</li> <li>82</li> <li>84</li> <li>90</li> <li>91</li> <li>76</li> </ul>	5 8 6 9 12 15 11 15 7	72-122/18 69-122/19 71-118/18 69-125/19 68-121/19 68-129/22 70-129/20 50-163/30 72 11/(18)
108-88-3 1330-20-7 CAS No.	Toluene Xylene (total) Surrogate Recoveries Dibromofluoromethane	40 120 BSP	28.5 89.5 BSI		30.5 95.1 Limits	76 79	7 6	72-116/18 68-118/18
1868-53-7 2037-26-5 460-00-4	Toluene-D8 4-Bromofluorobenzene	103% 90% 98%	100 89% 99%	ó	72-1409 87-1139 81-1159	6		

(a) Outside laboratory control limits; but within marginal exceedance criteria.



5.2.3

G

Job Number:	C46413
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
R40955.D	1	07/08/16	CV	n/a	n/a	VR1577
R40956.D	1	07/08/16	CV	n/a	n/a	VR1577
K40930.D	1	07/08/10	Cv	11/ a	II/a	VK13//
	R40955.D	R40955.D 1	R40955.D 1 07/08/16	R40955.D 1 07/08/16 CV	R40955.D 1 07/08/16 CV n/a	R40955.D 1 07/08/16 CV n/a n/a

#### The QC reported here applies to the following samples:

Method: SW846 8260B

C46413-8, C46413-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	20	20.5	103	20.2	101	1	76-120/10
108-20-3	Di-Isopropyl ether	20	21.5	108	21.3	107	1	69-126/10
100-41-4	Ethylbenzene	20	21.1	106	20.3	102	4	78-123/10
637-92-3	Ethyl Tert Butyl Ether	20	20.4	102	20.7	104	1	75-126/11
1634-04-4	Methyl Tert Butyl Ether	20	19.0	95	19.2	96	1	73-120/10
91-20-3	Naphthalene	20	18.8	94	18.8	94	0	66-120/12
994-05-8	Tert-Amyl Methyl Ether	20	20.4	102	20.6	103	1	77-126/10
75-65-0	Tert-Butyl Alcohol	100	94.7	95	102	102	7	52-148/18
108-88-3	Toluene	20	20.4	102	19.7	99	3	78-121/10
1330-20-7	Xylene (total)	60	60.7	101	58.8	98	3	78-122/10
CAS No.	Surrogate Recoveries	BSP	BS	D	Limits			

1868-53-7	Dibromofluoromethane	108%	110%	80-123%
2037-26-5	Toluene-D8	103%	102%	88-112%
460-00-4	4-Bromofluorobenzene	100%	99%	79-114%



Job Number:	C46413
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

Sample	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	By	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
VL1498-BS	L49946.D	1	07/11/16	JT	n/a	n/a	VL1498
VL1498-BSD	L49947.D	1	07/11/16	JT	n/a	n/a	VL1498

#### The QC reported here applies to the following samples:

Method: SW846 8260B

C46413-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
1634-04-4	Methyl Tert Butyl Ether	40	29.4	74	28.5	71	3	68-121/19
CAS No.	Surrogate Recoveries	BSP	BSI	)	Limits			



Laboratory Control Sample SummaryPage 1 of 1Job Number:C46413Account:QSMCAF Quick Stop MarketsProject:T1000008568-CCCAD:Quik Stop #51, Oakland, CA											
Sample VU1472-L0			<b>lyzed</b> 06/16	By MV	<b>Prep Date</b> n/a	<b>Prep Batch</b> n/a	Analytical Batch VU1472				
<b>The QC re</b> C46413-15	ported here applies to th	e following sar	nples:			Method: SW840	5 8260B				
CAS No.	Compound	Spike ug/l	LCS ug/l	LCS %	Limits						
CAS No.	Surrogate Recoveries	BSP	L	imits							
1868-53-7 2037-26-5	Dibromofluoromethane Toluene-D8	106% 104%		)-123% 3-112%							

79-114%

460-00-4

4-Bromofluorobenzene

98%



5.3.1

S

## Laboratory Control Sample Summary

Job Number:	C46413
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

VM1856-LCS M61713.D 1 07/06/16 JT n/a n/a VM1856
--

#### The QC reported here applies to the following samples:

Method: SW846 8260B

C46413-6, C46413-7, C46413-9, C46413-14

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
	TPH-GRO (C6-C10)	250	229	92	70-123
CAS No.	Surrogate Recoveries	BSP	Lin	nits	
1868-53-7	Dibromofluoromethane	104%	72_1	40%	
2037-26-5	Toluene-D8	104%		140%	
460-00-4	4-Bromofluorobenzene	101%		115%	



5.3.2

G

## Laboratory Control Sample Summary

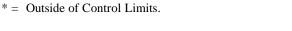
Job Number:	C46413
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

<b>Sample</b>	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	By	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
VL1497-LCS	L49907.D	1	07/07/16	JT	n/a	n/a	VL1497
The QC reporte	ed here applies t	o the follo	wing samples:		]	Method: SW84	6 8260B

C46413-1, C46413-2, C46413-3, C46413-4, C46413-5, C46413-10, C46413-11, C46413-12, C46413-13

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
	TPH-GRO (C6-C10)	250	271	108	70-123
CAS No.	Surrogate Recoveries	BSP	Lim	its	
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	100% 91% 96%	87-1	40% 13% 15%	

Page 1 of 1





Laboratory Job Number:Control Sample Summary C46413Page 1 of Page 1 of C46413Account:QSMCAF Quick Stop Markets T1000008568-CCCAD:Quik Stop #51, Oakland, CA										
Sample VR1577-LCS	<b>File ID</b> R40958.D	<b>DF</b> 1		<b>lyzed</b> 8/16	By CV	<b>Prep Date</b> n/a	<b>Prep Batch</b> n/a	<b>Analytical Batch</b> VR1577		
The QC reported here applies to the following samples:       Method: SW846 8260B         C46413-8, C46413-15										
CAS No. Co	ompound		Spike ug/l	LCS ug/l	LCS %	Limits				

125

BSP

107%

104%

96%

143

114

Limits

80-123%

88-112%

79-114%

70-130

TPH-GRO (C6-C10)

Surrogate Recoveries

Dibromofluoromethane

4-Bromofluorobenzene

Toluene-D8

CAS No.

1868-53-7

2037-26-5

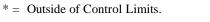
460-00-4



5.3.4

G

Laboratory Control Sample SummaryJob Number:C46413Account:QSMCAF Quick Stop MarketsProject:T10000008568-CCCAD:Quik Stop #51, Oakland, CA										
Sample VL1498-L0	<b>File ID</b> CS L49948.D		<b>lyzed</b> 11/16	By JT	<b>Prep Date</b> n/a	<b>Prep Batch</b> n/a	<b>Analytical Batch</b> VL1498			
<b>The QC re</b> C46413-5	ported here applies to	the following sa	mples:			Method: SW840	5 8260B			
CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits					
CAS No.	Surrogate Recoveries	BSP	Li	mits						
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethan Toluene-D8 4-Bromofluorobenzene	98%	87	-140% -113% -115%						





5.3.5

G

Job Number:	C46413
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

Sample	File ID	<b>DF</b>	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C46393-1MS C46393-1MSD	U35741.D U35742.D	100 100	07/06/16 07/06/16	MV MV	n/a n/a	n/a n/a	VU1472 VU1472
C46393-1	U35736.D	100	07/06/16	MV	n/a	n/a	VU1472

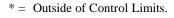
#### The QC reported here applies to the following samples:

Method: SW846 8260B

C46413-15

CAS No.	Compound	C46393-1 ug/l Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-20-3 637-92-3 1634-04-4 91-20-3 994-05-8 75-65-0 108-88-3 1330-20-7	Di-Isopropyl ether Ethyl Tert Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether Tert-Butyl Alcohol Toluene Xylene (total)	ND ND ND ND ND ND ND	2000 2000 2000 2000 2000 10000 2000 6000	1700 1750 1700 1540 1780 8120 1610 4540	85 88 85 77 89 81 81 76* <sup>a</sup>	2000 2000 2000 2000 2000 10000 2000 6000	1760 1820 1800 1600 1870 8450 1680 4730	88 91 90 80 94 85 84 79	3 4 6 4 5 4 4 4	69-126/10 75-126/11 73-120/10 66-120/12 77-126/10 52-148/18 78-121/10 78-122/10
CAS No. 1868-53-7 2037-26-5 460-00-4	Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	MS 103% 101% 102%	MSD 105% 101% 102%	C40 120 999 929	6	Limits 80-1239 88-1129 79-1149	6			

(a) Outside control limits due to matrix interference. AZ:M2





Page 1 of 1

Job Number:	C46413
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

Sample	File ID	DF	Analyzed	Bv	Prep Date	Prep Batch	Analytical Batch
C46413-7MS	M61730.D	1	07/06/16	Dy IT	, <b>-</b>	, I	VM1856
		1		JI	n/a	n/a	
C46413-7MSD	M61731.D	I	07/06/16	JT	n/a	n/a	VM1856
C46413-7	M61718.D	1	07/06/16	JT	n/a	n/a	VM1856

#### The QC reported here applies to the following samples:

Method: SW846 8260B

C46413-6, C46413-7, C46413-9, C46413-14

CAS No.	Compound	C46413 ug/kg	-7 Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	0.47	J	38.7	32.7	83	38.6	31.2	80	5	72-122/18
108-20-3	Di-Isopropyl ether	ND		38.7	27.5	71	38.6	25.6	66* a	7	69-122/19
100-41-4	Ethylbenzene	ND		38.7	32.7	85	38.6	31.2	81	5	71-118/18
637-92-3	Ethyl tert-Butyl Ether	ND		38.7	28.2	73	38.6	26.0	67* <sup>a</sup>	8	69-125/19
1634-04-4	Methyl Tert Butyl Ether	47.4		38.7	51.0	9* a	38.6	42.6	-12* a	18	68-121/19
91-20-3	Naphthalene	ND		38.7	29.9	77	38.6	28.7	74	4	68-129/22
994-05-8	Tert-Amyl Methyl Ether	ND		38.7	30.1	78	38.6	27.6	71	9	70-129/20
75-65-0	Tert Butyl Alcohol	20.9	J	193	160	72	193	146	65	9	50-163/30
108-88-3	Toluene	ND		38.7	32.4	84	38.6	30.0	78	8	72-116/18
1330-20-7	Xylene (total)	ND		116	101	87	116	94.9	82	6	68-118/18
CAS No.	Surrogate Recoveries	MS		MSD	C4	6413-7	Limits				
1868-53-7	Dibromofluoromethane	89%		87%	109	9%	72-1409	6			
2037-26-5	Toluene-D8	96%		95%	989	%	87-1139	6			
460-00-4	4-Bromofluorobenzene	101%		99%	100	)%	81-1159	6			

(a) Outside control limits due to matrix interference.

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#### 44 of 47 ACCUTEST C46413

\* = Outside of Control Limits.

Job Number:	C46413
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

alytical Batcl	h Ana	Prep Batch	Prep Date	By	Analyzed	DF	File ID	Sample
.1497	VL1	n/a	n/a	JT	07/07/16	1	L49915.D	C46418-2MS
.1497	VL1	n/a	n/a	JT	07/07/16	1	L49916.D	C46418-2MSD
.1497	VL1	n/a	n/a	JT	07/07/16	1	L49909.D	C46418-2
.1497	VL1	n/a	n/a	JT	07/07/16	1	L49909.D	C46418-2

#### The QC reported here applies to the following samples:

\* = Outside of Control Limits.

