



Madison Park Financial Corporation

Lake Merritt Tower
155 Grand Avenue, Ste. 1025
Oakland, California 94612

510.452.2944
510.452.2973 Fax

www.mpfcorp.com

October 20, 2016

RECEIVED

By Alameda County Environmental Health 2:35 pm, Oct 21, 2016

Ms. Kit Soo
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

SUBJECT: SUBSURFACE INVESTIGATION DOCUMENTATION TRANSMITTAL
CERTIFICATION
County File # RO 3160
Former Precision Cast Products Site (1549 32nd Street)
2868 Hannah Street
Oakland, CA

Dear Ms. Soo:

You will find enclosed one copy of the following document prepared by P&D Environmental, Inc. for the subject site:

- Subsurface Investigation Documentation Transmittal dated October 20, 2016 (RB-6 Through RB-8 and MW-1 Through MW-3) (document 0741.R1).

I declare under penalty of perjury that the contents and conclusions in the document are true and correct to the best of my knowledge.

Should you have any questions, please do not hesitate to contact me at (510) 452-2944.

Sincerely,

2868 Hannah Street LLC

A handwritten signature in black ink, appearing to read 'John Protoppapas', written over a horizontal line.

John Protoppapas
Managing Member

0741.L5

P&D ENVIRONMENTAL, INC.

55 Santa Clara Ave, Suite 240
Oakland, CA 94610
(510) 658-6916

October 20, 2016
Report 0741.R1

Mr. Bob Huff
2868 Hannah Street, LLC
155 Grand Avenue, Suite 1025
Oakland, CA 94612

**SUBJECT: SUBSURFACE INVESTIGATION DOCUMENTATION TRANSMITTAL
(RB-6 THROUGH RB-8 AND MW-1 THROUGH MW-3)
County File # RO 0003160
Former Precision Cast Products Site (1549 32nd Street)
2868 Hannah Street (alternate site address)
Oakland, CA**

Dear Mr. Huff:

P&D Environmental, Inc. (P&D) has prepared this report transmitting documents related to subsurface investigation activities performed at the subject site in 2015 by Roux Associates, Inc. (Roux) of Oakland, California. The work performed by Roux included the following:

- Drilling two boreholes designated as RB-6 and RB-7 and collection of soil and groundwater samples from the two boreholes on August 27, 2015,
- Installation of three groundwater monitoring wells designated as MW-1, MW-2, and MW-3 and collection of soil samples from the boreholes on September 24, 2015,
- Drilling of one additional borehole designated as RB-8 and collection of soil and groundwater samples from the borehole on September 25, 2015,
- Development of groundwater monitoring wells MW-1 through MW-3 on October 2, 2015,
- Surveying of groundwater monitoring wells MW-1 through MW-3 on October 5, 2015,
- Monitoring and sampling of groundwater monitoring wells MW-1 through MW-3,
- Soil and groundwater sample laboratory analysis.

The work performed by Roux was proposed in their Phase II Environmental Site Assessment Results report dated August 10, 2015 and the proposed work was conditionally approved by the Alameda County Department of Environmental Health (ACDEH) in a letter dated August 13, 2015.

P&D received the following documents from Roux on April 20, 2016:

- Figure 4 showing borehole and groundwater monitoring well locations,
- Boring logs for boreholes RB-6 through RB-8,
- Boring logs/well construction logs for groundwater monitoring wells MW-1 through MW-3,
- Monitoring Well Survey data dated October 15, 2015 from Virgil Chavez Land Surveying of Vallejo, California,

- Groundwater monitoring well development data dated October 2, 2015 from Blaine Tech Services, Inc. (BTS) of San Jose, California,
- Groundwater monitoring well monitoring and sampling data dated October 6, 2015 from BTS,
- Laboratory Analytical Reports c41481, c41959, c41989, c41990, and c42157 from Accutest Laboratories of San Jose, California,
- California Department of Water Resources (DWR) Well Completion Reports (WCRs) for groundwater monitoring wells MW-1 through MW-3.

Copies of the documents from Roux are attached with this report with the exception of the DWR WCRs, which were provided to Mr. James Yoo at the Alameda County Public Works Agency by P&D under separate cover.

In addition, P&D received on October 13, 2016 manifests documenting the disposal of investigation-derived waste associated with the work performed at the site by Roux in 2015. Copies of the manifests are also attached with this report.

A brief summary prepared by P&D of activities and results associated with the documents obtained from Roux is provided below. The summary includes summary tables of soil and groundwater laboratory analytical results and well groundwater level measurements. A site location map prepared by P&D is attached with this report as Figure 1 and a site map showing borehole and well locations prepared by P&D using Figure 4 provided by Roux is attached with this report as Figure 2.

FIELD ACTIVITIES

Summaries of information related to drilling, well installation, well development, well surveying, and well sampling obtained from review of documents provided by Roux are provided below. Figure 4 provided by Roux showing borehole and well locations is attached with this report as Appendix A.

Borehole Drilling and Sample Collection

Soil boring logs and well construction logs are attached with this report as Appendix B. Review of Appendix B shows that Roux personnel oversaw the continuous coring of three 2.0-inch diameter boreholes, designated as RB-6, RB-7, and RB-8 at locations shown on Figure 2 using Geoprobe direct push technology to depths of 20.0, 38.0, and 27.5 feet below the ground surface (bgs), respectively. Boreholes RB-6 and RB-7 were drilled on August 27, 2015 by Cascade Drilling and borehole RB-8 was drilled on September 25, 2015 by Gregg Drilling.

Photoionization Detector (PID) values are identified on the RB-6, RB-7, and RB-8 boring logs as follows:

- RB-6: PID values ranged from 0.4 to 82.1 parts per million (ppm) with the maximum value of 82.1 ppm recorded at a depth of approximately 9.0 feet bgs,

- RB-7: PID values ranged from 0.5 to 7.5 ppm with the maximum value of 7.5 ppm recorded at a depth of approximately 8.0 feet bgs,
- RB-8: PID values ranged from 0.8 to 4.1 ppm with the maximum value of 4.1 ppm recorded at a depth of approximately 15.0 feet bgs.

No other evidence of contamination such as odors, staining, or discoloration was noted on the boring logs.

The RB-6, RB-7, and RB-8 boring logs identified grab soil samples collected at the following depths:

- RB-6: Approximately 2.5, 7.5, 9.0, and 12.0 feet bgs,
- RB-7: Approximately 3.5, 7.5, 13.0, 18.0, 21.5, 24.0, 29.5, and 35.0 feet bgs,
- RB-8: Approximately 3.0, 9.5, 14.5, 18.5, and 24.5 feet bgs.

Other than the identification of a Macro-Core sampler, sample collection methods are not identified on the boring logs. All of the soil samples were placed on hold at the laboratory and subsequently the samples collected at depths that are underlined above were analyzed and samples collected at depths not underlined above were not analyzed.

The RB-6, RB-7, and RB-8 boring logs show that groundwater was first encountered during drilling and was subsequently measured in the boreholes as follows.

- RB-6: Groundwater was first encountered at a depth of 16.5 feet bgs and was subsequently measured in the borehole at a depth of 12.0 feet bgs,
- RB-7: Groundwater was first encountered at a depth of 16.5 feet bgs and also at a depth of approximately 35.1 feet bgs (the total borehole depth was 38.0 feet bgs), and was subsequently measured in the borehole at a depth of approximately 22.5 feet bgs as shown graphically on the boring log or at a depth of 23 feet below land surface as identified in the boring log header information,
- RB-8: Groundwater was first encountered at a depth of 26.0 feet bgs and was subsequently not measured in the borehole.

Groundwater samples were collected from boreholes RB-6 through RB-8 on the dates of drilling (August 27 and September 25, 2015) using unknown methods. Chain of custody documentation procedures were observed for transfer of the samples to the laboratory.

Groundwater Monitoring Well Borehole Drilling and Installation

Review of Appendix B shows that Roux personnel oversaw the continuous coring of three 2.0-inch diameter boreholes, designated as MW-1, MW-2 and MW-3 at locations shown on Figure 2 using Geoprobe direct push technology to depths of 20.0, 20.0, and 15.0 bgs, respectively. All of the boreholes were drilled on September 24, 2015 by Gregg Drilling. The boring log borehole diameters are all identified as 8 inches. Although the boring logs do not identify the drilling method for well installation in the boreholes, the Department of Water Resources (DWR) Well Completion Reports (WCRs) identify the drilling method for well construction as hollow stem

auger. Based on this information the boreholes were initially continuously cored with a Geoprobe drill rig and the boreholes were subsequently enlarged with a hollow stem auger drill rig for well construction. The DWR Well Completion Reports show that wells MW1, MW2, and MW3 were constructed in the boreholes using ACPWA permit numbers W2015-0775, W2015-0774, and W2015-0773, respectively.

Review of the MW-1, MW-2 and MW-3 well construction logs in Appendix B and the DWR WCRs shows that all three of the wells were constructed using a 2-inch diameter Schedule 40 PVC pipe with 12.0 feet of 0.010-inch factory-slotted pipe placed in the bottom of the borehole. The annular space surrounding the PVC pipe was filled with #2/12 sand from the bottom of the borehole to a height of one foot above the top of the slotted interval. A one-foot thick layer of bentonite was placed above the sand, and neat cement grout was placed in the remaining annular space above the bentonite to approximately one half foot bgs. Field observations show that the tops of the wells are covered with stove pipe covers that extend above the ground surface by approximately 3.5 feet.

Review of the Appendix B graphic logs and associated visual descriptions for provided in the well construction logs for boreholes MW-1, MW-2 and MW-3 shows that PID values were identified in the boreholes as follows:

- MW-1: PID values ranged from 4.8 to 46.1 ppm with the maximum value of 46.1 ppm recorded at a depth of approximately 4.0 feet bgs,
- MW-2: PID values ranged from 7.7 to 13.4 ppm with the maximum value of 13.4 ppm recorded at a depth of approximately 9.5 feet bgs,
- MW-3: PID values ranged from 8.2 to 406 ppm with the maximum value of 406 ppm recorded at a depth of approximately 1.5 feet bgs.

No other evidence of contamination such as odors, staining, or discoloration was noted on the graphic logs and associated visual descriptions for the boreholes.

The MW-1, MW-2 and MW-3 graphic logs in the well construction logs identified grab soil samples collected at the following depths:

- MW-1: Approximately 4.0, 9.5, 14.5 and 19.5 feet bgs,
- MW-2: Approximately 4.0, 9.5, 14.5 and 19.5 feet bgs (the chain of custody document identifies the 4.0 sample as being collected at a depth of 4.5 feet),
- MW-3: Approximately 1.0, 4.0, 9.5, and 14.5 feet bgs.

Other than the identification of a Macro-Core sampler, sample collection methods are not identified on the boring logs. All of the soil samples were placed on hold at the laboratory and subsequently the samples collected at depths that are underlined above were analyzed and samples collected at depths not underlined above were not analyzed.

The MW-1, MW-2 and MW-3 graphic logs in the well construction logs show that groundwater was first encountered during drilling and was subsequently measured in the boreholes as follows:

- MW-1: Groundwater was first encountered at a depth of 16.0 feet bgs and was subsequently measured in the borehole at a depth of 8.7 feet bgs,
- MW-2: Groundwater was first encountered at a depth of 16.0 feet bgs and was subsequently measured in the borehole at a depth of 4.8 feet bgs,
- MW-3: Groundwater was first encountered at a depth of 16.5 feet bgs and was subsequently measured in the borehole at a depth of 8.1 feet bgs.

Well Development

On October 2, 2015, wells MW1 through MW3 were developed by surging and over-pumping by BTS personnel. Water from the wells was pumped using a positive air displacement pump and wells MW1 and MW2 were also purged using a bailer. Prior to development, the monitoring wells were monitored for depth to water to the nearest 0.01 feet using an electric water level indicator. The measured depth to groundwater prior to development on October 2, 2015 in wells MW1, MW2, and MW3 was 11.34, 11.30, and 10.89 feet, respectively. Depth to water measurements are summarized in Table 4 prepared by P&D. The top of the PVC well pipe is approximately 3.5 feet above the ground surface at each well location.

During purging operations, the field parameters of electrical conductivity, temperature, pH, and turbidity were monitored and recorded on well development data sheets for each well.

BTS personnel did not identify any odors or sheen on the water purged from wells MW1 through MW3. As a result of relatively low recharge rates for wells MW1 and MW2 approximately 10 and 15 gallons of water was removed from each of these wells during development, respectively, and approximately 40 gallons of water was removed from well MW3.

Well development field data sheets including a wellhead inspection checklist and a SPH or Purge Water Drum Log are attached with this report as Appendix C. According to the SPH or Purge Water Drum Log, the water removed from the wells during development was stored in labeled 55-gallon steel drums at the subject site along with several drums of soil cuttings pending characterization and appropriate disposal.

Well Surveying

The vertical elevations and horizontal locations for the top of the PVC casing for each of the three new wells were surveyed by Virgil Chavez Land Surveying of Vallejo, California (Virgil Chavez) on October 5, 2015. In addition, the ground surface elevation adjacent to each well was also surveyed. The surveyed top of casing elevations for each well are provided in Table 4 and a copy of the October 2015 survey information provided by the surveyor is attached with this report as Appendix D.

Depth-to-water level measurements for all of the wells for the subject site are summarized in Table 4. All of the calculated groundwater surface elevations in Table 4 are relative to the North American Geodetic Vertical Datum of 1988 (NAVD 88) referenced as the datum used in the October 15, 2015 Virgil Chavez Monitoring Well Survey Report.

Well Monitoring and Sampling

On October 6, 2015 BTS personnel returned to the site and monitored and sampled wells MW-1 through MW-3. The measured depth to groundwater prior to purging and sampling wells MW-1, MW-2, and MW-3 on October 6, 2015 was 11.34, 11.32, and 10.91 feet, respectively. The depth to water measurements are summarized in Table 4.

Following the completion of monitoring the wells for depth to water they were purged and sampled using a peristaltic pump at flow rates ranging from approximately 100 to 200 milliliters per minute. During purging operations, the field parameters of electrical conductivity, temperature, pH, dissolved oxygen, oxidation reduction potential, turbidity, and depth to water were monitored and recorded on a groundwater low flow well monitoring data sheet for each well. The total volume purged from each of wells MW-1, MW-2 and MW-3 prior to sample collection was 2,100 milliliters (ml), 2,100 ml, and 1,650 ml, respectively. Copies of the well monitoring and sampling field data sheets including a wellhead inspection checklist and a SPH or Purge Water Drum Log are attached with this report as Appendix E.

In addition to collecting groundwater samples from each of the groundwater monitoring wells, BTS personnel also prepared a trip blank, designated as TB-1 and collected a field duplicate sample from well MW2 designated as DUP-1 and submitted both samples to the laboratory for analysis. Chain of custody documentation accompanied the samples to the laboratory.

Waste Disposal

On October 11, 2016 six drums of soil were removed from the site as non-hazardous waste by Soil Safe, Inc. (Soil Safe) of Adelanto, California and brought to the Belshire Environmental Services, Inc. (Belshire) facility in Foothill Ranch, California using non-hazardous waste manifest 46482. Also on October 11, 2016 three drums of groundwater were removed from the site as non-hazardous waste by Nieto & Sons Trucking, Inc. of Brea, California to the Demenno Kerdoon facility in Compton, California using non-hazardous waste data form 272652. Copies of the non-hazardous waste manifest and the non-hazardous waste data form are attached with this report as Appendix F.

LABORATORY RESULTS

All of the soil and groundwater samples collected from boreholes RB-6 through RB-8 and wells MW-1 through MW-3 were analyzed at Accutest Laboratories (Accutest) of San Jose, California.

The soil samples were analyzed for the following analytes:

- Total Petroleum Hydrocarbons as Gasoline (TPH-G) and for Volatile Organic Compounds (VOCs), including methyl tert-butyl ether (MTBE), benzene, toluene, ethylbenzene, and total xylenes (BTEX), and also including Tetrachloroethene (PCE) and the decomposition products Trichloroethene (TCE), cis-1,2-Dichloroethene (cis-1,2-DCE), trans-1,2-Dichloroethene (trans-1,2-DCE), and Vinyl Chloride using EPA Method 8260B,

- Total Petroleum Hydrocarbons as Diesel (TPH-D) which was reported by the laboratory as TPH (C10-C28) and for Total Petroleum Hydrocarbons as Motor Oil (TPH-MO) which was reported by the lab as TPH (>C28-C40) using modified EPA Method 8015B in conjunction with EPA Method 3550B,
- Percent moisture using modified Standard Method SM2540.

The borehole groundwater samples were analyzed for the same analytes as the soil samples and using the same methods, except for TPH-D and TPH-MO which were analyzed using modified EPA Method 8015B in conjunction with EPA Method 3510C.

The well groundwater samples including duplicate DUP-1 were analyzed for the following analytes:

- VOCs using EPA Method 8260B,
- Methane, ethane, and ethane using Method RSK-175,
- Total and dissolved iron and manganese using EPA Method 3010A,
- Bromide, Nitrogen, Nitrate, and Sulfate using EPA Method 300 in conjunction with EPA Method 9056A,
- Sulfide using Standard Method SM4500S D-00,
- Total Organic Carbon (TOC) using Standard Method SM5310 C-00.

The trip blank (TP-1) was analyzed for VOCs by EPA Method 8260B only.

The laboratory analytical results for borehole soil samples collected from boreholes RB-6 through RB-8 and from MW3 are summarized in Table 1 prepared by P&D. The groundwater grab samples collected from boreholes RB-6 through RB-8 are summarized in Table 2 prepared by P&D. The groundwater samples collected from groundwater monitoring wells MW1 through MW3 are summarized in Table 3 prepared by P&D. Copies of the laboratory analytical reports and chain of custody documentation are included with this report as Appendix G.

DISTRIBUTION

A copy of this report will be uploaded to the GeoTracker and ACEH LOP databases.

LIMITATIONS

This report was prepared solely for the use of 2868 Hannah Street, LLC. The content and conclusions provided by P&D in this assessment are based on information collected during our investigation, which may include, but not be limited to, visual site inspections; interviews with the site owner, regulatory agencies and other pertinent individuals; review of available public documents; subsurface exploration and our professional judgment based on said information at the time of preparation of this document. Any subsurface sample results and observations presented herein are considered to be representative of the area of investigation; however, geological conditions may vary between borings and may not necessarily apply to the general site as a whole. If future subsurface or other conditions are revealed which vary from these findings, the newly revealed conditions must be evaluated and may invalidate the findings of this report.

October 20, 2016
Report 0741.R1

This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information contained herein is brought to the attention of the appropriate regulatory agencies, where required by law. Additionally, it is the sole responsibility of the owner to properly dispose of any hazardous materials or hazardous wastes left onsite, in accordance with existing laws and regulations.


This report has been prepared in accordance with generally accepted practices using standards of care and diligence normally practiced by recognized consulting firms performing services of a similar nature. P&D is not responsible for the accuracy or completeness of information provided by other individuals or entities, which are used in this report. This report presents our professional judgment based upon data and findings identified in this report and interpretation of such data based upon our experience and background, and no warranty, either express or implied, is made. The conclusions presented are based upon the current regulatory climate and may require revision if future regulatory changes occur.

October 20, 2016
Report 0741.R1

Should you have any questions or comments, please do not hesitate to contact us at (510) 658-6916.

Sincerely,

P&D Environmental, Inc.



Paul H. King
Professional Geologist #5901
Expires: 12/31/17



Attachments:

Table 1 - Summary of Borehole Soil Sample Analytical Results
Table 2 - Summary of Borehole Groundwater Sample Analytical Results
Table 3 - Summary of Monitoring Well Groundwater Sample Analytical Results
Table 4 - Summary of Groundwater Elevation Data

Figure 1 - Site Location Map
Figure 2 - Site Map Showing Borehole and Well Locations

Appendix A - Roux Figure 4 Showing Borehole and Well Locations
Appendix B - Soil Boring Logs and Well Construction Logs
Appendix C - October 2, 2015 Well Development Field Data Sheets
Appendix D - October 5, 2015 Well Survey Data
Appendix E - October 6, 2015 Well Monitoring and Sampling Field Data Sheets
Appendix F - Disposal Manifest and Non-Hazardous Waste Data Form
Appendix G - Laboratory Analytical Reports and Chain of Custody Documentation

PHK/sjc
0741.R1

TABLES

Table 1
Summary of Borehole Soil Sample Analytical Results

Sample ID	Sample Collection Date	Sample Collection Depth (ft bgs)	TPH-G	TPH-D	TPH-MO	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	Other VOCs by EPA Metod 8260B	Moisture (%)
RB-6 2.5-3.0'	8/27/2015	2.5	ND<0.100	30.4	29.9	ND<0.0052	ND<0.0052	ND<0.0052	ND<0.0052	ND<0.010	Acetone = 0.0113, b Methylene Chloride = 0.0097, b	13.5
RB-6 7.5-8.0'	8/27/2015	7.5	28.7	10.3	ND<7.9	ND<0.0047	ND<0.0047	ND<0.0047	ND<0.0047	ND<0.0095	All ND	15.4
RB-6 9.0-9.5'	8/27/2015	9.0	27.6	25.6	ND<7.8	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0097	All ND	15
RB-6 12.0-12.5'	8/27/2015	12.0	ND<0.110	ND<4.2	ND<8.4	ND<0.0053	ND<0.0053	ND<0.0053	ND<0.0053	ND<0.011	All ND	21.1
RB-7 3.5-4.0'	8/27/2015	3.5	0.705	128	ND<24	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	Acetone = 0.0275, b	16.6
RB-7 7.5-8.0'	8/27/2015	7.5	0.267	74.0	ND<7.8	ND<0.0052	ND<0.0052	ND<0.0052	ND<0.0052	ND<0.010	Acetone = 0.0147, b Chlorobenzene = 0.00065, b Dibromochloromethane = 0.0013, b sec-Butylbenzene = 0.0016, b	14.8
RB-7 13-13.5'	8/27/2015	13.0	ND<0.110	1.51, a	ND<8.5	ND<0.0055	ND<0.0055	ND<0.0055	ND<0.0055	ND<0.011	All ND	22.1
RB-7 18-18.5'	8/27/2015	18.0	ND<0.100	1.13, a	ND<8.4	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	All ND	20.8
RB-7 21.5-22'	8/27/2015	21.5	ND<0.098	ND<4.1	ND<8.2	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0049	ND<0.0098	All ND	19.4
RB-8 24.5-25.0'	9/25/2015	24.5	ND<0.100	1.73, b	2.71, b	ND<0.0052	ND<0.0052	ND<0.0052	ND<0.0052	ND<0.010	All ND	15.2
MW-3 1.0-1.5'	9/24/2015	1.0	55	251	61.8, b	ND<0.470	ND<0.470	0.0972, b	0.157, b	0.652, b	All ND, except Naphthalene = 0.706 , n-Butylbenzene = 1.090, sec-Butylbenzene = 0.889, Isopropylbenzene = 0.525, p-Isopropyltoluene = 0.755, n-Propylbenzene = 1.590, 1,2,4-Trimethylbenzene = 5.990, 1,3,5-Trimethylbenzene = 0.729	17.2
MW-3 4.0-4.5'	9/24/2015	4.0	0.949, a	1.62, b	3.02, b	ND<0.0060	ND<0.0060	ND<0.0060	ND<0.0060	ND<0.012	All ND, except Acetone = 0.0444, b	15.1
MW-3 9.5-10.0'	9/24/2015	9.5	ND<0.093	15.3	5.65, b	ND<0.0047	ND<0.0047	ND<0.0047	ND<0.0047	ND<0.0093	All ND	16.4
MW-3 14.5-15.0'	9/24/2015	14.5	ND<0.110	1.49, b	ND<0.0083	ND<0.0056	ND<0.0056	ND<0.0056	ND<0.0056	ND<0.011	All ND	19.7

Table 1
Summary of Borehole Soil Sample Analytical Results

Sample ID	Sample Collection Date	Sample Collection Depth (ft bgs)	TPH-G	TPH-D	TPH-MO	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	Other VOCs by EPA Metod 8260B	Moisture (%)
LTCP	Residential						0-5' = 1.9		0-5' = 21			
	Residential						5-10' = 2.8		5-10' = 32			
LTCP	Commercial/Industrial						0-5' = 8.2		0-5' = 89			
	Commercial/Industrial						5-10' = 12		5-10' = 134			
	Utility Worker						0-10' = 14		0-10' = 314			
ESL	Soil Tier 1 ESL		100	230	5,100	0.023	0.044	2.9	1.4	2.3	Naphthalene = 0.033, Acetone = 0.5, Methylene Chloride = 0.077, Chlorobenzene = 1.5, Dibromochloromethane = 3.8, n-Butylbenzene = No Value, sec-Butylbenzene = No Value, Isopropylbenzene = No Value, p-Isopropyltoluene = No Value, n-Propylbenzene = No Value, 1,2,4-Trimethylbenzene = No Value, 1,3,5-Trimethylbenzene = No Value	No Value
NOTES:												
TPH-G = Total Petroleum Hydrocarbons as Gasoline.												
TPH-D = Total Petroleum Hydrocarbons as Diesel (Reported by Lab as TPH C10-C28).												
TPH-MO = Total Petroleum Hydrocarbons as Motor Oil (Reported by Lab as TPH >C28-C40).												
MTBE = Methyl tertiary-butyl ether.												
VOCs = Volatile Organic Compounds.												
ft bgs = feet below ground surface.												
ND = Not detected.												
a = Laboratory Note: Atypical pattern; heavier hydrocarbons contributing to quantitation.												
b = Laboratory Note: Estimated value.												
LTCP = Low Threat Closure Policy, by State Water Resources Control Board, effective August 17, 2012, from Table 1 - Concentrations of Petroleum Constituents in Soil That Will Have No Significant Risk of Adversely Affecting Human Health.												
ESL = Environmental Screening Level, by San Francisco Bay – Regional Water Quality Control Board, updated February 2016 (Revision 3), from Summary of Soil ESLs, Soil Tier 1 ESL.												
Hi-lighted depths include the interval 0 -10.0 feet.												
Results in bold exceed their respective ESL values.												
Results, LTCP values, and ESL values, reported in mg/kg (milligrams per kilogram), unless otherwise indicated.												

Table 2
Summary of Borehole Groundwater Sample Analytical Results

Sample ID	Sample Collection Date	Sample Collection Depth (ft bgs)	TPH-G	TPH-D	TPH-MO	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	Other VOCs by EPA Method 8260B
RB-6 GW	8/27/2015	12.0	50.4	93.9, a	52.9, a	ND<1.0	ND<1.0	ND<1.0	0.39, a	2.2	All ND, except Acetone = 49.6
RB-7 GW23'	8/27/2015	23.0	ND<50	0.0260,a	ND<200	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<2.0	All ND
RB-8 27.5' GW	9/25/2015	27.5	ND<50	308	230	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<2.0	All ND, except PCE = 3.3
LTCP Groundwater	Scenario 2 Scenario 4					1,000 1,000	3,000 1,000				
Specific Criteria											
ESL			100	100	50,000	5.0	1.0	40	13	20	Acetone = 1,500, PCE = 3.0
NOTES:											
TPH-G = Total Petroleum Hydrocarbons as Gasoline.											
TPH-D = Total Petroleum Hydrocarbons as Diesel (Reported by Lab as TPH C10-C28).											
TPH-MO = Total Petroleum Hydrocarbons as Motor Oil (Reported by Lab as TPH >C28-C40).											
MTBE = Methyl tertiary-butyl ether.											
VOCs = Volatile Organic Compounds.											
PCE = Tetrachloroethene.											
ft bgs = feet below ground surface.											
ND = Not detected.											
a = Laboratory Note: Estimated value.											
LTCP = Low Threat Closure Policy, by State Water Resources Control Board, effective August 17, 2012, from Groundwater-Specific Criteria Scenarios 2 and 4.											
ESL = Environmental Screening Level, by San Francisco Bay – Regional Water Quality Control Board, updated February 2016 (Revision 3), from Summary of Groundwater ESLs, GW Tier 1 ESL.											
Results in bold exceed their respective ESL values.											
Results, LTCP values, and ESL values, reported in µg/L (micrograms per Liter), unless otherwise indicated.											

Table 3
Summary of Monitoring Well Groundwater Sample Analytical Results

Sample ID	Sample Collection Date	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	Other VOCs by EPA Method 8260B	Methane	Ethane	Ethene	Bromide	Nitrogen, Nitrate	Sulfate	Sulfide	TOC	Total Iron	Total Manganese	Dissolved Iron	Dissolved Manganese	
MW1	10/6/2015	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<2.0	All ND	1.9	ND<1.0	ND<1.0	910	2,100	291,000	ND<20	3,700	401	196	ND<200	119	
MW2	10/6/2015	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<2.0	All ND, except PCE = 655 , TCE = 22.5 , cis-1,2-DCE = 4.0, trans-1,2-DCE = 0.28, a Vinyl Chloride = 0.39 , a	ND<0.50	ND<1.0	ND<1.0	1,200	560	268,000	ND<20	3,700	799	537	ND<200	557	
DUP-1	10/6/2015	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<2.0	All ND, except PCE = 550 , TCE = 23.6 , cis-1,2-DCE = 4.7, trans-1,2-DCE = 0.35, a Vinyl Chloride = 0.43 , a	ND<0.50	ND<1.0	ND<1.0	1,200	590	266,000	ND<20	3,800	998	537	ND<200	508	
MW3	10/6/2015	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<2.0	All ND	ND<0.50	ND<1.0	ND<1.0	1,200	210	176,000	ND<20	7,200	1,850	742	950	813	
TB-1	10/6/2015	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<2.0	All ND	--	--	--	--	--	--	--	--	--	--	--	--	
LTCP Groundwater Specific Criteria	Scenario 2 Scenario 4	1,000 1,000	3,000 1,000																	
ESL ¹		5.0	1.0	40	13	20	PCE = 3.0, TCE = 5.0, cis-1,2-DCE = 6.0, trans-1,2-DCE = 10, Vinyl Chloride = 0.061	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value
ESL ²		15,000	30	100,000	370	38,000	PCE = 100, TCE = 170, cis-1,2-DCE = 15,000, trans-1,2-DCE = 31,000, Vinyl Chloride = 2.0	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value
ESL ³		130,000	260	No Value	3,300	No Value	PCE = 880, TCE = 1,500, cis-1,2-DCE = 130,000, trans-1,2-DCE = 260,000, Vinyl Chloride = 17	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value
NOTES:																				
MTBE = Methyl tertiary-butyl ether.																				
TOC = Total Organic Carbon.																				
VOCs = Volatile Organic Compounds.																				
PCE = Tetrachloroethene.																				
TCE = Trichloroethene.																				
cis-1,2-DCE = cis-1,2-Dichloroethene.																				
trans-1,2-DCE = trans-1,2-Dichloroethene.																				
ND = Not detected.																				
-- = Not analyzed.																				
a = Laboratory Note: Estimated value.																				
LTCP = Low Threat Closure Policy, by State Water Resources Control Board, effective August 17, 2012, from Groundwater-Specific Criteria Scenarios 2 and 4.																				
ESL ¹ = Environmental Screening Level, by San Francisco Bay – Regional Water Quality Control Board, updated February 2016 (Revision 3), from Summary of Groundwater ESLs, GW Tier 1 ESL.																				
ESL ² = Environmental Screening Level, by San Francisco Bay – Regional Water Quality Control Board, updated February 2016 (Revision 3), from Table GW-3 Groundwater Vapor Intrusion Human Health Risk Screening Levels. Deep groundwater. Fine-coarse scenario. Residential Land Use.																				
ESL ³ = Environmental Screening Level, by San Francisco Bay – Regional Water Quality Control Board, updated February 2016 (Revision 3), from Table GW-3 Groundwater Vapor Intrusion Human Health Risk Screening Levels. Deep groundwater. Fine-coarse scenario. Commercial/Industrial Land Use.																				
Results in bold exceed their respective ESL¹ values.																				
<u>Underlined results exceed their respective ESL² values.</u>																				
Results, LTCP values, and ESL values, reported in µg/L (micrograms per Liter), unless otherwise indicated.																				

Table 4
 Summary of Groundwater Elevation Data

Well ID	Date Monitored	Top of Casing Elevation (Ft)	Depth to Water (Ft)	Water Table Elevation (Ft)
MW1	10/6/2015	15.81**	11.34	4.47
	10/2/2015		11.34*	4.47
MW2	10/6/2015	14.88**	11.32	3.56
	10/2/2015		11.30*	3.58
MW3	10/6/2015	14.88**	10.91	3.97
	10/2/2015		10.89*	3.99
NOTES:				
* = Prior to well development.				
** = Surveyed on October 5, 2015 by Virgil Chavez Land Surveying.				