Method: SW846 8260B

C46413-1, C46413-2, C46413-3, C46413-4, C46413-5, C46413-10, C46413-11, C46413-12, C46413-13

CAS No.	Compound	C46418-2 ug/kg Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	43.7	37.9	87	44.7	40.0	89	5	72-122/18
108-20-3	Di-Isopropyl ether	ND	43.7	36.3	83	44.7	39.4	88	8	69-122/19
100-41-4	Ethylbenzene	ND	43.7	35.6	81	44.7	37.8	85	6	71-118/18
637-92-3	Ethyl tert-Butyl Ether	ND	43.7	38.0	87	44.7	41.0	92	8	69-125/19
1634-04-4	Methyl Tert Butyl Ether	ND	43.7	35.3	81	44.7	38.4	86	8	68-121/19
91-20-3	Naphthalene	ND	43.7	30.9	71	44.7	30.3	68	2	68-129/22
994-05-8	Tert-Amyl Methyl Ether	ND	43.7	39.2	90	44.7	43.0	96	9	70-129/20
75-65-0	Tert Butyl Alcohol	ND	219	186	85	224	196	88	5	50-163/30
108-88-3	Toluene	ND	43.7	34.5	79	44.7	37.2	83	8	72-116/18
1330-20-7	Xylene (total)	ND	131	107	82	134	114	85	6	68-118/18
CAS No.	Surrogate Recoveries	MS	MSD	C4	6418-2	Limits				
1868-53-7	Dibromofluoromethane	101%	102%	107	7%	72-1409	%			
2037-26-5	Toluene-D8	88%	90%	929	%	87-1139	%			
460-00-4	4-Bromofluorobenzene	96%	96%	989	%	81-1159	%			



5.4.3

S

Job Number:	C46413
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C46413-8MS	R40974.D	200	07/08/16	CV	n/a	n/a	VR1577
C46413-8MSD	R40975.D	200	07/08/16	CV	n/a	n/a	VR1577
C46413-8 <sup>a</sup>	R40968.D	200	07/08/16	CV	n/a	n/a	VR1577

#### The QC reported here applies to the following samples:

Method: SW846 8260B

C46413-8, C46413-15

CAS No.	Compound	C46413- ug/l	8 Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	511		4000	4560	101	4000	4410	97	3	76-120/10
108-20-3	Di-Isopropyl ether	ND		4000	3900	98	4000	3780	95	3	69-126/10
100-41-4	Ethylbenzene	141	J	4000	4280	103	4000	4160	100	3	78-123/10
637-92-3	Ethyl Tert Butyl Ether	ND		4000	3980	100	4000	3870	97	3	75-126/11
1634-04-4	Methyl Tert Butyl Ether	14600		4000	17700	78	4000	17500	73	1	73-120/10
91-20-3	Naphthalene	ND		4000	4020	101	4000	3880	97	4	66-120/12
994-05-8	Tert-Amyl Methyl Ether	ND		4000	4100	103	4000	3990	100	3	77-126/10
75-65-0	Tert-Butyl Alcohol	20000		20000	41300	107	20000	41300	107	0	52-148/18
108-88-3	Toluene	ND		4000	4130	103	4000	3970	99	4	78-121/10
1330-20-7	Xylene (total)	316	J	12000	12700	103	12000	12200	99	4	78-122/10
CAS No.	Surrogate Recoveries	MS		MSD	C40	6413-8	Limits				
1868-53-7	Dibromofluoromethane	103%		102%	108	%	80-1239	6			
2037-26-5	Toluene-D8	100%		100%	104	%	88-1129	6			
460-00-4	4-Bromofluorobenzene	99%		98%	95%	6	79-1149	6			

(a) Sample vial contained more than 0.5cm of sediment.



5.4.4

S

Job Number:	C46413
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C46413-5MS	L49964.D	1	07/11/16	JT	n/a	n/a	VL1498
C46413-5MSD	L49965.D	1	07/11/16	JT	n/a	n/a	VL1498
C46413-5	L49963.D	1	07/11/16	JT	n/a	n/a	VL1498

#### The QC reported here applies to the following samples:

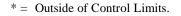
Method: SW846 8260B

C46413-5

CAS No.	Compound	C46413-5 ug/kg Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
1634-04-4	Methyl Tert Butyl Ether	12700	7740	18900	80	7740	17600	63* a	7	68-121/19
~ . ~										
CAS No.	Surrogate Recoveries	MS	MSD	C46	413-5	Limits				

(a) Outside control limits due to matrix interference.

Page 1 of 1







## ACCUTEST Northern California

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e-Hardcopy 2.0 Automated Report

SG:

Technical Report for

Quick Stop Markets

T10000008568-CCCAD: Quik Stop #51, Oakland, CA

12216-1

SGS Accutest Job Number: C46475



Sampling Dates: 07/11/16 - 07/12/16

Report to:

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

ATTN: Gary Mulkey

Total number of pages in report: 62



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James J. Rhudy Lab Director

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.

Client Service contact: Elvin Kumar 408-588-0200

Certifications: CA (ELAP 2910) AK (UST-092) AZ (AZ0762) NV (CA00150) OR (CA300006) WA (C925) DoD ELAP (L-A-B L2242)

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## **Sample Summary**

Quick Stop Markets

**Job No:** C46475

T10000008568-CCCAD:Quik Stop #51, Oakland, CA Project No: 12216-1

Sample Number	Collected Date	Time By	Received	Matri Code		Client Sample ID
C46475-1	07/11/16	08:30	07/12/16	SO	Soil	B-2-5
C46475-2	07/11/16	08:35	07/12/16	SO	Soil	B-2-10
C46475-3	07/11/16	08:40	07/12/16	SO	Soil	B-2-15
C46475-4	07/11/16	08:55	07/12/16	SO	Soil	B-2-20
C46475-5	07/11/16	09:10	07/12/16	SO	Soil	B-2-25
C46475-6	07/11/16	09:30	07/12/16	SO	Soil	B-2-30
C46475-7	07/11/16	10:25	07/12/16	SO	Soil	B-3-5
C46475-8	07/11/16	10:30	07/12/16	SO	Soil	B-3-10
C46475-9	07/11/16	10:35	07/12/16	SO	Soil	B-3-15
C46475-10	07/11/16	10:40	07/12/16	SO	Soil	B-3-20
C46475-11	07/11/16	10:50	07/12/16	SO	Soil	B-3-21
C46475-12	07/11/16	11:05	07/12/16	SO	Soil	B-3-25
C46475-13	07/11/16	11:15	07/12/16	SO	Soil	B-3-30

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



# Sample Summary (continued)

**Quick Stop Markets** 

Job No: C46475

T10000008568-CCCAD:Quik Stop #51, Oakland, CA Project No: 12216-1

Sample Number	Collected Date	Time By	Received	Matri Code		Client Sample ID
C46475-14	07/12/16	08:45	07/12/16	AQ	Ground Water	B-3-W
C46475-15	07/12/16	08:55	07/12/16	AQ	Ground Water	B-2-W
C46475-16	07/12/16	09:15	07/12/16	AQ	Ground Water	B-1-W
C46475-17	07/12/16	10:15	07/12/16	AQ	Ground Water	B-5-W

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



## Summary of Hits

Job Number:	C46475
Account:	Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA
Collected:	07/11/16 thru 07/12/16

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
C46475-1	B-2-5					
No hits reported in this sample.						
C46475-2	<b>B-2-10</b>					
TPH-GRO (C6-C	210)	21400	4600	2300	ug/kg	SW846 8260B
C46475-3	B-2-15					
TPH-GRO (C6-C	210)	117000	47000	24000	ug/kg	SW846 8260B
C46475-4	<b>B-2-20</b>					
Benzene Ethylbenzene Naphthalene TPH-GRO (C6-C	210)	407 J 1640 J 486 J 195000	2200 2200 2200 43000	220 220 430 22000	ug/kg ug/kg ug/kg ug/kg	SW846 8260B SW846 8260B SW846 8260B SW846 8260B
C46475-5	<b>B-2-25</b>					
Benzene Tert Butyl Alcoh TPH-GRO (C6-C		16.6 21.1 J 426	4.9 39 97	0.49 9.7 49	ug/kg ug/kg ug/kg	SW846 8260B SW846 8260B SW846 8260B
C46475-6	<b>B-2-30</b>					
Methyl Tert Buty	l Ether	1.0 J	4.9	0.98	ug/kg	SW846 8260B
C46475-7	B-3-5					
Tert Butyl Alcoh TPH-GRO (C6-C		5560 2560 J	1800 4500	450 2200	ug/kg ug/kg	SW846 8260B SW846 8260B
C46475-8	B-3-10					
Tert Butyl Alcoh TPH-GRO (C6-C		2980 2220 J	1800 4500	450 2200	ug/kg ug/kg	SW846 8260B SW846 8260B
C46475-9	B-3-15					
Benzene Ethylbenzene Methyl Tert Buty Naphthalene	/l Ether	307 J 3540 2460 4010	2300 2300 2300 2300	230 230 460 460	ug/kg ug/kg ug/kg ug/kg	SW846 8260B SW846 8260B SW846 8260B SW846 8260B SW846 8260B



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## **Summary of Hits**

Job Number:	C46475
Account:	Quick Stop Markets
Project:	T10000008568-CCCAD: Quik Stop #51, Oakland, CA
Collected:	07/11/16 thru 07/12/16

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
TPH-GRO (C6-C10)	640000	46000	23000	ug/kg	SW846 8260B
C46475-10 B-3-20					
Ethylbenzene Methyl Tert Butyl Ether Tert Butyl Alcohol TPH-GRO (C6-C10)	532 J 2580 8210 J 150000	2200 2200 17000 43000	220 430 4300 22000	ug/kg ug/kg ug/kg ug/kg	SW846 8260B SW846 8260B SW846 8260B SW846 8260B
C46475-11 B-3-21					
Benzene Ethylbenzene Xylene (total) Methyl Tert Butyl Ether Naphthalene Tert Butyl Alcohol TPH-GRO (C6-C10)	546 J 9110 11500 8200 5830 6490 J 386000	2300 2300 4600 2300 2300 18000 46000	230 230 460 460 460 4600 23000	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	SW846 8260B SW846 8260B SW846 8260B SW846 8260B SW846 8260B SW846 8260B SW846 8260B
C46475-12 B-3-25					
Tert Butyl Alcohol TPH-GRO (C6-C10)	29900 2490 J	1800 4500	450 2200	ug/kg ug/kg	SW846 8260B SW846 8260B
C46475-13 B-3-30					
Methyl Tert Butyl Ether Tert Butyl Alcohol TPH-GRO (C6-C10)	40.2 14.5 J 97.0	4.8 38 96	0.96 9.6 48	ug/kg ug/kg ug/kg	SW846 8260B SW846 8260B SW846 8260B
C46475-14 B-3-W					
Benzene Toluene Ethylbenzene Xylene (total) Di-Isopropyl ether Methyl Tert Butyl Ether Tert-Amyl Methyl Ether Tert-Butyl Alcohol TPH-GRO (C6-C10)	1140 4.4 1340 784 J 0.28 J 21100 16.5 17900 72500	500 1.0 500 1000 2.0 500 2.0 5000 25000	100 0.20 100 230 0.22 100 0.40 1200 13000	ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l	SW846 8260B SW846 8260B SW846 8260B SW846 8260B SW846 8260B SW846 8260B SW846 8260B SW846 8260B SW846 8260B
C46475-15 B-2-W					
Benzene	1280	50	10	ug/l	SW846 8260B



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## **Summary of Hits**

Job Number:	C46475
Account:	Quick Stop Markets
Project:	T10000008568-CCCAD: Quik Stop #51, Oakland, CA
Collected:	07/11/16 thru 07/12/16

Lab Sample ID Client Sample ID Analyte	Result/ Qual	RL	MDL	Units	Method
Toluene	154	50	10	ug/l	SW846 8260B
Ethylbenzene	575	50	10	ug/l	SW846 8260B
Xylene (total)	2430	100	23	ug/l	SW846 8260B
Methyl Tert Butyl Ether <sup>a</sup>	2.7	1.0	0.20	ug/l	SW846 8260B
Naphthalene	123 J	250	25	ug/l	SW846 8260B
Tert-Butyl Alcohol <sup>a</sup>	51.6	10	2.4	ug/l	SW846 8260B
TPH-GRO (C6-C10)	21000	2500	1300	ug/l	SW846 8260B
C46475-16 B-1-W					
Benzene <sup>a</sup>	233 J	500	100	ug/l	SW846 8260B
Toluene <sup>a</sup>	3.7	1.0	0.20	ug/l	SW846 8260B
Ethylbenzene <sup>a</sup>	254 J	500	100	ug/l	SW846 8260B
Xylene (total) <sup>a</sup>	133	2.0	0.46	ug/l	SW846 8260B
Methyl Tert Butyl Ether a	25100	500	100	ug/l	SW846 8260B
Naphthalene <sup>a</sup>	5.9	5.0	0.50	ug/l	SW846 8260B
Tert-Amyl Methyl Ether <sup>a</sup>	16.7	2.0	0.40	ug/l	SW846 8260B
Tert-Butyl Alcohol <sup>a</sup>	39000	5000	1200	ug/l	SW846 8260B
TPH-GRO (C6-C10) <sup>a</sup>	71100	25000	13000	ug/l	SW846 8260B
C46475-17 B-5-W					
Benzene	404 J	1000	200	ug/l	SW846 8260B
Toluene	5.5	1.0	0.20	ug/l	SW846 8260B
Ethylbenzene	613 J	1000	200	ug/l	SW846 8260B
Xylene (total)	551 J	2000	460	ug/l	SW846 8260B
Di-Isopropyl ether	0.93 J	2.0	0.22	ug/l	SW846 8260B
Ethyl Tert Butyl Ether	0.39 J	2.0	0.22	ug/l	SW846 8260B
Methyl Tert Butyl Ether	70100	1000	200	ug/l	SW846 8260B
Naphthalene	12.2	5.0	0.50	ug/l	SW846 8260B
Tert-Amyl Methyl Ether	42.1	2.0	0.40	ug/l	SW846 8260B
Tert-Butyl Alcohol	129000	10000	2400	ug/l	SW846 8260B
TPH-GRO (C6-C10)	183000	50000	25000	ug/l	SW846 8260B

(a) Sample vial contained more than 0.5cm of sediment.