FIGURES

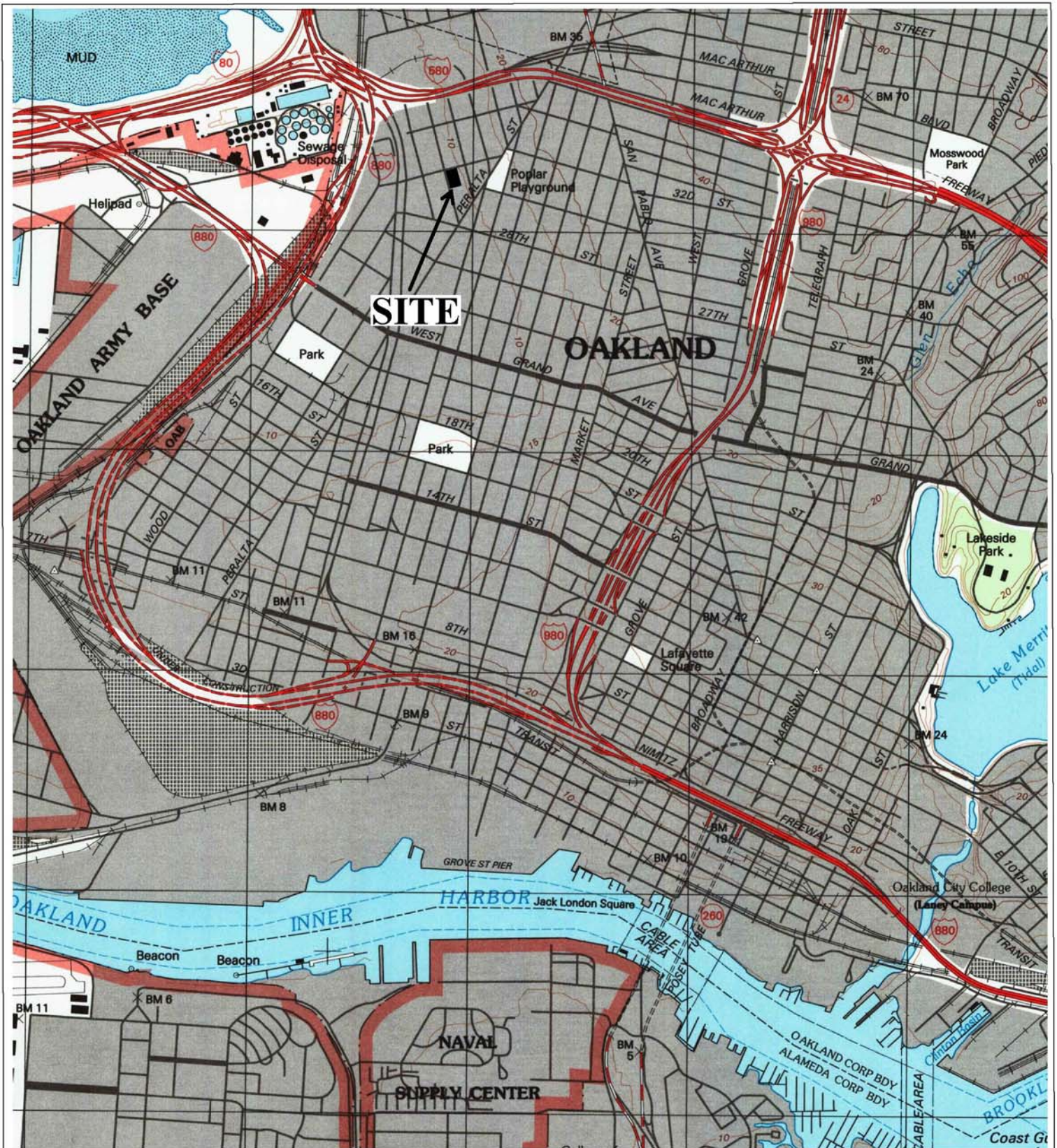


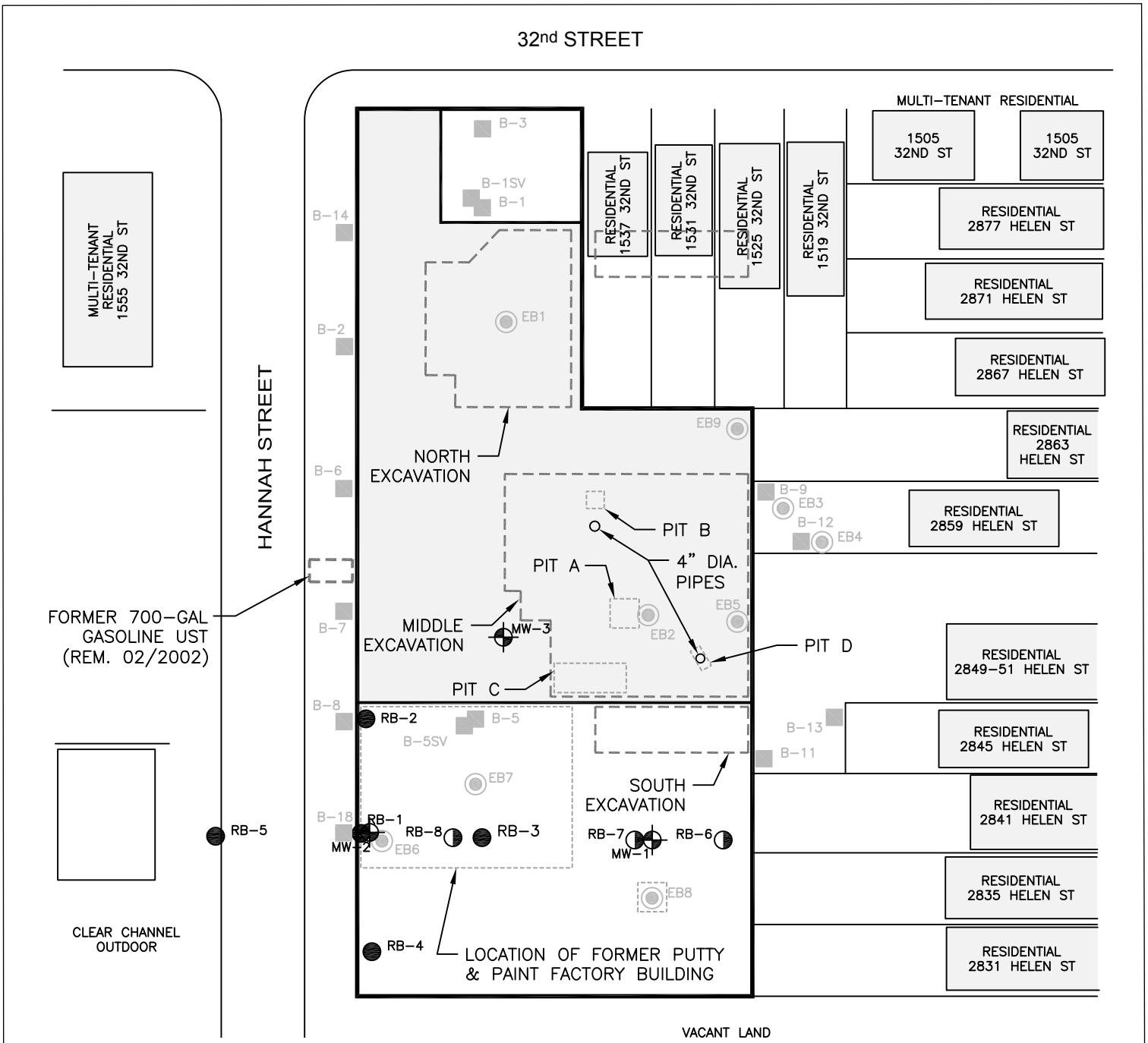
Figure 1
 Site Location Map
 2868 Hannah Street
 Oakland, California

Basemap from:
 U.S. Geological Survey 7.5-Minute Quadrangle,
 Oakland East, California Map edited 1996, and
 U.S. Geological Survey 7.5-Minute Quadrangle,
 Oakland West, California, Map edited 1996

P&D Environmental, Inc.
 55 Santa Clara Ave., Suite 240
 Oakland, CA 94610

0 1,000 2,000
 Approximate Scale in Feet





LEGEND

- Borehole Location By Environmental Risk Specialties
- Borehole Location By ERS
- Borehole Location By Roux Associates, Inc.
- ◐ Supplemental Borehole Location By Roux Associates, Inc.
- ⊕ Groundwater Monitoring Well Location By Roux Associates, Inc.

Figure 2
Site Map Showing Borehole and Well Locations
 2868 Hannah Street
 Oakland, California

Basemap from:
 Roux Associates, Inc., dated October 23, 2015

P&D Environmental, Inc.
 55 Santa Clara Ave., Suite 240
 Oakland, CA 94610

0 25 50

 Approximate Scale in Feet

N

APPENDIX A

Roux Figure 4 Showing Borehole and Well Locations

32ND STREET I

MULTI-TENANT RESIDENTIAL

1505 32ND ST

1505 32ND ST

RESIDENTIAL 2877 HELEN ST

RESIDENTIAL 2871 HELEN ST

RESIDENTIAL 2867 HELEN ST

RESIDENTIAL 2863 HELEN ST

RESIDENTIAL 2859 HELEN ST

RESIDENTIAL 2849-51 HELEN ST

RESIDENTIAL 2845 HELEN ST

RESIDENTIAL 2841 HELEN ST

RESIDENTIAL 2835 HELEN ST

RESIDENTIAL 2831 HELEN ST

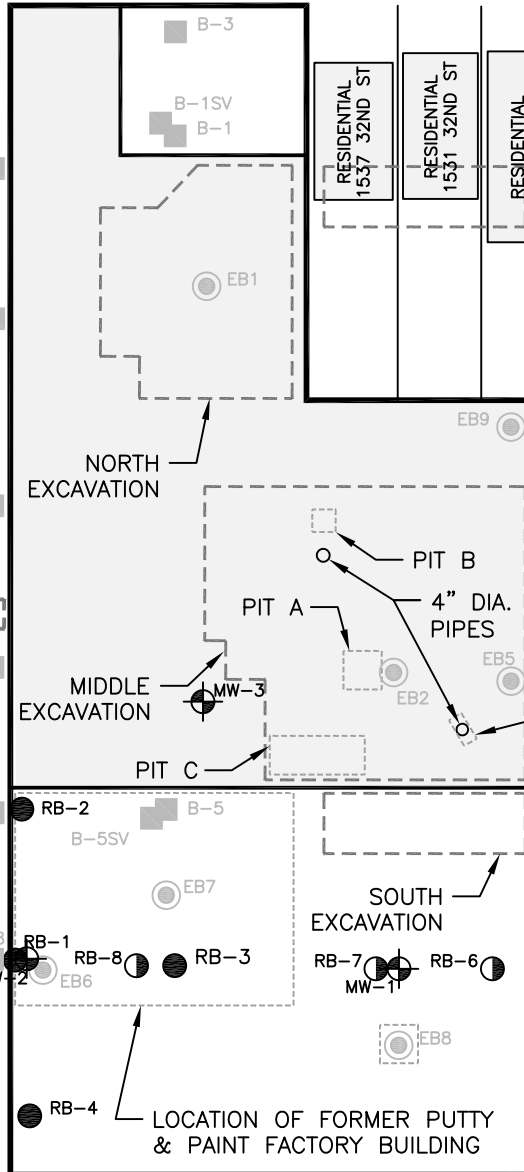
VACANT LAND

MULTI-TENANT RESIDENTIAL 1555 32ND ST

HANNAH STREET

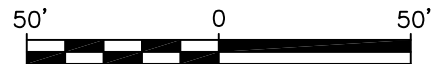
FORMER 700-GAL GASOLINE UST (REM. 02/2002)

CLEAR CHANNEL OUTDOOR



LEGEND

- ENVIRONMENTAL RISK SPECIALTIES SOIL BORING LOCATION
- ENVIRONMENTAL RESTORATION SERVICES BORING LOCATION
- ROUX PHASE 2 SOIL BORING LOCATION
- GROUNDWATER MONITORING WELL
- SUPPLEMENTAL SOIL BORING LOCATION



Title:			
SOIL BORINGS AND GROUNDWATER MONITORING WELLS			
2868 HANNAH STREET OAKLAND CALIFORNIA			
Prepared For:			
2868 HANNAH STREET, LLC			
 ROUX ASSOCIATES, INC. <i>Environmental Consulting & Management</i>	Compiled by: D.F.	Date: 23OCT15	FIGURE 4
	Prepared by: N.R.	Scale: AS SHOWN	
	Project Mgr: A.C.	Project: 2463.0003S000	
	File: 2463.0003S105.02.DWG		

S:\OAKLAND\CLIENTS\MADISON PARK FINANCIAL\2868 HANNAH STREET, OAKLAND\FIGURES\SUBSURFACE INVESTIGATION REPORT FIGURES\2463.0003S105.02.DWG

APPENDIX B

SOIL BORING LOGS AND WELL CONSTRUCTION LOGS

**BOREHOLES
RB-6 THROUGH RB-8**



ROUX ASSOCIATES, INC.
Environmental Consulting
& Management

555 12th Street
Suite 125
Oakland, CA 94607
Telephone: (415) 967-6000
Fax: (415) 967-6001

SOIL BORING LOG

WELL NO. RB-6	NORTHING Not Measured	EASTING Not Measured
PROJECT NO./NAME 2463.0003S002 / 2868 Hannah Street		LOCATION 2868 Hannah Street
APPROVED BY D. Grunat, P.G.	LOGGED BY N. Rodriguez	Oakland, California
DRILLING CONTRACTOR/DRILLER Roux Associates, Inc. / Cascade Drilling		GEOGRAPHIC AREA
DRILL BIT DIAMETER/TYPE 2-in. / Drive Sampler	BOREHOLE DIAMETER 2-inches	DRILLING EQUIPMENT/METHOD / Geoprobe
LAND SURFACE ELEVATION Not Measured	DEPTH TO WATER 12 (Feet BLS)	BACKFILL Portland Type I/II Cement
		SAMPLING METHOD 2" Macro-Core
		START-FINISH DATE 8/27/15-8/27/15

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		<<U>FILL: Dark gray, Dry, Fine to medium, Not plastic, Large cobbles/Concrete fragments.			
		<u>CLAY</u> : Dark gray to black w orange and black mottling, Dry, Stiff, Plastic.		0.7	RB-6 2.5-3.0'
5		<u>CLAY</u> : Medium brown w black mottling, Slightly moist, Medium stiff, Plastic.			
		<u>CLAY</u> : Medium gray w black mottling, Slightly Moist, Medium stiff, Plastic.		14.9	RB-6 7.5-8.0'
		<u>CLAY</u> : Light gray to brown w black mottling, Moist, Soft, Plastic.		82.1	RB-6 9.0-9.5'
10		<u>CLAY</u> : Light brown/orange w gray and black mottling, Moist, Soft, Plastic.		0.6	RB-6 12.0-12.5'
		<u>Sandy CLAY</u> : Dark brown, Wet, Very soft, Slightly plastic.			
		<u>CLAY</u> : Medium gray, Very moist, Soft, Plastic.		0.4	
20					

BORING/FEET 2868 HANNAH STREET.GPJ ROUX.GDT 10/28/15

▼
STATIC
GROUNDWATER
LEVEL 8/27/15

▼
FIRST
ENCOUNTERED
GROUNDWATER
LEVEL 8/27/15



ROUX ASSOCIATES, INC.
Environmental Consulting
& Management

555 12th Street
Suite 125
Oakland, CA 94607
Telephone: (415) 967-6000
Fax: (415) 967-6001

SOIL BORING LOG

WELL NO. RB-7	NORTHING Not Measured	EASTING Not Measured
PROJECT NO./NAME 2463.0003S002 / 2868 Hannah Street		LOCATION 2868 Hannah Street
APPROVED BY D. Grunat, P.G.	LOGGED BY N. Rodriguez	Oakland, California
DRILLING CONTRACTOR/DRILLER Roux Associates, Inc. / Cascade Drilling		GEOGRAPHIC AREA
DRILL BIT DIAMETER/TYPE 2-in. / Drive Sampler	BOREHOLE DIAMETER 2-inches	DRILLING EQUIPMENT/METHOD / Geoprobe
LAND SURFACE ELEVATION Not Measured	DEPTH TO WATER 23 (Feet BLS)	BACKFILL Portland Type I/II Cement
		SAMPLING METHOD 2" Macro-Core
		START-FINISH DATE 8/27/15-8/27/15

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		FILL: Dark gray, Dry, Fine to medium, Not plastic, Large cobbles/Concrete fragments.			
		CLAY: Dark gray to black w orange and black mottling, Dry, Stiff, Plastic.			
5		CLAY: Medium gray w black mottling, Slightly moist, Stiff, Slightly plastic.	G	5.3	RB-7 3.5-4.0'
		CLAY: Medium brown w gray and black mottling, Slightly moist, Stiff, Slightly plastic.			
10		CLAY: Medium brown w orange/gray mottling, Moist, Medium stiff, Plastic.	G	7.5	RB-7 7.5-8.0'
		CLAY: Medium brown w orange/gray mottling, Moist, Soft, Plastic.			
15		CLAY: Medium brown w orange/gray mottling, Moist, Soft, Plastic.	G	2.6	RB-7 13-13.5'
		CLAY: Medium brown w orange/gray mottling, Moist, Soft, Plastic.			
		Sandy CLAY: Dark brown, Wet, Very soft, Slightly plastic.			
		CLAY: Dark gray, Moist, Medium stiff, Slightly plastic.	G	1.7	RB-7 18-18.5'
20					

BORING/FEET 2868 HANNAH STREET.GPJ ROUX.GDT 10/28/15

▽
FIRST
ENCOUNTERED
GROUNDWATER
LEVEL 8/27/15



ROUX ASSOCIATES, INC.
Environmental Consulting
& Management

555 12th Street
Suite 125
Oakland, CA 94607
Telephone: (415) 967-6000
Fax: (415) 967-6001

SOIL BORING LOG

WELL NO. RB-7	NORTHING Not Measured	EASTING Not Measured
PROJECT NO./NAME 2463.0003S002 / 2868 Hannah Street		LOCATION 2868 Hannah Street
APPROVED BY D. Grunat, P.G.	LOGGED BY N. Rodriguez	Oakland, California

Depth, feet	Graphic Log	Visual Description (continued)	Blow Counts per 6"	PID Values (ppm)	REMARKS
		CLAY: Dark gray, Moist, Medium stiff, Slightly plastic. <i>(continued)</i>			
		CLAY: Dark gray, Wet, Very soft, Slightly plastic.	G	1.6	RB-7 21.5-22'
		Sandy CLAY: Dark brown, Wet, Very soft, Slightly plastic, fine to coarse sand lens (~2" thick) at 23.0'.			
		CLAY: Medium gray w black mottling, Moist, Soft, Plastic.	G	0.5	RB-7 24.0-24.5'
25					25
		CLAY: Dark gray w black mottling, Moist, Medium stiff, Slightly plastic.			
		CLAY: Dark gray w black mottling, Moist, Soft, Slightly plastic.	G	0.5	RB-7 29.5-30.0'
30					30
		CLAY: Tan w black mottling, Moist, Medium stiff to Soft, Slightly plastic.			
		CLAY: Dark brown, Wet, Very soft, Slightly plastic.	G	0.7	RB-7 35.0-35.5'
35					35
		Gravelly SAND: Medium brown, Wet, Fine to medium, Not plastic.			

▽
FIRST
ENCOUNTERED
GROUNDWATER
LEVEL 8/27/15
STATIC
GROUNDWATER
LEVEL 8/27/15

▽
FIRST
ENCOUNTERED
GROUNDWATER
LEVEL 8/27/15

BORING/FEET 2868 HANNAH STREET.GPJ ROUX.GDT 10/28/15



ROUX ASSOCIATES, INC.
Environmental Consulting
& Management

555 12th Street
Suite 125
Oakland, CA 94607
Telephone: (415) 967-6000
Fax: (415) 967-6001

SOIL BORING LOG

WELL NO. RB-8	NORTHING Not Measured	EASTING Not Measured
PROJECT NO./NAME 2463.0003S002 / 2868 Hannah Street		LOCATION 2868 Hannah Street
APPROVED BY D. Grunat, P.G.	LOGGED BY N. Rodriguez	Oakland, California
DRILLING CONTRACTOR/DRILLER Roux Associates, Inc. / Gregg		GEOGRAPHIC AREA
DRILL BIT DIAMETER/TYPE 2-in. / Drive Sampler	BOREHOLE DIAMETER 2-inches	DRILLING EQUIPMENT/METHOD / Geoprobe
LAND SURFACE ELEVATION Not Measured	DEPTH TO WATER Not Measured	BACKFILL Portland Type I/II Cement
		SAMPLING METHOD 2" Macro-Core
		START-FINISH DATE 9/25/15-9/25/15

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
		FILL: Brown, Dry, Medium to coarse, Not plastic, Large cobbles/Concrete fragments.			
		Silty CLAY: Dark gray/black, Slightly moist, Medium stiff, Not plastic.			
5			0.8		
		CLAY: Tan w black mottling, Slightly moist, Medium stiff to stiff, Slightly plastic.			
10			0.8		
		CLAY: Tan w/ gray and black mottling, Moist, Medium stiff, Slightly plastic.			
15			4.1		
		Sandy CLAY: Brown w/ gray and black mottling, Moist, Very soft, Slightly plastic.			
		Sandy CLAY: Brown w/ gray and black mottling, Wet, Very soft, Slightly plastic.			
		Sandy CLAY: Brown w/ gray and black mottling, Moist, Soft, Slightly plastic.			
			2.3		
20					

BORING/FEET 2868 HANNAH STREET.GPJ ROUX.GDT 10/28/15

▽
FIRST
ENCOUNTERED
GROUNDWATER
LEVEL 9/25/15



ROUX ASSOCIATES, INC.
Environmental Consulting
& Management

555 12th Street
Suite 125
Oakland, CA 94607
Telephone: (415) 967-6000
Fax: (415) 967-6001

SOIL BORING LOG

WELL NO. RB-8	NORTHING Not Measured	EASTING Not Measured
PROJECT NO./NAME 2463.0003S002 / 2868 Hannah Street		LOCATION 2868 Hannah Street
APPROVED BY D. Grunat, P.G.	LOGGED BY N. Rodriguez	Oakland, California

Depth, feet	Graphic Log	Visual Description (continued)	Blow Counts per 6"	PID Values (ppm)	REMARKS
		Sandy CLAY: Brown w/ gray and black mottling, Very moist, Very soft, Slightly plastic. <i>(continued)</i>			
		Sandy CLAY: Brown w/ gray and black mottling, Moist, Medium stiff, Slightly plastic.			
		Sandy CLAY: Gray, Moist, Medium stiff to soft, Slightly plastic.			
25		Sandy CLAY: Gray, Wet, Soft, Slightly plastic.			
		Gravelly SAND: Gray/black, Wet, Coarse, Dense, Slightly angular.			
		Clayey SAND: Gray, Wet, Coarse, Dense, Slightly angular.			
			G	1.6	25

**MONITORING WELLS
MW1 THROUGH MW3**



ROUX ASSOCIATES, INC.
Environmental Consulting
& Management

555 12th Street
Suite 125
Oakland, CA 94607
Telephone: (415) 967-6000
Fax: (415) 967-6001

WELL CONSTRUCTION LOG

WELL NO. MW-1	NORTHING Not Measured	EASTING Not Measured
PROJECT NO./NAME 2463.0003S002 / 2868 Hannah Street		LOCATION 2868 Hannah Street
APPROVED BY D. Grunat, P.G.	LOGGED BY N. Rodriguez	Oakland, California
DRILLING CONTRACTOR/DRILLER Roux Associates, Inc. / Gregg		GEOGRAPHIC AREA
DRILL BIT DIAMETER/TYPE 2-in. / Drive Sampler	BOREHOLE DIAMETER 8-inches	DRILLING EQUIPMENT/METHOD / Geoprobe
CASING MAT./DIA. PVC / 2-inch	SCREEN: TYPE Slotted	MAT. PVC
ELEVATION OF: (Feet)		TOTAL LENGTH 12.0ft
GROUND SURFACE	TOP OF WELL CASING 15.81	TOP & BOTTOM SCREEN /
GRAVEL PACK SIZES #2/12 SAND		DIA. 2-inch
SLOT SIZE 0.010		START-FINISH DATE 9/24/15-9/24/15

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
0		FILL: Brown, Dry, Medium to coarse, Not plastic, Large cobbles/Concrete fragments.			
5		CLAY: Dark gray, Moist, Stiff, Plastic.		46.1	
5		No Recovery.			
10		CLAY: Medium gray w black mottling, Moist, Medium stiff, Plastic.		10.4	
10		CLAY: Tan w/ gray and black mottling, Moist, Medium stiff, Plastic. Gravelly sand lens from 14 to 14.25' bgs.			
15		CLAY: Tan w/ gray and black mottling, Moist, Soft, Plastic.		4.8	
15		Sandy CLAY: Dark brown w/ tan and orange mottling, Wet, Very soft, Slightly plastic.			
15		CLAY: Tan to gray w black mottling, Moist, Soft, Plastic.			
20				5.5	

STATIC GROUNDWATER LEVEL 9/24/15

FIRST ENCOUNTERED GROUNDWATER LEVEL 9/24/15

BORING/FEET 2868 HANNAH STREET.GPJ ROUX.GDT 10/28/15



ROUX ASSOCIATES, INC.
Environmental Consulting
& Management

555 12th Street
Suite 125
Oakland, CA 94607
Telephone: (415) 967-6000
Fax: (415) 967-6001

WELL CONSTRUCTION LOG

WELL NO. MW-2	NORTHING Not Measured	EASTING Not Measured
PROJECT NO./NAME 2463.0003S002 / 2868 Hannah Street		LOCATION 2868 Hannah Street
APPROVED BY D. Grunat, P.G.	LOGGED BY N. Rodriguez	Oakland, California
DRILLING CONTRACTOR/DRILLER Roux Associates, Inc. / Gregg		GEOGRAPHIC AREA
DRILL BIT DIAMETER/TYPE 2-in. / Drive Sampler	BOREHOLE DIAMETER 8-inches	DRILLING EQUIPMENT/METHOD / Geoprobe
CASING MAT./DIA. PVC / 2-inch	SCREEN: TYPE Slotted	MAT. PVC
TOTAL LENGTH 12.0ft		DIA. 2-inch
ELEVATION OF: GROUND SURFACE		START-FINISH DATE 9/24/15-9/24/15
(Feet)	TOP OF WELL CASING 14.88	TOP & BOTTOM SCREEN /
GRAVEL PACK SIZES #2/12 SAND		SLOT SIZE 0.010

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
0	Cement	FILL: Brown, Dry, Medium to coarse, Not plastic, Large cobbles/Concrete fragments.			
5	Cement grout	Silty CLAY: Dark gray/black, Slightly moist, Medium stiff, Not plastic.			
5	Bentonite	CLAY: Medium gray w black mottling, Moist, Medium stiff, Slightly plastic.	7.8		5
10	2/12 Sand	CLAY: Tan w black mottling, Moist, Medium stiff, Slightly plastic.	13.4		10
15		CLAY w/ sand: Tan w/ orange, black, and gray mottling, Very moist, Soft, Slightly plastic.	10.1		15
20		Sandy CLAY: Tan to gray, Wet, Very soft, Slightly plastic, 25% recovery. SAND: Brown, Wet, Medium to coarse, Very loose, Slightly angular. CLAY: Tan to gray w black mottling, Moist, Soft, Plastic.	7.7		20

BORING/FEET 2868 HANNAH STREET.GPJ ROUX.GDT 10/28/15

STATIC GROUNDWATER LEVEL 9/24/15

FIRST ENCOUNTERED GROUNDWATER LEVEL 9/24/15



ROUX ASSOCIATES, INC.
Environmental Consulting
& Management

555 12th Street
Suite 125
Oakland, CA 94607
Telephone: (415) 967-6000
Fax: (415) 967-6001

WELL CONSTRUCTION LOG

WELL NO. MW-3	NORTHING Not Measured	EASTING Not Measured
PROJECT NO./NAME 2463.0003S002 / 2868 Hannah Street		LOCATION 2868 Hannah Street
APPROVED BY D. Grunat, P.G.	LOGGED BY N. Rodriguez	Oakland, California
DRILLING CONTRACTOR/DRILLER Roux Associates, Inc. / Gregg		GEOGRAPHIC AREA
DRILL BIT DIAMETER/TYPE 2-in. / Drive Sampler	BOREHOLE DIAMETER 8-inches	DRILLING EQUIPMENT/METHOD / Geoprobe
CASING MAT./DIA. PVC / 2-inch	SCREEN: TYPE Slotted	MAT. PVC
TOTAL LENGTH 12.0ft		DIA. 2-inch
ELEVATION OF: GROUND SURFACE		START-FINISH DATE 9/24/15-9/24/15
(Feet)	TOP OF WELL CASING 14.88	TOP & BOTTOM SCREEN /
GRAVEL PACK SIZES #2/12 SAND		SLOT SIZE 0.010

Depth, feet	Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS
0	Cement	FILL: Brown, Dry, Medium to coarse, Not plastic, Large cobbles/Concrete fragments.			
0	Cement grout	Silty CLAY: Dark gray/black, Slightly moist, Medium stiff, Not plastic.		406	
5	Bentonite	CLAY: Medium gray w black mottling, Moist, Medium stiff, Slightly plastic.		63.8	5
10	2/12 Sand	CLAY: Tan w black mottling, Moist, Medium stiff, Slightly plastic.		8.8	10
15		CLAY w/ sand: Tan w/ orange, black, and gray mottling, Very moist, Soft, Slightly plastic.		8.2	15
20		Sandy CLAY: Tan to gray, Wet, Very soft, Slightly plastic, 25% recovery.			20

STATIC GROUNDWATER LEVEL 9/24/15

FIRST ENCOUNTERED GROUNDWATER LEVEL 9/24/15

BORING/FEET 2868 HANNAH STREET.GPJ ROUX.GDT 10/28/15

APPENDIX C

OCTOBER 2, 2015

WELL DEVELOPMENT FIELD DATA SHEETS

WELL DEVELOPMENT DATA SHEET

Project #: <u>151002-RH</u>	Client: <u>Roux</u>
Developer: <u>R. Huerta</u>	Date Developed: <u>10-2-15</u>
Well I.D. <u>MW-1</u>	Well Diameter: (circle one) <u>2</u> 3 4 6
Total Well Depth: Before <u>21.92</u> After	Depth to Water: Before <u>11.34</u> After
Reason not developed:	If Free Product, thickness:
Additional Notations:	

Volume Conversion Factor (VCF):
 $(12 \times (d^2/4) \times \pi) / 231$
 where
 12 = in / foot
 d = diameter (in.)
 $\pi = 3.1416$
 231 = in³/gal

Well dia.	VCF
2" =	0.16
3" =	0.37
4" =	0.65
6" =	1.47
10" =	4.08
12" =	6.87

<u>1.7</u>	X	<u>10</u>	=	<u>17</u>
1 Case Volume		Specified Volumes		gallons

- Purging Device: Bailer Electric Submersible
 Suction Pump Positive Air Displacement

Type of Installed Pump _____
 Other equipment used _____

TIME	TEMP (F)	pH	Cond. (mS or μS)	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:	
	* Swabbed well for 15min prior to purge.						
0950	65.9	8.48	3364	71000	2	very silty, Dark Brown	
0956	66.8	8.16	3396	71000	4		
1005	66.0	8.22	3342	71000	6		
1005	* well Dewatered						
1030	Bailed out remaining water						DTW: 20.51'
1036							DTW: 19.74'
1410	* Resume Purge						DTW: 14.11'
1414	70.2	7.56	2360	71000	8	Dark Brown, silty	
1417	70.1	7.60	2405	71000	10		
1418	* well Dewatered						
1425	Bailed out Remaining water						DTW: 20.79, Hard Bottom
Did Well Dewater?		If yes, note above.		Gallons Actually Evacuated:			

WELL DEVELOPMENT DATA SHEET

Project #: 151002-RH1	Client: Roux
Developer: R. Huerta	Date Developed: 10-2-15
Well I.D. mw-2	Well Diameter: (circle one) ② 3 4 6
Total Well Depth: Before 21.87 After	Depth to Water: Before 11.30 After
Reason not developed:	If Free Product, thickness: —
Additional Notations:	

Volume Conversion Factor (VCF):
 $(12 \times (d^2/4) \times \pi) / 231$
 where
 12 = in / foot
 d = diameter (in.)
 $\pi = 3.1416$
 231 = in³/gal

Well dia.	VCF
2" =	0.16
3" =	0.37
4" =	0.65
6" =	1.47
10" =	4.08
12" =	6.87

<u>1.7</u>	X	<u>10</u>	=	<u>17</u>
1 Case Volume		Specified Volumes		gallons

Purging Device: Bailer Electric Submersible
 Suction Pump Positive Air Displacement

Type of Installed Pump _____
 Other equipment used _____

TIME	TEMP (F)	pH	Cond. (mS or μ S)	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
* Swabbed well for 15 min prior to purge						
1103	71.8	7.92	3365	71000	2	Silty, Dark Brown
1106	71.6	7.56	3302	71000	4	
1110	71.4	7.39	3125	71000	6	
1114	70.4	7.63	3066	71000	8	
1119	* well Dewatered @ 9g.		Insufficient water for PAD			
1125	Bailed out remaining water, DTW 21.15					
1130	DTW: 19.14		DTW: 19.14, TD: 21.87			
1343	DTW: 12.35, Resume purge					
1349	70.5	7.59	2060	71000	11	Dark Brown, Silty
1353	70.8	7.54	2138	71000	13	
1357	70.6	7.55	2147	71000	15	
1357	* Well Dewatered					
Did Well Dewater? Y		If yes, note above.		Gallons Actually Evacuated:		

WELL DEVELOPMENT DATA SHEET

Project #: 151002-RH1	Client: ROUX
Developer: R. Huerta	Date Developed: 10-2-15
Well I.D. mw-3	Well Diameter: (circle one) ② 3 4 6
Total Well Depth: Before 21.93 After 21.93	Depth to Water: Before 10.89 After 14.15
Reason not developed:	If Free Product, thickness: _____
Additional Notations:	

Volume Conversion Factor (VCF):
 $\{12 \times (d^2/4) \times \pi\} / 231$
 where
 12 = in / foot
 d = diameter (in.)
 $\pi = 3.1416$
 231 = in³/gal

Well dia.	VCF
2" =	0.16
3" =	0.37
4" =	0.65
6" =	1.47
10" =	4.08
12" =	6.87

<u>1.8</u>	X	<u>10</u>	=	<u>18</u>	gallons
1 Case Volume		Specified Volumes			

Purging Device: Bailer Electric Submersible
 Suction Pump Positive Air Displacement

Type of Installed Pump _____
 Other equipment used _____

TIME	TEMP (F)	pH	Cond. (mS or μ S)	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
* Swabbed well for 15min prior to purging						
1201	71.1	7.77	2794	71000	2	Dark Brown, very silty
1204	70.1	7.46	2469	71000	4	
1208	68.8	7.43	2288	71000	6	
1212	67.9	7.41	2172	71000	8	
1216	67.6	7.40	2095	71000	10	
1219	67.3	7.40	2034	71000	12	
1223	66.9	7.41	2003	71000	14	
1226	66.9	7.39	1999	71000	16	
1229	66.7	7.41	1925	71000	18	
1233	66.9	7.41	1903	71000	20	
1235*	Compressor overheated, stop purge					
1248	67.6	7.59	1778	71000	22	Brown, silty
Did Well Dewater?		If yes, note above.		Gallons Actually Evacuated:		

SPH or Purge Water Drum Log

Client:

Roux Assoc.

Site Address:

2868 Hannah St. Oakland CA

STATUS OF DRUM(S) UPON ARRIVAL

Date	10-2-15					
Number of drum(s) empty:						
Number of drum(s) 1/4 full:						
Number of drum(s) 1/2 full:						
Number of drum(s) 3/4 full:						
Number of drum(s) full:	7					
Total drum(s) on site:	7					
Are the drum(s) properly labeled?	yes					
Drum ID & Contents:	soil cuttings					
If any drum(s) are partially or totally filled, what is the first use date:	NA					

- If you add any SPH to an empty or partially filled drum, drum must have at least 20 gals. of Purgewater or DI Water.

-If drum contains SPH, the drum MUST be steel AND labeled with the appropriate label.

-All BTS drums MUST be labeled appropriately.

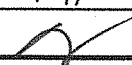
STATUS OF DRUM(S) UPON DEPARTURE

Date	10-2-15					
Number of drums empty:						
Number of drum(s) 1/4 full:	1					
Number of drum(s) 1/2 full:						
Number of drum(s) 3/4 full:						
Number of drum(s) full:	8					
Total drum(s) on site:	9					
Are the drum(s) properly labeled?	yes					
Drum ID & Contents:	soil cuttings / H ₂ O Develops					

LOCATION OF DRUM(S)

Describe location of drum(s): 2 Drums at each well.