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ယ Section 3

Sample Results

Report of Analysis



	<b>Report of Analysis</b>							
Client Sa	mple ID: E	8-2-5						
Lab Sample ID: Matrix: Method:		246475-1			Da	ate Sampled: 07	7/11/16	
		O - Soil			Da	ate Received: 07	7/12/16	
		W846 8260B			Pe	ercent Solids: n/	a <sup>a</sup>	
Project:	Т	1000008568-C	CCAD:Quik St	top #51, <b>C</b>	Dakland, CA			
	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch	
Run #1	L50032.E	) 1	07/14/16	JT	n/a	n/a	VL1501	
	L50032.D	) 1	07/14/16	JT	n/a	n/a	VL1501	
	L50032.E		07/14/16	JT	n/a	n/a	VL1501	
Run #1 Run #2 Run #1			07/14/16	JT	n/a	n/a	VL1501	

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	4.7	0.47	ug/kg	
108-88-3	Toluene	ND	4.7	0.47	ug/kg	
100-41-4	Ethylbenzene	ND	4.7	0.47	ug/kg	
1330-20-7	Xylene (total)	ND	9.4	0.94	ug/kg	
108-20-3	Di-Isopropyl ether	ND	4.7	0.47	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	4.7	0.47	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.7	0.94	ug/kg	
91-20-3	Naphthalene	ND	4.7	0.94	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	4.7	0.47	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	38	9.4	ug/kg	
	TPH-GRO (C6-C10)	ND	94	47	ug/kg	
CAS No.	Sumagata Dagavaniag	Run# 1	Run# 2	Lim	ita	
CAS NO.	Surrogate Recoveries	Kull# 1	Kull# 2	LIII	115	
1868-53-7	Dibromofluoromethane	91%		72-1	40%	
2037-26-5	Toluene-D8	93%		87-1	13%	
460-00-4	4-Bromofluorobenzene	90%		81-1	15%	

(a) All results reported on a wet weight basis.

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



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			Rep	ort of A	Analysis		Page 1 of 1
Client San Lab Sam Matrix: Method: Project:	ple ID: C46473 SO - So SW846	oil 8260B	CCCAD:Quik	Stop #51, (	Dakland, CA	Date Sampled: Date Received: Percent Solids:	
Run #1 Run #2	<b>File ID</b> L50013.D	<b>DF</b> 1	<b>Analyzed</b> 07/13/16	By JT	<b>Prep Date</b> n/a	<b>Prep Batcl</b> n/a	n Analytical Batch VL1500
Run #1 Run #2	<b>Initial Weight</b> 5.40 g	<b>Final</b> 5.0 ml	Volume	<b>Methanol</b> 100 ul	l Aliquot		

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7 108-20-3	Benzene Toluene Ethylbenzene Xylene (total) Di-Isopropyl ether	ND ND ND ND ND	230 230 230 460 230	23 23 23 46 23	ug/kg ug/kg ug/kg ug/kg	
637-92-3 1634-04-4 91-20-3 994-05-8 75-65-0	Ethyl tert-Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether Tert Butyl Alcohol TPH-GRO (C6-C10)	ND ND ND ND ND 21400	230 230 230 230 230 1900 4600	23 23 46 46 23 460 2300	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	87% 96% 93%		87-1	40% 13% 15%	

(a) All results reported on a wet weight basis.

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



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			Rep	ort of A	Analysis		Page 1 of 1
Client Sa Lab Samj Matrix: Method: Project:	ple ID: C464' SO - S SW84	75-3 Soil 6 8260B	CCCAD:Quik	Stop #51, (	]	r r	07/11/16 07/12/16 /a <sup>a</sup>
Run #1 Run #2	<b>File ID</b> L50037.D	<b>DF</b> 1	<b>Analyzed</b> 07/14/16	By JT	<b>Prep Date</b> n/a	<b>Prep Batch</b> n/a	<b>Analytical Batch</b> VL1501
Run #1 Run #2	<b>Initial Weigh</b> 5.31 g	t <b>Final V</b> 5.0 ml	olume	Methanol 10.0 ul	Aliquot		

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7 108-20-3 637-92-3 1634-04-4 91-20-3 994-05-8	Benzene Toluene Ethylbenzene Xylene (total) Di-Isopropyl ether Ethyl tert-Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether	ND ND ND ND ND ND ND ND	2400 2400 4700 2400 2400 2400 2400 2400	240 240 240 470 240 240 470 470 240	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	
75-65-0 CAS No.	Tert Butyl Alcohol TPH-GRO (C6-C10) Surrogate Recoveries	ND 117000 Run# 1	19000 47000 Run# 2	4700 24000 Lim	ug/kg ug/kg its	
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	88% 95% 90%		72-1 87-1 81-1	13%	

(a) All results reported on a wet weight basis.

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



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			Rep	ort of A	Analysis		Page 1 of 1
Client San Lab Sam Matrix: Method: Project:	ple ID: C4647 SO - S SW84	75-4 Soil 6 8260B	CCCAD:Quik	Stop #51, (	Dakland, CA	Date Sampled: Date Received: Percent Solids:	07/11/16 07/12/16 n/a <sup>a</sup>
Run #1 Run #2	<b>File ID</b> L50018.D	<b>DF</b> 1	<b>Analyzed</b> 07/13/16	By JT	<b>Prep Date</b> n/a	<b>Prep Batc</b> n/a	h Analytical Batch VL1500
Run #1 Run #2	<b>Initial Weight</b> 5.75 g	<b>Final V</b> 5.0 ml	/olume	<b>Methanol</b> 10.0 ul	Aliquot		

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7 108-20-3 637-92-3 1634-04-4 91-20-3	Benzene Toluene Ethylbenzene Xylene (total) Di-Isopropyl ether Ethyl tert-Butyl Ether Methyl Tert Butyl Ether Naphthalene	407 ND 1640 ND ND ND ND 486	2200 2200 2200 4300 2200 2200 2200 2200	220 220 220 430 220 220 430 430	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	] J
994-05-8 75-65-0	Tert-Amyl Methyl Ether Tert Butyl Alcohol TPH-GRO (C6-C10)	ND ND 195000	2200 17000 43000	220 4300 22000	ug/kg ug/kg ug/kg	
CAS No. 1868-53-7 2037-26-5 460-00-4	Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	<b>Run# 1</b> 89% 100% 91%	Run# 2         Limits           72-140%         87-113%           81-115%         81-115%		40% 13%	

(a) All results reported on a wet weight basis.

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



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Lab Samı Matrix: Method: Project:	SO SW	B-2-25 C46475-5 SO - Soil SW846 8260B T10000008568-CCCAD:Quik Stop #51, Oakla			Dakland. CA	07/11/16 07/12/16 n/a <sup>a</sup>	
Run #1 Run #2	<b>File ID</b> L50031.D	<b>DF</b> 1	<b>Analyzed</b> 07/14/16	By JT	<b>Prep Date</b> n/a	<b>Prep Batch</b> n/a	Analytical Batch VL1501
Run #1 Run #2	<b>Initial Weig</b> 5.14 g	ht					

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	16.6 ND ND ND	4.9 4.9 4.9 9.7	0.49 0.49 0.49 0.97	ug/kg ug/kg ug/kg ug/kg	
108-20-3 637-92-3 1634-04-4 91-20-3 994-05-8 75-65-0	Di-Isopropyl ether Ethyl tert-Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether Tert Butyl Alcohol TPH-GRO (C6-C10)	ND ND ND ND 21.1 426	4.9 4.9 4.9 4.9 4.9 39 97	0.49 0.49 0.97 0.97 0.49 9.7 49	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	J
CAS No. 1868-53-7 2037-26-5	Surrogate Recoveries Dibromofluoromethane Toluene-D8	Run# 1 92% 96%	Run# 2 Limits 72-140% 87-113%		40% 13%	
460-00-4	4-Bromofluorobenzene	93%		81-1	15%	

(a) All results reported on a wet weight basis.

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



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	Report of Analysis						
Client Sa	mple ID:	3-2-30					
Lab Sample ID: Matrix: Method:		246475-6			Da	ate Sampled: 07	7/11/16
		SO - Soil			Da	ate Received: 07	7/12/16
		SW846 8260B			Pe	ercent Solids: n/	a <sup>a</sup>
Project:	r	Г10000008568-С	CCCAD:Quik St	top #51, <b>G</b>	Dakland, CA		
	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
			ť	-	-	-	-
Run #1	L50030.I	D 1	07/14/16	JT	n/a	n/a	VL1501
	L50030.1	D 1	07/14/16	JT	n/a	n/a	VL1501
	L50030.1		07/14/16	JT 	n/a	n/a	VL1501
Run #1 Run #2 Run #1			07/14/16	J1 <sup>*</sup>	n/a	n/a	VL1501

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7 108-20-3	Benzene Toluene Ethylbenzene Xylene (total) Di-Isopropyl ether	ND ND ND ND ND	4.9 4.9 4.9 9.8 4.9	0.49 0.49 0.49 0.98 0.49	ug/kg ug/kg ug/kg ug/kg ug/kg	
637-92-3 1634-04-4 91-20-3 994-05-8 75-65-0	Ethyl tert-Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether Tert Butyl Alcohol TPH-GRO (C6-C10)	ND 1.0 ND ND ND ND	4.9 4.9 4.9 4.9 39 98	0.49 0.98 0.98 0.49 9.8 49	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	Limits	
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	89% 94% 90%	72-140% 87-113% 81-115%			

(a) All results reported on a wet weight basis.

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



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			Rep	ort of A	Analysis		Page 1 of 1
Client Sa Lab Sam Matrix: Method: Project:	ple ID: C46475 SO - So SW846	oil 8260B	CCCAD:Quik	Stop #51, 0		L .	07/11/16 07/12/16 n/a <sup>a</sup>
Run #1 Run #2	<b>File ID</b> L50015.D	<b>DF</b> 1	<b>Analyzed</b> 07/13/16	By JT	<b>Prep Date</b> n/a	<b>Prep Batch</b> n/a	<b>Analytical Batch</b> VL1500
Run #1 Run #2	<b>Initial Weight</b> 5.57 g	<b>Final</b> 5.0 ml	Volume	<b>Methanol</b> 100 ul	l Aliquot		

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND ND	220 220 220 450	22 22 22 45	ug/kg ug/kg ug/kg ug/kg	
108-20-3 637-92-3 1634-04-4 91-20-3 994-05-8 75-65-0	Di-Isopropyl ether Ethyl tert-Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether Tert Butyl Alcohol	ND ND ND ND ND 5560	220 220 220 220 220 220 220 1800	22 22 45 45 22 450	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	
CAS No. 1868-53-7 2037-26-5 460-00-4	TPH-GRO (C6-C10) Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	2560 Run# 1 86% 98% 92%	4500 Run# 2	87-1	ug/kg its 40% 13% 15%	J

(a) All results reported on a wet weight basis.

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



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			Rep	ort of A	Analysis		Page 1 of 1
Client San Lab Sam Matrix: Method: Project:	ple ID: C464 SO - S SW84	75-8 Soil 6 8260B	CCCAD:Quik	Stop #51,	Oakland, CA	Date Sampled: Date Received: Percent Solids:	0
Run #1 Run #2	<b>File ID</b> L50055.D	<b>DF</b> 1	<b>Analyzed</b> 07/15/16	By JT	<b>Prep Date</b> n/a	<b>Prep Batc</b> n/a	h Analytical Batch VL1502
Run #1 Run #2	<b>Initial Weight</b> 5.57 g	t <b>Final V</b> 5.0 ml	olume	Methano 100 ul	l Aliquot		

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	220	22	ug/kg	
108-88-3	Toluene	ND	220	22	ug/kg	
100-41-4	Ethylbenzene	ND	220	22	ug/kg	
1330-20-7	Xylene (total)	ND	450	45	ug/kg	
108-20-3	Di-Isopropyl ether	ND	220	22	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	220	22	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	220	45	ug/kg	
91-20-3	Naphthalene	ND	220	45	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	220	22	ug/kg	
75-65-0	Tert Butyl Alcohol	2980	1800	450	ug/kg	
	TPH-GRO (C6-C10)	2220	4500	2200	ug/kg	J
CAS No.	Surragata Dagovarias	Run# 1	Run# 2	Lim	ita	
CAS NO.	Surrogate Recoveries	Kull# 1	Kull# 2	LIIII	115	
1868-53-7	Dibromofluoromethane	92%		72-1	40%	
2037-26-5	Toluene-D8	94%		87-1	13%	
460-00-4	4-Bromofluorobenzene	89%		81-1	15%	

(a) All results reported on a wet weight basis.

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



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C46475

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				Rep	ort of A	Analysis		Page 1 of 1
Client Sa	mple ID:	B-3-15						
Lab Sam	ple ID:	C46475	-9				Date Sampled:	07/11/16
Matrix:		SO - So	oil				Date Received:	07/12/16
Method:		SW846	8260B				Percent Solids:	n/a <sup>a</sup>
Project:		T10000	008568-C	CCCAD:Quik	Stop #51, C	Dakland, CA		
	File ID		DF	Analyzed	By	Prep Date	Prep Batcl	h Analytical Batch
Run #1	<b>File ID</b> L50039		<b>DF</b> 1	<b>Analyzed</b> 07/14/16	<b>Ву</b> ЈТ	<b>Prep Date</b> n/a	<b>Prep Batcl</b> n/a	h Analytical Batch VL1501
Run #1 Run #2			<b>DF</b> 1	U	e	-	-	•
	L50039		DF 1 Final V	07/14/16	e	n/a	-	•

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7 108-20-3 637-92-3 1634-04-4 91-20-3 994-05-8 75-65-0	Benzene Toluene Ethylbenzene Xylene (total) Di-Isopropyl ether Ethyl tert-Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether Tert Butyl Alcohol	307 ND 3540 ND ND 2460 4010 ND ND	2300 2300 2300 4600 2300 2300 2300 2300 2300 2300 18000	230 230 230 460 230 230 460 460 230 4600	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	J
	TPH-GRO (C6-C10)	640000	46000	23000	ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	its	
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	86% 96% 92%		72-14 87-1 81-1	13%	

(a) All results reported on a wet weight basis.

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



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ACCUTEST C46475

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Lab Samj Matrix: Method: Project:	SO - So SW846	5-10 pil 5 8260B	CCCAD:Quik	Stop #51, C	D P	ate Sampled: 07 ate Received: 07 ercent Solids: n/	112/10
Run #1 Run #2	<b>File ID</b> L50036.D	<b>DF</b> 1	<b>Analyzed</b> 07/14/16	By JT	<b>Prep Date</b> n/a	<b>Prep Batch</b> n/a	Analytical Batch VL1501
Run #1 Run #2	<b>Initial Weight</b> 5.81 g	Final V 5.0 ml	olume	Methanol 10.0 ul	Aliquot		

## **BTEX, Oxygenates**

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7 108-20-3 637-92-3 1634-04-4 91-20-3 994-05-8 75-65-0	Benzene Toluene Ethylbenzene Xylene (total) Di-Isopropyl ether Ethyl tert-Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether Tert Butyl Alcohol	ND ND 532 ND ND 2580 ND ND 8210	2200 2200 2200 4300 2200 2200 2200 2200	220 220 220 430 220 220 430 430 220 4300	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	J
CAS No.	TPH-GRO (C6-C10) Surrogate Recoveries	150000 Run# 1	43000 Run# 2	22000 Limi	ug/kg	5
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	90% 95% 92%	72-140% 87-113% 81-115%			

(a) All results reported on a wet weight basis.

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



Lab Sam Matrix: Method:	SO - S SW84	C46475-11Date SaSO - SoilDate ReSW846 8260BPercentT10000008568-CCCAD:Quik Stop #51, Oakland, CA					=
Project:	T1000	0008568-0	CCCAD:Quik S	Stop #51, C	Dakland, CA		
	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L50038.D	1	07/14/16	JT	n/a	n/a	VL1501
Run #2							
	Initial Weight	Final V	olume	Methanol	Aliquot		
	<b>Initial Weight</b> 5.48 g	Final V 5.0 ml	olume	Methanol 10.0 ul	Aliquot		

## **BTEX, Oxygenates**

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7 108-20-3 637-92-3 1634-04-4 91-20-3 994-05-8	Benzene Toluene Ethylbenzene Xylene (total) Di-Isopropyl ether Ethyl tert-Butyl Ether Methyl Tert Butyl Ether Naphthalene	546 ND 9110 11500 ND 8200 5830 ND	2300 2300 2300 4600 2300 2300 2300 2300 2300	230 230 230 460 230 230 460 460 230	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	J
75-65-0 CAS No.	Tert-Amyl Methyl Ether Tert Butyl Alcohol TPH-GRO (C6-C10) Surrogate Recoveries	6490 386000 Run# 1	2300 18000 46000 Run# 2	2300 4600 23000 Limi	ug/kg ug/kg ug/kg its	J
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	89% 96% 94%	72-140% 87-113% 81-115%			

(a) All results reported on a wet weight basis.

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



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ACCUTEST C46475

3.11 **3** 

				Rep	ort of A	Analysis		Page 1 of 1
Client Sa	mple ID:	B-3-25						
Lab Sam	ple ID:	C46475	-12				Date Sampled:	07/11/16
Matrix:		SO - So	il				Date Received:	07/12/16
Method:		SW846	8260B				Percent Solids:	n/a <sup>a</sup>
Project:		T10000	008568-0	CCAD:Quik	Stop #51, C	Dakland, CA		
	File ID		DF	Analyzed	By	Prep Date	Prep Batcl	h Analytical Batch
Run #1	File ID L50011		<b>DF</b> 1	<b>Analyzed</b> 07/13/16	<b>Ву</b> ЈТ	<b>Prep Date</b> n/a	<b>Prep Batcl</b> n/a	h Analytical Batch VL1500
Run #1 Run #2			<b>DF</b> 1	U	•	-	-	-
		.D	DF 1 Final V	07/13/16	•	n/a	-	-

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	220	22	ug/kg	
108-88-3	Toluene	ND	220	22	ug/kg	
100-41-4	Ethylbenzene	ND	220	22	ug/kg	
1330-20-7	Xylene (total)	ND	450	45	ug/kg	
108-20-3	Di-Isopropyl ether	ND	220	22	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	220	22	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	220	45	ug/kg	
91-20-3	Naphthalene	ND	220	45	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	220	22	ug/kg	
75-65-0	Tert Butyl Alcohol	29900	1800	450	ug/kg	
	TPH-GRO (C6-C10)	2490	4500	2200	ug/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	ita	
CAS NO.	Surrogate Recoveries	Kull# 1	Kull# 2	LIIII	115	
1868-53-7	Dibromofluoromethane	91%		72-1	40%	
2037-26-5	Toluene-D8	99%		87-1	13%	
460-00-4	4-Bromofluorobenzene	93%		81-1	15%	

(a) All results reported on a wet weight basis.

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



3.12 **3** 

			Repo	ort of A	Analysis		Page 1 of
	1	B-3-30					
Lab Sam	ple ID:	C46475-13			Da	ate Sampled: 07	7/11/16
Matrix:		SO - Soil			Da	ate Received: 07	7/12/16
Method:		SW846 8260B			Pe	ercent Solids: n/	a <sup>a</sup>
Project:	,	T10000008568-C	CCCAD:Quik St	top #51, C	Dakland, CA		
	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
		-		-	-	_	•
Run #1	L50029.1	D 1	07/14/16	JT	n/a	n/a	VL1501
	L50029.	D 1	07/14/16	JI	n/a	n/a	VL1501
	L50029.		07/14/16	J1	n/a	n/a	VL1501
Run #1 Run #2 Run #1			07/14/16	J1	n/a	n/a	VL1501

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7 108-20-3 637-92-3 1634-04-4 91-20-3	Benzene Toluene Ethylbenzene Xylene (total) Di-Isopropyl ether Ethyl tert-Butyl Ether Methyl Tert Butyl Ether Naphthalene	ND ND ND ND ND 40.2 ND	4.8 4.8 4.8 9.6 4.8 4.8 4.8 4.8 4.8	0.48 0.48 0.96 0.48 0.48 0.48 0.96 0.96	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg	
994-05-8 75-65-0	Tert-Amyl Methyl Ether Tert Butyl Alcohol TPH-GRO (C6-C10)	ND 14.5 97.0	4.8 38 96	0.48 9.6 48	ug/kg ug/kg ug/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	94% 96% 92%		87-1	40% 13% 15%	

(a) All results reported on a wet weight basis.

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

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3.13 Page 1 of 1



Lab Sam Matrix: Method:	AQ -		ıter		Da	ate Sampled: 0' ate Received: 0' ercent Solids: n/	
Project:			CCAD:Quik St	op #51, C		icent bonus. n/	u
	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R41066.D	1	07/13/16	CV	n/a	n/a	VR1582
Run #2	R41127.D	500	07/15/16	CV	n/a	n/a	VR1584
	Purge Volum	e					
Run #1	10.0 ml						

### **BTEX, Oxygenates**

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7 108-20-3 637-92-3 1634-04-4 91-20-3 994-05-8 75-65-0	Benzene Toluene Ethylbenzene Xylene (total) Di-Isopropyl ether Ethyl Tert Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether Tert-Butyl Alcohol	1140 <sup>a</sup> 4.4 1340 <sup>a</sup> 784 <sup>a</sup> 0.28 ND 21100 <sup>a</sup> ND <sup>a</sup> 16.5 17900 <sup>a</sup>	500 1.0 500 1000 2.0 2.0 500 2500 2.0 5000	100 0.20 100 230 0.22 0.22 100 250 0.40 1200	ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l	] J
CAS No.	TPH-GRO (C6-C10) Surrogate Recoveries	72500 <sup>a</sup> Run# 1	25000 Run# 2	13000 Lim	ug/l	
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	109% 104% 107%	115% 102% 95%	80-1 88-1 79-1	23% 12%	

(a) Result is from Run# 2

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



Run #1 <sup>a</sup>	ole ID: C464 AQ - SW84	75-15 Ground Wa 6 8260B	ater CCCAD:Quik St	op #51, C	Da Pe	L	7/12/16 7/12/16 ⁄a
	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	R41067.D	1	07/13/16	ĊV	n/a	n/a	VR1582
Run #2	R41175.D	50	07/19/16	CV	n/a	n/a	VR1587
	Purge Volum	e					
Run #1	10.0 ml						
Run #2	10.0 ml						

### **BTEX, Oxygenates**

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7 108-20-3 637-92-3 1634-04-4	Benzene Toluene Ethylbenzene Xylene (total) Di-Isopropyl ether Ethyl Tert Butyl Ether Methyl Tert Butyl Ether	1280 <sup>b</sup> 154 <sup>b</sup> 575 <sup>b</sup> 2430 <sup>b</sup> ND ND 2.7	50 50 50 100 2.0 2.0 1.0	10 10 23 0.22 0.22 0.20	ug/l ug/l ug/l ug/l ug/l ug/l ug/l	
91-20-3 994-05-8 75-65-0	Naphthalene Tert-Amyl Methyl Ether Tert-Butyl Alcohol TPH-GRO (C6-C10)	123 <sup>b</sup> ND 51.6 21000 <sup>b</sup>	250 2.0 10 2500	25 0.40 2.4 1300	ug/l ug/l ug/l ug/l	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	103% 103% 105%	106% 103% 97%	88-1	23% 12% 14%	

(a) Sample vial contained more than 0.5cm of sediment.