FINAL STATUS

Number of new drum(s) left on site this event	2					
Date of inspection:	10-2-15					
Drum(s) labelled properly:	yes					
Logged by BTS Field Tech:	RH					
Office reviewed by:						

APPENDIX D

**OCTOBER 5, 2015
WELL SURVEY DATA**

Virgil Chavez Land Surveying

721 Tuolumne Street

Vallejo, California 94590

(707) 553-2476 • Fax (707) 553-8698

October 15, 2105

Project No.: 3395-02

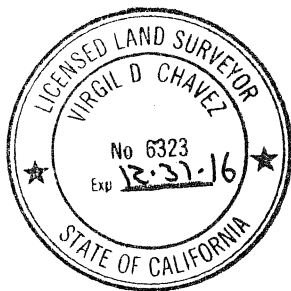
Nichole Rodriguez
Roux Associates, Inc.
555 12th Street, Suite 1725
Oakland, CA 94607

Subject: Monitoring Well Survey
2868 Hannah Street
Oakland, CA

Dear Nichole:

This is to confirm that we have proceeded at your request to survey the wells at the above referenced location. The survey was completed on October 5, 2015. The benchmark for this survey was a well monument on Powell St. approximately 80 feet west of the southbound direction of I-80. The latitude, longitude and coordinates are for top of casings and are based on the CSCS, Zone III (NAD83), Epoch 2010.00. Benchmark Elevation = 13.88 feet (NAVD 88).

<u>Latitude</u>	<u>Longitude</u>	<u>Northing</u>	<u>Easting</u>	<u>Elev.</u>	<u>Desc.</u>
37.8228692	-122.2861540	2127010.29	6045793.89	12.33	GRD MW-1
				15.81	TOC MW-1
				11.23	GRD MW-2
37.8228017	-122.2864988	2126987.62	6045693.85	14.88	TOC MW-2
				11.36	GRD MW-3
37.8229928	-122.2864215	2127056.76	6045717.49	14.88	TOC MW-3



Sincerely,

Virgil D. Chavez

 Virgil D. Chavez, PLS 6323

APPENDIX E

OCTOBER 6, 2015

**WELL MONITORING AND SAMPLING FIELD
DATA SHEETS**

LOW FLOW WELL MONITORING DATA SHEET

Project #: 151006-MW1	Client: Roux
Sampler: MW, AK	Start Date: 10/6/15
Well I.D.: MW-1	Well Diameter: (2) 3 4 6 8
Total Well Depth: 21.91	Depth to Water Pre: 11.34 Post: 12.15
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: PVC Grade	Flow Cell Type: YSI Pro Plus

Purge Method: 2" Grundfos Pump Watterra Peristaltic Pump Bladder Pump Other _____
 Sampling Method: Dedicated Tubing Disp Bailer New Tubing Other _____
 Flow Rate: ~~200 ml/min~~ → 100 ml/min 51' 6" 18' Pump Depth: 14.5'

Time	Temp. (°C or °F)	pH	Cond. (mS or μS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1252	22.3	7.04	2179	7.31	3.0	201.0	Initial	11.50
1255	21.8	7.03	2171	8.61	2.87	232.5	600	11.52
1258	21.7	7.03	2164	10.6	2.90	255.1	1200	11.72
1300	21.5	7.04	2164	10.2	2.75	265.6	1500	11.89
1303	21.6	7.05	2167	9.46	2.81	270.2	1800	12.10
1306	21.8	7.06	2171	8.62	2.90	272.9	2100	12.15

Did well dewater? Yes No Amount actually evacuated: 2100 gals. or ml
 Sampling Time: 1310 Sampling Date: 10/6/15
 Sample I.D.: MW-1 Laboratory: Accutest
 Analyzed for: TPH-G BTEX MTBE TPH-D Other: See COC
 Equipment Blank I.D.: @ Time Duplicate I.D.: Trip Blank TB-1 @ 0910

LOW FLOW WELL MONITORING DATA SHEET

Project #: 151006-MW1	Client: RBOX
Sampler: MW, AK	Start Date: 10/6/15
Well I.D.: MW-2	Well Diameter: (2) 3 4 6 8
Total Well Depth: 21.85	Depth to Water Pre: 11.32 Post:
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: VSI Pro Plus

Purge Method: 2" Grundfos Pump Watterra Peristaltic Pump Bladder Pump Other _____
 Sampling Method: Dedicated Tubing Disp Bailer New Tubing Other _____
 Flow Rate: 200 gal/min → 100 gal/min 6'-18' Pump Depth: 14.5'

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1139	21.5	7.30	2176	7.05	2.52	163.3	Initial	11.44
1142	21.3	7.28	2130	6.32	2.01	165.4	600	11.68
1145	21.7	7.29	2106	6.83	1.88	166.2	900	11.70
1148	21.7	7.30	2116	6.53	2.11	167.6	1200	11.80
1151	21.6	7.30	2120	6.92	2.58	169.1	1500	11.91
1154	21.7	7.31	2110	7.63	2.64	170.2	1800	12.03
1157	21.6	7.31	2135	6.40	2.70	171.3	2100	12.11

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Amount actually evacuated: 2100 gals. or (ml)
Sampling Time: 1200	Sampling Date: 10/6/15
Sample I.D.: MW-2	Laboratory: Acutest
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: See COL
Equipment Blank I.D.: @	Duplicate I.D.: Dup-1 @ 0900

LOW FLOW WELL MONITORING DATA SHEET

Project #: 151006-MW1	Client: Roux
Sampler: MN, AK	Start Date: 10/6/15
Well I.D.: MW-3	Well Diameter: ② 3 4 6 8
Total Well Depth: 21.91	Depth to Water Pre: 10.91 Post: 11.13
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	Flow Cell Type: YSI Pro Plus

Purge Method: 2" Grundfos Pump Watterra Peristaltic Pump Bladder Pump Other _____
 Sampling Method: Dedicated Tubing Disp Bailer New Tubing Other _____
 Flow Rate: 200 ml/min → 100 ml/min 51 6'-18' Pump Depth: 14.5'

Time	Temp. (°C or °F)	pH	Cond. (mS or μS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW/ Observations
1034	21.0	7.32	1867	60	.65	192.7	-	10.97
1037	21.2	7.31	1868	48.8	.55	192.4	600	11.02
1040	21.1	7.31	1868	38.9	.53	192.3	1050	11.13
1043	21.1	7.31	1867	38.3	.53	192.2	1350	11.13
1046	21.2	7.31	1870	37.9	.50	192.2	1650	11.13

↓ 150 ml/min
 ↓ 200 ml/min

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Amount actually evacuated: 1650 gals. or mL
Sampling Time: 1050	Sampling Date: 10/6/15
Sample I.D.: MW-3	Laboratory: Accutest
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: See COL
Equipment Blank I.D.: @ Time	Duplicate I.D.:

WELLHEAD INSPECTION CHECKLIST

Client Rosk Date 10/6/15

Site Address 2868 Hannah St., Oakland

Job Number 151006-MW1 Technician MN, AK

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
MW-1	X							
MW-2	X							
MW-3	X							

NOTES: _____

PURGE DRUM INVENTORY LOG

CLIENT Rox

SITE ADDRESS 2868 Hannah St., Oakland

STATUS OF DRUM(S) UPON ARRIVAL

DATE	10/6/15						
Number of drum(s) empty:							
Number of drum(s) 1/4 full:	1 - Deion water						
Number of drum(s) 1/2 full:	1 - Purge water						
Number of drum(s) 3/4 full:							
Number of drum(s) full:	7 ⁶ - Soil 1 - Purge water						
Total drum(s) on site:	9						
Are the drum(s) properly labeled?	Y						
Drum ID & Contents:	Various						

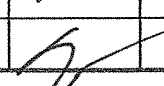
STATUS OF DRUM(S) UPON DEPARTURE

DATE	10/6/15						
Number of drum(s) empty:							
Number of drum(s) 1/4 full:	1 - Deion water						
Number of drum(s) 1/2 full:							
Number of drum(s) 3/4 full:	1 - Purge water						
Number of drum(s) full:	7 ⁶ - Soil 1 - Purge water						
Total drum(s) on site:	9						
Are the drum(s) properly labeled?	Y						
Drum ID & Contents:	Various						

LOCATION OF DRUM(S)

Describe location of drum(s): Next to wells

FINAL STATUS

Number of new drum(s) left on site this event:	0						
Date of inspection:	10/6/15						
Logged by BTS Field Technician:	mn						
Office reviewed by:							

APPENDIX F

- **Manifest # 46482 for Six Drums of Non-Hazardous Soil Dated October 11, 2016**
- **Non-Hazardous Waste Data Form for Three Drums of Non-Hazardous Groundwater**

Manifest

SOIL SAFE OF CA - TPST Non-Hazardous Soils

↓ Manifest # ↓

Date of Shipment: / /	Responsible for Payment:	Transport Truck #:	Facility #: A07	Approval Number: 46482	Load #:
--------------------------	--------------------------	--------------------	--------------------	---------------------------	---------

Generator's Name and Billing Address: 2888 HANNAH ST, LLC 155 GRAND AVE #1025, OAKLAND, CA 94612	Generator's Phone #: 510-715-5492
	Person to Contact:
	FAX#:
Customer Account Number	

Consultant's Name and Billing Address:	Consultant's Phone #:
	Person to Contact:
	FAX#:
Customer Account Number	

Generation Site (Transport from): (name & address) 2888 HANNAH ST. 2888 HANNAH ST. OAKLAND, CA 94608	Site Phone #:
	Person to Contact:
	FAX#:

Designated Facility (Transport to): (name & address) SOIL SAFE 12328 HIBISCUS AVENUE ADELANTO, CA 92301	Facility Phone #: (800) 862-8001
	Person to Contact: JOE PROVANSAL
	FAX#: (760) 246-8004

Transporter Name and Mailing Address: BELSHIRE 25971 TOWNE CENTRE DRIVE FOOTHILL RANCH, CA 92610 BESI: 272652	Transporter's Phone #: 949-460-5200	CAR000183013
	Person to Contact: LARRY MOOTHART	450647
	FAX#: 949-460-5210	Customer Account Number

Generator and/or Consultant

Description of Soil	Moisture Content	Contaminated by:	Approx. Qty:	Description of Delivery	Gross Weight	Tare Weight	Net Weight
Sand <input type="checkbox"/> Organic <input type="checkbox"/> Clay <input type="checkbox"/> Other <input type="checkbox"/>	0 - 10% <input type="checkbox"/> 10 - 20% <input type="checkbox"/> 20% - over <input type="checkbox"/>	Gas <input type="checkbox"/> Diesel <input type="checkbox"/> Other <input checked="" type="checkbox"/>	6 DM	Soil			
Sand <input type="checkbox"/> Organic <input type="checkbox"/> Clay <input type="checkbox"/> Other <input type="checkbox"/>	0 - 10% <input type="checkbox"/> 10 - 20% <input type="checkbox"/> 20% - over <input type="checkbox"/>	Gas <input type="checkbox"/> Diesel <input type="checkbox"/> Other <input type="checkbox"/>					


List any exception to items listed above: _____ Scale Ticket # _____

Generator's and/or consultant's certification: I/We certify that the soil referenced herein is taken entirely from those soils described in the Soil Data Sheet completed and certified by me/us for the Generation Site shown above and nothing has been added or done to such soil that would alter it in any way.

Print or Type Name: Generator <input type="checkbox"/> Consultant <input type="checkbox"/> KURT BIDDLE	Signature and date:  05/11/2016	Month Day Year 10 11 16
---	--	------------------------------------

Transporter

Transporter's certification: I/We acknowledge receipt of the soil referenced above and certify that such soil is being delivered in exactly the same condition as when received. I/We further certify that the soil is being directly transported from the Generation Site to the Designated Facility without off-loading, adding to, subtracting from or in any way delaying delivery to such site.

Print or Type Name: Ron Green	Signature and date:  10/11/16	Month Day Year 10 11 16
----------------------------------	--	------------------------------------

Recycling Facility

Discrepancies:

Recycling Facility certifies the receipt of the soil covered by this manifest except as noted above:

Print or Type Name: J. PROVANSAL	Signature and date:
-------------------------------------	---------------------

Please print or type.

NON-HAZARDOUS WASTE DATA FORM

BESI # 272652

Generator's Name and Mailing Address
 2888 HANNAH ST, LLC
 155 GRAND AVE #1025,
 OAKLAND, CA 94612

Generator's Site Address (if different than mailing address)
 2888 HANNAH ST.
 2888 HANNAH ST.
 OAKLAND, CA 94608

Generator's Phone: 510-715-5482

Container type removed from site:
 Drums Vacuum Truck Roll-off Truck Dump Truck
 Other _____

Quantity 3

Container type transported to receiving facility:
 Drums Vacuum Truck Roll-off Truck Dump Truck
 Other _____

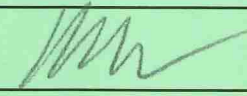
Quantity _____ Volume _____

WASTE DESCRIPTION NON-HAZARDOUS WATER GENERATING PROCESS WELL PURGING / DECON WATER

COMPONENTS OF WASTE			PPM	%	COMPONENTS OF WASTE			PPM	%
1.	WATER			99-100%	3.				
2.	TPH			<1%	4.				

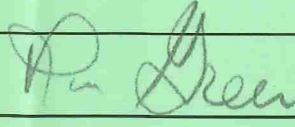
Waste Profile _____ PROPERTIES: pH 7-10 SOLID LIQUID SLUDGE SLURRY OTHER _____

HANDLING INSTRUCTIONS: _____

Generator Printed/Typed Name: KURT BLODE Signature:  Month: 10 Day: 11 Year: 16

The Generator certifies that the waste as described is 100% non-hazardous

Transporter 1 Company Name: BELSHIRE Phone#: 949-460-5200

Transporter 1 Printed/Typed Name: Rongreen Signature:  Month: 10 Day: 11 Year: 16

Transporter Acknowledgment of Receipt of Materials

Transporter 2 Company Name: NIETO & SONS TRUCKING, INC. Phone#: 714-990-8855

Transporter 2 Printed/Typed Name: _____ Signature: _____ Month: _____ Day: _____ Year: _____

Transporter Acknowledgment of Receipt of Materials

Designated Facility Name and Site Address: DEMENNO KERDOON Phone#: 310-537-7100
2000 N. ALAMEDA ST.
COMPTON, CA 90222

Printed/Typed Name: _____ Signature: _____ Month: _____ Day: _____ Year: _____

Designated Facility Owner or Operator: Certification of receipt of materials covered by this data form.

GENERATOR

TRANSPORTER

RECEIVING FACILITY

APPENDIX G

LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY DOCUMENTATION

- **Accutest Lab Report # C41481 - Borehole Soil and Groundwater Samples from Boreholes RB-6 and RB-7**
- **Accutest Lab Report # C41959 - Soil Samples from Monitoring Well MW3 Borehole**
- **Accutest Lab Report # C41989 - Borehole Soil and Groundwater Samples from Borehole RB-8**
- **Accutest Lab Report # C42157 - Groundwater Samples from Monitoring Wells MW1 Through MW3**

Technical Report for

ROUX Associates - Oakland CA

2868 Hannah St. Oakland CA

Accutest Job Number: C41481

Sampling Date: 08/27/15

Report to:

ROUX Associates, Inc.
555 12th Street Suite 1725
Oakland, CA 94607
dgrunat@rouxinc.com

ATTN: David Grunat

Total number of pages in report: **120**



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.



James J. Rhudy
Lab Director

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)

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

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Summary of Hits	4
Section 3: Sample Results	6
3.1: C41481-1: RB-6 2.5-3.0'	7
3.2: C41481-2: RB-6 7.5-8.0'	12
3.3: C41481-3: RB-6 9.0-9.5'	17
3.4: C41481-4: RB-6 12.0-12.5'	22
3.5: C41481-9: RB-7 3.5-4.0'	27
3.6: C41481-10: RB-7 7.5-8.0'	32
3.7: C41481-11: RB-7 GW23'	37
3.8: C41481-12: RB-6 GW	41
3.9: C41481-16: RB-7 13-13.5'	45
3.10: C41481-17: RB-7 18-18.5'	50
3.11: C41481-18: RB-7 21.5-22'	55
Section 4: Misc. Forms	60
4.1: Chain of Custody	61
Section 5: GC/MS Volatiles - QC Data Summaries	65
5.1: Method Blank Summary	66
5.2: Blank Spike/Blank Spike Duplicate Summary	80
5.3: Laboratory Control Sample Summary	94
5.4: Matrix Spike/Matrix Spike Duplicate Summary	100
Section 6: GC Semi-volatiles - QC Data Summaries	113
6.1: Method Blank Summary	114
6.2: Blank Spike/Blank Spike Duplicate Summary	117
6.3: Matrix Spike/Matrix Spike Duplicate Summary	120



Sample Summary

ROUX Associates - Oakland CA

Job No: C41481

2868 Hannah St. Oakland CA

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
C41481-1	08/27/15	07:50 NR	08/27/15	SO	Soil	RB-6 2.5-3.0'
C41481-2	08/27/15	07:57 NR	08/27/15	SO	Soil	RB-6 7.5-8.0'
C41481-3	08/27/15	08:10 NR	08/27/15	SO	Soil	RB-6 9.0-9.5'
C41481-4	08/27/15	08:00 NR	08/27/15	SO	Soil	RB-6 12.0-12.5'
C41481-9	08/27/15	09:25 NR	08/27/15	SO	Soil	RB-7 3.5-4.0'
C41481-10	08/27/15	09:27 NR	08/27/15	SO	Soil	RB-7 7.5-8.0'
C41481-11	08/27/15	10:15 NR	08/27/15	AQ	Ground Water	RB-7 GW23'
C41481-12	08/27/15	11:30 NR	08/27/15	AQ	Ground Water	RB-6 GW
C41481-16	08/27/15	09:30 NR	08/27/15	SO	Soil	RB-7 13-13.5'
C41481-17	08/27/15	09:35 NR	08/27/15	SO	Soil	RB-7 18-18.5'
C41481-18	08/27/15	09:37 NR	08/27/15	SO	Soil	RB-7 21.5-22'

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

Summary of Hits

Job Number: C41481
Account: ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA
Collected: 08/27/15

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

C41481-1 RB-6 2.5-3.0'

Acetone	11.3 J	41	10	ug/kg	SW846 8260B
Methylene chloride	9.7 J	21	5.2	ug/kg	SW846 8260B
TPH (C10-C28)	30.4	7.7	1.9	mg/kg	SW846 8015B M
TPH (> C28-C40)	29.9	15	3.8	mg/kg	SW846 8015B M

C41481-2 RB-6 7.5-8.0'

TPH-GRO (C6-C10) ^a	28700	7100	3500	ug/kg	SW846 8260B
TPH (C10-C28)	10.3	3.9	0.98	mg/kg	SW846 8015B M

C41481-3 RB-6 9.0-9.5'

TPH-GRO (C6-C10) ^a	27600	6000	3000	ug/kg	SW846 8260B
TPH (C10-C28)	25.6	3.9	0.98	mg/kg	SW846 8015B M

C41481-4 RB-6 12.0-12.5'

No hits reported in this sample.

C41481-9 RB-7 3.5-4.0'

Acetone	27.5 J	40	10	ug/kg	SW846 8260B
TPH-GRO (C6-C10) ^a	705	100	50	ug/kg	SW846 8260B
TPH (C10-C28)	128	12	3.0	mg/kg	SW846 8015B M

C41481-10 RB-7 7.5-8.0'

Acetone	14.7 J	42	10	ug/kg	SW846 8260B
sec-Butylbenzene	1.6 J	5.2	0.52	ug/kg	SW846 8260B
Chlorobenzene	0.65 J	5.2	0.52	ug/kg	SW846 8260B
Dibromochloromethane	1.3 J	5.2	0.52	ug/kg	SW846 8260B
TPH-GRO (C6-C10) ^a	267	100	52	ug/kg	SW846 8260B
TPH (C10-C28)	74.0	3.9	0.97	mg/kg	SW846 8015B M

C41481-11 RB-7 GW23'

TPH (C10-C28)	0.0260 J	0.10	0.025	mg/l	SW846 8015B M
---------------	----------	------	-------	------	---------------

C41481-12 RB-6 GW

Acetone	49.6	20	4.0	ug/l	SW846 8260B
Ethylbenzene	0.39 J	1.0	0.20	ug/l	SW846 8260B
Xylene (total)	2.2	2.0	0.46	ug/l	SW846 8260B

Summary of Hits

Job Number: C41481
Account: ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA
Collected: 08/27/15

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

TPH-GRO (C6-C10)		50.4	50	25	ug/l	SW846 8260B
TPH (C10-C28)		0.0939 J	0.099	0.025	mg/l	SW846 8015B M
TPH (> C28-C40)		0.0529 J	0.20	0.050	mg/l	SW846 8015B M

C41481-16 RB-7 13-13.5'

TPH (C10-C28)		1.51 J	4.2	1.1	mg/kg	SW846 8015B M
---------------	--	--------	-----	-----	-------	---------------

C41481-17 RB-7 18-18.5'

TPH (C10-C28)		1.13 J	4.2	1.0	mg/kg	SW846 8015B M
---------------	--	--------	-----	-----	-------	---------------

C41481-18 RB-7 21.5-22'

No hits reported in this sample.

(a) Atypical pattern; heavier hydrocarbons contributing to quantitation.



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: RB-6 2.5-3.0'		Date Sampled: 08/27/15
Lab Sample ID: C41481-1		Date Received: 08/27/15
Matrix: SO - Soil		Percent Solids: 86.5
Method: SW846 8260B		
Project: 2868 Hannah St. Oakland CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L44039.D	1	09/01/15	EA	n/a	n/a	VL1325
Run #2							

Run #1	Initial Weight
Run #1	5.59 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	11.3	41	10	ug/kg	J
71-43-2	Benzene	ND	5.2	0.52	ug/kg	
108-86-1	Bromobenzene	ND	5.2	0.52	ug/kg	
74-97-5	Bromochloromethane	ND	5.2	0.52	ug/kg	
75-27-4	Bromodichloromethane	ND	5.2	0.52	ug/kg	
75-25-2	Bromoform	ND	5.2	0.52	ug/kg	
104-51-8	n-Butylbenzene	ND	5.2	0.52	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.2	0.52	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.2	0.52	ug/kg	
108-90-7	Chlorobenzene	ND	5.2	0.52	ug/kg	
75-00-3	Chloroethane	ND	5.2	1.0	ug/kg	
67-66-3	Chloroform	ND	5.2	0.52	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.2	0.52	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.2	0.52	ug/kg	
56-23-5	Carbon tetrachloride ^a	ND	5.2	0.52	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.2	0.52	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.2	0.52	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.2	0.52	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.2	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.2	0.52	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.2	0.52	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.2	0.52	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.2	0.52	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.2	0.52	ug/kg	
594-20-7	2,2-Dichloropropane ^a	ND	5.2	0.52	ug/kg	
124-48-1	Dibromochloromethane	ND	5.2	0.52	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.2	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.2	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.2	0.52	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.2	0.52	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.2	0.52	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.2	0.52	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RB-6 2.5-3.0'	
Lab Sample ID: C41481-1	Date Sampled: 08/27/15
Matrix: SO - Soil	Date Received: 08/27/15
Method: SW846 8260B	Percent Solids: 86.5
Project: 2868 Hannah St. Oakland CA	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	5.2	0.52	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.2	0.52	ug/kg	
100-41-4	Ethylbenzene	ND	5.2	0.52	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.2	0.52	ug/kg	
591-78-6	2-Hexanone	ND	21	2.1	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.2	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.2	0.52	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.2	0.52	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	21	2.1	ug/kg	
74-83-9	Methyl bromide	ND	5.2	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.2	1.0	ug/kg	
74-95-3	Methylene bromide	ND	5.2	0.52	ug/kg	
75-09-2	Methylene chloride	9.7	21	5.2	ug/kg	J
78-93-3	Methyl ethyl ketone	ND	21	2.1	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.2	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.2	1.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.2	0.52	ug/kg	
100-42-5	Styrene	ND	5.2	0.52	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.2	0.52	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	41	10	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.2	0.52	ug/kg	
71-55-6	1,1,1-Trichloroethane ^a	ND	5.2	0.52	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.2	0.52	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.2	0.52	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.2	0.52	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.2	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	0.52	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.2	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.2	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.2	0.62	ug/kg	
108-88-3	Toluene	ND	5.2	0.52	ug/kg	
79-01-6	Trichloroethylene	ND	5.2	0.52	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.2	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.2	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	52	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		75-125%

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

Report of Analysis

Client Sample ID: RB-6 2.5-3.0' Lab Sample ID: C41481-1 Matrix: SO - Soil Method: SW846 8260B Project: 2868 Hannah St. Oakland CA	Date Sampled: 08/27/15 Date Received: 08/27/15 Percent Solids: 86.5
--	--

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	89%		80-121%
460-00-4	4-Bromofluorobenzene	104%		71-126%

(a) CCV outside of control limits (biased high); not detected in sample.

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

Report of Analysis

Client Sample ID: RB-6 2.5-3.0'	
Lab Sample ID: C41481-1	Date Sampled: 08/27/15
Matrix: SO - Soil	Date Received: 08/27/15
Method: SW846 8015B M SW846 3550B	Percent Solids: 86.5
Project: 2868 Hannah St. Oakland CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH326035.D	2	08/30/15	NN	08/28/15	OP12976	GHH1614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	30.4	7.7	1.9	mg/kg	
	TPH (> C28-C40)	29.9	15	3.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	84%		43-144%

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

Report of Analysis

Client Sample ID: RB-6 2.5-3.0'	Date Sampled: 08/27/15
Lab Sample ID: C41481-1	Date Received: 08/27/15
Matrix: SO - Soil	Percent Solids: 86.5
Project: 2868 Hannah St. Oakland CA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Moisture, Percent	13.5		%	1	09/01/15 11:04	EA	SM2540MOD G-97

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RB-6 7.5-8.0'	Date Sampled:	08/27/15
Lab Sample ID:	C41481-2	Date Received:	08/27/15
Matrix:	SO - Soil	Percent Solids:	84.6
Method:	SW846 8260B		
Project:	2868 Hannah St. Oakland CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L44075.D	1	09/02/15	XB	n/a	n/a	VL1326
Run #2	M55406.D	1	09/03/15	XB	n/a	n/a	VM1674
Run #3	L44129.D	1	09/04/15	XB	n/a	n/a	VL1327

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.24 g		
Run #2	4.79 g	5.0 ml	100 ul
Run #3	4.79 g	5.0 ml	30.0 ul

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	38	9.5	ug/kg	
71-43-2	Benzene	ND	4.7	0.47	ug/kg	
108-86-1	Bromobenzene	ND	4.7	0.47	ug/kg	
74-97-5	Bromochloromethane	ND	4.7	0.47	ug/kg	
75-27-4	Bromodichloromethane	ND	4.7	0.47	ug/kg	
75-25-2	Bromoform	ND	4.7	0.47	ug/kg	
104-51-8	n-Butylbenzene	ND	4.7	0.47	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.7	0.47	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.7	0.47	ug/kg	
108-90-7	Chlorobenzene	ND	4.7	0.47	ug/kg	
75-00-3	Chloroethane	ND	4.7	0.95	ug/kg	
67-66-3	Chloroform	ND	4.7	0.47	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.7	0.47	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.7	0.47	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.7	0.47	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.7	0.47	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.7	0.47	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.7	0.47	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.7	1.3	ug/kg	
106-93-4	1,2-Dibromoethane	ND	4.7	0.47	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.7	0.47	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.7	0.47	ug/kg	
142-28-9	1,3-Dichloropropane	ND	4.7	0.47	ug/kg	
108-20-3	Di-Isopropyl ether	ND	4.7	0.47	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.7	0.47	ug/kg	
124-48-1	Dibromochloromethane	ND	4.7	0.47	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.7	0.95	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.7	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.7	0.47	ug/kg	
541-73-1	m-Dichlorobenzene	ND	4.7	0.47	ug/kg	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RB-6 7.5-8.0'	
Lab Sample ID: C41481-2	Date Sampled: 08/27/15
Matrix: SO - Soil	Date Received: 08/27/15
Method: SW846 8260B	Percent Solids: 84.6
Project: 2868 Hannah St. Oakland CA	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	4.7	0.47	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4.7	0.47	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.7	0.47	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.7	0.47	ug/kg	
100-41-4	Ethylbenzene	ND	4.7	0.47	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	4.7	0.47	ug/kg	
591-78-6	2-Hexanone	ND	19	1.9	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.7	0.95	ug/kg	
98-82-8	Isopropylbenzene	ND	4.7	0.47	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.7	0.47	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	19	1.9	ug/kg	
74-83-9	Methyl bromide	ND	4.7	0.95	ug/kg	
74-87-3	Methyl chloride	ND	4.7	0.95	ug/kg	
74-95-3	Methylene bromide	ND	4.7	0.47	ug/kg	
75-09-2	Methylene chloride	ND	19	4.7	ug/kg	
78-93-3	Methyl ethyl ketone	ND	19	1.9	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.7	0.95	ug/kg	
91-20-3	Naphthalene	ND	4.7	0.95	ug/kg	
103-65-1	n-Propylbenzene	ND	4.7	0.47	ug/kg	
100-42-5	Styrene	ND	4.7	0.47	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	4.7	0.47	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	38	9.5	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.7	0.47	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.7	0.47	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.7	0.47	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.7	0.47	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.7	0.47	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.7	0.95	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.7	0.47	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.7	0.95	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.7	0.95	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.7	0.57	ug/kg	
108-88-3	Toluene	ND	4.7	0.47	ug/kg	
79-01-6	Trichloroethylene	ND	4.7	0.47	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.7	0.95	ug/kg	
75-01-4	Vinyl chloride	ND	4.7	0.95	ug/kg	
1330-20-7	Xylene (total)	ND	9.5	0.95	ug/kg	
	TPH-GRO (C6-C10) ^a	28700 ^b	7100	3500	ug/kg	

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

Report of Analysis

Client Sample ID: RB-6 7.5-8.0' Lab Sample ID: C41481-2 Matrix: SO - Soil Method: SW846 8260B Project: 2868 Hannah St. Oakland CA	Date Sampled: 08/27/15 Date Received: 08/27/15 Percent Solids: 84.6
--	--

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
1868-53-7	Dibromofluoromethane	100%	108%	95%	75-125%
2037-26-5	Toluene-D8	85%	97%	99%	80-121%
460-00-4	4-Bromofluorobenzene	105%	169% ^c	100%	71-126%

- (a) Atypical pattern; heavier hydrocarbons contributing to quantitation.
- (b) Result is from Run# 2
- (c) Outside control limits due to matrix interference.

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

Report of Analysis

32
3

Client Sample ID: RB-6 7.5-8.0'	
Lab Sample ID: C41481-2	Date Sampled: 08/27/15
Matrix: SO - Soil	Date Received: 08/27/15
Method: SW846 8015B M SW846 3550B	Percent Solids: 84.6
Project: 2868 Hannah St. Oakland CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH326016.D	1	08/30/15	NN	08/28/15	OP12976	GHH1614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	10.3	3.9	0.98	mg/kg	
	TPH (> C28-C40)	ND	7.9	2.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	84%		43-144%

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

Report of Analysis

Client Sample ID: RB-6 7.5-8.0'	Date Sampled: 08/27/15
Lab Sample ID: C41481-2	Date Received: 08/27/15
Matrix: SO - Soil	Percent Solids: 84.6
Project: 2868 Hannah St. Oakland CA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Moisture, Percent	15.4		%	1	09/01/15 11:04	EA	SM2540MOD G-97

RL = Reporting Limit

Report of Analysis

Client Sample ID: RB-6 9.0-9.5'		Date Sampled: 08/27/15
Lab Sample ID: C41481-3		Date Received: 08/27/15
Matrix: SO - Soil		Percent Solids: 85.0
Method: SW846 8260B		
Project: 2868 Hannah St. Oakland CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L44076.D	1	09/02/15	XB	n/a	n/a	VL1326
Run #2	M55407.D	1	09/03/15	XB	n/a	n/a	VM1674
Run #3	L44130.D	1	09/04/15	XB	n/a	n/a	VL1327

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	6.05 g		
Run #2	5.74 g	5.0 ml	100 ul
Run #3	5.74 g	5.0 ml	30.0 ul

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	39	9.7	ug/kg	
71-43-2	Benzene	ND	4.9	0.49	ug/kg	
108-86-1	Bromobenzene	ND	4.9	0.49	ug/kg	
74-97-5	Bromochloromethane	ND	4.9	0.49	ug/kg	
75-27-4	Bromodichloromethane	ND	4.9	0.49	ug/kg	
75-25-2	Bromoform	ND	4.9	0.49	ug/kg	
104-51-8	n-Butylbenzene	ND	4.9	0.49	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.9	0.49	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.9	0.49	ug/kg	
108-90-7	Chlorobenzene	ND	4.9	0.49	ug/kg	
75-00-3	Chloroethane	ND	4.9	0.97	ug/kg	
67-66-3	Chloroform	ND	4.9	0.49	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.9	0.49	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.9	0.49	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.9	0.49	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.9	0.49	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.9	0.49	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.9	0.49	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.9	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	4.9	0.49	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.9	0.49	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.9	0.49	ug/kg	
142-28-9	1,3-Dichloropropane	ND	4.9	0.49	ug/kg	
108-20-3	Di-Isopropyl ether	ND	4.9	0.49	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.9	0.49	ug/kg	
124-48-1	Dibromochloromethane	ND	4.9	0.49	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.9	0.97	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.9	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.9	0.49	ug/kg	
541-73-1	m-Dichlorobenzene	ND	4.9	0.49	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RB-6 9.0-9.5'		Date Sampled: 08/27/15
Lab Sample ID: C41481-3		Date Received: 08/27/15
Matrix: SO - Soil		Percent Solids: 85.0
Method: SW846 8260B		
Project: 2868 Hannah St. Oakland CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-50-1	o-Dichlorobenzene	ND	4.9	0.49	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4.9	0.49	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	4.9	0.49	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.9	0.49	ug/kg	
100-41-4	Ethylbenzene	ND	4.9	0.49	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	4.9	0.49	ug/kg	
591-78-6	2-Hexanone	ND	19	1.9	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.9	0.97	ug/kg	
98-82-8	Isopropylbenzene	ND	4.9	0.49	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.9	0.49	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	19	1.9	ug/kg	
74-83-9	Methyl bromide	ND	4.9	0.97	ug/kg	
74-87-3	Methyl chloride	ND	4.9	0.97	ug/kg	
74-95-3	Methylene bromide	ND	4.9	0.49	ug/kg	
75-09-2	Methylene chloride	ND	19	4.9	ug/kg	
78-93-3	Methyl ethyl ketone	ND	19	1.9	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.9	0.97	ug/kg	
91-20-3	Naphthalene	ND	4.9	0.97	ug/kg	
103-65-1	n-Propylbenzene	ND	4.9	0.49	ug/kg	
100-42-5	Styrene	ND	4.9	0.49	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	4.9	0.49	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	39	9.7	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.9	0.49	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.9	0.49	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.9	0.49	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.9	0.49	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.9	0.49	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.9	0.97	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	0.49	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.9	0.97	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.9	0.97	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.9	0.58	ug/kg	
108-88-3	Toluene	ND	4.9	0.49	ug/kg	
79-01-6	Trichloroethylene	ND	4.9	0.49	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.9	0.97	ug/kg	
75-01-4	Vinyl chloride	ND	4.9	0.97	ug/kg	
1330-20-7	Xylene (total)	ND	9.7	0.97	ug/kg	
	TPH-GRO (C6-C10) ^a	27600 ^b	6000	3000	ug/kg	

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

Report of Analysis

Client Sample ID: RB-6 9.0-9.5'	
Lab Sample ID: C41481-3	Date Sampled: 08/27/15
Matrix: SO - Soil	Date Received: 08/27/15
Method: SW846 8260B	Percent Solids: 85.0
Project: 2868 Hannah St. Oakland CA	

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
1868-53-7	Dibromofluoromethane	101%	100%	97%	75-125%
2037-26-5	Toluene-D8	88%	97%	98%	80-121%
460-00-4	4-Bromofluorobenzene	120%	128% ^c	104%	71-126%

- (a) Atypical pattern; heavier hydrocarbons contributing to quantitation.
- (b) Result is from Run# 2
- (c) Outside control limits due to matrix interference.