(b) Result is from Run# 2

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

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_	AQ - SW84	Ground Wa 6 8260B	tter CCAD:Quik St	op #51, C	Da Pe	ate Sampled: 07 ate Received: 07 ercent Solids: n/	
	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	R41068.D	1	07/13/16	ĊV	n/a	n/a	VR1582
Run #2 <sup>a</sup>	R41096.D	500	07/14/16	CV	n/a	n/a	VR1583
	Purge Volum	e					
Run #1	10.0 ml						
Run #2	10.0 ml						

### **BTEX, Oxygenates**

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7 108-20-3 637-92-3 1634-04-4 91-20-3 994-05-8 75-65-0	Benzene Toluene Ethylbenzene Xylene (total) Di-Isopropyl ether Ethyl Tert Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether Tert-Butyl Alcohol	233 b 3.7 254 b 133 ND ND 25100 b 5.9 16.7 39000 b	500 1.0 500 2.0 2.0 2.0 500 5.0 2.0 5000	100 0.20 100 0.46 0.22 0.22 100 0.50 0.40 1200	ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l	J J
	TPH-GRO (C6-C10)	71100 b	25000	13000	ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	108% 100% 96%	118% 103% 93%	80-1 88-1 79-1	12%	

(a) Sample vial contained more than 0.5cm of sediment.

(b) Result is from Run# 2

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

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Client San Lab Samj Matrix: Method: Project:	AQ - SW84	75-17 Ground Wat 6 8260B	ter CCAD:Quik St	op #51, C	D P	Date Sampled: 0 Date Received: 0 Percent Solids: n	
	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R41069.D	1	07/13/16	CV	n/a	n/a	VR1582
Run #2	R41152.D	1000	07/18/16	CV	n/a	n/a	VR1586
	Purge Volum	e					
Run #1	10.0 ml						
Run #2	10.0 ml						

### **BTEX, Oxygenates**

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7 108-20-3 637-92-3 1634-04-4 91-20-3 994-05-8 75 65 0	Benzene Toluene Ethylbenzene Xylene (total) Di-Isopropyl ether Ethyl Tert Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether Tart Butyl Alcohol	404 a 5.5 613 a 551 a 0.93 0.39 70100 a 12.2 42.1 129000 a	1000 1.0 1000 2000 2.0 2.0 1000 5.0 2.0 10000	200 0.20 200 460 0.22 0.22 200 0.50 0.40 2400	ug/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l	1 1 1 1
75-65-0 CAS No.	Tert-Butyl Alcohol TPH-GRO (C6-C10) Surrogate Recoveries	129000 <sup>a</sup> 183000 <sup>a</sup> <b>Run# 1</b>	10000 50000 Run# 2	2400 25000 Limi	ug/l ug/l its	
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	108% 101% 103%	109% 102% 95%	80-1 88-1 79-1	12%	

(a) Result is from Run# 2

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





**Section 4** 

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

• Chain of Custody



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	Closure, Inc	<b>c</b> .			СН	AIN	OF C	US	то	DY I	REC	COF	RD /	ANE	D A	NAI	LYS	SIS	RE	QU	ES.	Ť¥	N C46475
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	SAMPLE IDENTIFICATION	,	DATE	TIME	COMP	GRAB	PRES. USED	CED	NO. CO	SAMPL	1	13/2	(S108) 02 191	100 (S10) 201	2/2/20	65210 62210	0520	\$   {			/	/	REMARKS
ι	B-2-5		7/11/16	8:30		X	Aller	X	1	5	X			-	-		_	*	4	_		ſ	Cat FRIL Care
へ	B-2-10	7	1/4/16	8:39	5	x	1	X	1	5	X	5						X	X				Get TPHy from Gems
Ż	B-2-15		7/11/16	8,40		×		X	(	5	X	x						X	+				
4	8-2-20			8:55		X		X	1	5	X	X						Ł	+				
5	B-2-25	;	7/11/16	9:10		X		X	1	5	X	X				ŀ		X	$\boldsymbol{x}$				
Ý	B-2-30		7/11/11	9:30		X		X	1	5	X	x						X	$\boldsymbol{\chi}$				
7	B-3-5	7	1/1/16	10:25	·	X		K	1	5	X'	$\left  X \right $						X	X				
8	8-3-10		1/11/16	10.'30		X		X	1	5	X	r						$\boldsymbol{k}$	-+				
9	B-3-15		7/11/10	10:3	5	$\kappa$		x	۱	S	X	ス						$\left  X \right $	-7				
10	B-3-20	7	1/11/11.	10:40		X		x	1	5	X	x						x	X				
11	B-3.21	· ·	1/1/16	10:50		x		X	1	.5	X	x						x	x				prepari EDF
12	B-3-25		1/1/16	11:03	r l	x		x	1	5	x	x						X	$\mathbf{x}$				Goto Globabe I.D. H
13 [	B-3-30			11:15		x	V	X	1	5	X	X						X	$\times$				T10000008568
14	B-3-W	7	12/16	8:45			Hei	X	3	w	χ	X							X				
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C46475: Chain of Custody Page 1 of 3





		-		СН	AIN	OF C	UST	TOD	)Y F	REC	OR	DA	ND	AN/	٩LY	SIS	RE	QU	ES	ট্য	C416475
PROJECT NO.	PROJECT NAM ຜູບເ ຜູດ	E/SITE K stop -KLAND	#51 ,cA			,						7	77	ANAL					ST S	¢ 7	P.O. #:
SAMPLERS Hary R	ul hey	(PRINT)	GARY	R. 1	чис	key		CONTAINERS	SAMPLE TYPE		194, 100200 V. Hal	5	700,001	1000	$\int_{\infty}$	7	$\frac{1}{2}$				
SAMPLE IDENTI	FICATION	DATE	тіме	COMP	GRAB	PRES. USED	ICED	, S		BYE	704, 100, 2000	0/04 10/	700 (0015)	2010010	54/65	22/22/22	S)	(* ) \$			REMARKS
B-1-	w	7/12/16	9:15	-	X	HCL	х	3	w	х	X			1	1	X	X				Get TPHE for
B-5-1	4 <u>0</u>	7/12/10			x	HCL.	×	3	ç	X	X			-	-	X	X				Get TPHS fro. GCHS
				_																	
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C46475: Chain of Custody Page 2 of 3



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## SGS Accutest Sample Receipt Summary

Job Number: C46	475	Client:	COMPLIAN	ICE & CLO	SURE	Project:	QUIK STOP #51 O	AKLAN	D,CA	
Date / Time Received: 7/12	/2016 12:50:00	PM	Delivery M	lethod:	Accutest Courier	Airbill #'	s:			
Cooler Temps (Initial/Adjuste	ed): #1: (4/5);	-								
Cooler Security V	or N			V or N	Comple Integrity	Decuma	ntation	Y	or N	
Cooler SecurityY1. Custody Seals Present:□2. Custody Seals Intact:□	<b>.</b>	. COC Pr mpl Date	esent: s/Time OK	<u>Y or N</u> ✓ □ ✓ □	1. Sample labels pi       2. Container labelir	esent on b	ottles:	<ul><li>✓</li></ul>	<u>or N</u>	
Cooler Temperature	Y or N				3. Sample containe	r label / CC	OC agree:	$\checkmark$		
Temp criteria achieved:     Therm ID:     .     Cooler media:     .     No. Coolers:	IR3;           Ice (Bag)           1				Sample Integrity 1. Sample recvd wi 2. All containers ac 3. Condition of sam	thin HT: counted for		Y 2 2	or N	
Quality Control_Preservation 1. Trip Blank present / cooler: 2. Trip Blank listed on COC:	<u>Y or N</u> □ ✓ □ ✓	<u>N/A</u>			Sample Integrity 1. Analysis reques 2. Bottles received	ted is clear	:	Y V	or N □ ☑	N/A
<ol> <li>Samples preserved properly:</li> <li>VOCs headspace free:</li> </ol>					<ol> <li>Sufficient volum</li> <li>Compositing ins</li> <li>Filtering instruct</li> </ol>	tructions cl				V
Comments										

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# **Section 5**

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

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

S



Account: Project:	QSMCAF Quicl T10000008568-	-		Dakland,	CA		
<b>Sample</b>	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b> 07/13/16	By	<b>Prep Date</b>	<b>Prep Batch</b>	Analytical Batch
VR1582-MB	R41050.D	1		CV	n/a	n/a	VR1582

## The QC reported here applies to the following samples:

Method: SW846 8260B

C46475-14, C46475-15, C46475-16, C46475-17

108-20-3Di-Isopropyl etherND2.00.22ug/l637-92-3Ethyl Tert Butyl EtherND2.00.22ug/l1634-04-4Methyl Tert Butyl EtherND1.00.20ug/l91-20-3NaphthaleneND5.00.50ug/l994-05-8Tert-Amyl Methyl EtherND2.00.40ug/l	Q
75-65-0         Tert-Butyl Alcohol         ND         10         2.4         ug/l           108-88-3         Toluene         ND         1.0         0.20         ug/l	
1330-20-7         Xylene (total)         ND         2.0         0.46         ug/l	

CAS No.	Surrogate Recoveries		Limits
2037-26-5	Dibromofluoromethane	104%	80-123%
	Toluene-D8	104%	88-112%
	4-Bromofluorobenzene	94%	79-114%

G



Account: Project:	QSMCAF Quicl T10000008568-			Dakland,	CA		
Sample	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b> 07/13/16	By	<b>Prep Date</b>	<b>Prep Batch</b>	Analytical Batch
VL1500-MB	L50004.D	1		JT	n/a	n/a	VL1500

## The QC reported here applies to the following samples:

Method: SW846 8260B

C46475-2, C46475-4, C46475-7, C46475-12

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	1.0	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	40	10	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	
	TPH-GRO (C6-C10) a	53.9	100	50	ug/kg	J
CAS No.	Surrogate Recoveries		Limits			
1868-53-7	Dibromofluoromethane	97%	72-140	%		
2037-26-5	Toluene-D8	99%	87-113	%		
460-00-4	4-Bromofluorobenzene	91%	81-115	%		

(a) No gasoline pattern present.