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

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

Report of Analysis

Client Sample ID: RB-6 9.0-9.5'	
Lab Sample ID: C41481-3	Date Sampled: 08/27/15
Matrix: SO - Soil	Date Received: 08/27/15
Method: SW846 8015B M SW846 3550B	Percent Solids: 85.0
Project: 2868 Hannah St. Oakland CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH326017.D	1	08/30/15	NN	08/28/15	OP12976	GHH1614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	25.6	3.9	0.98	mg/kg	
	TPH (> C28-C40)	ND	7.8	2.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	81%		43-144%

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

Report of Analysis

Client Sample ID: RB-6 9.0-9.5'	Date Sampled: 08/27/15
Lab Sample ID: C41481-3	Date Received: 08/27/15
Matrix: SO - Soil	Percent Solids: 85.0
Project: 2868 Hannah St. Oakland CA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Moisture, Percent	15		%	1	09/01/15 11:04	EA	SM2540MOD G-97

RL = Reporting Limit

Report of Analysis

Client Sample ID: RB-6 12.0-12.5'		Date Sampled: 08/27/15
Lab Sample ID: C41481-4		Date Received: 08/27/15
Matrix: SO - Soil		Percent Solids: 78.9
Method: SW846 8260B		
Project: 2868 Hannah St. Oakland CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L44040.D	1	09/01/15	EA	n/a	n/a	VL1325
Run #2							

Run #	Initial Weight
Run #1	6.00 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	42	11	ug/kg	
71-43-2	Benzene	ND	5.3	0.53	ug/kg	
108-86-1	Bromobenzene	ND	5.3	0.53	ug/kg	
74-97-5	Bromochloromethane	ND	5.3	0.53	ug/kg	
75-27-4	Bromodichloromethane	ND	5.3	0.53	ug/kg	
75-25-2	Bromoform	ND	5.3	0.53	ug/kg	
104-51-8	n-Butylbenzene	ND	5.3	0.53	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.3	0.53	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.3	0.53	ug/kg	
108-90-7	Chlorobenzene	ND	5.3	0.53	ug/kg	
75-00-3	Chloroethane	ND	5.3	1.1	ug/kg	
67-66-3	Chloroform	ND	5.3	0.53	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.3	0.53	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.3	0.53	ug/kg	
56-23-5	Carbon tetrachloride ^a	ND	5.3	0.53	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.3	0.53	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.3	0.53	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.3	0.53	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.3	1.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.3	0.53	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.3	0.53	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.3	0.53	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.3	0.53	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.3	0.53	ug/kg	
594-20-7	2,2-Dichloropropane ^a	ND	5.3	0.53	ug/kg	
124-48-1	Dibromochloromethane	ND	5.3	0.53	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.3	1.1	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.3	1.2	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.3	0.53	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.3	0.53	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.3	0.53	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.3	0.53	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-6 12.0-12.5'	Date Sampled:	08/27/15
Lab Sample ID:	C41481-4	Date Received:	08/27/15
Matrix:	SO - Soil	Percent Solids:	78.9
Method:	SW846 8260B		
Project:	2868 Hannah St. Oakland CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	5.3	0.53	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.3	0.53	ug/kg	
100-41-4	Ethylbenzene	ND	5.3	0.53	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.3	0.53	ug/kg	
591-78-6	2-Hexanone	ND	21	2.1	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.3	1.1	ug/kg	
98-82-8	Isopropylbenzene	ND	5.3	0.53	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.3	0.53	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	21	2.1	ug/kg	
74-83-9	Methyl bromide	ND	5.3	1.1	ug/kg	
74-87-3	Methyl chloride	ND	5.3	1.1	ug/kg	
74-95-3	Methylene bromide	ND	5.3	0.53	ug/kg	
75-09-2	Methylene chloride	ND	21	5.3	ug/kg	
78-93-3	Methyl ethyl ketone	ND	21	2.1	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.3	1.1	ug/kg	
91-20-3	Naphthalene	ND	5.3	1.1	ug/kg	
103-65-1	n-Propylbenzene	ND	5.3	0.53	ug/kg	
100-42-5	Styrene	ND	5.3	0.53	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.3	0.53	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	42	11	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.3	0.53	ug/kg	
71-55-6	1,1,1-Trichloroethane ^a	ND	5.3	0.53	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.3	0.53	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.3	0.53	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.3	0.53	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.3	1.1	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.3	0.53	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.3	1.1	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.3	1.1	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.3	0.63	ug/kg	
108-88-3	Toluene	ND	5.3	0.53	ug/kg	
79-01-6	Trichloroethylene	ND	5.3	0.53	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.3	1.1	ug/kg	
75-01-4	Vinyl chloride	ND	5.3	1.1	ug/kg	
1330-20-7	Xylene (total)	ND	11	1.1	ug/kg	
	TPH-GRO (C6-C10)	ND	110	53	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		75-125%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RB-6 12.0-12.5'	
Lab Sample ID: C41481-4	Date Sampled: 08/27/15
Matrix: SO - Soil	Date Received: 08/27/15
Method: SW846 8260B	Percent Solids: 78.9
Project: 2868 Hannah St. Oakland CA	

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	90%		80-121%
460-00-4	4-Bromofluorobenzene	105%		71-126%

(a) CCV outside of control limits (biased high); not detected in sample.

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

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

Report of Analysis

3.4
3

Client Sample ID: RB-6 12.0-12.5'	
Lab Sample ID: C41481-4	Date Sampled: 08/27/15
Matrix: SO - Soil	Date Received: 08/27/15
Method: SW846 8015B M SW846 3550B	Percent Solids: 78.9
Project: 2868 Hannah St. Oakland CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH326018.D	1	08/30/15	NN	08/28/15	OP12976	GHH1614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	4.2	1.1	mg/kg	
	TPH (> C28-C40)	ND	8.4	2.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	83%		43-144%

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

Report of Analysis

Client Sample ID: RB-6 12.0-12.5'	Date Sampled: 08/27/15
Lab Sample ID: C41481-4	Date Received: 08/27/15
Matrix: SO - Soil	Percent Solids: 78.9
Project: 2868 Hannah St. Oakland CA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Moisture, Percent	21.1		%	1	09/01/15 11:04	EA	SM2540MOD G-97

RL = Reporting Limit

Report of Analysis

Client Sample ID: RB-7 3.5-4.0'		Date Sampled: 08/27/15
Lab Sample ID: C41481-9		Date Received: 08/27/15
Matrix: SO - Soil		Percent Solids: 83.4
Method: SW846 8260B		
Project: 2868 Hannah St. Oakland CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L44077.D	1	09/02/15	XB	n/a	n/a	VL1326
Run #2							

Run #1	Initial Weight
Run #1	5.97 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	27.5	40	10	ug/kg	J
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-7 3.5-4.0'	Date Sampled:	08/27/15
Lab Sample ID:	C41481-9	Date Received:	08/27/15
Matrix:	SO - Soil	Percent Solids:	83.4
Method:	SW846 8260B		
Project:	2868 Hannah St. Oakland CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	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	
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	1.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	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	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	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	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.60	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	
	TPH-GRO (C6-C10) ^a	705	100	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		75-125%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RB-7 3.5-4.0'	
Lab Sample ID: C41481-9	Date Sampled: 08/27/15
Matrix: SO - Soil	Date Received: 08/27/15
Method: SW846 8260B	Percent Solids: 83.4
Project: 2868 Hannah St. Oakland CA	

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	89%		80-121%
460-00-4	4-Bromofluorobenzene	106%		71-126%

(a) Atypical pattern; heavier hydrocarbons contributing to quantitation.

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

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

Report of Analysis

Client Sample ID: RB-7 3.5-4.0'	
Lab Sample ID: C41481-9	Date Sampled: 08/27/15
Matrix: SO - Soil	Date Received: 08/27/15
Method: SW846 8015B M SW846 3550B	Percent Solids: 83.4
Project: 2868 Hannah St. Oakland CA	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH326046.D	3	08/31/15	NN	08/28/15	OP12976	GHH1615
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	128	12	3.0	mg/kg	
	TPH (> C28-C40)	ND	24	6.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	84%		43-144%

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

Report of Analysis

Client Sample ID: RB-7 3.5-4.0'	Date Sampled: 08/27/15
Lab Sample ID: C41481-9	Date Received: 08/27/15
Matrix: SO - Soil	Percent Solids: 83.4
Project: 2868 Hannah St. Oakland CA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Moisture, Percent	16.6		%	1	09/01/15 11:04	EA	SM2540MOD G-97

RL = Reporting Limit

Report of Analysis

Client Sample ID: RB-7 7.5-8.0'		
Lab Sample ID: C41481-10		Date Sampled: 08/27/15
Matrix: SO - Soil		Date Received: 08/27/15
Method: SW846 8260B		Percent Solids: 85.2
Project: 2868 Hannah St. Oakland CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L44078.D	1	09/02/15	XB	n/a	n/a	VL1326
Run #2							

Run #1	Initial Weight
Run #1	5.62 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	14.7	42	10	ug/kg	J
71-43-2	Benzene	ND	5.2	0.52	ug/kg	
108-86-1	Bromobenzene	ND	5.2	0.52	ug/kg	
74-97-5	Bromochloromethane	ND	5.2	0.52	ug/kg	
75-27-4	Bromodichloromethane	ND	5.2	0.52	ug/kg	
75-25-2	Bromoform	ND	5.2	0.52	ug/kg	
104-51-8	n-Butylbenzene	ND	5.2	0.52	ug/kg	
135-98-8	sec-Butylbenzene	1.6	5.2	0.52	ug/kg	J
98-06-6	tert-Butylbenzene	ND	5.2	0.52	ug/kg	
108-90-7	Chlorobenzene	0.65	5.2	0.52	ug/kg	J
75-00-3	Chloroethane	ND	5.2	1.0	ug/kg	
67-66-3	Chloroform	ND	5.2	0.52	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.2	0.52	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.2	0.52	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.2	0.52	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.2	0.52	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.2	0.52	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.2	0.52	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.2	1.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.2	0.52	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.2	0.52	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.2	0.52	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.2	0.52	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.2	0.52	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.2	0.52	ug/kg	
124-48-1	Dibromochloromethane	1.3	5.2	0.52	ug/kg	J
75-71-8	Dichlorodifluoromethane	ND	5.2	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.2	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.2	0.52	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.2	0.52	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.2	0.52	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.2	0.52	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RB-7 7.5-8.0'	
Lab Sample ID: C41481-10	Date Sampled: 08/27/15
Matrix: SO - Soil	Date Received: 08/27/15
Method: SW846 8260B	Percent Solids: 85.2
Project: 2868 Hannah St. Oakland CA	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	5.2	0.52	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.2	0.52	ug/kg	
100-41-4	Ethylbenzene	ND	5.2	0.52	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.2	0.52	ug/kg	
591-78-6	2-Hexanone	ND	21	2.1	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.2	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.2	0.52	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.2	0.52	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	21	2.1	ug/kg	
74-83-9	Methyl bromide	ND	5.2	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.2	1.0	ug/kg	
74-95-3	Methylene bromide	ND	5.2	0.52	ug/kg	
75-09-2	Methylene chloride	ND	21	5.2	ug/kg	
78-93-3	Methyl ethyl ketone	ND	21	2.1	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.2	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.2	1.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.2	0.52	ug/kg	
100-42-5	Styrene	ND	5.2	0.52	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.2	0.52	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	42	10	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.2	0.52	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.2	0.52	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.2	0.52	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.2	0.52	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.2	0.52	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.2	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	0.52	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.2	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.2	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.2	0.63	ug/kg	
108-88-3	Toluene	ND	5.2	0.52	ug/kg	
79-01-6	Trichloroethylene	ND	5.2	0.52	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.2	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.2	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	
	TPH-GRO (C6-C10) ^a	267	100	52	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		75-125%

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

36
 3

Report of Analysis

Client Sample ID: RB-7 7.5-8.0' Lab Sample ID: C41481-10 Matrix: SO - Soil Method: SW846 8260B Project: 2868 Hannah St. Oakland CA	Date Sampled: 08/27/15 Date Received: 08/27/15 Percent Solids: 85.2
---	--

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	90%		80-121%
460-00-4	4-Bromofluorobenzene	110%		71-126%

(a) Atypical pattern; heavier hydrocarbons contributing to quantitation.

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

Report of Analysis

Client Sample ID: RB-7 7.5-8.0'	
Lab Sample ID: C41481-10	Date Sampled: 08/27/15
Matrix: SO - Soil	Date Received: 08/27/15
Method: SW846 8015B M SW846 3550B	Percent Solids: 85.2
Project: 2868 Hannah St. Oakland CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH326020.D	1	08/30/15	NN	08/28/15	OP12976	GHH1614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	74.0	3.9	0.97	mg/kg	
	TPH (> C28-C40)	ND	7.8	1.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	85%		43-144%

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

Report of Analysis

Client Sample ID: RB-7 7.5-8.0'	Date Sampled: 08/27/15
Lab Sample ID: C41481-10	Date Received: 08/27/15
Matrix: SO - Soil	Percent Solids: 85.2
Project: 2868 Hannah St. Oakland CA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Moisture, Percent	14.8		%	1	09/01/15 11:04	EA	SM2540MOD G-97

RL = Reporting Limit

Report of Analysis

Client Sample ID: RB-7 GW23'	Date Sampled: 08/27/15
Lab Sample ID: C41481-11	Date Received: 08/27/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: 2868 Hannah St. Oakland CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V27995.D	1	09/02/15	SY	n/a	n/a	VV1134
Run #2							

Run #	Purge Volume
Run #1	10.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	4.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-7 GW23'	Date Sampled:	08/27/15
Lab Sample ID:	C41481-11	Date Received:	08/27/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	2868 Hannah St. Oakland CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		78-125%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RB-7 GW23'	
Lab Sample ID: C41481-11	Date Sampled: 08/27/15
Matrix: AQ - Ground Water	Date Received: 08/27/15
Method: SW846 8260B	Percent Solids: n/a
Project: 2868 Hannah St. Oakland CA	

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	100%		86-114%
460-00-4	4-Bromofluorobenzene	97%		80-113%

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

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

Report of Analysis

Client Sample ID: RB-7 GW23'	
Lab Sample ID: C41481-11	Date Sampled: 08/27/15
Matrix: AQ - Ground Water	Date Received: 08/27/15
Method: SW846 8015B M SW846 3510C	Percent Solids: n/a
Project: 2868 Hannah St. Oakland CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH326044.D	1	08/31/15	NN	08/31/15	OP12977	GHH1615
Run #2							

Run #	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.0260	0.10	0.025	mg/l	J
	TPH (> C28-C40)	ND	0.20	0.051	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	71%		38-139%

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

Report of Analysis

Client Sample ID: RB-6 GW
Lab Sample ID: C41481-12
Matrix: AQ - Ground Water
Method: SW846 8260B
Project: 2868 Hannah St. Oakland CA

Date Sampled: 08/27/15

Date Received: 08/27/15

Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R37013.D	1	09/03/15	KZ	n/a	n/a	VR1408
Run #2							

	Purge Volume
Run #1	10.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	49.6	20	4.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride ^a	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane ^a	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RB-6 GW	Date Sampled:	08/27/15
Lab Sample ID:	C41481-12	Date Received:	08/27/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	2868 Hannah St. Oakland CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	0.39	1.0	0.20	ug/l	J
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	2.2	2.0	0.46	ug/l	
	TPH-GRO (C6-C10)	50.4	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		78-125%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RB-6 GW		Date Sampled: 08/27/15
Lab Sample ID: C41481-12		Date Received: 08/27/15
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260B		
Project: 2868 Hannah St. Oakland CA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	90%		86-114%
460-00-4	4-Bromofluorobenzene	100%		80-113%

(a) CCV outside of control limits (biased high); not detected in sample.

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

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

Report of Analysis



Client Sample ID: RB-6 GW	Date Sampled: 08/27/15
Lab Sample ID: C41481-12	Date Received: 08/27/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8015B M SW846 3510C	
Project: 2868 Hannah St. Oakland CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH326154.D	1	09/03/15	NN	09/03/15	OP13000	GHH1618
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1010 ml	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.0939	0.099	0.025	mg/l	J
	TPH (> C28-C40)	0.0529	0.20	0.050	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	73%		38-139%

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

Report of Analysis

Client Sample ID: RB-7 13-13.5'		Date Sampled: 08/27/15
Lab Sample ID: C41481-16		Date Received: 08/27/15
Matrix: SO - Soil		Percent Solids: 77.9
Method: SW846 8260B		
Project: 2868 Hannah St. Oakland CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L44041.D	1	09/01/15	EA	n/a	n/a	VL1325
Run #2							

Run #	Initial Weight
Run #1	5.85 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	44	11	ug/kg	
71-43-2	Benzene	ND	5.5	0.55	ug/kg	
108-86-1	Bromobenzene	ND	5.5	0.55	ug/kg	
74-97-5	Bromochloromethane	ND	5.5	0.55	ug/kg	
75-27-4	Bromodichloromethane	ND	5.5	0.55	ug/kg	
75-25-2	Bromoform	ND	5.5	0.55	ug/kg	
104-51-8	n-Butylbenzene	ND	5.5	0.55	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.5	0.55	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.5	0.55	ug/kg	
108-90-7	Chlorobenzene	ND	5.5	0.55	ug/kg	
75-00-3	Chloroethane	ND	5.5	1.1	ug/kg	
67-66-3	Chloroform	ND	5.5	0.55	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.5	0.55	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.5	0.55	ug/kg	
56-23-5	Carbon tetrachloride ^a	ND	5.5	0.55	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.5	0.55	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.5	0.55	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.5	0.55	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.5	1.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.5	0.55	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.5	0.55	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.5	0.55	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.5	0.55	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.5	0.55	ug/kg	
594-20-7	2,2-Dichloropropane ^a	ND	5.5	0.55	ug/kg	
124-48-1	Dibromochloromethane	ND	5.5	0.55	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.5	1.1	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.5	1.2	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.5	0.55	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.5	0.55	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.5	0.55	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.5	0.55	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RB-7 13-13.5'	
Lab Sample ID: C41481-16	Date Sampled: 08/27/15
Matrix: SO - Soil	Date Received: 08/27/15
Method: SW846 8260B	Percent Solids: 77.9
Project: 2868 Hannah St. Oakland CA	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	5.5	0.55	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.5	0.55	ug/kg	
100-41-4	Ethylbenzene	ND	5.5	0.55	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.5	0.55	ug/kg	
591-78-6	2-Hexanone	ND	22	2.2	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.5	1.1	ug/kg	
98-82-8	Isopropylbenzene	ND	5.5	0.55	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.5	0.55	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	22	2.2	ug/kg	
74-83-9	Methyl bromide	ND	5.5	1.1	ug/kg	
74-87-3	Methyl chloride	ND	5.5	1.1	ug/kg	
74-95-3	Methylene bromide	ND	5.5	0.55	ug/kg	
75-09-2	Methylene chloride	ND	22	5.5	ug/kg	
78-93-3	Methyl ethyl ketone	ND	22	2.2	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.5	1.1	ug/kg	
91-20-3	Naphthalene	ND	5.5	1.1	ug/kg	
103-65-1	n-Propylbenzene	ND	5.5	0.55	ug/kg	
100-42-5	Styrene	ND	5.5	0.55	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.5	0.55	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	44	11	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.5	0.55	ug/kg	
71-55-6	1,1,1-Trichloroethane ^a	ND	5.5	0.55	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.5	0.55	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.5	0.55	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.5	0.55	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.5	1.1	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.5	0.55	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.5	1.1	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.5	1.1	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.5	0.66	ug/kg	
108-88-3	Toluene	ND	5.5	0.55	ug/kg	
79-01-6	Trichloroethylene	ND	5.5	0.55	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.5	1.1	ug/kg	
75-01-4	Vinyl chloride	ND	5.5	1.1	ug/kg	
1330-20-7	Xylene (total)	ND	11	1.1	ug/kg	
	TPH-GRO (C6-C10)	ND	110	55	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		75-125%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RB-7 13-13.5'	
Lab Sample ID: C41481-16	Date Sampled: 08/27/15
Matrix: SO - Soil	Date Received: 08/27/15
Method: SW846 8260B	Percent Solids: 77.9
Project: 2868 Hannah St. Oakland CA	

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	89%		80-121%
460-00-4	4-Bromofluorobenzene	105%		71-126%

(a) CCV outside of control limits (biased high); not detected in sample.

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

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

Report of Analysis

Client Sample ID: RB-7 13-13.5'	
Lab Sample ID: C41481-16	Date Sampled: 08/27/15
Matrix: SO - Soil	Date Received: 08/27/15
Method: SW846 8015B M SW846 3550B	Percent Solids: 77.9
Project: 2868 Hannah St. Oakland CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH326021.D	1	08/30/15	NN	08/28/15	OP12976	GHH1614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	1.51	4.2	1.1	mg/kg	J
	TPH (> C28-C40)	ND	8.5	2.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	85%		43-144%

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

Report of Analysis

Client Sample ID: RB-7 13-13.5'	Date Sampled: 08/27/15
Lab Sample ID: C41481-16	Date Received: 08/27/15
Matrix: SO - Soil	Percent Solids: 77.9
Project: 2868 Hannah St. Oakland CA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Moisture, Percent	22.1		%	1	09/01/15 11:04	EA	SM2540MOD G-97

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RB-7 18-18.5'	Date Sampled:	08/27/15
Lab Sample ID:	C41481-17	Date Received:	08/27/15
Matrix:	SO - Soil	Percent Solids:	79.2
Method:	SW846 8260B		
Project:	2868 Hannah St. Oakland CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L44042.D	1	09/01/15	EA	n/a	n/a	VL1325
Run #2							

Run #	Initial Weight
Run #1	6.34 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	10	ug/kg	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride ^a	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane ^a	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RB-7 18-18.5'	
Lab Sample ID: C41481-17	Date Sampled: 08/27/15
Matrix: SO - Soil	Date Received: 08/27/15
Method: SW846 8260B	Percent Solids: 79.2
Project: 2868 Hannah St. Oakland CA	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	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	
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	1.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	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	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	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	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane ^a	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.60	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	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	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		75-125%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RB-7 18-18.5'	
Lab Sample ID: C41481-17	Date Sampled: 08/27/15
Matrix: SO - Soil	Date Received: 08/27/15
Method: SW846 8260B	Percent Solids: 79.2
Project: 2868 Hannah St. Oakland CA	

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	89%		80-121%
460-00-4	4-Bromofluorobenzene	103%		71-126%

(a) CCV outside of control limits (biased high); not detected in sample.

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

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

Report of Analysis

Client Sample ID: RB-7 18-18.5'	
Lab Sample ID: C41481-17	Date Sampled: 08/27/15
Matrix: SO - Soil	Date Received: 08/27/15
Method: SW846 8015B M SW846 3550B	Percent Solids: 79.2
Project: 2868 Hannah St. Oakland CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH326022.D	1	08/30/15	NN	08/28/15	OP12976	GHH1614
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	1.13	4.2	1.0	mg/kg	J
	TPH (> C28-C40)	ND	8.4	2.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	81%		43-144%

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

Report of Analysis

Client Sample ID: RB-7 18-18.5'	Date Sampled: 08/27/15
Lab Sample ID: C41481-17	Date Received: 08/27/15
Matrix: SO - Soil	Percent Solids: 79.2
Project: 2868 Hannah St. Oakland CA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Moisture, Percent	20.8		%	1	09/01/15 11:04	EA	SM2540MOD G-97

RL = Reporting Limit

Report of Analysis

Client Sample ID: RB-7 21.5-22'		
Lab Sample ID: C41481-18		Date Sampled: 08/27/15
Matrix: SO - Soil		Date Received: 08/27/15
Method: SW846 8260B		Percent Solids: 80.6
Project: 2868 Hannah St. Oakland CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	L44043.D	1	09/01/15	EA	n/a	n/a	VL1325

Run #1	Initial Weight
Run #2	6.34 g

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	39	9.8	ug/kg	
71-43-2	Benzene	ND	4.9	0.49	ug/kg	
108-86-1	Bromobenzene	ND	4.9	0.49	ug/kg	
74-97-5	Bromochloromethane	ND	4.9	0.49	ug/kg	
75-27-4	Bromodichloromethane	ND	4.9	0.49	ug/kg	
75-25-2	Bromoform	ND	4.9	0.49	ug/kg	
104-51-8	n-Butylbenzene	ND	4.9	0.49	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.9	0.49	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.9	0.49	ug/kg	
108-90-7	Chlorobenzene	ND	4.9	0.49	ug/kg	
75-00-3	Chloroethane	ND	4.9	0.98	ug/kg	
67-66-3	Chloroform	ND	4.9	0.49	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.9	0.49	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.9	0.49	ug/kg	
56-23-5	Carbon tetrachloride ^a	ND	4.9	0.49	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.9	0.49	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.9	0.49	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.9	0.49	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.9	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	4.9	0.49	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.9	0.49	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.9	0.49	ug/kg	
142-28-9	1,3-Dichloropropane	ND	4.9	0.49	ug/kg	
108-20-3	Di-Isopropyl ether	ND	4.9	0.49	ug/kg	
594-20-7	2,2-Dichloropropane ^a	ND	4.9	0.49	ug/kg	
124-48-1	Dibromochloromethane	ND	4.9	0.49	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	4.9	0.98	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.9	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.9	0.49	ug/kg	
541-73-1	m-Dichlorobenzene	ND	4.9	0.49	ug/kg	
95-50-1	o-Dichlorobenzene	ND	4.9	0.49	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4.9	0.49	ug/kg	

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

Report of Analysis

Client Sample ID:	RB-7 21.5-22'	Date Sampled:	08/27/15
Lab Sample ID:	C41481-18	Date Received:	08/27/15
Matrix:	SO - Soil	Percent Solids:	80.6
Method:	SW846 8260B		
Project:	2868 Hannah St. Oakland CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	4.9	0.49	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.9	0.49	ug/kg	
100-41-4	Ethylbenzene	ND	4.9	0.49	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	4.9	0.49	ug/kg	
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.9	0.98	ug/kg	
98-82-8	Isopropylbenzene	ND	4.9	0.49	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.9	0.49	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	4.9	0.98	ug/kg	
74-87-3	Methyl chloride	ND	4.9	0.98	ug/kg	
74-95-3	Methylene bromide	ND	4.9	0.49	ug/kg	
75-09-2	Methylene chloride	ND	20	4.9	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.9	0.98	ug/kg	
91-20-3	Naphthalene	ND	4.9	0.98	ug/kg	
103-65-1	n-Propylbenzene	ND	4.9	0.49	ug/kg	
100-42-5	Styrene	ND	4.9	0.49	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	4.9	0.49	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	39	9.8	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.9	0.49	ug/kg	
71-55-6	1,1,1-Trichloroethane ^a	ND	4.9	0.49	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.9	0.49	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.9	0.49	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.9	0.49	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.9	0.98	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.9	0.49	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.9	0.98	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.9	0.98	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.9	0.59	ug/kg	
108-88-3	Toluene	ND	4.9	0.49	ug/kg	
79-01-6	Trichloroethylene	ND	4.9	0.49	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.9	0.98	ug/kg	
75-01-4	Vinyl chloride	ND	4.9	0.98	ug/kg	
1330-20-7	Xylene (total)	ND	9.8	0.98	ug/kg	
	TPH-GRO (C6-C10)	ND	98	49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		75-125%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RB-7 21.5-22'	
Lab Sample ID: C41481-18	Date Sampled: 08/27/15
Matrix: SO - Soil	Date Received: 08/27/15
Method: SW846 8260B	Percent Solids: 80.6
Project: 2868 Hannah St. Oakland CA	

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	89%		80-121%
460-00-4	4-Bromofluorobenzene	104%		71-126%

(a) CCV outside of control limits (biased high); not detected in sample.

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

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

Report of Analysis

Client Sample ID: RB-7 21.5-22'	
Lab Sample ID: C41481-18	Date Sampled: 08/27/15
Matrix: SO - Soil	Date Received: 08/27/15
Method: SW846 8015B M SW846 3550B	Percent Solids: 80.6
Project: 2868 Hannah St. Oakland CA	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH326024.D	1	08/30/15	NN	08/28/15	OP12976	GHH1614
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	4.1	1.0	mg/kg	
	TPH (> C28-C40)	ND	8.2	2.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	83%		43-144%

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

Report of Analysis

Client Sample ID: RB-7 21.5-22'	Date Sampled: 08/27/15
Lab Sample ID: C41481-18	Date Received: 08/27/15
Matrix: SO - Soil	Percent Solids: 80.6
Project: 2868 Hannah St. Oakland CA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Moisture, Percent	19.4		%	1	09/01/15 11:04	EA	SM2540MOD G-97

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



ACCUTEST
LABORATORIES

CHAIN OF CUSTODY

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

1013

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest NC Job #: C C41481

Client / Reporting Information		Project Information	
Company Name: ROUX ASSOCIATES	Project Name: Z8108 HANNAH ST		
Address: 555 12th St Suite 1725	Street: Z8108 HANNAH ST		
City: Oakland CA 94607	City: Oakland CA		
Project Contact: Nicole Rodriguez	Project #		
Phone #: 415-967-6018	EMAIL: nrodriguez@rouxinc.com		
Sampler's Name: N. Rodriguez	Client Purchase Order #		

Accutest Sample ID	Sample ID / Field Point / Point of Collection	Date	Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles													
							NOI	NO3	NO2	NO	NO3-N	NO3-NH	NO3-NH4	NO3-NH4-N	NO3-NH4-NH	NO3-NH4-NH-N				
1	RB-6 2.5-3.0'	8/21/15	7:50	NR	S	5														
2	RB-6 7.5-8.0'		7:57		S	5														
3	RB-6 9.0-9.5'		8:10		S	5														
4	RB-6 12.0-12.5'		8:00		S	5														
5	RB-8 3.5-4.0'		8:40		S	5														
6	RB-8 15.5-16.0'		8:50		S	5														
7	RB-8 7.5-8.0'		9:43		S	5														
8	RB-8 13.0-13.5'		8:47		S	5														
9	RB-7 3.5-4.0'		9:25		S	5														
10	RB-7 7.5-8.0'		9:27		S	5														

Requested Analysis	Matrix Codes
VOCs (8210) TPH9 (8210) TPH2 (8015) TPH10 (8015)	WW- Wastewater GW- Ground Water SW- Surface Water SO- Soil OI- Oil WP- Wipe LIQ- Non-aqueous Liquid AIR DW- Drinking Water (Perchlorate Only)
HOLD	LAB USE ONLY

Turnaround Time (Business days)	Approved By / Date:	Data Deliverable Information
<input type="checkbox"/> 10 Day <input type="checkbox"/> 5 Day <input type="checkbox"/> 3 Day <input type="checkbox"/> 2 Day <input type="checkbox"/> 1 Day <input type="checkbox"/> Same Day	ROUX SID. TAT	<input type="checkbox"/> Commercial "A" - Results only <input type="checkbox"/> Commercial "B" - Results with QC summaries <input type="checkbox"/> Commercial "B+" - Results, QC, and chromatograms <input type="checkbox"/> FULL1 - Level 4 data package <input type="checkbox"/> EDF for Geotracker <input type="checkbox"/> EDD Format Provide EDF Global ID _____ Provide EDF Logcode: _____

Comments / Remarks

HOLD ALL SAMPLES.