Account: Project:	QSMCAF Quict T10000008568-	-		Dakland,	CA		
Sample VL1501-MB	<b>File ID</b> L50028.D	<b>DF</b> 1	<b>Analyzed</b> 07/14/16	By JT	<b>Prep Date</b> n/a	<b>Prep Batch</b> n/a	<b>Analytical Batch</b> VL1501
The QC repor	ted here applies t	o the follo	owing samples:			Method: SW84	6 8260B

C46475-1, C46475-3, C46475-5, C46475-6, C46475-9, C46475-10, C46475-11, C46475-13

CAS No.	Compound	Result	RL	MDL	Units Q
71-43-2 108-20-3 100-41-4 637-92-3 1634-04-4 91-20-3 994-05-8 75-65-0 108-88-3 1330-20-7	Benzene Di-Isopropyl ether Ethylbenzene Ethyl tert-Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether Tert Butyl Alcohol Toluene Xylene (total) TPH-GRO (C6-C10)	ND ND ND ND ND ND ND ND ND ND	$5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 5.0 \\ 40 \\ 5.0 \\ 10 \\ 100$	$\begin{array}{c} 0.50\\ 0.50\\ 0.50\\ 1.0\\ 1.0\\ 0.50\\ 10\\ 0.50\\ 1.0\\ 50\\ 1.0\\ 50\\ \end{array}$	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg
<b>CAS No.</b> 1868-53-7 2037-26-5 460-00-4	Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	91% 95% 88%	Limits 72-140 87-113 81-115	%	



Job Number: Account: Project:	C46475 QSMCAF Quicl T10000008568-	1		Oakland,	CA		
<b>Sample</b> VR1583-MB	<b>File ID</b> R41082.D	<b>DF</b> 1	<b>Analyzed</b> 07/14/16	<b>By</b> CV	<b>Prep Date</b> n/a	<b>Prep Batch</b> n/a	Analytical Batch VR1583
<b>The QC repor</b> C46475-16	ted here applies t	o the follo	wing samples	:		Method: SW84	5 8260B
CAS No. Co	ompound		Result	RL I	MDL Units	Q	

71-43-2	Benzene	ND	1.0	0.20	ug/l
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l
75-65-0	Tert-Butyl Alcohol	ND	10	2.4	ug/l
	TPH-GRO (C6-C10)	ND	50	25	ug/l

CAS No.	Surrogate Recoveries		Limits
	Dibromofluoromethane Toluene-D8	101% 103%	80-123% 88-112%
460-00-4	4-Bromofluorobenzene	95%	79-114%





## **Method Blank Summary**

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1502-MB	L50054.D	1	07/15/16	JT	n/a	n/a	VL1502

Job Number: C46475 **OSMCAF** Ouick Stop Markets Account:

# The QC reported here applies to the following samples:

C46475-8

CAS No.	Compound	Result	RL	MDL	Units Q
71-43-2	Benzene	ND	5.0	0.50	ug/kg
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg
91-20-3	Naphthalene	ND	5.0	1.0	ug/kg
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg
75-65-0	Tert Butyl Alcohol	ND	40	10	ug/kg
108-88-3	Toluene	ND	5.0	0.50	ug/kg
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg
	TPH-GRO (C6-C10)	ND	100	50	ug/kg
CAS No.	Surrogate Recoveries		Limits		
1868-53-7	Dibromofluoromethane	87%	72-140	%	
2037-26-5	Toluene-D8	95%	87-113	%	
460-00-4	4-Bromofluorobenzene	91%	81-115	%	





		DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR1584-MB	R41109.D	1	07/15/16	CV	n/a	n/a	VR1584

C46475-14

CAS No.	Compound	Result	RL	MDL	Units Q
71-43-2 100-41-4 1634-04-4 91-20-3 75-65-0 1330-20-7	Benzene Ethylbenzene Methyl Tert Butyl Ether Naphthalene Tert-Butyl Alcohol Xylene (total) TPH-GRO (C6-C10)	ND ND ND ND ND ND	1.0 1.0 5.0 10 2.0 50	0.20 0.20 0.20 0.50 2.4 0.46 25	ug/l ug/l ug/l ug/l ug/l ug/l ug/l
					-

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	100%	80-123%
2037-26-5	Toluene-D8	104%	88-112%
460-00-4	4-Bromofluorobenzene	94%	79-114%





	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR1586-MB	R41140.D	1	07/18/16	ČV	n/a	n/a	VR1586
The OC report	ted here applies t	o the follo	wing samples:		I	Method: SW84	5 8260B
x r	···· ···· ····		BF				

CAS No.	Compound	Result	RL	MDL	Units Q
71-43-2 100-41-4 1634-04-4 75-65-0 1330-20-7	Benzene Ethylbenzene Methyl Tert Butyl Ether Tert-Butyl Alcohol Xylene (total)	ND ND ND ND ND	1.0 1.0 1.0 10 2.0	0.20 0.20 0.20 2.4 0.46	ug/l ug/l ug/l ug/l ug/l ug/l
	TPH-GRO (C6-C10)	ND	50	25	ug/l

CAS No.	Surrogate Recoveries		Limits
2037-26-5	Dibromofluoromethane	106%	80-123%
	Toluene-D8	105%	88-112%
	4-Bromofluorobenzene	94%	79-114%





Ethylbenzene

Naphthalene

Xylene (total)

Toluene-D8

TPH-GRO (C6-C10)

**Surrogate Recoveries** 

Dibromofluoromethane

4-Bromofluorobenzene

Toluene

100-41-4

91-20-3

108-88-3

CAS No.

1868-53-7

2037-26-5

460-00-4

1330-20-7

Job Number: Account: Project:	C46475 QSMCAF Quicl T10000008568-			Oakland	CA		
<b>Sample</b> VR1587-MB	<b>File ID</b> R41170.D	<b>DF</b> 1	<b>Analyzed</b> 07/19/16	<b>By</b> CV	<b>Prep Da</b> n/a	nte Prep Batch n/a	Analytical Batch VR1587
<b>The QC repo</b> C46475-15	rted here applies t	o the follow	ing samples	:		Method: SW8	346 8260B
CAS No. (	Compound	]	Result ]	RL	MDL Un	its Q	
	Benzene				0.20 ug/	(1	

1.0

5.0

1.0

2.0

50

Limits

80-123%

88-112%

79-114%

0.20

0.50

0.20

0.46

25

ug/l ug/l

ug/l

ug/l

ug/l

ND

ND

ND

ND

ND

98%

101%

93%

Page 1 of 1

SGS



Job Number:	C46475
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1500-BS	L49998.D	1	07/13/16	JT	n/a	n/a	VL1500
VL1500-BSD	L49999.D	1	07/13/16	JT	n/a	n/a	VL1500

## The QC reported here applies to the following samples:

Method: SW846 8260B

C46475-2, C46475-4, C46475-7, C46475-12

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	40	43.1	108	43.4	109	1	72-122/18
108-20-3	Di-Isopropyl ether	40	35.9	90	35.1	88	2	69-122/19
100-41-4	Ethylbenzene	40	44.7	112	45.3	113	1	71-118/18
637-92-3	Ethyl tert-Butyl Ether	40	36.2	91	35.8	90	1	69-125/19
1634-04-4	Methyl Tert Butyl Ether	40	34.9	87	34.5	86	1	68-121/19
91-20-3	Naphthalene	40	41.2	103	43.4	109	5	68-129/22
994-05-8	Tert-Amyl Methyl Ether	40	38.2	96	37.7	94	1	70-129/20
75-65-0	Tert Butyl Alcohol	200	187	94	194	97	4	50-163/30
108-88-3	Toluene	40	44.9	112	45.0	113	0	72-116/18
1330-20-7	Xylene (total)	120	135	113	137	114	1	68-118/18
CAS No.	Surrogate Recoveries	BSP	BSI	D	Limits			

	e			
1868-53-7	Dibromofluoromethane	92%	89%	72-140%
2037-26-5	Toluene-D8	98%	97%	87-113%
460-00-4	4-Bromofluorobenzene	95%	94%	81-115%



\* = Outside of Control Limits.

5.2.1

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Job Number:	C46475
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR1582-BS	R41047.D	1	07/13/16	CV	n/a	n/a	VR1582
VR1582-BSD	R41048.D	1	07/13/16	CV	n/a	n/a	VR1582

### The QC reported here applies to the following samples:

Method: SW846 8260B

C46475-14, C46475-15, C46475-16, C46475-17

4-Bromofluorobenzene

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
108-20-3	Di-Isopropyl ether	20	21.7	109	20.9	105	4	69-126/10
637-92-3	Ethyl Tert Butyl Ether	20	21.0	105	20.3	102	3	75-126/11
1634-04-4	Methyl Tert Butyl Ether	20	19.4	97	18.9	95	3	73-120/10
91-20-3	Naphthalene	20	18.9	95	18.7	94	1	66-120/12
994-05-8	Tert-Amyl Methyl Ether	20	20.8	104	20.2	101	3	77-126/10
75-65-0	Tert-Butyl Alcohol	100	100	100	99.1	99	1	52-148/18
108-88-3	Toluene	20	19.8	99	19.4	97	2	78-121/10
1330-20-7	Xylene (total)	60	58.3	97	57.5	96	1	78-122/10
CAS No.	Surrogate Recoveries	BSP	BS	SD	Limits			
1868-53-7	Dibromofluoromethane	110%	10	9%	80-123%	, 0		

102%

99%

88-112%

79-114%

101%

100%

2037-26-5 Toluene-D8

460-00-4



5.2.2 5

Job Number:	C46475
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

Sample	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	By	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
VL1501-BS	L50025.D	1	07/14/16	JT	n/a	n/a	VL1501
VL1501-BSD	L50026.D	1	07/14/16	JT	n/a	n/a	VL1501

## The QC reported here applies to the following samples:

Method: SW846 8260B

C46475-1, C46475-3, C46475-5, C46475-6, C46475-9, C46475-10, C46475-11, C46475-13

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	40	43.1	108	42.8	107	1	72-122/18
108-20-3	Di-Isopropyl ether	40	35.2	88	33.7	84	4	69-122/19
100-41-4	Ethylbenzene	40	44.3	111	42.6	107	4	71-118/18
637-92-3	Ethyl tert-Butyl Ether	40	37.1	93	34.8	87	6	69-125/19
1634-04-4	Methyl Tert Butyl Ether	40	37.1	93	34.3	86	8	68-121/19
91-20-3	Naphthalene	40	45.9	115	42.6	107	7	68-129/22
994-05-8	Tert-Amyl Methyl Ether	40	39.7	99	37.4	94	6	70-129/20
75-65-0	Tert Butyl Alcohol	200	231	116	194	97	17	50-163/30
108-88-3	Toluene	40	44.2	111	43.0	108	3	72-116/18
1330-20-7	Xylene (total)	120	136	113	131	109	4	68-118/18
CAS No.	Surrogate Recoveries	BSP	BSI	)	Limits			
1868-53-7	Dibromofluoromethane	94%	91%	, D	72-140%	ó		
2037-26-5	Toluene-D8	95%	94%		87-113%			
460-00-4	4-Bromofluorobenzene	93%	90%	, D	81-115%	ó		

5.2.3

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Job Number:	C46475
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	<b>Analytical Batch</b>
VR1583-BS	R41078.D	1	07/14/16	CV	n/a	n/a	VR1583
VR1583-BSD	R41080.D	1	07/14/16	CV	n/a	n/a	VR1583

## The QC reported here applies to the following samples:

Method: SW846 8260B

C46475-16

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	20	17.9	90	18.9	95	5	76-120/10
100-41-4	Ethylbenzene	20	18.1	91	19.0	95	5	78-123/10
1634-04-4	Methyl Tert Butyl Ether	20	17.2	86	17.7	89	3	73-120/10
75-65-0	Tert-Butyl Alcohol	100	95.3	95	89.8	90	6	52-148/18

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	105%	106%	80-123%
2037-26-5	Toluene-D8	101%	101%	88-112%
460-00-4	4-Bromofluorobenzene	98%	98%	79-114%





Job Number:	C46475
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

			Prep Date	Prep Batch	Analytical Batch
51.D 1	07/15/16	JT	n/a	n/a	VL1502
52.D 1	07/15/16	JT	n/a	n/a	VL1502

## The QC reported here applies to the following samples:

Method: SW846 8260B

C46475-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	40	41.4	104	44.0	110	6	72-122/18
108-20-3	Di-Isopropyl ether	40	31.5	79	34.1	85	8	69-122/19
100-41-4	Ethylbenzene	40	42.1	105	43.3	108	3	71-118/18
637-92-3	Ethyl tert-Butyl Ether	40	33.1	83	35.8	90	8	69-125/19
1634-04-4	Methyl Tert Butyl Ether	40	32.5	81	35.0	88	7	68-121/19
91-20-3	Naphthalene	40	40.4	101	42.4	106	5	68-129/22
994-05-8	Tert-Amyl Methyl Ether	40	35.2	88	38.0	95	8	70-129/20
75-65-0	Tert Butyl Alcohol	200	176	88	182	91	3	50-163/30
108-88-3	Toluene	40	41.3	103	43.2	108	4	72-116/18
1330-20-7	Xylene (total)	120	128	107	133	111	4	68-118/18
CAS No.	Surrogate Recoveries	BSP	BSI	D	Limits			

1868-53-7	Dibromofluoromethane	90%	92%	72-140%
2037-26-5	Toluene-D8	93%	92%	87-113%
460-00-4	4-Bromofluorobenzene	91%	91%	81-115%

5.2.5

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Job Number:	C46475
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
R41106.D	1	07/15/16	CV	n/a	n/a	VR1584
R41107.D	1	07/15/16	CV	n/a	n/a	VR1584
K41107.D	1	07/15/10	CV	11/ a	11/ a	VR1364
	R41106.D	R41106.D 1	R41106.D 1 07/15/16	R41106.D 1 07/15/16 CV	R41106.D 1 07/15/16 CV n/a	R41106.D 1 07/15/16 CV n/a n/a