Emergency TIA data available VIA Lablink					
Sample Custody must be documented below each time samples change possession, including courier delivery.					
Relinquished By: <i>[Signature]</i>	Date Time: 8/21/15 13:00	Received By: <i>[Signature]</i>	Date Time: 8/27/15 16:07	Relinquished By: <i>[Signature]</i>	Received By: <i>[Signature]</i>
Relinquished By:	Date Time:	Received By:	Date Time:	Relinquished By:	Received By:
3		3		4	
Relinquished By:	Date Time:	Received By:	Date Time:	Relinquished By:	Received By:
5		5		4	
Custody Seal #		Appropriate Bottle / Pres. Y / N		Headspace Y / N	
Labels match Coc? Y / N		Separate Receiving Check List used: Y / N		On Ice Y / N	
				Cooler Temp. 41/41.7	

4.1
4

CHAIN OF CUSTODY
ACCUTEST LABORATORIES
 2105 Lundy Ave, San Jose, CA 95131
 (408) 588-0200 FAX: (408) 588-0201

FEDEX Tracking #
 Bottle Order Control #
 Accutest Quote #
 Accutest NC Job #: C **CL4481**

Client / Reporting Information		Project Information		Requested Analysis										Matrix Codes									
Company Name: ROUX ASSOCIATES		Project Name: 2808 Hannah St		<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);"> VOC's (PHH) (8200) TPH (D) (PHH) (8200) </div> <div style="border: 1px solid black; padding: 5px;"> HOLD ALL SAMPLES </div> </div>										WW- Wastewater GW- Ground Water SW- Surface Water SO- Soil OI- Oil WP- Wipe LIQ- Non-aqueous Liquid AIR DW- Drinking Water (Perchlorate Only)									
Address: 555 12th St Suite 1725		Street: 2808 Hannah St																					
City: Oakland CA 94601		City: Oakland CA																					
Project Contact: NICOLE RODRIGUEZ		Project #: _____																					
Phone #: 415-967-6018		Email: Nrodriguez@rouxinc.com																					
Sampler's Name: N. Rodriguez		Client Purchase Order #: _____												LAB USE ONLY									
Accutest Sample ID	Sample ID / Field Point / Point of Collection	Date	Time	Sampled by	Matrix	# of bottles	LEI	MSD	MSD	MSD	MSD	MSD	MSD	MSD	MSD	MSD	MSD	MSD	MSD	MSD	MSD		
11	RB-7 GW 23'	8/27/15	10:10	NR	W	5	3																
12	RB-10 GW		16:30		W	5	3																
13	RB-8 GW		10:40		W	5	3																
14	RB-8 GW DUP		12:30		W	5	3																
15	RB-7 GW 310'		13:20		W	5	3																
16	RB-7 13.0-13.5		9:30		S	5																	
17	RB-7 18-18.5		9:35		S	5																	
18	RB-7 21.5-22.1		9:37		S	5																	
19	RB-7 24.0-24.5		9:40		S	5																	
20	RB-7 27.5-30.0		13:00		S	5																	
Turnaround Time (Business days)		Approved By / Date:		Data Delivered Information										Comments / Remarks									
<input type="checkbox"/> 10 Day <input type="checkbox"/> 5 Day <input type="checkbox"/> 3 Day <input type="checkbox"/> 2 Day <input type="checkbox"/> 1 Day <input type="checkbox"/> Same Day		<input type="checkbox"/> Commercial "A" - Results only <input type="checkbox"/> Commercial "B" - Results with QC summaries <input type="checkbox"/> Commercial "B*" - Results, QC, and chromatograms <input type="checkbox"/> FULL1 - Level 4 data package <input type="checkbox"/> EDF for Geotracker <input type="checkbox"/> EDF Format Provide EDF Global ID _____ Provide EDF Logcode: _____												HOLD ALL SAMPLES.									
Emergency TIA data available VIA Lablink																							
Relinquished by Sampler:		Date Time: 8/27/15 15:00		Received By: Nicole Rodriguez		Date Time: 8/27/15 16:07		Relinquished By: [Signature]		Date Time: _____		Received By: _____		Date Time: _____		Received By: _____		Date Time: _____		Received By: _____		Date Time: _____	
Relinquished by:		Date Time:		Received By:		Date Time:		Relinquished By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:	
Relinquished by:		Date Time:		Received By:		Date Time:		Relinquished By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:	
Relinquished by:		Date Time:		Received By:		Date Time:		Relinquished By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:	
Relinquished by:		Date Time:		Received By:		Date Time:		Relinquished By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:	
Relinquished by:		Date Time:		Received By:		Date Time:		Relinquished By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:		Received By:		Date Time:	

4.1
4



CHAIN OF CUSTODY

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

ACCUTEST

LABORATORIES

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest NC Job #: C <u>C41481</u>

Client / Reporting Information		Project Information	
Company Name: <u>ROUX ASSOCIATES</u>		Project Name: <u>2808 Hannah St</u>	
Address: <u>555 12th St Suite 1725</u>		Street: <u>2808 Hannah St</u>	
City: <u>Oakland</u> State: <u>CA</u> Zip: <u>94601</u>	City: <u>Oakland</u> State: <u>CA</u>	Project #	
Project Contact: <u>Nicolas Rodriguez</u>		EMAIL: <u>nrdriguez@rouxinc.com</u>	
Phone # <u>415-967-4608</u>		Client Purchase Order #	
Sampler's Name: <u>N. Rodriguez</u>			

Requested Analysis	Matrix Codes
<u>VOCs (TPHg) (B290)</u> <u>TPHd/TPHm(S15)</u>	WW- Wastewater
	GW- Ground Water
	SW- Surface Water
	SO- Soil
	OI-OI
	WP-WP
	LIQ- Non-aqueous Liquid
	AIR
	DW- Drinking Water (Perchlorate Only)
	LAB USE ONLY

Accutest Sample ID	Sample ID / Field Point / Point of Collection	Date	Time	Sampled By	Matrix	Number of preserved Bottles																		
						HI	LO	HVO	CC	NO	NO	NO	NO	NO	NO	NO	NO							
<u>21</u>	<u>RB-735.0-35.58715</u>	<u>8/27/15</u>	<u>1305</u>	<u>NR</u>	<u>S</u>	<u>5</u>																		

Turnaround Time (Business days)	Approved By / Date:	Data Deliverable Information	Comments / Remarks
<input type="checkbox"/> 10 Day <input type="checkbox"/> 5 Day <input type="checkbox"/> 3 Day <input type="checkbox"/> 2 Day <input type="checkbox"/> 1 Day <input type="checkbox"/> Same Day	<u>ROUX</u> <u>STD. TAT</u>	<input type="checkbox"/> Commercial "A" - Results only <input type="checkbox"/> Commercial "B" - Results with QC summaries <input type="checkbox"/> Commercial "B+" - Results, QC, and chromatograms <input type="checkbox"/> FULL1 - Level 4 data package <input type="checkbox"/> EDF for Geotracker <input type="checkbox"/> EDD Format Provide EDF Global ID _____ Provide EDF Logcode: _____	<u>HOLD ALL SAMPLES.</u>

Emergency TIA data available VIA Lablink					
Sample Custody must be documented below each time samples change possession, including courier delivery.					
Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
<u>[Signature]</u>	<u>8/27/15 15:00</u>	<u>[Signature]</u>	<u>[Signature]</u>	<u>8/27/15 16:07</u>	<u>[Signature]</u>
3		4			
5				Appropriate Bottle / Pres. Y/N	Labels match Coc? Y/N
				Headspace Y/N	Separate Receiving Check List used: Y/N
				On Ice Y/N	Cooler Temp.



Accutest Laboratories Sample Receipt Summary

Accutest Job Number: C41481 Client: ROUX Project: 2868 HANNAH STREET
 Date / Time Received: 8/27/2015 4:07:00 PM Delivery Method: Accutest Courier Airbill #s: _____
 Cooler Temps (Initial/Adjusted): #1: (4.1/4.1); #2: (4.7/4.7);

<u>Cooler Security</u>	<u>Y</u>	<u>or</u>	<u>N</u>		<u>Y</u>	<u>or</u>	<u>N</u>
1. Custody Seals Present:	<input type="checkbox"/>		<input checked="" type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Custody Seals Intact:	<input type="checkbox"/>		<input type="checkbox"/>	4. SmpI Dates/Time OK	<input checked="" type="checkbox"/>		<input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Temp criteria achieved:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Therm ID:	<u>IR1;</u>		
3. Cooler media:	<u>Ice (Bag)</u>		
4. No. Coolers:	<u>2</u>		

<u>Quality Control Preservation</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
4. VOCs headspace free:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

<u>Sample Integrity - Documentation</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>

<u>Sample Integrity - Condition</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:	<u>Intact</u>		

<u>Sample Integrity - Instructions</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

4.1
4

GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1325-MB	L44038.D	1	09/01/15	EA	n/a	n/a	VL1325

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-1, C41481-4, C41481-16, C41481-17, C41481-18

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	10	ug/kg	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	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	

Method Blank Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1325-MB	L44038.D	1	09/01/15	EA	n/a	n/a	VL1325

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-1, C41481-4, C41481-16, C41481-17, C41481-18

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	1.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	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	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	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	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.60	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

Method Blank Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1325-MB	L44038.D	1	09/01/15	EA	n/a	n/a	VL1325

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-1, C41481-4, C41481-16, C41481-17, C41481-18

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	98% 75-125%
2037-26-5	Toluene-D8	90% 80-121%
460-00-4	4-Bromofluorobenzene	101% 71-126%

5.1.1
5

Method Blank Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1134-MB	V27993.D	1	09/02/15	SY	n/a	n/a	VV1134

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-11

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	4.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	

Method Blank Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1134-MB	V27993.D	1	09/02/15	SY	n/a	n/a	VV1134

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-11

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

Method Blank Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1134-MB	V27993.D	1	09/02/15	SY	n/a	n/a	VV1134

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-11

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	93% 78-125%
2037-26-5	Toluene-D8	98% 86-114%
460-00-4	4-Bromofluorobenzene	96% 80-113%

5.1.2
5

Method Blank Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1326-MB	L44071.D	1	09/02/15	XB	n/a	n/a	VL1326

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-2, C41481-3, C41481-9, C41481-10

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	10	ug/kg	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	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	

Method Blank Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1326-MB	L44071.D	1	09/02/15	XB	n/a	n/a	VL1326

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-2, C41481-3, C41481-9, C41481-10

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	1.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	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	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	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	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.60	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

Method Blank Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1326-MB	L44071.D	1	09/02/15	XB	n/a	n/a	VL1326

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-2, C41481-3, C41481-9, C41481-10

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	100% 75-125%
2037-26-5	Toluene-D8	90% 80-121%
460-00-4	4-Bromofluorobenzene	103% 71-126%

Method Blank Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR1408-MB	R37007.D	1	09/03/15	KZ	n/a	n/a	VR1408

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-12

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	4.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	

Method Blank Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR1408-MB	R37007.D	1	09/03/15	KZ	n/a	n/a	VR1408

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-12

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

Method Blank Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR1408-MB	R37007.D	1	09/03/15	KZ	n/a	n/a	VR1408

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-12

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	105% 78-125%
2037-26-5	Toluene-D8	94% 86-114%
460-00-4	4-Bromofluorobenzene	84% 80-113%

5.1.4
5

Method Blank Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1674-MB	M55401.D	1	09/03/15	XB	n/a	n/a	VM1674

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-2, C41481-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	99% 75-125%
2037-26-5	Toluene-D8	95% 80-121%
460-00-4	4-Bromofluorobenzene	103% 71-126%

Method Blank Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1327-MB	L44116.D	1	09/03/15	XB	n/a	n/a	VL1327

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-2, C41481-3

CAS No.	Compound	Result	RL	MDL	Units	Q
---------	----------	--------	----	-----	-------	---

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	94%	75-125%
2037-26-5	Toluene-D8	100%	80-121%
460-00-4	4-Bromofluorobenzene	97%	71-126%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1325-BS	L44034.D	1	09/01/15	EA	n/a	n/a	VL1325
VL1325-BSD	L44036.D	1	09/01/15	EA	n/a	n/a	VL1325

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-1, C41481-4, C41481-16, C41481-17, C41481-18

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	160	150	94	161	101	7	59-143/27
71-43-2	Benzene	40	42.1	105	39.7	99	6	80-122/13
108-86-1	Bromobenzene	40	38.6	97	36.1	90	7	76-122/12
74-97-5	Bromochloromethane	40	42.4	106	41.4	104	2	81-126/13
75-27-4	Bromodichloromethane	40	43.4	109	42.0	105	3	76-124/13
75-25-2	Bromoform	40	41.7	104	42.1	105	1	72-134/14
104-51-8	n-Butylbenzene	40	40.7	102	36.2	91	12	76-122/14
135-98-8	sec-Butylbenzene	40	40.5	101	36.1	90	11	77-124/14
98-06-6	tert-Butylbenzene	40	40.6	102	36.5	91	11	76-124/13
108-90-7	Chlorobenzene	40	39.2	98	37.8	95	4	78-122/12
75-00-3	Chloroethane	40	30.1	75	29.3	73	3	71-126/16
67-66-3	Chloroform	40	43.7	109	41.7	104	5	79-126/13
95-49-8	o-Chlorotoluene	40	39.3	98	35.7	89	10	73-124/15
106-43-4	p-Chlorotoluene	40	38.3	96	35.8	90	7	73-127/16
56-23-5	Carbon tetrachloride	40	47.5	119	42.9	107	10	78-127/15
75-34-3	1,1-Dichloroethane	40	40.0	100	37.8	95	6	76-123/14
75-35-4	1,1-Dichloroethylene	40	35.9	90	32.7	82	9	73-124/15
563-58-6	1,1-Dichloropropene	40	40.4	101	36.7	92	10	78-126/14
96-12-8	1,2-Dibromo-3-chloropropane	40	37.3	93	35.5	89	5	62-127/21
106-93-4	1,2-Dibromoethane	40	38.7	97	39.1	98	1	76-123/13
107-06-2	1,2-Dichloroethane	40	42.9	107	42.9	107	0	74-125/12
78-87-5	1,2-Dichloropropane	40	42.1	105	41.3	103	2	76-123/12
142-28-9	1,3-Dichloropropane	40	40.1	100	40.7	102	1	77-121/13
108-20-3	Di-Isopropyl ether	40	38.3	96	37.1	93	3	71-126/14
594-20-7	2,2-Dichloropropane	40	47.1	118	42.1	105	11	77-132/17
124-48-1	Dibromochloromethane	40	38.1	95	38.3	96	1	73-127/13
75-71-8	Dichlorodifluoromethane	40	27.9	70	25.9	65	7	52-141/20
156-59-2	cis-1,2-Dichloroethylene	40	42.7	107	40.8	102	5	80-124/13
10061-01-5	cis-1,3-Dichloropropene	40	46.3	116	45.0	113	3	77-125/13
541-73-1	m-Dichlorobenzene	40	38.5	96	35.7	89	8	76-123/12
95-50-1	o-Dichlorobenzene	40	37.4	94	35.5	89	5	76-123/12
106-46-7	p-Dichlorobenzene	40	38.4	96	36.0	90	6	77-121/12
156-60-5	trans-1,2-Dichloroethylene	40	35.9	90	33.9	85	6	78-123/15
10061-02-6	trans-1,3-Dichloropropene	40	40.7	102	40.7	102	0	71-122/13
100-41-4	Ethylbenzene	40	41.5	104	38.9	97	6	79-121/13
637-92-3	Ethyl tert-Butyl Ether	40	40.8	102	40.1	100	2	76-131/13

* = Outside of Control Limits.

5.2.1
 5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1325-BS	L44034.D	1	09/01/15	EA	n/a	n/a	VL1325
VL1325-BSD	L44036.D	1	09/01/15	EA	n/a	n/a	VL1325

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-1, C41481-4, C41481-16, C41481-17, C41481-18

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	160	159	99	162	101	2	65-135/20
87-68-3	Hexachlorobutadiene	40	43.6	109	37.6	94	15	77-131/17
98-82-8	Isopropylbenzene	40	42.9	107	40.0	100	7	80-124/14
99-87-6	p-Isopropyltoluene	40	40.5	101	36.3	91	11	78-122/13
108-10-1	4-Methyl-2-pentanone	160	177	111	184	115	4	70-135/18
74-83-9	Methyl bromide	40	31.9	80	31.5	79	1	74-130/15
74-87-3	Methyl chloride	40	30.6	77	29.0	73	5	65-131/22
74-95-3	Methylene bromide	40	43.9	110	44.1	110	0	78-124/13
75-09-2	Methylene chloride	40	33.1	83	31.8	80	4	75-121/16
78-93-3	Methyl ethyl ketone	160	163	102	166	104	2	70-137/21
1634-04-4	Methyl Tert Butyl Ether	40	38.2	96	38.0	95	1	75-127/16
91-20-3	Naphthalene	40	34.6	87	33.8	85	2	67-127/19
103-65-1	n-Propylbenzene	40	39.1	98	35.0	88	11	75-123/13
100-42-5	Styrene	40	41.2	103	39.5	99	4	78-122/12
994-05-8	Tert-Amyl Methyl Ether	40	42.9	107	42.6	107	1	77-127/13
75-65-0	Tert Butyl Alcohol	200	198	99	208	104	5	61-141/32
630-20-6	1,1,1,2-Tetrachloroethane	40	41.3	103	40.2	101	3	78-124/13
71-55-6	1,1,1-Trichloroethane	40	46.6	117	42.7	107	9	79-128/15
79-34-5	1,1,2,2-Tetrachloroethane	40	37.0	93	36.2	91	2	70-125/14
79-00-5	1,1,2-Trichloroethane	40	38.9	97	38.7	97	1	74-122/13
87-61-6	1,2,3-Trichlorobenzene	40	39.0	98	37.4	94	4	75-128/18
96-18-4	1,2,3-Trichloropropane	40	44.2	111	44.8	112	1	74-125/15
120-82-1	1,2,4-Trichlorobenzene	40	39.3	98	36.8	92	7	77-128/16
95-63-6	1,2,4-Trimethylbenzene	40	38.7	97	35.7	89	8	76-121/13
108-67-8	1,3,5-Trimethylbenzene	40	40.8	102	36.8	92	10	78-123/13
127-18-4	Tetrachloroethylene	40	43.1	108	40.4	101	6	77-125/14
108-88-3	Toluene	40	39.7	99	38.1	95	4	78-120/13
79-01-6	Trichloroethylene	40	44.9	112	42.1	105	6	80-124/13
75-69-4	Trichlorofluoromethane	40	42.3	106	40.4	101	5	78-130/17
75-01-4	Vinyl chloride	40	36.8	92	35.3	88	4	69-136/18
1330-20-7	Xylene (total)	120	123	103	116	97	6	78-122/13

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	99%	100%	75-125%

* = Outside of Control Limits.

5.2.1
 5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1325-BS	L44034.D	1	09/01/15	EA	n/a	n/a	VL1325
VL1325-BSD	L44036.D	1	09/01/15	EA	n/a	n/a	VL1325

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-1, C41481-4, C41481-16, C41481-17, C41481-18

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	90%	91%	80-121%
460-00-4	4-Bromofluorobenzene	105%	106%	71-126%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1134-BS	V27990.D	1	09/02/15	SY	n/a	n/a	VV1134
VV1134-BSD	V27991.D	1	09/02/15	SY	n/a	n/a	VV1134

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	80	61.0	76	65.0	81	6	58-137/12
71-43-2	Benzene	20	19.6	98	20.0	100	2	77-118/10
108-86-1	Bromobenzene	20	20.0	100	21.5	108	7	78-122/10
74-97-5	Bromochloromethane	20	18.9	95	19.5	98	3	76-124/10
75-27-4	Bromodichloromethane	20	19.0	95	19.5	98	3	74-121/10
75-25-2	Bromoform	20	19.8	99	20.6	103	4	58-133/10
104-51-8	n-Butylbenzene	20	20.1	101	20.3	102	1	75-125/10
135-98-8	sec-Butylbenzene	20	20.4	102	21.2	106	4	76-127/10
98-06-6	tert-Butylbenzene	20	20.9	105	21.2	106	1	76-124/10
108-90-7	Chlorobenzene	20	19.3	97	19.8	99	3	77-120/10
75-00-3	Chloroethane	20	13.8	69	14.6	73	6	63-117/10
67-66-3	Chloroform	20	18.4	92	19.1	96	4	74-123/10
95-49-8	o-Chlorotoluene	20	19.1	96	21.4	107	11* a	76-125/10
106-43-4	p-Chlorotoluene	20	19.0	95	20.7	104	9	76-123/10
56-23-5	Carbon tetrachloride	20	19.7	99	19.8	99	1	72-128/11
75-34-3	1,1-Dichloroethane	20	18.0	90	18.5	93	3	70-120/10
75-35-4	1,1-Dichloroethylene	20	19.1	96	19.4	97	2	65-120/11
563-58-6	1,1-Dichloropropene	20	18.0	90	18.2	91	1	69-125/10
96-12-8	1,2-Dibromo-3-chloropropane	20	17.3	87	17.6	88	2	63-128/10
106-93-4	1,2-Dibromoethane	20	19.6	98	20.8	104	6	78-123/10
107-06-2	1,2-Dichloroethane	20	18.6	93	19.2	96	3	72-123/10
78-87-5	1,2-Dichloropropane	20	19.4	97	20.0	100	3	76-119/10
142-28-9	1,3-Dichloropropane	20	20.9	105	21.7	109	4	78-122/10
108-20-3	Di-Isopropyl ether	20	17.6	88	17.9	90	2	69-124/10
594-20-7	2,2-Dichloropropane	20	18.6	93	18.7	94	1	68-129/10
124-48-1	Dibromochloromethane	20	19.1	96	20.2	101	6	75-124/10
75-71-8	Dichlorodifluoromethane	20	10.5	53	10.9	55	4	37-149/21
156-59-2	cis-1,2-Dichloroethylene	20	20.0	100	20.6	103	3	74-121/10
10061-01-5	cis-1,3-Dichloropropene	20	20.2	101	20.9	105	3	76-125/10
541-73-1	m-Dichlorobenzene	20	20.2	101	20.5	103	1	77-121/10
95-50-1	o-Dichlorobenzene	20	19.6	98	19.8	99	1	77-120/10
106-46-7	p-Dichlorobenzene	20	20.0	100	20.6	103	3	78-118/10
156-60-5	trans-1,2-Dichloroethylene	20	17.2	86	17.8	89	3	71-118/10
10061-02-6	trans-1,3-Dichloropropene	20	18.8	94	20.1	101	7	73-122/10
100-41-4	Ethylbenzene	20	19.7	99	20.3	102	3	78-121/10
637-92-3	Ethyl Tert Butyl Ether	20	18.0	90	18.3	92	2	76-130/10

* = Outside of Control Limits.

5.2.2
 5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1134-BS	V27990.D	1	09/02/15	SY	n/a	n/a	VV1134
VV1134-BSD	V27991.D	1	09/02/15	SY	n/a	n/a	VV1134

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-11

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	80	75.8	95	79.4	99	5	71-139/10
87-68-3	Hexachlorobutadiene	20	20.2	101	20.9	105	3	69-127/11
98-82-8	Isopropylbenzene	20	20.1	101	20.1	101	0	77-125/10
99-87-6	p-Isopropyltoluene	20	20.1	101	20.6	103	2	76-125/10
108-10-1	4-Methyl-2-pentanone	80	75.2	94	77.1	96	2	71-132/10
74-83-9	Methyl bromide	20	14.1	71	14.6	73	3	66-123/10
74-87-3	Methyl chloride	20	15.3	77	15.7	79	3	50-138/19
74-95-3	Methylene bromide	20	19.7	99	20.2	101	3	77-125/10
75-09-2	Methylene chloride	20	16.7	84	17.6	88	5	65-124/14
78-93-3	Methyl ethyl ketone	80	69.6	87	72.6	91	4	67-139/11
1634-04-4	Methyl Tert Butyl Ether	20	17.2	86	17.6	88	2	73-124/10
91-20-3	Naphthalene	20	16.9	85	16.9	85	0	68-122/12
103-65-1	n-Propylbenzene	20	19.9	100	20.8	104	4	76-123/10
100-42-5	Styrene	20	19.5	98	20.7	104	6	74-126/10
994-05-8	Tert-Amyl Methyl Ether	20	18.3	92	19.1	96	4	76-127/10
75-65-0	Tert-Butyl Alcohol	100	75.2	75	80.2	80	6	47-161/18
630-20-6	1,1,1,2-Tetrachloroethane	20	19.3	97	19.9	100	3	79-123/10
71-55-6	1,1,1-Trichloroethane	20	19.0	95	19.5	98	3	73-124/10
79-34-5	1,1,2,2-Tetrachloroethane	20	20.1	101	20.6	103	2	77-123/10
79-00-5	1,1,2-Trichloroethane	20	19.6	98	20.6	103	5	77-120/10
87-61-6	1,2,3-Trichlorobenzene	20	17.3	87	17.8	89	3	70-126/11
96-18-4	1,2,3-Trichloropropane	20	18.0	90	19.0	95	5	65-125/10
120-82-1	1,2,4-Trichlorobenzene	20	18.6	93	18.8	94	1	72-123/10
95-63-6	1,2,4-Trimethylbenzene	20	19.6	98	19.9	100	2	77-122/10
108-67-8	1,3,5-Trimethylbenzene	20	20.3	102	21.4	107	5	79-127/10
127-18-4	Tetrachloroethylene	20	20.2	101	20.9	105	3	71-124/10
108-88-3	Toluene	20	19.8	99	21.1	106	6	78-120/10
79-01-6	Trichloroethylene	20	19.4	97	19.5	98	1	75-119/10
75-69-4	Trichlorofluoromethane	20	16.6	83	17.4	87	5	67-129/14
75-01-4	Vinyl chloride	20	15.4	77	15.5	78	1	60-133/15
1330-20-7	Xylene (total)	60	59.0	98	61.7	103	4	78-122/10

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	93%	94%	78-125%

* = Outside of Control Limits.

5.2.2
 5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1134-BS	V27990.D	1	09/02/15	SY	n/a	n/a	VV1134
VV1134-BSD	V27991.D	1	09/02/15	SY	n/a	n/a	VV1134

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-11

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	99%	101%	86-114%
460-00-4	4-Bromofluorobenzene	96%	99%	80-113%

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

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1326-BS	L44068.D	1	09/02/15	XB	n/a	n/a	VL1326
VL1326-BSD	L44069.D	1	09/02/15	XB	n/a	n/a	VL1326

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-2, C41481-3, C41481-9, C41481-10

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	160	184	115	179	112	3	59-143/27
71-43-2	Benzene	40	44.1	110	43.9	110	0	80-122/13
108-86-1	Bromobenzene	40	38.5	96	40.4	101	5	76-122/12
74-97-5	Bromochloromethane	40	47.4	119	46.9	117	1	81-126/13
75-27-4	Bromodichloromethane	40	45.9	115	46.4	116	1	76-124/13
75-25-2	Bromoform	40	45.0	113	45.7	114	2	72-134/14
104-51-8	n-Butylbenzene	40	40.5	101	41.6	104	3	76-122/14
135-98-8	sec-Butylbenzene	40	39.9	100	41.6	104	4	77-124/14
98-06-6	tert-Butylbenzene	40	40.3	101	41.2	103	2	76-124/13
108-90-7	Chlorobenzene	40	40.7	102	40.4	101	1	78-122/12
75-00-3	Chloroethane	40	40.1	100	38.2	96	5	71-126/16
67-66-3	Chloroform	40	48.4	121	46.9	117	3	79-126/13
95-49-8	o-Chlorotoluene	40	38.0	95	39.0	98	3	73-124/15
106-43-4	p-Chlorotoluene	40	39.6	99	41.1	103	4	73-127/16
56-23-5	Carbon tetrachloride	40	49.8	125	49.6	124	0	78-127/15
75-34-3	1,1-Dichloroethane	40	43.3	108	42.3	106	2	76-123/14
75-35-4	1,1-Dichloroethylene	40	38.6	97	37.4	94	3	73-124/15
563-58-6	1,1-Dichloropropene	40	41.7	104	41.3	103	1	78-126/14
96-12-8	1,2-Dibromo-3-chloropropane	40	43.0	108	42.8	107	0	62-127/21
106-93-4	1,2-Dibromoethane	40	41.6	104	42.5	106	2	76-123/13
107-06-2	1,2-Dichloroethane	40	46.8	117	47.0	118	0	74-125/12
78-87-5	1,2-Dichloropropane	40	44.8	112	44.9	112	0	76-123/12
142-28-9	1,3-Dichloropropane	40	42.6	107	43.4	109	2	77-121/13
108-20-3	Di-Isopropyl ether	40	42.5	106	41.4	104	3	71-126/14
594-20-7	2,2-Dichloropropane	40	51.0	128	49.1	123	4	77-132/17
124-48-1	Dibromochloromethane	40	40.7	102	41.5	104	2	73-127/13
75-71-8	Dichlorodifluoromethane	40	32.2	81	30.1	75	7	52-141/20
156-59-2	cis-1,2-Dichloroethylene	40	47.2	118	45.6	114	3	80-124/13
10061-01-5	cis-1,3-Dichloropropene	40	50.1	125	49.6	124	1	77-125/13
541-73-1	m-Dichlorobenzene	40	39.0	98	40.4	101	4	76-123/12
95-50-1	o-Dichlorobenzene	40	38.3	96	39.8	100	4	76-123/12
106-46-7	p-Dichlorobenzene	40	39.1	98	40.3	101	3	77-121/12
156-60-5	trans-1,2-Dichloroethylene	40	39.5	99	38.6	97	2	78-123/15
10061-02-6	trans-1,3-Dichloropropene	40	42.9	107	43.7	109	2	71-122/13
100-41-4	Ethylbenzene	40	42.0	105	42.2	106	0	79-121/13
637-92-3	Ethyl tert-Butyl Ether	40	45.9	115	44.9	112	2	76-131/13

* = Outside of Control Limits.

5.2.3
 5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1326-BS	L44068.D	1	09/02/15	XB	n/a	n/a	VL1326
VL1326-BSD	L44069.D	1	09/02/15	XB	n/a	n/a	VL1326

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-2, C41481-3, C41481-9, C41481-10

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	160	179	112	181	113	1	65-135/20
87-68-3	Hexachlorobutadiene	40	44.2	111	44.9	112	2	77-131/17
98-82-8	Isopropylbenzene	40	43.7	109	44.0	110	1	80-124/14
99-87-6	p-Isopropyltoluene	40	40.4	101	41.8	105	3	78-122/13
108-10-1	4-Methyl-2-pentanone	160	210	131	213	133	1	70-135/18
74-83-9	Methyl bromide	40	38.1	95	35.9	90	6	74-130/15
74-87-3	Methyl chloride	40	37.2	93	35.3	88	5	65-131/22
74-95-3	Methylene bromide	40	48.4	121	48.3	121	0	78-124/13
75-09-2	Methylene chloride	40	36.1	90	35.4	89	2	75-121/16
78-93-3	Methyl ethyl ketone	160	195	122	195	122	0	70-137/21
1634-04-4	Methyl Tert Butyl Ether	40	44.1	110	43.3	108	2	75-127/16
91-20-3	Naphthalene	40	39.1	98	38.8	97	1	67-127/19
103-65-1	n-Propylbenzene	40	38.8	97	39.9	100	3	75-123/13
100-42-5	Styrene	40	42.2	106	42.7	107	1	78-122/12
994-05-8	Tert-Amyl Methyl Ether	40	49.4	124	48.3	121	2	77-127/13
75-65-0	Tert Butyl Alcohol	200	275	138	229	115	18	61-141/32
630-20-6	1,1,1,2-Tetrachloroethane	40	42.7	107	42.9	107	0	78-124/13
71-55-6	1,1,1-Trichloroethane	40	50.9	127	49.6	124	3	79-128/15
79-34-5	1,1,2,2-Tetrachloroethane	40	39.8	100	40.9	102	3	70-125/14
79-00-5	1,1,2-Trichloroethane	40	41.3	103	41.1	103	0	74-122/13
87-61-6	1,2,3-Trichlorobenzene	40	41.9	105	42.1	105	0	75-128/18
96-18-4	1,2,3-Trichloropropane	40	48.4	121	48.9	122	1	74-125/15
120-82-1	1,2,4-Trichlorobenzene	40	41.0	103	41.5	104	1	77-128/16
95-63-6	1,2,4-Trimethylbenzene	40	38.8	97	40.3	101	4	76-121/13
108-67-8	1,3,5-Trimethylbenzene	40	40.7	102	41.9	105	3	78-123/13
127-18-4	Tetrachloroethylene	40	44.3	111	43.8	110	1	77-125/14
108-88-3	Toluene	40	40.8	102	40.9	102	0	78-120/13
79-01-6	Trichloroethylene	40	47.4	119	47.1	118	1	80-124/13
75-69-4	Trichlorofluoromethane	40	47.5	119	44.4	111	7	78-130/17
75-01-4	Vinyl chloride	40	43.8	110	41.4	104	6	69-136/18
1330-20-7	Xylene (total)	120	126	105	126	105	0	78-122/13

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	105%	102%	75-125%

* = Outside of Control Limits.

5.2.3
 5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1326-BS	L44068.D	1	09/02/15	XB	n/a	n/a	VL1326
VL1326-BSD	L44069.D	1	09/02/15	XB	n/a	n/a	VL1326

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-2, C41481-3, C41481-9, C41481-10

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	89%	90%	80-121%
460-00-4	4-Bromofluorobenzene	103%	105%	71-126%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR1408-BS	R37004.D	1	09/03/15	KZ	n/a	n/a	VR1408
VR1408-BSD	R37005.D	1	09/03/15	KZ	n/a	n/a	VR1408

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	80	82.0	103	77.2	97	6	58-137/12
71-43-2	Benzene	20	22.4	112	20.3	102	10	77-118/10
108-86-1	Bromobenzene	20	21.8	109	20.7	104	5	78-122/10
74-97-5	Bromochloromethane	20	22.5	113	20.8	104	8	76-124/10
75-27-4	Bromodichloromethane	20	22.6	113	20.4	102	10	74-121/10
75-25-2	Bromoform	20	20.2	101	18.8	94	7	58-133/10
104-51-8	n-Butylbenzene	20	21.7	109	20.2	101	7	75-125/10
135-98-8	sec-Butylbenzene	20	21.2	106	19.9	100	6	76-127/10
98-06-6	tert-Butylbenzene	20	20.7	104	19.5	98	6	76-124/10
108-90-7	Chlorobenzene	20	21.9	110	20.4	102	7	77-120/10
75-00-3	Chloroethane	20	17.3	87	16.0	80	8	63-117/10
67-66-3	Chloroform	20	21.8	109	19.9	100	9	74-123/10
95-49-8	o-Chlorotoluene	20	21.4	107	20.2	101	6	76-125/10
106-43-4	p-Chlorotoluene	20	21.4	107	21.2	106	1	76-123/10
56-23-5	Carbon tetrachloride	20	25.5	128	23.0	115	10	72-128/11
75-34-3	1,1-Dichloroethane	20	21.2	106	19.4	97	9	70-120/10
75-35-4	1,1-Dichloroethylene	20	22.0	110	20.4	102	8	65-120/11
563-58-6	1,1-Dichloropropene	20	21.2	106	19.4	97	9	69-125/10
96-12-8	1,2-Dibromo-3-chloropropane	20	20.0	100	19.4	97	3	63-128/10
106-93-4	1,2-Dibromoethane	20	22.6	113	21.0	105	7	78-123/10
107-06-2	1,2-Dichloroethane	20	22.0	110	19.8	99	11* a	72-123/10
78-87-5	1,2-Dichloropropane	20	22.6	113	20.5	103	10	76-119/10
142-28-9	1,3-Dichloropropane	20	22.9	115	21.2	106	8	78-122/10
108-20-3	Di-Isopropyl ether	20	20.8	104	19.0	95	9	69-124/10
594-20-7	2,2-Dichloropropane	20	25.1	126	22.8	114	10	68-129/10
124-48-1	Dibromochloromethane	20	23.2	116	21.5	108	8	75-124/10
75-71-8	Dichlorodifluoromethane	20	14.8	74	12.5	63	17	37-149/21
156-59-2	cis-1,2-Dichloroethylene	20	22.9	115	21.2	106	8	74-121/10
10061-01-5	cis-1,3-Dichloropropene	20	25.0	125	22.7	114	10	76-125/10
541-73-1	m-Dichlorobenzene	20	21.7	109	20.5	103	6	77-121/10
95-50-1	o-Dichlorobenzene	20	21.8	109	20.6	103	6	77-120/10
106-46-7	p-Dichlorobenzene	20	21.5	108	20.3	102	6	78-118/10
156-60-5	trans-1,2-Dichloroethylene	20	20.0	100	18.7	94	7	71-118/10
10061-02-6	trans-1,3-Dichloropropene	20	20.3	102	18.7	94	8	73-122/10
100-41-4	Ethylbenzene	20	23.5	118	21.6	108	8	78-121/10
637-92-3	Ethyl Tert Butyl Ether	20	21.5	108	19.7	99	9	76-130/10

* = Outside of Control Limits.

5.2.4
5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR1408-BS	R37004.D	1	09/03/15	KZ	n/a	n/a	VR1408
VR1408-BSD	R37005.D	1	09/03/15	KZ	n/a	n/a	VR1408

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	80	84.0	105	77.7	97	8	71-139/10
87-68-3	Hexachlorobutadiene	20	25.3	127	23.7	119	7	69-127/11
98-82-8	Isopropylbenzene	20	22.1	111	20.3	102	8	77-125/10
99-87-6	p-Isopropyltoluene	20	20.8	104	19.5	98	6	76-125/10
108-10-1	4-Methyl-2-pentanone	80	89.9	112	81.9	102	9	71-132/10
74-83-9	Methyl bromide	20	19.1	96	17.6	88	8	66-123/10
74-87-3	Methyl chloride	20	15.4	77	13.9	70	10	50-138/19
74-95-3	Methylene bromide	20	23.0	115	20.7	104	11* a	77-125/10
75-09-2	Methylene chloride	20	22.8	114	21.1	106	8	65-124/14
78-93-3	Methyl ethyl ketone	80	86.6	108	81.0	101	7	67-139/11
1634-04-4	Methyl Tert Butyl Ether	20	20.3	102	19.0	95	7	73-124/10
91-20-3	Naphthalene	20	19.3	97	18.7	94	3	68-122/12
103-65-1	n-Propylbenzene	20	22.6	113	21.3	107	6	76-123/10
100-42-5	Styrene	20	20.6	103	19.0	95	8	74-126/10
994-05-8	Tert-Amyl Methyl Ether	20	22.4	112	20.8	104	7	76-127/10
75-65-0	Tert-Butyl Alcohol	100	94.9	95	91.3	91	4	47-161/18
630-20-6	1,1,1,2-Tetrachloroethane	20	23.8	119	21.9	110	8	79-123/10
71-55-6	1,1,1-Trichloroethane	20	24.1	121	22.0	110	9	73-124/10
79-34-5	1,1,2,2-Tetrachloroethane	20	21.4	107	20.3	102	5	77-123/10
79-00-5	1,1,2-Trichloroethane	20	21.5	108	19.9	100	8	77-120/10
87-61-6	1,2,3-Trichlorobenzene	20	22.8	114	21.7	109	5	70-126/11
96-18-4	1,2,3-Trichloropropane	20	23.0	115	21.3	107	8	65-125/10
120-82-1	1,2,4-Trichlorobenzene	20	23.0	115	21.8	109	5	72-123/10
95-63-6	1,2,4-Trimethylbenzene	20	20.2	101	19.0	95	6	77-122/10
108-67-8	1,3,5-Trimethylbenzene	20	21.2	106	19.9	100	6	79-127/10
127-18-4	Tetrachloroethylene	20	22.7	114	21.0	105	8	71-124/10
108-88-3	Toluene	20	22.2	111	20.6	103	7	78-120/10
79-01-6	Trichloroethylene	20	22.7	114	20.6	103	10	75-119/10
75-69-4	Trichlorofluoromethane	20	22.4	112	20.2	101	10	67-129/14
75-01-4	Vinyl chloride	20	16.9	85	15.2	76	11	60-133/15
1330-20-7	Xylene (total)	60	69.7	116	64.1	107	8	78-122/10

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	99%	98%	78-125%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR1408-BS	R37004.D	1	09/03/15	KZ	n/a	n/a	VR1408
VR1408-BSD	R37005.D	1	09/03/15	KZ	n/a	n/a	VR1408

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-12

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	97%	97%	86-114%
460-00-4	4-Bromofluorobenzene	100%	100%	80-113%

(a) Outside laboratory control limits.

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1674-BS	M55397.D	1	09/03/15	XB	n/a	n/a	VM1674
VM1674-BSD	M55398.D	1	09/03/15	XB	n/a	n/a	VM1674

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-2, C41481-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
---------	----------	----------------	--------------	----------	--------------	----------	-----	-------------------

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	102%	95%	75-125%
2037-26-5	Toluene-D8	95%	93%	80-121%
460-00-4	4-Bromofluorobenzene	99%	97%	71-126%

* = Outside of Control Limits.

5.2.5
5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1327-BS	L44113.D	1	09/03/15	XB	n/a	n/a	VL1327
VL1327-BSD	L44114.D	1	09/03/15	XB	n/a	n/a	VL1327

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-2, C41481-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
---------	----------	----------------	--------------	----------	--------------	----------	-----	-------------------

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	95%	98%	75-125%
2037-26-5	Toluene-D8	97%	98%	80-121%
460-00-4	4-Bromofluorobenzene	98%	98%	71-126%

* = Outside of Control Limits.

5.2.6
 5

Laboratory Control Sample Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1325-LCS	L44037.D	1	09/01/15	EA	n/a	n/a	VL1325

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-1, C41481-4, C41481-16, C41481-17, C41481-18

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
	TPH-GRO (C6-C10)	250	221	88	50-150

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	75-125%
2037-26-5	Toluene-D8	89%	80-121%
460-00-4	4-Bromofluorobenzene	103%	71-126%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1134-LCS	V27992.D	1	09/02/15	SY	n/a	n/a	VV1134

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-11

CAS No.	Compound	Spike ug/l	LCS ug/l	LCS %	Limits
	TPH-GRO (C6-C10)	125	102	82	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	93%	78-125%
2037-26-5	Toluene-D8	100%	86-114%
460-00-4	4-Bromofluorobenzene	96%	80-113%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1326-LCS	L44070.D	1	09/02/15	XB	n/a	n/a	VL1326

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-2, C41481-3, C41481-9, C41481-10

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
	TPH-GRO (C6-C10)	250	204	82	50-150

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	75-125%
2037-26-5	Toluene-D8	91%	80-121%
460-00-4	4-Bromofluorobenzene	103%	71-126%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR1408-LCS	R37008.D	1	09/03/15	KZ	n/a	n/a	VR1408

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-12

CAS No.	Compound	Spike ug/l	LCS ug/l	LCS %	Limits
	TPH-GRO (C6-C10)	125	124	99	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	96%	78-125%
2037-26-5	Toluene-D8	101%	86-114%
460-00-4	4-Bromofluorobenzene	89%	80-113%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1674-LCS	M55400.D	1	09/03/15	XB	n/a	n/a	VM1674

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-2, C41481-3

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
	TPH-GRO (C6-C10)	250	206	82	50-150

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	97%	75-125%
2037-26-5	Toluene-D8	97%	80-121%
460-00-4	4-Bromofluorobenzene	103%	71-126%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1327-LCS	L44115.D	1	09/03/15	XB	n/a	n/a	VL1327

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-2, C41481-3

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
---------	----------	----------------	--------------	----------	--------

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	93%	75-125%
2037-26-5	Toluene-D8	99%	80-121%
460-00-4	4-Bromofluorobenzene	98%	71-126%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D74435-2MS	L44054.D	1	09/02/15	EA	n/a	n/a	VL1325
D74435-2MSD	L44055.D	1	09/02/15	EA	n/a	n/a	VL1325
D74435-2	L44045.D	1	09/01/15	EA	n/a	n/a	VL1325

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-1, C41481-4, C41481-16, C41481-17, C41481-18

CAS No.	Compound	D74435-2 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	165		188	395	122	187	378	4	59-143/27
71-43-2	Benzene	3.7	J	46.9	39.9	77* a	46.8	39.4	1	80-122/13
108-86-1	Bromobenzene	ND		46.9	27.0	58* a	46.8	24.0	12	76-122/12
74-97-5	Bromochloromethane	ND		46.9	40.3	86	46.8	37.9	6	81-126/13
75-27-4	Bromodichloromethane	ND		46.9	38.5	82	46.8	36.6	5	76-124/13
75-25-2	Bromoform	ND		46.9	35.5	76	46.8	31.7	11	72-134/14
104-51-8	n-Butylbenzene	ND		46.9	18.2	39* a	46.8	15.7	15* a	76-122/14
135-98-8	sec-Butylbenzene	ND		46.9	22.0	47* a	46.8	19.2	14	77-124/14
98-06-6	tert-Butylbenzene	ND		46.9	29.7	63* a	46.8	27.3	8	76-124/13
108-90-7	Chlorobenzene	ND		46.9	30.0	64* a	46.8	26.8	11	78-122/12
75-00-3	Chloroethane	ND		46.9	30.7	65* a	46.8	28.5	7	71-126/16
67-66-3	Chloroform	ND		46.9	40.5	86	46.8	38.0	6	79-126/13
95-49-8	o-Chlorotoluene	ND		46.9	25.6	55* a	46.8	22.5	13	73-124/15
106-43-4	p-Chlorotoluene	ND		46.9	23.6	50* a	46.8	20.3	15	73-127/16
56-23-5	Carbon tetrachloride	ND		46.9	38.3	82	46.8	36.6	5	78-127/15
75-34-3	1,1-Dichloroethane	ND		46.9	36.8	78	46.8	34.7	6	76-123/14
75-35-4	1,1-Dichloroethylene	ND		46.9	31.4	67* a	46.8	30.0	5	73-124/15
563-58-6	1,1-Dichloropropene	ND		46.9	32.7	70* a	46.8	30.6	7	78-126/14
96-12-8	1,2-Dibromo-3-chloropropane	ND		46.9	30.6	65	46.8	27.5	11	62-127/21
106-93-4	1,2-Dibromoethane	ND		46.9	35.5	76	46.8	32.9	8	76-123/13
107-06-2	1,2-Dichloroethane	ND		46.9	39.7	85	46.8	38.7	3	74-125/12
78-87-5	1,2-Dichloropropane	ND		46.9	38.8	83	46.8	36.8	5	76-123/12
142-28-9	1,3-Dichloropropane	ND		46.9	37.0	79	46.8	34.6	7	77-121/13
108-20-3	Di-Isopropyl ether	ND		46.9	37.7	80	46.8	35.6	6	71-126/14
594-20-7	2,2-Dichloropropane	ND		46.9	38.5	82	46.8	36.0	7	77-132/17
124-48-1	Dibromochloromethane	ND		46.9	34.1	73	46.8	31.3	9	73-127/13
75-71-8	Dichlorodifluoromethane	ND		46.9	29.3	62	46.8	27.2	7	52-141/20
156-59-2	cis-1,2-Dichloroethylene	ND		46.9	39.7	85	46.8	36.8	8	80-124/13
10061-01-5	cis-1,3-Dichloropropene	ND		46.9	39.3	84	46.8	37.4	5	77-125/13
541-73-1	m-Dichlorobenzene	ND		46.9	21.2	45* a	46.8	17.8	17* a	76-123/12
95-50-1	o-Dichlorobenzene	ND		46.9	21.8	46* a	46.8	18.5	16* a	76-123/12
106-46-7	p-Dichlorobenzene	ND		46.9	21.4	46* a	46.8	17.9	18* a	77-121/12
156-60-5	trans-1,2-Dichloroethylene	ND		46.9	32.2	69* a	46.8	30.1	7	78-123/15
10061-02-6	trans-1,3-Dichloropropene	ND		46.9	34.7	74	46.8	31.7	9	71-122/13
100-41-4	Ethylbenzene	24.4		46.9	60.5	77* a	46.8	64.7	7	79-121/13
637-92-3	Ethyl tert-Butyl Ether	ND		46.9	40.8	87	46.8	39.1	4	76-131/13

* = Outside of Control Limits.

5.4.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D74435-2MS	L44054.D	1	09/02/15	EA	n/a	n/a	VL1325
D74435-2MSD	L44055.D	1	09/02/15	EA	n/a	n/a	VL1325
D74435-2	L44045.D	1	09/01/15	EA	n/a	n/a	VL1325

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-1, C41481-4, C41481-16, C41481-17, C41481-18

CAS No.	Compound	D74435-2 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD	
591-78-6	2-Hexanone	ND		188	157	84	187	148	79	6	65-135/20
87-68-3	Hexachlorobutadiene	ND		46.9	10.2	22* a	46.8	9.2	20* a	10	77-131/17
98-82-8	Isopropylbenzene	1.1	J	46.9	31.3	64* a	46.8	28.6	59* a	9	80-124/14
99-87-6	p-Isopropyltoluene	ND		46.9	22.2	47* a	46.8	19.4	41* a	13	78-122/13
108-10-1	4-Methyl-2-pentanone	ND		188	180	96	187	175	94	3	70-135/18
74-83-9	Methyl bromide	ND		46.9	31.3	67* a	46.8	28.9	62* a	8	74-130/15
74-87-3	Methyl chloride	ND		46.9	33.9	72	46.8	30.6	65	10	65-131/22
74-95-3	Methylene bromide	ND		46.9	40.7	87	46.8	39.2	84	4	78-124/13
75-09-2	Methylene chloride	ND		46.9	53.8	115	46.8	56.6	121	5	75-121/16
78-93-3	Methyl ethyl ketone	28.5		188	208	96	187	202	93	3	70-137/21
1634-04-4	Methyl Tert Butyl Ether	ND		46.9	39.5	84	46.8	38.1	81	4	75-127/16
91-20-3	Naphthalene	ND		46.9	17.3	37* a	46.8	13.8	30* a	23* a	67-127/19
103-65-1	n-Propylbenzene	2.2	J	46.9	27.5	54* a	46.8	25.1	49* a	9	75-123/13
100-42-5	Styrene	ND		46.9	28.6	61* a	46.8	24.7	53* a	15* a	78-122/12
994-05-8	Tert-Amyl Methyl Ether	ND		46.9	43.5	93	46.8	41.6	89	4	77-127/13
75-65-0	Tert Butyl Alcohol	ND		235	228	97	234	215	92	6	61-141/32
630-20-6	1,1,1,2-Tetrachloroethane	ND		46.9	35.3	75* a	46.8	32.1	69* a	9	78-124/13
71-55-6	1,1,1-Trichloroethane	ND		46.9	40.7	87	46.8	38.2	82	6	79-128/15
79-34-5	1,1,2,2-Tetrachloroethane	ND		46.9	32.0	68* a	46.8	29.5	63* a	8	70-125/14
79-00-5	1,1,2-Trichloroethane	ND		46.9	36.0	77	46.8	33.3	71* a	8	74-122/13
87-61-6	1,2,3-Trichlorobenzene	ND		46.9	14.1	30* a	46.8	11.0	24* a	25* a	75-128/18
96-18-4	1,2,3-Trichloropropane	ND		46.9	40.8	87	46.8	37.8	81	8	74-125/15
120-82-1	1,2,4-Trichlorobenzene	ND		46.9	13.7	29* a	46.8	10.4	22* a	27* a	77-128/16
95-63-6	1,2,4-Trimethylbenzene	9.7		46.9	36.5	57* a	46.8	35.6	55* a	2	76-121/13
108-67-8	1,3,5-Trimethylbenzene	3.6	J	46.9	30.9	58* a	46.8	29.0	54* a	6	78-123/13
127-18-4	Tetrachloroethylene	ND		46.9	39.7	85	46.8	34.6	74* a	14	77-125/14
108-88-3	Toluene	0.85	J	46.9	35.5	74* a	46.8	33.0	69* a	7	78-120/13
79-01-6	Trichloroethylene	ND		46.9	37.1	79* a	46.8	35.4	76* a	5	80-124/13
75-69-4	Trichlorofluoromethane	ND		46.9	40.2	86	46.8	36.4	78	10	78-130/17
75-01-4	Vinyl chloride	ND		46.9	41.4	88	46.8	37.9	81	9	69-136/18
1330-20-7	Xylene (total)	80.5		141	189	77* a	140	201	86	6	78-122/13
	TPH-GRO (C6-C10)	266		293	ND	-91* a	292	ND	-91* a	nc	50-150/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D74435-2MS	L44054.D	1	09/02/15	EA	n/a	n/a	VL1325
D74435-2MSD	L44055.D	1	09/02/15	EA	n/a	n/a	VL1325
D74435-2	L44045.D	1	09/01/15	EA	n/a	n/a	VL1325

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-1, C41481-4, C41481-16, C41481-17, C41481-18

CAS No.	Surrogate Recoveries	MS	MSD	D74435-2	Limits
1868-53-7	Dibromofluoromethane	103%	101%	101%	75-125%
2037-26-5	Toluene-D8	92%	91%	88%	80-121%
460-00-4	4-Bromofluorobenzene	108%	108%	103%	71-126%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C41446-1MS	V28010.D	5	09/02/15	SY	n/a	n/a	VV1134
C41446-1MSD	V28011.D	5	09/02/15	SY	n/a	n/a	VV1134
C41446-1 ^a	V27998.D	5	09/02/15	SY	n/a	n/a	VV1134

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-11

CAS No.	Compound	C41446-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	400	356	89	400	357	89	0	58-137/12
71-43-2	Benzene	ND	100	99.2	99	100	100	100	1	77-118/10
108-86-1	Bromobenzene	ND	100	101	101	100	105	105	4	78-122/10
74-97-5	Bromochloromethane	ND	100	95.1	95	100	98.1	98	3	76-124/10
75-27-4	Bromodichloromethane	ND	100	96.4	96	100	97.5	98	1	74-121/10
75-25-2	Bromoform	ND	100	105	105	100	109	109	4	58-133/10
104-51-8	n-Butylbenzene	ND	100	97.4	97	100	100	100	3	75-125/10
135-98-8	sec-Butylbenzene	ND	100	103	103	100	102	102	1	76-127/10
98-06-6	tert-Butylbenzene	ND	100	104	104	100	104	104	0	76-124/10
108-90-7	Chlorobenzene	ND	100	100	100	100	102	102	2	77-120/10
75-00-3	Chloroethane	ND	100	72.9	73	100	73.1	73	0	63-117/10
67-66-3	Chloroform	1.1	J 100	93.3	92	100	95.9	95	3	74-123/10
95-49-8	o-Chlorotoluene	ND	100	102	102	100	99.5	100	2	76-125/10
106-43-4	p-Chlorotoluene	ND	100	97.2	97	100	99.2	99	2	76-123/10
56-23-5	Carbon tetrachloride	ND	100	99.7	100	100	98.8	99	1	72-128/11
75-34-3	1,1-Dichloroethane	ND	100	91.6	92	100	93.9	94	2	70-120/10
75-35-4	1,1-Dichloroethylene	ND	100	94.5	95	100	94.5	95	0	65-120/11
563-58-6	1,1-Dichloropropene	ND	100	90.2	90	100	89.8	90	0	69-125/10
96-12-8	1,2-Dibromo-3-chloropropane	ND	100	91.8	92	100	94.3	94	3	63-128/10
106-93-4	1,2-Dibromoethane	ND	100	101	101	100	103	103	2	78-123/10
107-06-2	1,2-Dichloroethane	ND	100	94.6	95	100	96.5	97	2	72-123/10
78-87-5	1,2-Dichloropropane	ND	100	98.0	98	100	99.4	99	1	76-119/10
142-28-9	1,3-Dichloropropane	ND	100	105	105	100	107	107	2	78-122/10
108-20-3	Di-Isopropyl ether	ND	100	88.6	89	100	91.7	92	3	69-124/10
594-20-7	2,2-Dichloropropane	ND	100	85.8	86	100	86.3	86	1	68-129/10
124-48-1	Dibromochloromethane	ND	100	98.7	99	100	102	102	3	75-124/10
75-71-8	Dichlorodifluoromethane	ND	100	51.9	52	100	55.5	56	7	37-149/21
156-59-2	cis-1,2-Dichloroethylene	145	100	233	88	100	245	100	5	74-121/10
10061-01-5	cis-1,3-Dichloropropene	ND	100	99.6	100	100	103	103	3	76-125/10
541-73-1	m-Dichlorobenzene	ND	100	101	101	100	103	103	2	77-121/10
95-50-1	o-Dichlorobenzene	ND	100	98.1	98	100	101	101	3	77-120/10
106-46-7	p-Dichlorobenzene	ND	100	101	101	100	103	103	2	78-118/10
156-60-5	trans-1,2-Dichloroethylene	ND	100	88.8	89	100	89.4	89	1	71-118/10
10061-02-6	trans-1,3-Dichloropropene	ND	100	95.1	95	100	99.5	100	5	73-122/10
100-41-4	Ethylbenzene	ND	100	102	102	100	101	101	1	78-121/10
637-92-3	Ethyl Tert Butyl Ether	ND	100	92.0	92	100	93.4	93	2	76-130/10

* = Outside of Control Limits.

5.4.2
 5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C41446-1MS	V28010.D	5	09/02/15	SY	n/a	n/a	VV1134
C41446-1MSD	V28011.D	5	09/02/15	SY	n/a	n/a	VV1134
C41446-1 ^a	V27998.D	5	09/02/15	SY	n/a	n/a	VV1134

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-11

CAS No.	Compound	C41446-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	ND	400	405	101	400	410	103	1	71-139/10
87-68-3	Hexachlorobutadiene	ND	100	98.7	99	100	102	102	3	69-127/11
98-82-8	Isopropylbenzene	ND	100	99.8	100	100	103	103	3	77-125/10
99-87-6	p-Isopropyltoluene	ND	100	99.6	100	100	103	103	3	76-125/10
108-10-1	4-Methyl-2-pentanone	ND	400	391	98	400	392	98	0	71-132/10
74-83-9	Methyl bromide	ND	100	72.3	72	100	72.3	72	0	66-123/10
74-87-3	Methyl chloride	ND	100	79.7	80	100	78.6	79	1	50-138/19
74-95-3	Methylene bromide	ND	100	101	101	100	101	101	0	77-125/10
75-09-2	Methylene chloride	ND	100	86.9	87	100	87.9	88	1	65-124/14
78-93-3	Methyl ethyl ketone	ND	400	373	93	400	377	94	1	67-139/11
1634-04-4	Methyl Tert Butyl Ether	ND	100	89.0	89	100	90.0	90	1	73-124/10
91-20-3	Naphthalene	ND	100	85.7	86	100	89.0	89	4	68-122/12
103-65-1	n-Propylbenzene	ND	100	101	101	100	102	102	1	76-123/10
100-42-5	Styrene	ND	100	97.9	98	100	102	102	4	74-126/10
994-05-8	Tert-Amyl Methyl Ether	ND	100	92.3	92	100	94.2	94	2	76-127/10
75-65-0	Tert-Butyl Alcohol	ND	500	405	81	500	428	86	6	47-161/18
630-20-6	1,1,1,2-Tetrachloroethane	ND	100	101	101	100	102	102	1	79-123/10
71-55-6	1,1,1-Trichloroethane	ND	100	94.1	94	100	96.4	96	2	73-124/10
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	102	102	100	104	104	2	77-123/10
79-00-5	1,1,2-Trichloroethane	ND	100	101	101	100	105	105	4	77-120/10
87-61-6	1,2,3-Trichlorobenzene	ND	100	87.3	87	100	93.3	93	7	70-126/11
96-18-4	1,2,3-Trichloropropane	ND	100	91.9	92	100	92.8	93	1	65-125/10
120-82-1	1,2,4-Trichlorobenzene	ND	100	92.3	92	100	96.2	96	4	72-123/10
95-63-6	1,2,4-Trimethylbenzene	ND	100	98.3	98	100	99.6	100	1	77-122/10
108-67-8	1,3,5-Trimethylbenzene	ND	100	102	102	100	105	105	3	79-127/10
127-18-4	Tetrachloroethylene	12.9	100	109	96	100	112	99	3	71-124/10
108-88-3	Toluene	ND	100	101	101	100	103	103	2	78-120/10
79-01-6	Trichloroethylene	4.3	J 100	101	97	100	102	98	1	75-119/10
75-69-4	Trichlorofluoromethane	ND	100	84.7	85	100	89.6	90	6	67-129/14
75-01-4	Vinyl chloride	ND	100	78.3	78	100	80.2	80	2	60-133/15
1330-20-7	Xylene (total)	ND	300	297	99	300	309	103	4	78-122/10

CAS No.	Surrogate Recoveries	MS	MSD	C41446-1	Limits
1868-53-7	Dibromofluoromethane	94%	96%	93%	78-125%

* = Outside of Control Limits.

5.4.2
 5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C41446-1MS	V28010.D	5	09/02/15	SY	n/a	n/a	VV1134
C41446-1MSD	V28011.D	5	09/02/15	SY	n/a	n/a	VV1134
C41446-1 ^a	V27998.D	5	09/02/15	SY	n/a	n/a	VV1134

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-11

CAS No.	Surrogate Recoveries	MS	MSD	C41446-1	Limits
2037-26-5	Toluene-D8	99%	100%	101%	86-114%
460-00-4	4-Bromofluorobenzene	97%	98%	96%	80-113%

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D74435-13MS	L44088.D	1	09/03/15	XB	n/a	n/a	VL1326
D74435-13MSD	L44089.D	1	09/03/15	XB	n/a	n/a	VL1326
D74435-13	L44086.D	1	09/02/15	XB	n/a	n/a	VL1326

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-2, C41481-3, C41481-9, C41481-10

CAS No.	Compound	D74435-13 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD	
67-64-1	Acetone	ND		11400	12600	110	11400	13600	119	8	59-143/27
71-43-2	Benzene	ND		2850	2990	105	2850	3060	107	2	80-122/13
108-86-1	Bromobenzene	ND		2850	4080	143* a	2850	2880	101	34* a	76-122/12
74-97-5	Bromochloromethane	ND		2850	3400	119	2850	3360	118	1	81-126/13
75-27-4	Bromodichloromethane	ND		2850	3340	117	2850	3370	118	1	76-124/13
75-25-2	Bromoform	ND		2850	3100	109	2850	3140	110	1	72-134/14
104-51-8	n-Butylbenzene	80.2	J	2850	2630	89	2850	2790	95	6	76-122/14
135-98-8	sec-Butylbenzene	ND		2850	2630	92	2850	2790	98	6	77-124/14
98-06-6	tert-Butylbenzene	ND		2850	2690	94	2850	2860	100	6	76-124/13
108-90-7	Chlorobenzene	ND		2850	2820	99	2850	2840	100	1	78-122/12
75-00-3	Chloroethane	ND		2850	2330	82	2850	2280	80	2	71-126/16
67-66-3	Chloroform	ND		2850	3200	112	2850	3330	117	4	79-126/13
95-49-8	o-Chlorotoluene	ND		2850	2520	88	2850	2680	94	6	73-124/15
106-43-4	p-Chlorotoluene	ND		2850	2630	92	2850	2750	96	4	73-127/16
56-23-5	Carbon tetrachloride	ND		2850	3160	111	2850	3210	113	2	78-127/15
75-34-3	1,1-Dichloroethane	ND		2850	2900	102	2850	2970	104	2	76-123/14
75-35-4	1,1-Dichloroethylene	ND		2850	2430	85	2850	2510	88	3	73-124/15
563-58-6	1,1-Dichloropropene	ND		2850	2730	96	2850	2750	96	1	78-126/14
96-12-8	1,2-Dibromo-3-chloropropane	ND		2850	2670	94	2850	3140	110	16	62-127/21
106-93-4	1,2-Dibromoethane	ND		2850	2940	103	2850	2950	103	0	76-123/13
107-06-2	1,2-Dichloroethane	ND		2850	3220	113	2850	3330	117	3	74-125/12
78-87-5	1,2-Dichloropropane	ND		2850	3130	110	2850	3210	113	3	76-123/12
142-28-9	1,3-Dichloropropane	ND		2850	3010	106	2850	3060	107	2	77-121/13
108-20-3	Di-Isopropyl ether	ND		2850	2910	102	2850	3020	106	4	71-126/14
594-20-7	2,2-Dichloropropane	ND		2850	3020	106	2850	3080	108	2	77-132/17
124-48-1	Dibromochloromethane	ND		2850	2980	104	2850	2940	103	1	73-127/13
75-71-8	Dichlorodifluoromethane	ND		2850	2160	76	2850	2040	72	6	52-141/20
156-59-2	cis-1,2-Dichloroethylene	ND		2850	3180	111	2850	3300	116	4	80-124/13
10061-01-5	cis-1,3-Dichloropropene	ND		2850	3390	119	2850	3490	122	3	77-125/13
541-73-1	m-Dichlorobenzene	ND		2850	2540	89	2850	2730	96	7	76-123/12
95-50-1	o-Dichlorobenzene	ND		2850	2560	90	2850	2770	97	8	76-123/12
106-46-7	p-Dichlorobenzene	ND		2850	2570	90	2850	2740	96	6	77-121/12
156-60-5	trans-1,2-Dichloroethylene	ND		2850	2560	90	2850	2660	93	4	78-123/15
10061-02-6	trans-1,3-Dichloropropene	ND		2850	2980	104	2850	2980	104	0	71-122/13
100-41-4	Ethylbenzene	ND		2850	2880	101	2850	2870	101	0	79-121/13
637-92-3	Ethyl tert-Butyl Ether	ND		2850	3140	110	2850	3270	115	4	76-131/13

* = Outside of Control Limits.

5.4.3
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D74435-13MS	L44088.D	1	09/03/15	XB	n/a	n/a	VL1326
D74435-13MSD	L44089.D	1	09/03/15	XB	n/a	n/a	VL1326
D74435-13	L44086.D	1	09/02/15	XB	n/a	n/a	VL1326

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-2, C41481-3, C41481-9, C41481-10

CAS No.	Compound	D74435-13 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	ND		11400	13200	116	11400	14100	7	65-135/20
87-68-3	Hexachlorobutadiene	ND		2850	2820	99	2850	3020	7	77-131/17
98-82-8	Isopropylbenzene	ND		2850	2990	105	2850	2970	1	80-124/14
99-87-6	p-Isopropyltoluene	ND		2850	2630	92	2850	2780	6	78-122/13
108-10-1	4-Methyl-2-pentanone	ND		11400	14000	123	11400	14900	6	70-135/18
74-83-9	Methyl bromide	ND		2850	2460	86	2850	2420	2	74-130/15
74-87-3	Methyl chloride	ND		2850	2450	86	2850	2370	3	65-131/22
74-95-3	Methylene bromide	ND		2850	3340	117	2850	3450	3	78-124/13
75-09-2	Methylene chloride	ND		2850	2430	85	2850	2540	4	75-121/16
78-93-3	Methyl ethyl ketone	ND		11400	13500	118	11400	14100	4	70-137/21
1634-04-4	Methyl Tert Butyl Ether	ND		2850	2950	103	2850	3120	6	75-127/16
91-20-3	Naphthalene	284	J	2850	2780	88	2850	3120	12	67-127/19
103-65-1	n-Propylbenzene	84.9	J	2850	2610	89	2850	2740	5	75-123/13
100-42-5	Styrene	ND		2850	2940	103	2850	2970	1	78-122/12
994-05-8	Tert-Amyl Methyl Ether	ND		2850	3350	117	2850	3550	6	77-127/13
75-65-0	Tert Butyl Alcohol	ND		14300	16600	116	14300	19500	16	61-141/32
630-20-6	1,1,1,2-Tetrachloroethane	ND		2850	2970	104	2850	2980	0	78-124/13
71-55-6	1,1,1-Trichloroethane	ND		2850	3280	115	2850	3360	2	79-128/15
79-34-5	1,1,2,2-Tetrachloroethane	ND		2850	2670	94	2850	3020	12	70-125/14
79-00-5	1,1,2-Trichloroethane	ND		2850	3100	109	2850	3170	2	74-122/13
87-61-6	1,2,3-Trichlorobenzene	ND		2850	2720	95	2850	3010	10	75-128/18
96-18-4	1,2,3-Trichloropropane	ND		2850	3260	114	2850	3360	3	74-125/15
120-82-1	1,2,4-Trichlorobenzene	ND		2850	2620	92	2850	2840	8	77-128/16
95-63-6	1,2,4-Trimethylbenzene	ND		2850	2550	89	2850	2730	7	76-121/13
108-67-8	1,3,5-Trimethylbenzene	ND		2850	2730	96	2850	2850	4	78-123/13
127-18-4	Tetrachloroethylene	ND		2850	3600	126* a	2850	3480	3	77-125/14
108-88-3	Toluene	ND		2850	2820	99	2850	2800	1	78-120/13
79-01-6	Trichloroethylene	ND		2850	3170	111	2850	3270	3	80-124/13
75-69-4	Trichlorofluoromethane	ND		2850	3160	111	2850	3140	1	78-130/17
75-01-4	Vinyl chloride	ND		2850	2080	73	2850	2010	3	69-136/18
1330-20-7	Xylene (total)	ND		8560	8630	101	8560	8600	0	78-122/13
	TPH-GRO (C6-C10)	34200		17800	ND	-192* a	17800	ND	nc	50-150/30

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D74435-13MS	L44088.D	1	09/03/15	XB	n/a	n/a	VL1326
D74435-13MSD	L44089.D	1	09/03/15	XB	n/a	n/a	VL1326
D74435-13	L44086.D	1	09/02/15	XB	n/a	n/a	VL1326

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-2, C41481-3, C41481-9, C41481-10

CAS No.	Surrogate Recoveries	MS	MSD	D74435-13	Limits
1868-53-7	Dibromofluoromethane	103%	103%	98%	75-125%
2037-26-5	Toluene-D8	91%	89%	89%	80-121%
460-00-4	4-Bromofluorobenzene	110%	107%	107%	71-126%

(a) Outside laboratory control limits.

* = Outside of Control Limits.