## The QC reported here applies to the following samples:

4-Bromofluorobenzene

**Method:** SW846 8260B

C46475-14

460-00-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD	
71-43-2	Benzene	20	20.4	102	20.5	103	0	76-120/10	
100-41-4	Ethylbenzene	20	20.6	103	20.7	104	0	78-123/10	
1634-04-4	Methyl Tert Butyl Ether	20	19.1	96	19.4	97	2	73-120/10	
91-20-3	Naphthalene	20	19.0	95	19.2	96	1	66-120/12	
75-65-0	Tert-Butyl Alcohol	100	106	106	110	110	4	52-148/18	
1330-20-7	Xylene (total)	60	59.0	98	59.7	100	1	78-122/10	
CAS No.	Surrogate Recoveries	BSP	BSD		Limits				
1868-53-7	Dibromofluoromethane	109%	109%		80-123%				
2037-26-5	Toluene-D8	102%	102	102%		88-112%			

100%

100%

79-114%



5.2.6 5

# Blank Spike/Blank Spike Duplicate Summary

Job Number:	C46475
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR1586-BS	R41137.D	1	07/18/16	CV	n/a	n/a	VR1586
VR1586-BSD	R41138.D	1	07/18/16	CV	n/a	n/a	VR1586

## The QC reported here applies to the following samples:

**Method:** SW846 8260B

C46475-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
71-43-2 100-41-4 1634-04-4 75-65-0 1330-20-7	Benzene Ethylbenzene Methyl Tert Butyl Ether Tert-Butyl Alcohol Xylene (total)	20 20 20 100 60	18.9 18.9 17.7 89.9 54.6	95 95 89 90 91	19.0 19.2 17.6 94.6 54.8	95 96 88 95 91	1 2 1 5 0	76-120/10 78-123/10 73-120/10 52-148/18 78-122/10
CAS No.	Surrogate Recoveries	BSP	BS	SD	Limits			
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	108% 103% 99%	10	7% 3% 0%	80-1239 88-1129 79-1149	6		



# Blank Spike/Blank Spike Duplicate Summary

Job Number:	C46475
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	<b>Analytical Batch</b>
VR1587-BS	R41167.D	1	07/19/16	CV	n/a	n/a	VR1587
VR1587-BSD	R41168.D	1	07/19/16	CV	n/a	n/a	VR1587

## The QC reported here applies to the following samples:

Method: SW846 8260B

C46475-15

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
71-43-2 100-41-4 91-20-3 108-88-3 1330-20-7	Benzene Ethylbenzene Naphthalene Toluene Xylene (total)	20 20 20 20 60	19.4 20.0 18.6 19.5 58.0	97 100 93 98 97	18.9 19.5 18.3 18.9 56.4	95 98 92 95 94	3 3 2 3 3	76-120/10 78-123/10 66-120/12 78-121/10 78-122/10
CAS No.	Surrogate Recoveries	BSP	BS	D	Limits			
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	100% 101% 99%	10 10 999	1%	80-1239 88-1129 79-1149	6		



# Laboratory Control Sample Summary

Job Number:	C46475
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

Sample	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b> 07/13/16	By	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
VL1500-LCS	L50000.D	1		JT	n/a	n/a	VL1500

#### The QC reported here applies to the following samples:

Method: SW846 8260B

C46475-2, C46475-4, C46475-7, C46475-12

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
	TPH-GRO (C6-C10)	250	286	114	70-123
CAS No.	Surrogate Recoveries	BSP	Lin	iits	
1868-53-7	Dibromofluoromethane	89%	72-	40%	
2037-26-5	Toluene-D8	97%	87-1	13%	
460-00-4	4-Bromofluorobenzene	90%	81-1	115%	

G



Laboratory Job Number:Control Sample Summary C46475Page 1 of 1Account:QSMCAF Quick Stop MarketsProject:T1000008568-CCCAD:Quik Stop #51, Oakland, CA											
<b>File ID</b> S R41049.D	<b>DF</b> 1		v	<b>By</b> CV	<b>Prep Date</b> n/a	<b>Prep Batch</b> n/a	<b>Analytical Batch</b> VR1582				
The QC reported here applies to the following samples:       Method:       SW846       8260B         C46475-14, C46475-15, C46475-16, C46475-17											
Compound		Spike ug/l	LCS ug/l	LCS %	Limits						
-		BSP									
	File ID S R41049.D orted here applies to C46475-15, C46475- Compound Surrogate Recoverie	T10000008568-CCCAD:Q         File ID       DF         S       R41049.D       1         orted here applies to the follo       C46475-15, C46475-16, C4647	File ID       DF       Anal         S       R41049.D       1       07/1         orted here applies to the following sar       C46475-15, C46475-16, C46475-17       Spike       ug/l         Surrogate Recoveries       BSP       Spike       Spike	T10000008568-CCCAD:Quik Stop #51, O         File ID       DF       Analyzed         S       R41049.D       1       07/13/16         orted here applies to the following samples:       C46475-15, C46475-16, C46475-17         Compound       Spike       LCS         Surrogate Recoveries       BSP       L	T10000008568-CCCAD:Quik Stop #51, Oakland, C         File ID       DF       Analyzed       By         5       R41049.D       1       07/13/16       CV         orted here applies to the following samples:         C46475-15, C46475-16, C46475-17         Spike LCS LCS         Compound         Spike LCS LCS         Surrogate Recoveries	T10000008568-CCCAD:Quik Stop #51, Oakland, CA         File ID       DF       Analyzed       By       Prep Date         S       R41049.D       1       07/13/16       CV       n/a         orted here applies to the following samples:         C46475-15, C46475-16, C46475-17         Compound       Spike       LCS       LCS         Surrogate Recoveries       BSP       Limits	T10000008568-CCCAD:Quik Stop #51, Oakland, CA         File ID       DF       Analyzed       By       Prep Date       Prep Batch         S       R41049.D       1       07/13/16       CV       n/a       n/a         orted here applies to the following samples:       Method:       SW844         C46475-15, C46475-16, C46475-17       Spike       LCS       LCS         Surrogate Recoveries       BSP       Limits				

88-112%

79-114%

103%

95%

Toluene-D8

4-Bromofluorobenzene

2037-26-5

460-00-4



5.3.2

## Laboratory Control Sample Summary

Job Number:	C46475
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

<b>Sample</b>	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	By	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>		
VL1501-LCS	L50027.D	1	07/14/16	JT	n/a	n/a	VL1501		
The QC reported here applies to the following samples:       Method:       SW846       8260B									

C46475-1, C46475-3, C46475-5, C46475-6, C46475-9, C46475-10, C46475-11, C46475-13

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
	TPH-GRO (C6-C10)	250	272	109	70-123
CAS No.	Surrogate Recoveries	BSP	Lim	iits	
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	87% 97% 91%	87-1	40% 13% 15%	





Laborate Job Number Account: Project:	r: C46475 QSMCAF Quick	y Control Sample Summary C46475 QSMCAF Quick Stop Markets T10000008568-CCCAD:Quik Stop #51, Oakland, CA							
Sample VR1583-LC	File ID S R41079.D	<b>DF</b> 1	<b>Ana</b> 07/1	l <b>yzed</b> 4/16	By CV	<b>Prep Date</b> n/a	<b>Prep Batch</b> n/a	Analytical Batch VR1583	
<b>The QC rep</b> C46475-16	orted here applies to	o the follow	ring san	nples:			Method: SW846	5 8260B	
CAS No.	Compound TPH-GRO (C6-C10)	1	Spike ug/l 125	LCS ug/l 138	<b>LCS</b> %	<b>Limits</b> 70-130			

#### Surrogate Recoveries CAS No. BSP Limits 1868-53-7 Dibromofluoromethane 105% 80-123% 2037-26-5 Toluene-D8 101% 88-112% 460-00-4 4-Bromofluorobenzene 95% 79-114%



5.3.4

## Laboratory Control Sample Summary

**Surrogate Recoveries** 

Dibromofluoromethane

4-Bromofluorobenzene

Toluene-D8

Job Numbe Account: Project:	er: C46475 QSMCAF Quick Sto T10000008568-CCC	1	#51, Oal	kland, C	A		C C
Sample VL1502-LC			e e	<b>By</b> JT	<b>Prep Date</b> n/a	<b>Prep Batch</b> n/a	Analytical Batch VL1502
<b>The QC rej</b> C46475-8	ported here applies to th	e following sar	nples:			Method: SW846	5 8260B
CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits		
	TPH-GRO (C6-C10)	250	266	106	70-123		

Limits

72-140%

87-113% 81-115%

BSP

88%

94%

92%

CAS No.

1868-53-7 2037-26-5

460-00-4



5.3.5

Labora Job Numb Account: Project:	er: C46475 QSMCAF Quick	y Control Sample Summary C46475 QSMCAF Quick Stop Markets T10000008568-CCCAD:Quik Stop #51, Oakland, CA						
<b>Sample</b> VR1584-L0	File ID CS R41108.D	<b>DF</b> 1	<b>Ana</b> 07/1	<b>lyzed</b> 5/16	By CV	<b>Prep Date</b> n/a	<b>Prep Batch</b> n/a	<b>Analytical Batch</b> VR1584
<b>The QC re</b> C46475-14	ported here applies to	) the follow	wing sar	nples:			Method: SW840	5 8260B
CAS No.	<b>Compound</b> TPH-GRO (C6-C10)		Spike ug/l 125	<b>LCS ug/l</b> 146	<b>LCS</b> %	<b>Limits</b> 70-130		

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	106%	80-123%
2037-26-5 460-00-4	Toluene-D8 4-Bromofluorobenzene	103% 95%	88-112% 79-114%



5.3.6

U

Laborat Job Numbe Account: Project:	ory Control Sa or: C46475 QSMCAF Quick T10000008568-0	s Stop Marl	cets	U	akland, C	A		Page 1 of 1
<b>Sample</b> VR1586-LC	<b>File ID</b> CS R41139.D	<b>DF</b> 1		<b>lyzed</b> 8/16	By CV	<b>Prep Date</b> n/a	<b>Prep Batch</b> n/a	<b>Analytical Batch</b> VR1586
<b>The QC rep</b> C46475-17	ported here applies t	o the follow	ving sar	nples:			Method: SW84	5 8260B
CAS No.	Compound		Spike ug/l	LCS ug/l	LCS %	Limits		
	TPH-GRO (C6-C10)	)	125	140	112	70-130		

Limits

80-123%

88-112%

79-114%

BSP

108%

104%

96%

Surrogate Recoveries

Dibromofluoromethane

4-Bromofluorobenzene

Toluene-D8

CAS No.

1868-53-7

2037-26-5

460-00-4



5.3.7



Laborat Job Numbe Account: Project:	ory Control Sample Summary       Page 1 of         :: C46475       QSMCAF Quick Stop Markets         T10000008568-CCCAD:Quik Stop #51, Oakland, CA								
<b>Sample</b> VR1587-LC	File ID S R41169.D	<b>DF</b> 1		<b>lyzed</b> 9/16	By CV	<b>Prep Date</b> n/a	<b>Prep Batch</b> n/a	<b>Analytical Batch</b> VR1587	
<b>The QC rep</b> C46475-15	ported here applies to	o the follo	owing sar	nples:			Method: SW84	5 8260B	
CAS No.	<b>Compound</b> TPH-GRO (C6-C10)	1	Spike ug/l 125	LCS ug/l 138	<b>LCS</b> %	<b>Limits</b> 70-130			

Limits

80-123%

88-112%

79-114%

BSP

99%

102%

95%

Surrogate Recoveries

Dibromofluoromethane

4-Bromofluorobenzene

Toluene-D8

CAS No.

1868-53-7

2037-26-5

460-00-4



5.3.8

Job Number:	C46475
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

File ID	DF	Analyzed	Bv	Prep Date	Prep Batch	<b>Analytical Batch</b>
L50016.D	1	07/13/16	JT	n/a	n/a	VL1500
L50017.D	1	07/13/16	JT	n/a	n/a	VL1500
L50008.D	1	07/13/16	JT	n/a	n/a	VL1500
	L50016.D L50017.D	L50016.D 1 L50017.D 1	L50016.D 1 07/13/16 L50017.D 1 07/13/16	L50016.D 1 07/13/16 JT L50017.D 1 07/13/16 JT	L50016.D 1 07/13/16 JT n/a L50017.D 1 07/13/16 JT n/a	L50016.D 1 07/13/16 JT n/a n/a L50017.D 1 07/13/16 JT n/a n/a

#### The QC reported here applies to the following samples:

Method: SW846 8260B

C46475-2, C46475-4, C46475-7, C46475-12

CAS No.	Compound	C46475-13 ug/kg Q	•	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2 108-20-3 100-41-4 637-92-3 1634-04-4 91-20-3 994-05-8 75-65-0 108-88-3	Benzene Di-Isopropyl ether Ethylbenzene Ethyl tert-Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether Tert Butyl Alcohol Toluene	ND ND ND 61.5 J ND ND ND ND	1910 1910 1910 1910 1910 1910 1910 9540 1910	2130 1790 2110 1800 1750 1930 1870 7180 2120	112 94 111 94 88 101 98 75 111	1910 1910 1910 1910 1910 1910 1910 9540 1910	2040 1670 2040 1680 1660 1940 1760 8170 2040	107 88 107 88 84 102 92 86 107	4 7 3 7 5 1 6 13 4	72-122/18 69-122/19 71-118/18 69-125/19 68-121/19 68-129/22 70-129/20 50-163/30 72-116/18
1330-20-7 CAS No.	Xylene (total) Surrogate Recoveries	ND MS	5730 MSD	6390	112 5475-13	5730	6170	108	4	68-118/18
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	91% 95% 91%	90% 95% 92%			72-1409 87-1139 81-1159	%			

(a) Sample used for QC purposes only.

\* = Outside of Control Limits.



Job Number:	C46475
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

			Prep Date	Prep Batch	Analytical Batch
1	07/13/16	ĊV	n/a	n/a	VR1582
1	07/13/16	CV	n/a	n/a	VR1582
1	07/13/16	CV	n/a	n/a	VR1582
	1 1 1	1 07/13/16	1 07/13/16 CV	1 07/13/16 CV n/a	1 07/13/16 CV n/a n/a

## The QC reported here applies to the following samples:

Method: SW846 8260B

C46475-14, C46475-15, C46475-16, C46475-17

CAS No.	Compound	C46478-5 ug/l Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-20-3 637-92-3 1634-04-4 91-20-3 994-05-8 75-65-0 108-88-3 1330-20-7	Di-Isopropyl ether Ethyl Tert Butyl Ether Methyl Tert Butyl Ether Naphthalene Tert-Amyl Methyl Ether Tert-Butyl Alcohol Toluene Xylene (total)	ND ND ND ND ND ND ND	20 20 20 20 20 100 20 60	18.3 18.3 20.5 18.5 18.4 336 20.1 59.0	92 92 103 93 92 336* a 101 98	20 20 20 20 20 100 20 60	18.5 18.5 18.1 18.5 18.6 105 20.0 58.2	93 93 91 93 93 105 100 97	1 12* a 0 1 105* a 0 1	69-126/10 75-126/11 73-120/10 66-120/12 77-126/10 52-148/18 78-121/10 78-122/10
CAS No. 1868-53-7 2037-26-5 460-00-4	Surrogate Recoveries Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	MS 97% 101% 97%	97% 101% 96%		5 <b>478-5</b> % %	Limits 80-123% 88-112% 79-114%	ó	21	1	10 122 10

(a) Outside laboratory control limits.



Job Number:	C46475
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

D 1	07/14/16	IT	. –		
	07/14/10	JI	n/a	n/a	VL1501
D 1	07/14/16	JT	n/a	n/a	VL1501
D 1	07/14/16	JT	n/a	n/a	VL1501

#### The QC reported here applies to the following samples:

Method: SW846 8260B

C46475-1, C46475-3, C46475-5, C46475-6, C46475-9, C46475-10, C46475-11, C46475-13

CAS No.	Compound	C46475 ug/kg	-10 Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		17200	18400	107	17200	18700	109	2	72-122/18
108-20-3	Di-Isopropyl ether	ND		17200	13900	81	17200	14200	83	2	69-122/19
100-41-4	Ethylbenzene	532	J	17200	18900	107	17200	18900	107	0	71-118/18
637-92-3	Ethyl tert-Butyl Ether	ND		17200	14400	84	17200	14900	87	3	69-125/19
1634-04-4	Methyl Tert Butyl Ether	2580		17200	16500	81	17200	17000	84	3	68-121/19
91-20-3	Naphthalene	ND		17200	17800	103	17200	17400	101	2	68-129/22
994-05-8	Tert-Amyl Methyl Ether	ND		17200	15300	89	17200	15700	91	3	70-129/20
75-65-0	Tert Butyl Alcohol	8210	J	86100	81400	85	86100	78500	82	4	50-163/30
108-88-3	Toluene	ND		17200	18600	108	17200	18800	109	1	72-116/18
1330-20-7	Xylene (total)	ND		51600	56700	110	51600	57000	110	1	68-118/18
CAS No.	Surrogate Recoveries	MS		MSD	C4	6475-10	Limits				
1868-53-7	Dibromofluoromethane	89%		89%	90%	6	72-1409	6			
2037-26-5	Toluene-D8	96%		94%	95%	6	87-1139	6			
460-00-4	4-Bromofluorobenzene	92%		90%	92%	6	81-1159	6			





Job Number:	C46475
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	<b>Analytical Batch</b>
C46475-16MS	R41100.D	500	07/15/16	CV	n/a	n/a	VR1583
C46475-16MSD	R41101.D	500	07/15/16	CV	n/a	n/a	VR1583
C46475-16 <sup>a</sup>	R41096.D	500	07/14/16	CV	n/a	n/a	VR1583

#### The QC reported here applies to the following samples:

Method: SW846 8260B

C46475-16

CAS No.	Compound	C46475-10 ug/l (	6 Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2 100-41-4 1634-04-4 75-65-0	Benzene Ethylbenzene Methyl Tert Butyl Ether Tert-Butyl Alcohol	233 J 254 J 25100 39000	l	10000 10000 10000 50000	9850 9660 33900 96000	96 94 88 114	10000 10000 10000 50000	10300 10100 33600 98400	101 98 85 119	4 4 1 2	76-120/10 78-123/10 73-120/10 52-148/18
CAS No.	Surrogate Recoveries	MS		MSD	С	46475-16	Limits				
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	117% 100% 98%		116% 101% 99%	10	8%  3% %	80-1239 88-1129 79-1149	ó			

(a) Sample vial contained more than 0.5cm of sediment.





Job Number:	C46475
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	<b>Analytical Batch</b>
C46475-8MS	L50056.D	1	07/15/16	JT	n/a	n/a	VL1502
C46475-8MSD	L50057.D	1	07/15/16	JT	n/a	n/a	VL1502
C46475-8	L50055.D	1	07/15/16	JT	n/a	n/a	VL1502

## The QC reported here applies to the following samples:

Method: SW846 8260B

C46475-8

CAS No.	Compound	C46475-8 ug/kg Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	1800	1820	101	1800	1920	107	5	72-122/18
108-20-3	Di-Isopropyl ether	ND	1800	1430	80	1800	1530	85	7	69-122/19
100-41-4	Ethylbenzene	ND	1800	1830	102	1800	1930	108	5	71-118/18
637-92-3	Ethyl tert-Butyl Ether	ND	1800	1500	84	1800	1600	89	6	69-125/19
1634-04-4	Methyl Tert Butyl Ether	ND	1800	1470	82	1800	1560	87	6	68-121/19
91-20-3	Naphthalene	ND	1800	1850	103	1800	1900	106	3	68-129/22
994-05-8	Tert-Amyl Methyl Ether	ND	1800	1580	88	1800	1680	94	6	70-129/20
75-65-0	Tert Butyl Alcohol	2980	8980	9840	76	8980	10800	87	9	50-163/30
108-88-3	Toluene	ND	1800	1840	102	1800	1940	108	5	72-116/18
1330-20-7	Xylene (total)	ND	5390	5640	105	5390	5990	111	6	68-118/18
CAS No.	Surrogate Recoveries	MS	MSD	C4	6475-8	Limits				
1868-53-7	Dibromofluoromethane	90%	88%	929	6	72-1409	%			
2037-26-5	Toluene-D8	91%	92%	949		87-1139				
460-00-4	4-Bromofluorobenzene	91%	91%	89%		81-1159				



Job Number:	C46475
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C46475-14MS	R41128.D	500	07/15/16	ĊV	n/a	n/a	VR1584
C46475-14MSD	R41129.D	500	07/15/16	CV	n/a	n/a	VR1584
C46475-14	R41127.D	500	07/15/16	CV	n/a	n/a	VR1584

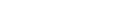
## The QC reported here applies to the following samples:

Method: SW846 8260B

C46475-14

\* = Outside of Control Limits.

CAS No.	Compound	C46475-14 ug/l Q	Spike ug/l		MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2 100-41-4 1634-04-4 91-20-3 75-65-0 1330-20-7	Benzene Ethylbenzene Methyl Tert Butyl Ether Naphthalene Tert-Butyl Alcohol Xylene (total)	1140 1340 21100 ND 17900 784 J	10000 10000 10000 10000 50000 30000	29800 9650 68000	106 104 87 97 100 99	10000 10000 10000 10000 50000 30000	11800 11900 30600 9850 73200 31000	107 106 95 99 111 101	1 2 3 2 7 1	76-120/10 78-123/10 73-120/10 66-120/12 52-148/18 78-122/10
CAS No.	Surrogate Recoveries	MS	MSD	C464	475-14	Limits				
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	118% 106% 104%	113% 101% 99%	115% 102% 95%		80-123% 88-112% 79-114%	6			





Job Number:	C46475
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C46475-17MS	R41160.D	1000	07/18/16	CV	n/a	n/a	VR1586
C46475-17MSD	R41161.D	1000	07/18/16	CV	n/a	n/a	VR1586
C46475-17	R41152.D	1000	07/18/16	CV	n/a	n/a	VR1586

#### The QC reported here applies to the following samples:

Method: SW846 8260B

C46475-17

CAS No.	Compound	C46475-17 ug/l Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2 100-41-4 1634-04-4 75-65-0 1330-20-7	Benzene Ethylbenzene Methyl Tert Butyl Ether Tert-Butyl Alcohol Xylene (total)	404J613J70100129000551J	20000 20000 20000 100000 60000	19400 20600 78400 231000 59500	95 100 42* <sup>a</sup> 102 98	20000 20000 20000 100000 60000	19000 19800 78300 230000 57100	93 96 41* <sup>a</sup> 101 94	2 4 0 0 4	76-120/10 78-123/10 73-120/10 52-148/18 78-122/10
CAS No.	Surrogate Recoveries	MS	MSD	C46	475-17	Limits				
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	100% 99% 97%	100% 99% 97%	1099 1029 95%	%	80-123% 88-112% 79-114%	, D			

(a) Outside control limits due to high level in sample relative to spike amount.



Job Number:	C46475
Account:	QSMCAF Quick Stop Markets
Project:	T10000008568-CCCAD:Quik Stop #51, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C46475-15MS	R41189.D	50	07/19/16	CV	n/a	n/a	VR1587
C46475-15MSD	R41190.D	50	07/19/16	CV	n/a	n/a	VR1587
C46475-15	R41175.D	50	07/19/16	CV	n/a	n/a	VR1587

## The QC reported here applies to the following samples:

Method: SW846 8260B

C46475-15

CAS No.	Compound	C46475-15 ug/l Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2 100-41-4 91-20-3 108-88-3 1330-20-7	Benzene Ethylbenzene Naphthalene Toluene Xylene (total)	1280 575 123 J 154 2430	1000 1000 1000 1000 3000	2290 1590 1110 1130 5450	101 102 99 98 101	1000 1000 1000 1000 3000	2240 1580 1090 1130 5420	96 101 97 98 100	2 1 2 0 1	76-120/10 78-123/10 66-120/12 78-121/10 78-122/10
CAS No.	Surrogate Recoveries	MS	MSD	C46	475-15	Limits				
1868-53-7 2037-26-5 460-00-4	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene	103% 99% 98%	102% 100% 98%	1069 1039 97%	%	80-1239 88-1129 79-1149	6			