5.4.3
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C41472-1MS	R37016.D	2.5	09/03/15	KZ	n/a	n/a	VR1408
C41472-1MSD	R37017.D	2.5	09/03/15	KZ	n/a	n/a	VR1408
C41472-1	R37011.D	2.5	09/03/15	KZ	n/a	n/a	VR1408

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-12

CAS No.	Compound	C41472-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	756	200	784	14* a	200	758	1* a	3	58-137/12
71-43-2	Benzene	0.96	50	57.9	114	50	56.8	112	2	77-118/10
108-86-1	Bromobenzene	ND	50	57.3	115	50	58.3	117	2	78-122/10
74-97-5	Bromochloromethane	ND	50	58.5	117	50	57.7	115	1	76-124/10
75-27-4	Bromodichloromethane	ND	50	53.8	108	50	52.4	105	3	74-121/10
75-25-2	Bromoform	ND	50	41.8	84	50	42.2	84	1	58-133/10
104-51-8	n-Butylbenzene	ND	50	55.9	112	50	57.7	115	3	75-125/10
135-98-8	sec-Butylbenzene	ND	50	55.3	111	50	57.1	114	3	76-127/10
98-06-6	tert-Butylbenzene	ND	50	53.5	107	50	55.2	110	3	76-124/10
108-90-7	Chlorobenzene	ND	50	56.8	114	50	56.5	113	1	77-120/10
75-00-3	Chloroethane	ND	50	45.8	92	50	44.2	88	4	63-117/10
67-66-3	Chloroform	ND	50	55.0	110	50	53.6	107	3	74-123/10
95-49-8	o-Chlorotoluene	ND	50	56.2	112	50	57.2	114	2	76-125/10
106-43-4	p-Chlorotoluene	ND	50	55.8	112	50	56.6	113	1	76-123/10
56-23-5	Carbon tetrachloride	ND	50	62.0	124	50	61.4	123	1	72-128/11
75-34-3	1,1-Dichloroethane	33.4	50	82.8	99	50	78.4	90	5	70-120/10
75-35-4	1,1-Dichloroethylene	14.8	50	73.4	117	50	71.9	114	2	65-120/11
563-58-6	1,1-Dichloropropene	ND	50	54.4	109	50	53.4	107	2	69-125/10
96-12-8	1,2-Dibromo-3-chloropropane	ND	50	50.7	101	50	49.5	99	2	63-128/10
106-93-4	1,2-Dibromoethane	ND	50	56.4	113	50	55.8	112	1	78-123/10
107-06-2	1,2-Dichloroethane	5.7	50	56.3	101	50	54.1	97	4	72-123/10
78-87-5	1,2-Dichloropropane	ND	50	56.5	113	50	54.8	110	3	76-119/10
142-28-9	1,3-Dichloropropane	ND	50	56.5	113	50	55.3	111	2	78-122/10
108-20-3	Di-Isopropyl ether	ND	50	51.8	104	50	50.3	101	3	69-124/10
594-20-7	2,2-Dichloropropane	ND	50	64.2	128	50	62.8	126	2	68-129/10
124-48-1	Dibromochloromethane	ND	50	52.9	106	50	52.5	105	1	75-124/10
75-71-8	Dichlorodifluoromethane	ND	50	32.2	64	50	28.9	58	11	37-149/21
156-59-2	cis-1,2-Dichloroethylene	2.7	50	61.9	118	50	61.0	117	1	74-121/10
10061-01-5	cis-1,3-Dichloropropene	ND	50	58.9	118	50	57.4	115	3	76-125/10
541-73-1	m-Dichlorobenzene	ND	50	56.7	113	50	57.5	115	1	77-121/10
95-50-1	o-Dichlorobenzene	ND	50	56.7	113	50	57.2	114	1	77-120/10
106-46-7	p-Dichlorobenzene	ND	50	56.0	112	50	56.9	114	2	78-118/10
156-60-5	trans-1,2-Dichloroethylene	ND	50	53.0	106	50	52.8	106	0	71-118/10
10061-02-6	trans-1,3-Dichloropropene	ND	50	45.9	92	50	45.2	90	2	73-122/10
100-41-4	Ethylbenzene	ND	50	59.7	119	50	59.5	119	0	78-121/10
637-92-3	Ethyl Tert Butyl Ether	ND	50	54.0	108	50	52.6	105	3	76-130/10

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C41472-1MS	R37016.D	2.5	09/03/15	KZ	n/a	n/a	VR1408
C41472-1MSD	R37017.D	2.5	09/03/15	KZ	n/a	n/a	VR1408
C41472-1	R37011.D	2.5	09/03/15	KZ	n/a	n/a	VR1408

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-12

CAS No.	Compound	C41472-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	ND	200	200	100	200	196	98	2	71-139/10
87-68-3	Hexachlorobutadiene	ND	50	68.4	137* b	50	74.0	148* b	8	69-127/11
98-82-8	Isopropylbenzene	ND	50	55.7	111	50	55.4	111	1	77-125/10
99-87-6	p-Isopropyltoluene	17.3	50	72.1	110	50	76.9	119	6	76-125/10
108-10-1	4-Methyl-2-pentanone	4.2	200	217	106	200	209	102	4	71-132/10
74-83-9	Methyl bromide	ND	50	48.2	96	50	45.8	92	5	66-123/10
74-87-3	Methyl chloride	1.0	50	37.7	73	50	35.1	68	7	50-138/19
74-95-3	Methylene bromide	ND	50	55.9	112	50	54.3	109	3	77-125/10
75-09-2	Methylene chloride	ND	50	58.4	117	50	56.8	114	3	65-124/14
78-93-3	Methyl ethyl ketone	167	200	360	97	200	357	95	1	67-139/11
1634-04-4	Methyl Tert Butyl Ether	ND	50	51.6	103	50	50.7	101	2	73-124/10
91-20-3	Naphthalene	ND	50	53.2	106	50	52.4	105	2	68-122/12
103-65-1	n-Propylbenzene	ND	50	58.4	117	50	60.1	120	3	76-123/10
100-42-5	Styrene	ND	50	33.1	66* b	50	35.5	71* b	7	74-126/10
994-05-8	Tert-Amyl Methyl Ether	ND	50	57.0	114	50	55.9	112	2	76-127/10
75-65-0	Tert-Butyl Alcohol	ND	250	203	81	250	209	84	3	47-161/18
630-20-6	1,1,1,2-Tetrachloroethane	ND	50	59.7	119	50	59.0	118	1	79-123/10
71-55-6	1,1,1-Trichloroethane	ND	50	61.4	123	50	60.1	120	2	73-124/10
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	54.4	109	50	54.7	109	1	77-123/10
79-00-5	1,1,2-Trichloroethane	2.7	50	55.5	106	50	54.2	103	2	77-120/10
87-61-6	1,2,3-Trichlorobenzene	ND	50	60.1	120	50	60.0	120	0	70-126/11
96-18-4	1,2,3-Trichloropropane	ND	50	47.5	95	50	45.5	91	4	65-125/10
120-82-1	1,2,4-Trichlorobenzene	ND	50	61.0	122	50	61.6	123	1	72-123/10
95-63-6	1,2,4-Trimethylbenzene	1.1	50	49.5	97	50	50.2	98	1	77-122/10
108-67-8	1,3,5-Trimethylbenzene	ND	50	54.5	109	50	55.4	111	2	79-127/10
127-18-4	Tetrachloroethylene	1.1	50	60.3	118	50	60.0	118	0	71-124/10
108-88-3	Toluene	4.8	50	62.0	114	50	61.3	113	1	78-120/10
79-01-6	Trichloroethylene	ND	50	59.8	120* b	50	59.0	118	1	75-119/10
75-69-4	Trichlorofluoromethane	ND	50	54.1	108	50	51.4	103	5	67-129/14
75-01-4	Vinyl chloride	6.4	50	55.7	99	50	50.0	87	11	60-133/15
1330-20-7	Xylene (total)	2.3	150	179	118	150	177	116	1	78-122/10

CAS No.	Surrogate Recoveries	MS	MSD	C41472-1	Limits
1868-53-7	Dibromofluoromethane	97%	95%	116%	78-125%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C41472-1MS	R37016.D	2.5	09/03/15	KZ	n/a	n/a	VR1408
C41472-1MSD	R37017.D	2.5	09/03/15	KZ	n/a	n/a	VR1408
C41472-1	R37011.D	2.5	09/03/15	KZ	n/a	n/a	VR1408

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-12

CAS No.	Surrogate Recoveries	MS	MSD	C41472-1	Limits
2037-26-5	Toluene-D8	96%	96%	94%	86-114%
460-00-4	4-Bromofluorobenzene	100%	98%	94%	80-113%

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

* = Outside of Control Limits.

5.4.4
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D74606-1MS	L44131.D	1	09/04/15	XB	n/a	n/a	VL1327
D74606-1MSD	L44132.D	1	09/04/15	XB	n/a	n/a	VL1327
D74606-1	L44123.D	1	09/03/15	XB	n/a	n/a	VL1327

The QC reported here applies to the following samples:

Method: SW846 8260B

C41481-2, C41481-3

CAS No.	Compound	D74606-1 ug/kg	Spike Q	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
---------	----------	-------------------	------------	-------------	---------	----------------	--------------	----------	-----	-------------------

CAS No.	Surrogate Recoveries	MS	MSD	D74606-1	Limits
1868-53-7	Dibromofluoromethane	99%	99%	98%	75-125%
2037-26-5	Toluene-D8	99%	99%	98%	80-121%
460-00-4	4-Bromofluorobenzene	100%	99%	98%	71-126%

* = Outside of Control Limits.

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12976-MB	HH326015.D	1	08/30/15	NN	08/28/15	OP12976	GHH1614

The QC reported here applies to the following samples:

Method: SW846 8015B M

C41481-1, C41481-2, C41481-3, C41481-4, C41481-9, C41481-10, C41481-16, C41481-17, C41481-18

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	3.3	0.83	mg/kg	
	TPH (> C28-C40)	ND	6.7	1.7	mg/kg	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	83% 43-144%

Method Blank Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12977-MB	HH326043.D	1	08/31/15	NN	08/31/15	OP12977	GHH1615

The QC reported here applies to the following samples:

Method: SW846 8015B M

C41481-11

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	0.10	0.025	mg/l	
	TPH (> C28-C40)	ND	0.20	0.050	mg/l	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	83% 38-139%

Method Blank Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13000-MB	HH326153.D	1	09/03/15	NN	09/03/15	OP13000	GHH1618

The QC reported here applies to the following samples:

Method: SW846 8015B M

C41481-12

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	0.10	0.025	mg/l	
	TPH (> C28-C40)	ND	0.20	0.050	mg/l	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	83% 38-139%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12976-BS	HH326013.D	1	08/30/15	NN	08/28/15	OP12976	GHH1614
OP12976-BSD	HH326014.D	1	08/30/15	NN	08/28/15	OP12976	GHH1614

The QC reported here applies to the following samples: **Method:** SW846 8015B M

C41481-1, C41481-2, C41481-3, C41481-4, C41481-9, C41481-10, C41481-16, C41481-17, C41481-18

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	33.3	25.7	77	23.8	71	8	50-111/13
	TPH (> C28-C40)	33.3	28.7	86	26.5	80	8	59-123/16

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	87%	84%	43-144%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12977-BS	HH326041.D	1	08/31/15	NN	08/31/15	OP12977	GHH1615
OP12977-BSD	HH326042.D	1	08/31/15	NN	08/31/15	OP12977	GHH1615

The QC reported here applies to the following samples:

Method: SW846 8015B M

C41481-11

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	1	0.776	78	0.762	76	2	46-109/18
	TPH (> C28-C40)	1	0.866	87	0.854	85	1	54-119/16

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	79%	79%	38-139%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13000-BS	HH326151.D	1	09/03/15	NN	09/03/15	OP13000	GHH1618
OP13000-BSD	HH326152.D	1	09/03/15	NN	09/03/15	OP13000	GHH1618

The QC reported here applies to the following samples:

Method: SW846 8015B M

C41481-12

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	1	0.767	77	0.754	75	2	46-109/18
	TPH (> C28-C40)	1	0.839	84	0.818	82	3	54-119/16

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	83%	82%	38-139%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41481
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah St. Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP12976-MS	HH326025.D	1	08/30/15	NN	08/28/15	OP12976	GHH1614
OP12976-MSD	HH326026.D	1	08/30/15	NN	08/28/15	OP12976	GHH1614
C41481-2	HH326016.D	1	08/30/15	NN	08/28/15	OP12976	GHH1614

The QC reported here applies to the following samples:

Method: SW846 8015B M

C41481-1, C41481-2, C41481-3, C41481-4, C41481-9, C41481-10, C41481-16, C41481-17, C41481-18

CAS No.	Compound	C41481-2 mg/kg	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	10.3	39.4	35.9	65	39.3	34.7	62	3	50-111/13
	TPH (> C28-C40)	ND	39.4	29.1	74	39.3	28.8	73	1	59-123/16

CAS No.	Surrogate Recoveries	MS	MSD	C41481-2	Limits
630-01-3	Hexacosane	82%	79%	84%	43-144%

* = Outside of Control Limits.

Technical Report for

ROUX Associates - Oakland CA

2868 Hannah Street, Oakland, CA

Accutest Job Number: C41959

Sampling Date: 09/24/15

Report to:

ROUX Associates, Inc.
555 12th Street Suite 1725
Oakland, CA 94607
dgrunat@rouxinc.com

ATTN: David Grunat

Total number of pages in report: **54**



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.



James J. Rhudy
Lab Director

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)

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

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Summary of Hits	4
Section 3: Sample Results	5
3.1: C41959-5: MW-3 1.0-1.5'	6
3.2: C41959-6: MW-3 4.0-4.5'	11
3.3: C41959-7: MW-3 9.5-10.0'	16
3.4: C41959-8: MW-3 14.5-15.0'	21
Section 4: Misc. Forms	26
4.1: Chain of Custody	27
Section 5: GC/MS Volatiles - QC Data Summaries	30
5.1: Method Blank Summary	31
5.2: Blank Spike/Blank Spike Duplicate Summary	37
5.3: Laboratory Control Sample Summary	43
5.4: Matrix Spike/Matrix Spike Duplicate Summary	45
Section 6: GC Semi-volatiles - QC Data Summaries	51
6.1: Method Blank Summary	52
6.2: Blank Spike/Blank Spike Duplicate Summary	53
6.3: Matrix Spike/Matrix Spike Duplicate Summary	54

1

2

3

4

5

6



Sample Summary

ROUX Associates - Oakland CA
 2868 Hannah Street, Oakland, CA

Job No: C41959

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
C41959-1	09/24/15	08:25 NR	09/24/15	SO	Solid	MW-1 4.0-4.5'
C41959-5	09/24/15	09:10 NR	09/24/15	SO	Soil	MW-3 1.0-1.5'
C41959-6	09/24/15	09:15 NR	09/24/15	SO	Soil	MW-3 4.0-4.5'
C41959-7	09/24/15	09:25 NR	09/24/15	SO	Soil	MW-3 9.5-10.0'
C41959-8	09/24/15	09:35 NR	09/24/15	SO	Soil	MW-3 14.5-15.0'

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

Summary of Hits

Job Number: C41959
Account: ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA
Collected: 09/24/15

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

C41959-5 MW-3 1.0-1.5'

n-Butylbenzene	1090	470	47	ug/kg	SW846 8260B
sec-Butylbenzene	889	470	47	ug/kg	SW846 8260B
Ethylbenzene	157 J	470	47	ug/kg	SW846 8260B
Isopropylbenzene	525	470	47	ug/kg	SW846 8260B
p-Isopropyltoluene	755	470	47	ug/kg	SW846 8260B
Naphthalene	706	470	93	ug/kg	SW846 8260B
n-Propylbenzene	1590	470	47	ug/kg	SW846 8260B
1,2,4-Trimethylbenzene	5990	470	93	ug/kg	SW846 8260B
1,3,5-Trimethylbenzene	729	470	93	ug/kg	SW846 8260B
Toluene	97.2 J	470	47	ug/kg	SW846 8260B
Xylene (total)	652 J	930	93	ug/kg	SW846 8260B
TPH-GRO (C6-C10)	55000	9300	4700	ug/kg	SW846 8260B
TPH (C10-C28)	251	40	10	mg/kg	SW846 8015B M
TPH (> C28-C40)	61.8 J	80	20	mg/kg	SW846 8015B M

C41959-6 MW-3 4.0-4.5'

Acetone	44.4 J	48	12	ug/kg	SW846 8260B
TPH-GRO (C6-C10) ^a	949	120	60	ug/kg	SW846 8260B
TPH (C10-C28)	1.62 J	3.9	0.98	mg/kg	SW846 8015B M
TPH (> C28-C40)	3.02 J	7.8	2.0	mg/kg	SW846 8015B M

C41959-7 MW-3 9.5-10.0'

TPH (C10-C28)	15.3	4.0	0.99	mg/kg	SW846 8015B M
TPH (> C28-C40)	5.65 J	8.0	2.0	mg/kg	SW846 8015B M

C41959-8 MW-3 14.5-15.0'

TPH (C10-C28)	1.49 J	4.1	1.0	mg/kg	SW846 8015B M
---------------	--------	-----	-----	-------	---------------

(a) Atypical pattern; heavier hydrocarbons contributing to quantitation.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: MW-3 1.0-1.5'		Date Sampled: 09/24/15
Lab Sample ID: C41959-5		Date Received: 09/24/15
Matrix: SO - Soil		Percent Solids: 82.8
Method: SW846 8260B		
Project: 2868 Hannah Street, Oakland, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L44795.D	1	09/30/15	XB	n/a	n/a	VL1345
Run #2							

Run #1	Initial Weight	Final Volume	Methanol Aliquot
Run #1	3.65 g	5.0 ml	100 ul
Run #2			

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	3700	930	ug/kg	
71-43-2	Benzene	ND	470	47	ug/kg	
108-86-1	Bromobenzene	ND	470	47	ug/kg	
74-97-5	Bromochloromethane	ND	470	47	ug/kg	
75-27-4	Bromodichloromethane	ND	470	47	ug/kg	
75-25-2	Bromoform	ND	470	47	ug/kg	
104-51-8	n-Butylbenzene	1090	470	47	ug/kg	
135-98-8	sec-Butylbenzene	889	470	47	ug/kg	
98-06-6	tert-Butylbenzene	ND	470	47	ug/kg	
108-90-7	Chlorobenzene	ND	470	47	ug/kg	
75-00-3	Chloroethane	ND	470	93	ug/kg	
67-66-3	Chloroform	ND	470	47	ug/kg	
95-49-8	o-Chlorotoluene	ND	470	47	ug/kg	
106-43-4	p-Chlorotoluene	ND	470	47	ug/kg	
56-23-5	Carbon tetrachloride	ND	470	47	ug/kg	
75-34-3	1,1-Dichloroethane	ND	470	47	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	470	47	ug/kg	
563-58-6	1,1-Dichloropropene	ND	470	47	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	470	130	ug/kg	
106-93-4	1,2-Dibromoethane	ND	470	47	ug/kg	
107-06-2	1,2-Dichloroethane	ND	470	47	ug/kg	
78-87-5	1,2-Dichloropropane	ND	470	47	ug/kg	
142-28-9	1,3-Dichloropropane	ND	470	47	ug/kg	
108-20-3	Di-Isopropyl ether	ND	470	47	ug/kg	
594-20-7	2,2-Dichloropropane	ND	470	47	ug/kg	
124-48-1	Dibromochloromethane	ND	470	47	ug/kg	
75-71-8	Dichlorodifluoromethane ^a	ND	470	93	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	470	100	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	470	47	ug/kg	
541-73-1	m-Dichlorobenzene	ND	470	47	ug/kg	
95-50-1	o-Dichlorobenzene	ND	470	47	ug/kg	
106-46-7	p-Dichlorobenzene	ND	470	47	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3 1.0-1.5'	Date Sampled:	09/24/15
Lab Sample ID:	C41959-5	Date Received:	09/24/15
Matrix:	SO - Soil	Percent Solids:	82.8
Method:	SW846 8260B		
Project:	2868 Hannah Street, Oakland, CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	470	47	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	470	47	ug/kg	
100-41-4	Ethylbenzene	157	470	47	ug/kg	J
637-92-3	Ethyl tert-Butyl Ether	ND	470	47	ug/kg	
591-78-6	2-Hexanone	ND	1900	190	ug/kg	
87-68-3	Hexachlorobutadiene	ND	470	93	ug/kg	
98-82-8	Isopropylbenzene	525	470	47	ug/kg	
99-87-6	p-Isopropyltoluene	755	470	47	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	1900	190	ug/kg	
74-83-9	Methyl bromide	ND	470	93	ug/kg	
74-87-3	Methyl chloride	ND	470	93	ug/kg	
74-95-3	Methylene bromide	ND	470	47	ug/kg	
75-09-2	Methylene chloride	ND	1900	470	ug/kg	
78-93-3	Methyl ethyl ketone	ND	1900	190	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	470	93	ug/kg	
91-20-3	Naphthalene	706	470	93	ug/kg	
103-65-1	n-Propylbenzene	1590	470	47	ug/kg	
100-42-5	Styrene	ND	470	47	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	470	47	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	3700	930	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	470	47	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	470	47	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	470	47	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	470	47	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	470	47	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	470	93	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	470	47	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	5990	470	93	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	729	470	93	ug/kg	
127-18-4	Tetrachloroethylene	ND	470	56	ug/kg	
108-88-3	Toluene	97.2	470	47	ug/kg	J
79-01-6	Trichloroethylene	ND	470	47	ug/kg	
75-69-4	Trichlorofluoromethane	ND	470	93	ug/kg	
75-01-4	Vinyl chloride	ND	470	93	ug/kg	
1330-20-7	Xylene (total)	652	930	93	ug/kg	J
	TPH-GRO (C6-C10)	55000	9300	4700	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%		75-125%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-3 1.0-1.5'	
Lab Sample ID: C41959-5	Date Sampled: 09/24/15
Matrix: SO - Soil	Date Received: 09/24/15
Method: SW846 8260B	Percent Solids: 82.8
Project: 2868 Hannah Street, Oakland, CA	

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	97%		80-121%
460-00-4	4-Bromofluorobenzene	94%		71-126%

(a) CCV outside of control limits (biased high); not detected in sample.

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

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

Report of Analysis

Client Sample ID: MW-3 1.0-1.5'	
Lab Sample ID: C41959-5	Date Sampled: 09/24/15
Matrix: SO - Soil	Date Received: 09/24/15
Method: SW846 8015B M SW846 3550B	Percent Solids: 82.8
Project: 2868 Hannah Street, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG61819.D	10	10/01/15	NN	09/28/15	OP13169	GGG1827
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	251	40	10	mg/kg	
	TPH (> C28-C40)	61.8	80	20	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	106%		43-144%

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

Report of Analysis

Client Sample ID: MW-3 1.0-1.5'	Date Sampled: 09/24/15
Lab Sample ID: C41959-5	Date Received: 09/24/15
Matrix: SO - Soil	Percent Solids: 82.8
Project: 2868 Hannah Street, Oakland, CA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Moisture, Percent	17.2		%	1	09/30/15 09:40	EA	SM2540MOD G-97

RL = Reporting Limit

Report of Analysis

Client Sample ID: MW-3 4.0-4.5'		Date Sampled: 09/24/15
Lab Sample ID: C41959-6		Date Received: 09/24/15
Matrix: SO - Soil		Percent Solids: 84.9
Method: SW846 8260B		
Project: 2868 Hannah Street, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L44782.D	1	09/30/15	XB	n/a	n/a	VL1345
Run #2							

Run #	Initial Weight
Run #1	4.88 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	44.4	48	12	ug/kg	J
71-43-2	Benzene	ND	6.0	0.60	ug/kg	
108-86-1	Bromobenzene	ND	6.0	0.60	ug/kg	
74-97-5	Bromochloromethane	ND	6.0	0.60	ug/kg	
75-27-4	Bromodichloromethane	ND	6.0	0.60	ug/kg	
75-25-2	Bromoform	ND	6.0	0.60	ug/kg	
104-51-8	n-Butylbenzene	ND	6.0	0.60	ug/kg	
135-98-8	sec-Butylbenzene	ND	6.0	0.60	ug/kg	
98-06-6	tert-Butylbenzene	ND	6.0	0.60	ug/kg	
108-90-7	Chlorobenzene	ND	6.0	0.60	ug/kg	
75-00-3	Chloroethane	ND	6.0	1.2	ug/kg	
67-66-3	Chloroform	ND	6.0	0.60	ug/kg	
95-49-8	o-Chlorotoluene	ND	6.0	0.60	ug/kg	
106-43-4	p-Chlorotoluene	ND	6.0	0.60	ug/kg	
56-23-5	Carbon tetrachloride	ND	6.0	0.60	ug/kg	
75-34-3	1,1-Dichloroethane	ND	6.0	0.60	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	6.0	0.60	ug/kg	
563-58-6	1,1-Dichloropropene	ND	6.0	0.60	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	6.0	1.7	ug/kg	
106-93-4	1,2-Dibromoethane	ND	6.0	0.60	ug/kg	
107-06-2	1,2-Dichloroethane	ND	6.0	0.60	ug/kg	
78-87-5	1,2-Dichloropropane	ND	6.0	0.60	ug/kg	
142-28-9	1,3-Dichloropropane	ND	6.0	0.60	ug/kg	
108-20-3	Di-Isopropyl ether	ND	6.0	0.60	ug/kg	
594-20-7	2,2-Dichloropropane	ND	6.0	0.60	ug/kg	
124-48-1	Dibromochloromethane	ND	6.0	0.60	ug/kg	
75-71-8	Dichlorodifluoromethane ^a	ND	6.0	1.2	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	6.0	1.3	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	6.0	0.60	ug/kg	
541-73-1	m-Dichlorobenzene	ND	6.0	0.60	ug/kg	
95-50-1	o-Dichlorobenzene	ND	6.0	0.60	ug/kg	
106-46-7	p-Dichlorobenzene	ND	6.0	0.60	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3 4.0-4.5'	Date Sampled:	09/24/15
Lab Sample ID:	C41959-6	Date Received:	09/24/15
Matrix:	SO - Soil	Percent Solids:	84.9
Method:	SW846 8260B		
Project:	2868 Hannah Street, Oakland, CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	6.0	0.60	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	6.0	0.60	ug/kg	
100-41-4	Ethylbenzene	ND	6.0	0.60	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	6.0	0.60	ug/kg	
591-78-6	2-Hexanone	ND	24	2.4	ug/kg	
87-68-3	Hexachlorobutadiene	ND	6.0	1.2	ug/kg	
98-82-8	Isopropylbenzene	ND	6.0	0.60	ug/kg	
99-87-6	p-Isopropyltoluene	ND	6.0	0.60	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	24	2.4	ug/kg	
74-83-9	Methyl bromide	ND	6.0	1.2	ug/kg	
74-87-3	Methyl chloride	ND	6.0	1.2	ug/kg	
74-95-3	Methylene bromide	ND	6.0	0.60	ug/kg	
75-09-2	Methylene chloride	ND	24	6.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	24	2.4	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	6.0	1.2	ug/kg	
91-20-3	Naphthalene	ND	6.0	1.2	ug/kg	
103-65-1	n-Propylbenzene	ND	6.0	0.60	ug/kg	
100-42-5	Styrene	ND	6.0	0.60	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	6.0	0.60	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	48	12	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	6.0	0.60	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	6.0	0.60	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.0	0.60	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	6.0	0.60	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	6.0	0.60	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	6.0	1.2	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	6.0	0.60	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	6.0	1.2	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	6.0	1.2	ug/kg	
127-18-4	Tetrachloroethylene	ND	6.0	0.72	ug/kg	
108-88-3	Toluene	ND	6.0	0.60	ug/kg	
79-01-6	Trichloroethylene	ND	6.0	0.60	ug/kg	
75-69-4	Trichlorofluoromethane	ND	6.0	1.2	ug/kg	
75-01-4	Vinyl chloride	ND	6.0	1.2	ug/kg	
1330-20-7	Xylene (total)	ND	12	1.2	ug/kg	
	TPH-GRO (C6-C10) ^b	949	120	60	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		75-125%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

32
3

Client Sample ID: MW-3 4.0-4.5'	Date Sampled: 09/24/15
Lab Sample ID: C41959-6	Date Received: 09/24/15
Matrix: SO - Soil	Percent Solids: 84.9
Method: SW846 8260B	
Project: 2868 Hannah Street, Oakland, CA	

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	94%		80-121%
460-00-4	4-Bromofluorobenzene	100%		71-126%

- (a) CCV outside of control limits (biased high); not detected in sample.
- (b) Atypical pattern; heavier hydrocarbons contributing to quantitation.

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

Report of Analysis

32
3

Client Sample ID: MW-3 4.0-4.5'	
Lab Sample ID: C41959-6	Date Sampled: 09/24/15
Matrix: SO - Soil	Date Received: 09/24/15
Method: SW846 8015B M SW846 3550B	Percent Solids: 84.9
Project: 2868 Hannah Street, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG61766.D	1	09/29/15	NN	09/28/15	OP13169	GGG1826
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	1.62	3.9	0.98	mg/kg	J
	TPH (> C28-C40)	3.02	7.8	2.0	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	95%		43-144%

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

Report of Analysis

Client Sample ID: MW-3 4.0-4.5'	Date Sampled: 09/24/15
Lab Sample ID: C41959-6	Date Received: 09/24/15
Matrix: SO - Soil	Percent Solids: 84.9
Project: 2868 Hannah Street, Oakland, CA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Moisture, Percent	15.1		%	1	09/30/15 09:40	EA	SM2540MOD G-97

RL = Reporting Limit

Report of Analysis

Client Sample ID: MW-3 9.5-10.0'		Date Sampled: 09/24/15
Lab Sample ID: C41959-7		Date Received: 09/24/15
Matrix: SO - Soil		Percent Solids: 83.6
Method: SW846 8260B		
Project: 2868 Hannah Street, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L44783.D	1	09/30/15	XB	n/a	n/a	VL1345
Run #2							

Run #	Initial Weight
Run #1	6.41 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	37	9.3	ug/kg	
71-43-2	Benzene	ND	4.7	0.47	ug/kg	
108-86-1	Bromobenzene	ND	4.7	0.47	ug/kg	
74-97-5	Bromochloromethane	ND	4.7	0.47	ug/kg	
75-27-4	Bromodichloromethane	ND	4.7	0.47	ug/kg	
75-25-2	Bromoform	ND	4.7	0.47	ug/kg	
104-51-8	n-Butylbenzene	ND	4.7	0.47	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.7	0.47	ug/kg	
98-06-6	tert-Butylbenzene	ND	4.7	0.47	ug/kg	
108-90-7	Chlorobenzene	ND	4.7	0.47	ug/kg	
75-00-3	Chloroethane	ND	4.7	0.93	ug/kg	
67-66-3	Chloroform	ND	4.7	0.47	ug/kg	
95-49-8	o-Chlorotoluene	ND	4.7	0.47	ug/kg	
106-43-4	p-Chlorotoluene	ND	4.7	0.47	ug/kg	
56-23-5	Carbon tetrachloride	ND	4.7	0.47	ug/kg	
75-34-3	1,1-Dichloroethane	ND	4.7	0.47	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	4.7	0.47	ug/kg	
563-58-6	1,1-Dichloropropene	ND	4.7	0.47	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.7	1.3	ug/kg	
106-93-4	1,2-Dibromoethane	ND	4.7	0.47	ug/kg	
107-06-2	1,2-Dichloroethane	ND	4.7	0.47	ug/kg	
78-87-5	1,2-Dichloropropane	ND	4.7	0.47	ug/kg	
142-28-9	1,3-Dichloropropane	ND	4.7	0.47	ug/kg	
108-20-3	Di-Isopropyl ether	ND	4.7	0.47	ug/kg	
594-20-7	2,2-Dichloropropane	ND	4.7	0.47	ug/kg	
124-48-1	Dibromochloromethane	ND	4.7	0.47	ug/kg	
75-71-8	Dichlorodifluoromethane ^a	ND	4.7	0.93	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	4.7	1.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	4.7	0.47	ug/kg	
541-73-1	m-Dichlorobenzene	ND	4.7	0.47	ug/kg	
95-50-1	o-Dichlorobenzene	ND	4.7	0.47	ug/kg	
106-46-7	p-Dichlorobenzene	ND	4.7	0.47	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-3 9.5-10.0'	
Lab Sample ID: C41959-7	Date Sampled: 09/24/15
Matrix: SO - Soil	Date Received: 09/24/15
Method: SW846 8260B	Percent Solids: 83.6
Project: 2868 Hannah Street, Oakland, CA	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	4.7	0.47	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	4.7	0.47	ug/kg	
100-41-4	Ethylbenzene	ND	4.7	0.47	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	4.7	0.47	ug/kg	
591-78-6	2-Hexanone	ND	19	1.9	ug/kg	
87-68-3	Hexachlorobutadiene	ND	4.7	0.93	ug/kg	
98-82-8	Isopropylbenzene	ND	4.7	0.47	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.7	0.47	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	19	1.9	ug/kg	
74-83-9	Methyl bromide	ND	4.7	0.93	ug/kg	
74-87-3	Methyl chloride	ND	4.7	0.93	ug/kg	
74-95-3	Methylene bromide	ND	4.7	0.47	ug/kg	
75-09-2	Methylene chloride	ND	19	4.7	ug/kg	
78-93-3	Methyl ethyl ketone	ND	19	1.9	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	4.7	0.93	ug/kg	
91-20-3	Naphthalene	ND	4.7	0.93	ug/kg	
103-65-1	n-Propylbenzene	ND	4.7	0.47	ug/kg	
100-42-5	Styrene	ND	4.7	0.47	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	4.7	0.47	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	37	9.3	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	4.7	0.47	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	4.7	0.47	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.7	0.47	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	4.7	0.47	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.7	0.47	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	4.7	0.93	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.7	0.47	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.7	0.93	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.7	0.93	ug/kg	
127-18-4	Tetrachloroethylene	ND	4.7	0.56	ug/kg	
108-88-3	Toluene	ND	4.7	0.47	ug/kg	
79-01-6	Trichloroethylene	ND	4.7	0.47	ug/kg	
75-69-4	Trichlorofluoromethane	ND	4.7	0.93	ug/kg	
75-01-4	Vinyl chloride	ND	4.7	0.93	ug/kg	
1330-20-7	Xylene (total)	ND	9.3	0.93	ug/kg	
	TPH-GRO (C6-C10)	ND	93	47	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		75-125%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-3 9.5-10.0'	
Lab Sample ID: C41959-7	Date Sampled: 09/24/15
Matrix: SO - Soil	Date Received: 09/24/15
Method: SW846 8260B	Percent Solids: 83.6
Project: 2868 Hannah Street, Oakland, CA	

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	93%		80-121%
460-00-4	4-Bromofluorobenzene	93%		71-126%

(a) CCV outside of control limits (biased high); not detected in sample.

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

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

Report of Analysis

Client Sample ID: MW-3 9.5-10.0'		
Lab Sample ID: C41959-7		Date Sampled: 09/24/15
Matrix: SO - Soil		Date Received: 09/24/15
Method: SW846 8015B M SW846 3550B		Percent Solids: 83.6
Project: 2868 Hannah Street, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG61767.D	1	09/29/15	NN	09/28/15	OP13169	GGG1826
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	15.3	4.0	0.99	mg/kg	
	TPH (> C28-C40)	5.65	8.0	2.0	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	91%		43-144%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

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

Report of Analysis

Client Sample ID: MW-3 9.5-10.0'	Date Sampled: 09/24/15
Lab Sample ID: C41959-7	Date Received: 09/24/15
Matrix: SO - Soil	Percent Solids: 83.6
Project: 2868 Hannah Street, Oakland, CA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Moisture, Percent	16.4		%	1	09/30/15 09:40	EA	SM2540MOD G-97

RL = Reporting Limit

Report of Analysis

Client Sample ID: MW-3 14.5-15.0'		
Lab Sample ID: C41959-8		Date Sampled: 09/24/15
Matrix: SO - Soil		Date Received: 09/24/15
Method: SW846 8260B		Percent Solids: 80.3
Project: 2868 Hannah Street, Oakland, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L44767.D	1	09/30/15	XB	n/a	n/a	VL1344
Run #2							

Run #1	Initial Weight
Run #1	5.54 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	45	11	ug/kg	
71-43-2	Benzene	ND	5.6	0.56	ug/kg	
108-86-1	Bromobenzene	ND	5.6	0.56	ug/kg	
74-97-5	Bromochloromethane	ND	5.6	0.56	ug/kg	
75-27-4	Bromodichloromethane	ND	5.6	0.56	ug/kg	
75-25-2	Bromoform	ND	5.6	0.56	ug/kg	
104-51-8	n-Butylbenzene	ND	5.6	0.56	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.6	0.56	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.6	0.56	ug/kg	
108-90-7	Chlorobenzene	ND	5.6	0.56	ug/kg	
75-00-3	Chloroethane	ND	5.6	1.1	ug/kg	
67-66-3	Chloroform	ND	5.6	0.56	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.6	0.56	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.6	0.56	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.6	0.56	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.6	0.56	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.6	0.56	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.6	0.56	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.6	1.6	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.6	0.56	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.6	0.56	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.6	0.56	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.6	0.56	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.6	0.56	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.6	0.56	ug/kg	
124-48-1	Dibromochloromethane	ND	5.6	0.56	ug/kg	
75-71-8	Dichlorodifluoromethane ^a	ND	5.6	1.1	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.6	1.2	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.6	0.56	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.6	0.56	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.6	0.56	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.6	0.56	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3 14.5-15.0'	Date Sampled:	09/24/15
Lab Sample ID:	C41959-8	Date Received:	09/24/15
Matrix:	SO - Soil	Percent Solids:	80.3
Method:	SW846 8260B		
Project:	2868 Hannah Street, Oakland, CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	5.6	0.56	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.6	0.56	ug/kg	
100-41-4	Ethylbenzene	ND	5.6	0.56	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.6	0.56	ug/kg	
591-78-6	2-Hexanone	ND	22	2.2	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.6	1.1	ug/kg	
98-82-8	Isopropylbenzene	ND	5.6	0.56	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.6	0.56	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	22	2.2	ug/kg	
74-83-9	Methyl bromide	ND	5.6	1.1	ug/kg	
74-87-3	Methyl chloride	ND	5.6	1.1	ug/kg	
74-95-3	Methylene bromide	ND	5.6	0.56	ug/kg	
75-09-2	Methylene chloride	ND	22	5.6	ug/kg	
78-93-3	Methyl ethyl ketone	ND	22	2.2	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.6	1.1	ug/kg	
91-20-3	Naphthalene	ND	5.6	1.1	ug/kg	
103-65-1	n-Propylbenzene	ND	5.6	0.56	ug/kg	
100-42-5	Styrene	ND	5.6	0.56	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.6	0.56	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	45	11	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.6	0.56	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.6	0.56	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.6	0.56	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.6	0.56	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.6	0.56	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.6	1.1	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.6	0.56	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.6	1.1	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.6	1.1	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.6	0.67	ug/kg	
108-88-3	Toluene	ND	5.6	0.56	ug/kg	
79-01-6	Trichloroethylene	ND	5.6	0.56	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.6	1.1	ug/kg	
75-01-4	Vinyl chloride	ND	5.6	1.1	ug/kg	
1330-20-7	Xylene (total)	ND	11	1.1	ug/kg	
	TPH-GRO (C6-C10)	ND	110	56	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		75-125%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-3 14.5-15.0'	
Lab Sample ID: C41959-8	Date Sampled: 09/24/15
Matrix: SO - Soil	Date Received: 09/24/15
Method: SW846 8260B	Percent Solids: 80.3
Project: 2868 Hannah Street, Oakland, CA	

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	92%		80-121%
460-00-4	4-Bromofluorobenzene	95%		71-126%

(a) CCV outside of control limits (biased high); not detected in sample.

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

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

Report of Analysis

Client Sample ID: MW-3 14.5-15.0'	
Lab Sample ID: C41959-8	Date Sampled: 09/24/15
Matrix: SO - Soil	Date Received: 09/24/15
Method: SW846 8015B M SW846 3550B	Percent Solids: 80.3
Project: 2868 Hannah Street, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG61768.D	1	09/29/15	NN	09/28/15	OP13169	GGG1826
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	1.49	4.1	1.0	mg/kg	J
	TPH (> C28-C40)	ND	8.3	2.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	97%		43-144%

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

Report of Analysis

Client Sample ID: MW-3 14.5-15.0'	Date Sampled: 09/24/15
Lab Sample ID: C41959-8	Date Received: 09/24/15
Matrix: SO - Soil	Percent Solids: 80.3
Project: 2868 Hannah Street, Oakland, CA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Moisture, Percent	19.7		%	1	09/30/15 09:40	EA	SM2540MOD G-97

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

1 of 2



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

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest NC Job #: C41959

Client / Reporting Information		Project Information		Requested Analysis		Matrix Codes	
Company Name Roux Associates	Project Name 2868 Hannah St					WW- Wastewater GW- Ground Water SW- Surface Water SO- Soil OF- Oil WP- Wipe LIQ - Non-aqueous Liquid AIR DW- Drinking Water (Perchlorate Only)	
Address 555 12th St, Suite 175		Street 2868 Hannah St					
City Oakland CA		City Oakland CA					
State CA		State CA					
Zip 94607		Zip 94607					
Project Contact Dave Grunat		Project #					
Phone # 415-967-6019		EMAIL: dgrunat@rouxinc.com					
Sampler's Name N. Rodriguez		Client Purchase Order #					

Accutest Sample ID	Sample ID / Field Point / Point of Collection	Date	Time	Sampled by	Matrix	# of bottles	Number of preserved bottles							LAB USE ONLY				
							GL	MUSH	ANCO	PCOOL	NONE	UNCON	UNCON		UNCON			
1	MW-1 4.0-4.5'	9/24/15	8:23	NR	S	5												
2	MW-1 9.5-10.0'		8:35			5												
3	MW-1 14.5-15.0'		8:40			5												
4	MW-1 19.5-20.0'		8:45			5												
5	MW-3 1.0-1.5'		9:10			5												
6	MW-3 4.0-4.5'		9:15			5												
7	MW-3 9.5-10.0'		9:25			5												
8	MW-3 14.5-15.0'		9:35			5												
9	MW-2 4.5-5.0'		10:05			5												
10	MW-2 4.5-10.0'		10:15			5												

VCC-TPH (B26)
 TPH (B26)
 TPH (B26)

HOLD ALL SAMPLES

Turnaround Time (Business days)	Approved By/ Date:	Data Deliverable Information	Comments / Remarks
<input type="checkbox"/> 10 Day <input type="checkbox"/> 5 Day <input type="checkbox"/> 3 Day <input type="checkbox"/> 2 Day <input type="checkbox"/> 1 Day <input type="checkbox"/> Same Day	ROUX STD. TAT	<input type="checkbox"/> Commercial "A" - Results only <input type="checkbox"/> Commercial "B" - Results with QC summaries <input type="checkbox"/> Commercial "B+" - Results, QC, and chromatograms <input type="checkbox"/> FULL1 - Level 4 data package <input type="checkbox"/> EOF for Geotracker <input type="checkbox"/> EDD Format Provide EDF Global ID: _____ Provide EDF Logcode: _____	

Emergency VIA data available VIA Lablink							
Sample Custody must be documented below each time samples change possession, including courier delivery.							
Relinquished by: 	Date Time: 9/24/15	Received By: M. Hernandez	Relinquished By: M. Hernandez	Date Time: 9/24/15 16:10	Received By: 		
Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:		
3		3					
Relinquished by:	Date Time:	Received By:	Custody Seal #	Appropriate Bottle / Pres. Y/N	Headspace Y/N	On Ice Y/N	Cooler Temp.
5		5	NONE	Labels match Coc? Y/N	Separate Receiving Check List used: Y/N		41.4 °C

4.1 4



2 of 2



ACCUTEST
LABORATORIES

CHAIN OF CUSTODY

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

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest NC Job #: C C41959

Client / Reporting Information		Project Information	
Company Name: ROUX ASSOCIATES		Project Name: 28608 Hannah St	
Address		Street	
City	State	City	State
Project Contact: Dove Grunot		Project #	
Phone #		EMAIL:	
Sampler's Name: N. Rodriguez		Client Purchase Order #	

Requested Analysis	Matrix Codes
LAB USE ONLY	

Accutest Sample ID	Sample ID / Field Point / Point of Collection	Date	Time	Sampled by	Matrix	# of bottles	ID	NOH	PHOS	PCO2	NO3	NO2	AMMONIA	PHOS	EDF
11	MW-2	14.5-15.0	9/24/15	1020	NR	5						2	1	2	XX
12	MW-2	19.5-20.0	9/24/15	1025	NR	5						2	1	2	XX

SHOULD ALL SAMPLES

Turnaround Time (Business days)	Data Deliverable Information	Comments / Remarks

Emergency TIA data available VIA Lablink		Sample Custody must be documented below each time samples change possession, including courier delivery.	
Relinquished by: <i>[Signature]</i>	Date Time: 9/24/15 15:15	Received By: <i>[Signature]</i>	Date Time: 9/24/15 16:10
Relinquished by: _____	Date Time: _____	Received By: _____	Date Time: _____
Relinquished by: _____	Date Time: _____	Received By: _____	Date Time: _____
Relinquished by: _____	Date Time: _____	Received By: _____	Date Time: _____
Relinquished by: _____	Date Time: _____	Received By: _____	Date Time: _____

Custody Seal # **None** Appropriate Bottle / Pres. Y/N _____ Headspace Y/N _____ On Ice Y/N _____ Cooler Temp. _____
 Labels match Coc? Y / N _____ Separate Receiving Check List used: Y / N **4/1/15**

4.1
4

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: C41959 **Client:** ROUX ASSOCIATES **Project:** 2868 HANNAH ST
Date / Time Received: 9/24/2015 4:10:00 PM **Delivery Method:** Accutest Courier **Airbill #s:** _____
Cooler Temps (Initial/Adjusted): #1: (4.1/4.1): _____

Cooler Security		<u>Y</u>	<u>or</u>	<u>N</u>		<u>Y</u>	<u>or</u>	<u>N</u>
1. Custody Seals Present:	<input type="checkbox"/>			<input checked="" type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Custody Seals Intact:	<input type="checkbox"/>			<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>		<input type="checkbox"/>

Cooler Temperature		<u>Y</u>	<u>or</u>	<u>N</u>
1. Temp criteria achieved:	<input checked="" type="checkbox"/>			<input type="checkbox"/>
2. Therm ID:	IR1;			
3. Cooler media:	Ice (Bag)			
4. No. Coolers:	1			

Quality Control Preservation	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>

Sample Integrity - Documentation		<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>			<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>			<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>			<input type="checkbox"/>

Sample Integrity - Condition		<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>			<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>			<input type="checkbox"/>
3. Condition of sample:	Intact			

Sample Integrity - Instructions		<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>			<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>			<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>			<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>			<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>			<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

4.1
4

GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: C41959
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1344-MB	L44753.D	1	09/29/15	XB	n/a	n/a	VL1344

The QC reported here applies to the following samples:

Method: SW846 8260B

C41959-8

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	10	ug/kg	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	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	

Method Blank Summary

Job Number: C41959
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1344-MB	L44753.D	1	09/29/15	XB	n/a	n/a	VL1344

The QC reported here applies to the following samples:

Method: SW846 8260B

C41959-8

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	1.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	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	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	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	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.60	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

Method Blank Summary

Job Number: C41959
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1344-MB	L44753.D	1	09/29/15	XB	n/a	n/a	VL1344

The QC reported here applies to the following samples:

Method: SW846 8260B

C41959-8

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	90%	75-125%
2037-26-5	Toluene-D8	93%	80-121%
460-00-4	4-Bromofluorobenzene	92%	71-126%

Method Blank Summary

Job Number: C41959
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1345-MB	L44780.D	1	09/30/15	XB	n/a	n/a	VL1345

The QC reported here applies to the following samples:

Method: SW846 8260B

C41959-5, C41959-6, C41959-7

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	10	ug/kg	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	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	

Method Blank Summary

Job Number: C41959
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1345-MB	L44780.D	1	09/30/15	XB	n/a	n/a	VL1345

The QC reported here applies to the following samples:

Method: SW846 8260B

C41959-5, C41959-6, C41959-7

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	1.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	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	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	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	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.60	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

Method Blank Summary

Job Number: C41959
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1345-MB	L44780.D	1	09/30/15	XB	n/a	n/a	VL1345

The QC reported here applies to the following samples:

Method: SW846 8260B

C41959-5, C41959-6, C41959-7

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	91% 75-125%
2037-26-5	Toluene-D8	95% 80-121%
460-00-4	4-Bromofluorobenzene	92% 71-126%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41959
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1344-BS	L44750.D	1	09/29/15	XB	n/a	n/a	VL1344
VL1344-BSD	L44751.D	1	09/29/15	XB	n/a	n/a	VL1344

The QC reported here applies to the following samples:

Method: SW846 8260B

C41959-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	160	139	87	143	89	3	59-143/27
71-43-2	Benzene	40	37.1	93	38.1	95	3	80-122/13
108-86-1	Bromobenzene	40	38.5	96	39.8	100	3	76-122/12
74-97-5	Bromochloromethane	40	38.4	96	39.8	100	4	81-126/13
75-27-4	Bromodichloromethane	40	39.5	99	40.7	102	3	76-124/13
75-25-2	Bromoform	40	41.8	105	43.3	108	4	72-134/14
104-51-8	n-Butylbenzene	40	35.9	90	36.8	92	2	76-122/14
135-98-8	sec-Butylbenzene	40	36.1	90	37.4	94	4	77-124/14
98-06-6	tert-Butylbenzene	40	36.5	91	38.2	96	5	76-124/13
108-90-7	Chlorobenzene	40	38.7	97	39.3	98	2	78-122/12
75-00-3	Chloroethane	40	36.6	92	37.8	95	3	71-126/16
67-66-3	Chloroform	40	36.8	92	37.9	95	3	79-126/13
95-49-8	o-Chlorotoluene	40	34.7	87	37.9	95	9	73-124/15
106-43-4	p-Chlorotoluene	40	35.4	89	36.7	92	4	73-127/16
56-23-5	Carbon tetrachloride	40	41.5	104	42.0	105	1	78-127/15
75-34-3	1,1-Dichloroethane	40	34.6	87	35.5	89	3	76-123/14
75-35-4	1,1-Dichloroethylene	40	34.7	87	35.4	89	2	73-124/15
563-58-6	1,1-Dichloropropene	40	38.8	97	40.0	100	3	78-126/14
96-12-8	1,2-Dibromo-3-chloropropane	40	35.2	88	37.4	94	6	62-127/21
106-93-4	1,2-Dibromoethane	40	38.2	96	39.2	98	3	76-123/13
107-06-2	1,2-Dichloroethane	40	39.3	98	40.5	101	3	74-125/12
78-87-5	1,2-Dichloropropane	40	35.9	90	36.6	92	2	76-123/12
142-28-9	1,3-Dichloropropane	40	36.4	91	37.1	93	2	77-121/13
108-20-3	Di-Isopropyl ether	40	32.4	81	33.0	83	2	71-126/14
594-20-7	2,2-Dichloropropane	40	37.7	94	38.0	95	1	77-132/17
124-48-1	Dibromochloromethane	40	41.1	103	42.1	105	2	73-127/13
75-71-8	Dichlorodifluoromethane	40	49.5	124	49.2	123	1	52-141/20
156-59-2	cis-1,2-Dichloroethylene	40	36.5	91	37.5	94	3	80-124/13
10061-01-5	cis-1,3-Dichloropropene	40	38.2	96	39.6	99	4	77-125/13
541-73-1	m-Dichlorobenzene	40	37.5	94	39.0	98	4	76-123/12
95-50-1	o-Dichlorobenzene	40	37.6	94	38.7	97	3	76-123/12
106-46-7	p-Dichlorobenzene	40	37.4	94	38.8	97	4	77-121/12
156-60-5	trans-1,2-Dichloroethylene	40	37.0	93	38.2	96	3	78-123/15
10061-02-6	trans-1,3-Dichloropropene	40	39.5	99	40.5	101	3	71-122/13
100-41-4	Ethylbenzene	40	38.1	95	38.9	97	2	79-121/13
637-92-3	Ethyl tert-Butyl Ether	40	34.5	86	35.5	89	3	76-131/13

* = Outside of Control Limits.

5.2.1
 5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41959
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1344-BS	L44750.D	1	09/29/15	XB	n/a	n/a	VL1344
VL1344-BSD	L44751.D	1	09/29/15	XB	n/a	n/a	VL1344

The QC reported here applies to the following samples:

Method: SW846 8260B

C41959-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	160	144	90	150	94	4	65-135/20
87-68-3	Hexachlorobutadiene	40	39.0	98	40.3	101	3	77-131/17
98-82-8	Isopropylbenzene	40	38.7	97	38.9	97	1	80-124/14
99-87-6	p-Isopropyltoluene	40	37.0	93	38.5	96	4	78-122/13
108-10-1	4-Methyl-2-pentanone	160	157	98	168	105	7	70-135/18
74-83-9	Methyl bromide	40	40.4	101	41.2	103	2	74-130/15
74-87-3	Methyl chloride	40	44.3	111	44.5	111	0	65-131/22
74-95-3	Methylene bromide	40	38.3	96	39.6	99	3	78-124/13
75-09-2	Methylene chloride	40	34.8	87	35.5	89	2	75-121/16
78-93-3	Methyl ethyl ketone	160	144	90	152	95	5	70-137/21
1634-04-4	Methyl Tert Butyl Ether	40	34.8	87	35.9	90	3	75-127/16
91-20-3	Naphthalene	40	34.7	87	37.4	94	7	67-127/19
103-65-1	n-Propylbenzene	40	35.7	89	37.1	93	4	75-123/13
100-42-5	Styrene	40	38.8	97	39.5	99	2	78-122/12
994-05-8	Tert-Amyl Methyl Ether	40	35.6	89	36.2	91	2	77-127/13
75-65-0	Tert Butyl Alcohol	200	170	85	175	88	3	61-141/32
630-20-6	1,1,1,2-Tetrachloroethane	40	40.0	100	41.4	104	3	78-124/13
71-55-6	1,1,1-Trichloroethane	40	38.3	96	39.0	98	2	79-128/15
79-34-5	1,1,2,2-Tetrachloroethane	40	33.8	85	35.1	88	4	70-125/14
79-00-5	1,1,2-Trichloroethane	40	36.7	92	36.5	91	1	74-122/13
87-61-6	1,2,3-Trichlorobenzene	40	37.0	93	39.4	99	6	75-128/18
96-18-4	1,2,3-Trichloropropane	40	41.5	104	41.8	105	1	74-125/15
120-82-1	1,2,4-Trichlorobenzene	40	37.6	94	39.6	99	5	77-128/16
95-63-6	1,2,4-Trimethylbenzene	40	37.0	93	38.2	96	3	76-121/13
108-67-8	1,3,5-Trimethylbenzene	40	36.8	92	37.9	95	3	78-123/13
127-18-4	Tetrachloroethylene	40	42.3	106	42.5	106	0	77-125/14
108-88-3	Toluene	40	38.8	97	39.1	98	1	78-120/13
79-01-6	Trichloroethylene	40	39.0	98	40.0	100	3	80-124/13
75-69-4	Trichlorofluoromethane	40	40.3	101	41.1	103	2	78-130/17
75-01-4	Vinyl chloride	40	42.3	106	42.3	106	0	69-136/18
1330-20-7	Xylene (total)	120	117	98	119	99	2	78-122/13

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	96%	92%	75-125%

* = Outside of Control Limits.

5.2.1
 5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41959
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1344-BS	L44750.D	1	09/29/15	XB	n/a	n/a	VL1344
VL1344-BSD	L44751.D	1	09/29/15	XB	n/a	n/a	VL1344

The QC reported here applies to the following samples:

Method: SW846 8260B

C41959-8

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	96%	94%	80-121%
460-00-4	4-Bromofluorobenzene	95%	93%	71-126%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41959
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1345-BS	L44777.D	1	09/30/15	XB	n/a	n/a	VL1345
VL1345-BSD	L44778.D	1	09/30/15	XB	n/a	n/a	VL1345

The QC reported here applies to the following samples:

Method: SW846 8260B

C41959-5, C41959-6, C41959-7

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	160	131	82	141	88	7	59-143/27
71-43-2	Benzene	40	38.2	96	37.0	93	3	80-122/13
108-86-1	Bromobenzene	40	38.8	97	37.3	93	4	76-122/12
74-97-5	Bromochloromethane	40	38.1	95	38.7	97	2	81-126/13
75-27-4	Bromodichloromethane	40	39.4	99	39.0	98	1	76-124/13
75-25-2	Bromoform	40	41.0	103	41.9	105	2	72-134/14
104-51-8	n-Butylbenzene	40	37.4	94	35.1	88	6	76-122/14
135-98-8	sec-Butylbenzene	40	37.9	95	35.6	89	6	77-124/14
98-06-6	tert-Butylbenzene	40	38.2	96	36.9	92	3	76-124/13
108-90-7	Chlorobenzene	40	38.5	96	38.2	96	1	78-122/12
75-00-3	Chloroethane	40	36.5	91	36.6	92	0	71-126/16
67-66-3	Chloroform	40	37.7	94	35.6	89	6	79-126/13
95-49-8	o-Chlorotoluene	40	35.9	90	35.6	89	1	73-124/15
106-43-4	p-Chlorotoluene	40	36.3	91	34.4	86	5	73-127/16
56-23-5	Carbon tetrachloride	40	43.2	108	41.8	105	3	78-127/15
75-34-3	1,1-Dichloroethane	40	35.5	89	33.4	84	6	76-123/14
75-35-4	1,1-Dichloroethylene	40	36.4	91	34.7	87	5	73-124/15
563-58-6	1,1-Dichloropropene	40	40.0	100	38.7	97	3	78-126/14
96-12-8	1,2-Dibromo-3-chloropropane	40	35.1	88	36.3	91	3	62-127/21
106-93-4	1,2-Dibromoethane	40	37.4	94	39.1	98	4	76-123/13
107-06-2	1,2-Dichloroethane	40	38.8	97	39.8	100	3	74-125/12
78-87-5	1,2-Dichloropropane	40	35.7	89	35.0	88	2	76-123/12
142-28-9	1,3-Dichloropropane	40	35.8	90	36.5	91	2	77-121/13
108-20-3	Di-Isopropyl ether	40	32.2	81	31.5	79	2	71-126/14
594-20-7	2,2-Dichloropropane	40	39.3	98	37.1	93	6	77-132/17
124-48-1	Dibromochloromethane	40	40.6	102	40.8	102	0	73-127/13
75-71-8	Dichlorodifluoromethane	40	49.8	125	49.5	124	1	52-141/20
156-59-2	cis-1,2-Dichloroethylene	40	37.2	93	35.3	88	5	80-124/13
10061-01-5	cis-1,3-Dichloropropene	40	38.2	96	38.3	96	0	77-125/13
541-73-1	m-Dichlorobenzene	40	38.7	97	36.7	92	5	76-123/12
95-50-1	o-Dichlorobenzene	40	37.7	94	36.6	92	3	76-123/12
106-46-7	p-Dichlorobenzene	40	38.4	96	36.7	92	5	77-121/12
156-60-5	trans-1,2-Dichloroethylene	40	37.9	95	36.8	92	3	78-123/15
10061-02-6	trans-1,3-Dichloropropene	40	38.7	97	39.2	98	1	71-122/13
100-41-4	Ethylbenzene	40	39.1	98	37.9	95	3	79-121/13
637-92-3	Ethyl tert-Butyl Ether	40	34.5	86	33.7	84	2	76-131/13

* = Outside of Control Limits.

5.2.2
 5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41959
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1345-BS	L44777.D	1	09/30/15	XB	n/a	n/a	VL1345
VL1345-BSD	L44778.D	1	09/30/15	XB	n/a	n/a	VL1345

The QC reported here applies to the following samples:

Method: SW846 8260B

C41959-5, C41959-6, C41959-7

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	160	137	86	149	93	8	65-135/20
87-68-3	Hexachlorobutadiene	40	41.2	103	38.2	96	8	77-131/17
98-82-8	Isopropylbenzene	40	39.3	98	38.5	96	2	80-124/14
99-87-6	p-Isopropyltoluene	40	38.7	97	36.5	91	6	78-122/13
108-10-1	4-Methyl-2-pentanone	160	155	97	167	104	7	70-135/18
74-83-9	Methyl bromide	40	40.2	101	39.9	100	1	74-130/15
74-87-3	Methyl chloride	40	42.3	106	43.1	108	2	65-131/22
74-95-3	Methylene bromide	40	38.0	95	39.2	98	3	78-124/13
75-09-2	Methylene chloride	40	34.5	86	33.6	84	3	75-121/16
78-93-3	Methyl ethyl ketone	160	139	87	151	94	8	70-137/21
1634-04-4	Methyl Tert Butyl Ether	40	33.9	85	34.3	86	1	75-127/16
91-20-3	Naphthalene	40	34.8	87	35.2	88	1	67-127/19
103-65-1	n-Propylbenzene	40	37.5	94	35.1	88	7	75-123/13
100-42-5	Styrene	40	39.0	98	38.7	97	1	78-122/12
994-05-8	Tert-Amyl Methyl Ether	40	34.8	87	34.8	87	0	77-127/13
75-65-0	Tert Butyl Alcohol	200	159	80	175	88	10	61-141/32
630-20-6	1,1,1,2-Tetrachloroethane	40	40.2	101	39.9	100	1	78-124/13
71-55-6	1,1,1-Trichloroethane	40	39.7	99	38.2	96	4	79-128/15
79-34-5	1,1,2,2-Tetrachloroethane	40	33.0	83	33.6	84	2	70-125/14
79-00-5	1,1,2-Trichloroethane	40	35.0	88	36.2	91	3	74-122/13
87-61-6	1,2,3-Trichlorobenzene	40	37.7	94	36.6	92	3	75-128/18
96-18-4	1,2,3-Trichloropropane	40	39.8	100	41.6	104	4	74-125/15
120-82-1	1,2,4-Trichlorobenzene	40	39.0	98	37.0	93	5	77-128/16
95-63-6	1,2,4-Trimethylbenzene	40	38.1	95	36.3	91	5	76-121/13
108-67-8	1,3,5-Trimethylbenzene	40	38.5	96	36.1	90	6	78-123/13
127-18-4	Tetrachloroethylene	40	43.4	109	41.9	105	4	77-125/14
108-88-3	Toluene	40	38.8	97	37.6	94	3	78-120/13
79-01-6	Trichloroethylene	40	40.6	102	39.3	98	3	80-124/13
75-69-4	Trichlorofluoromethane	40	40.7	102	41.2	103	1	78-130/17
75-01-4	Vinyl chloride	40	41.9	105	42.0	105	0	69-136/18
1330-20-7	Xylene (total)	120	119	99	116	97	3	78-122/13

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	94%	92%	75-125%

* = Outside of Control Limits.

5.2.2
 5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41959
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1345-BS	L44777.D	1	09/30/15	XB	n/a	n/a	VL1345
VL1345-BSD	L44778.D	1	09/30/15	XB	n/a	n/a	VL1345

The QC reported here applies to the following samples:

Method: SW846 8260B

C41959-5, C41959-6, C41959-7

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	95%	95%	80-121%
460-00-4	4-Bromofluorobenzene	93%	95%	71-126%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: C41959
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1344-LCS	L44752.D	1	09/29/15	XB	n/a	n/a	VL1344

The QC reported here applies to the following samples:

Method: SW846 8260B

C41959-8

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
	TPH-GRO (C6-C10)	250	213	85	50-150

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	88%	75-125%
2037-26-5	Toluene-D8	96%	80-121%
460-00-4	4-Bromofluorobenzene	94%	71-126%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: C41959
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1345-LCS	L44779.D	1	09/30/15	XB	n/a	n/a	VL1345

The QC reported here applies to the following samples:

Method: SW846 8260B

C41959-5, C41959-6, C41959-7

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
	TPH-GRO (C6-C10)	250	175	70	50-150

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	90%	75-125%
2037-26-5	Toluene-D8	94%	80-121%
460-00-4	4-Bromofluorobenzene	91%	71-126%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41959
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C42016-1MS	L44770.D	1	09/30/15	XB	n/a	n/a	VL1344
C42016-1MSD	L44771.D	1	09/30/15	XB	n/a	n/a	VL1344
C42016-1	L44765.D	1	09/30/15	XB	n/a	n/a	VL1344

The QC reported here applies to the following samples:

Method: SW846 8260B

C41959-8

CAS No.	Compound	C42016-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	39 U	157	267	170* a	159	253	159* a	5	59-143/27
71-43-2	Benzene	4.9 U	39.3	34.6	88	39.7	34.2	86	1	80-122/13
108-86-1	Bromobenzene	4.9 U	39.3	36.1	92	39.7	33.5	84	7	76-122/12
74-97-5	Bromochloromethane	4.9 U	39.3	36.0	92	39.7	37.2	94	3	81-126/13
75-27-4	Bromodichloromethane	4.9 U	39.3	37.4	95	39.7	37.7	95	1	76-124/13
75-25-2	Bromoform	4.9 U	39.3	36.1	92	39.7	36.0	91	0	72-134/14
104-51-8	n-Butylbenzene	4.9 U	39.3	31.3	80	39.7	28.5	72* a	9	76-122/14
135-98-8	sec-Butylbenzene	4.9 U	39.3	38.2	97	39.7	33.7	85	13	77-124/14
98-06-6	tert-Butylbenzene	4.9 U	39.3	40.9	104	39.7	35.5	89	14* a	76-124/13
108-90-7	Chlorobenzene	4.9 U	39.3	31.7	81	39.7	32.7	82	3	78-122/12
75-00-3	Chloroethane	4.9 U	39.3	30.8	78	39.7	30.1	76	2	71-126/16
67-66-3	Chloroform	4.9 U	39.3	34.8	89	39.7	34.7	87	0	79-126/13
95-49-8	o-Chlorotoluene	4.9 U	39.3	36.7	93	39.7	33.3	84	10	73-124/15
106-43-4	p-Chlorotoluene	4.9 U	39.3	32.7	83	39.7	30.5	77	7	73-127/16
56-23-5	Carbon tetrachloride	4.9 U	39.3	40.0	102	39.7	39.6	100	1	78-127/15
75-34-3	1,1-Dichloroethane	4.9 U	39.3	32.9	84	39.7	32.5	82	1	76-123/14
75-35-4	1,1-Dichloroethylene	4.9 U	39.3	31.5	80	39.7	32.4	82	3	73-124/15
563-58-6	1,1-Dichloropropene	4.9 U	39.3	34.6	88	39.7	34.9	88	1	78-126/14
96-12-8	1,2-Dibromo-3-chloropropane	4.9 U	39.3	36.3	92	39.7	32.1	81	12	62-127/21
106-93-4	1,2-Dibromoethane	4.9 U	39.3	35.2	90	39.7	35.4	89	1	76-123/13
107-06-2	1,2-Dichloroethane	4.9 U	39.3	38.8	99	39.7	38.7	98	0	74-125/12
78-87-5	1,2-Dichloropropane	4.9 U	39.3	33.9	86	39.7	34.1	86	1	76-123/12
142-28-9	1,3-Dichloropropane	4.9 U	39.3	35.3	90	39.7	34.6	87	2	77-121/13
108-20-3	Di-Isopropyl ether	4.9 U	39.3	31.4	80	39.7	30.9	78	2	71-126/14
594-20-7	2,2-Dichloropropane	4.9 U	39.3	33.8	86	39.7	32.9	83	3	77-132/17
124-48-1	Dibromochloromethane	4.9 U	39.3	39.4	100	39.7	38.7	98	2	73-127/13
75-71-8	Dichlorodifluoromethane	4.9 U	39.3	31.7	81	39.7	31.2	79	2	52-141/20
156-59-2	cis-1,2-Dichloroethylene	4.9 U	39.3	33.5	85	39.7	34.0	86	1	80-124/13
10061-01-5	cis-1,3-Dichloropropene	4.9 U	39.3	31.3	80	39.7	32.2	81	3	77-125/13
541-73-1	m-Dichlorobenzene	4.9 U	39.3	29.3	75* a	39.7	28.5	72* a	3	76-123/12
95-50-1	o-Dichlorobenzene	4.9 U	39.3	29.2	74* a	39.7	28.5	72* a	2	76-123/12
106-46-7	p-Dichlorobenzene	4.9 U	39.3	28.5	73* a	39.7	27.9	70* a	2	77-121/12
156-60-5	trans-1,2-Dichloroethylene	4.9 U	39.3	33.3	85	39.7	33.8	85	1	78-123/15
10061-02-6	trans-1,3-Dichloropropene	4.9 U	39.3	33.9	86	39.7	34.0	86	0	71-122/13
100-41-4	Ethylbenzene	4.9 U	39.3	34.5	88	39.7	33.9	85	2	79-121/13
637-92-3	Ethyl tert-Butyl Ether	4.9 U	39.3	33.8	86	39.7	33.7	85	0	76-131/13

* = Outside of Control Limits.

5.4.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41959
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C42016-1MS	L44770.D	1	09/30/15	XB	n/a	n/a	VL1344
C42016-1MSD	L44771.D	1	09/30/15	XB	n/a	n/a	VL1344
C42016-1	L44765.D	1	09/30/15	XB	n/a	n/a	VL1344

The QC reported here applies to the following samples:

Method: SW846 8260B

C41959-8

CAS No.	Compound	C42016-1 ug/kg	Spike Q	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	19 U		157	89.2	57* a	159	79.8	11	65-135/20
87-68-3	Hexachlorobutadiene	4.9 U		39.3	31.0	79	39.7	29.6	5	77-131/17
98-82-8	Isopropylbenzene	4.9 U		39.3	34.2	87	39.7	33.5	2	80-124/14
99-87-6	p-Isopropyltoluene	4.9 U		39.3	35.3	90	39.7	30.4	15* a	78-122/13
108-10-1	4-Methyl-2-pentanone	19 U		157	138	88	159	132	4	70-135/18
74-83-9	Methyl bromide	4.9 U		39.3	26.9	68* a	39.7	27.4	2	74-130/15
74-87-3	Methyl chloride	4.9 U		39.3	30.8	78	39.7	30.3	2	65-131/22
74-95-3	Methylene bromide	4.9 U		39.3	37.2	95	39.7	37.6	1	78-124/13
75-09-2	Methylene chloride	19 U		39.3	34.4	88	39.7	34.0	1	75-121/16
78-93-3	Methyl ethyl ketone	19 U		157	110	70	159	103	7	70-137/21
1634-04-4	Methyl Tert Butyl Ether	4.9 U		39.3	34.9	89	39.7	33.9	3	75-127/16
91-20-3	Naphthalene	4.9 U		39.3	13.9	35* a	39.7	14.8	6	67-127/19
103-65-1	n-Propylbenzene	4.9 U		39.3	37.9	96	39.7	33.4	13	75-123/13
100-42-5	Styrene	4.9 U		39.3	28.1	72* a	39.7	29.8	6	78-122/12
994-05-8	Tert-Amyl Methyl Ether	4.9 U		39.3	34.7	88	39.7	33.9	2	77-127/13
75-65-0	Tert Butyl Alcohol	39 U		196	168	86	198	161	4	61-141/32
630-20-6	1,1,1,2-Tetrachloroethane	4.9 U		39.3	38.8	99	39.7	37.8	3	78-124/13
71-55-6	1,1,1-Trichloroethane	4.9 U		39.3	37.2	95	39.7	36.2	3	79-128/15
79-34-5	1,1,2,2-Tetrachloroethane	4.9 U		39.3	39.5	101	39.7	34.4	14	70-125/14
79-00-5	1,1,2-Trichloroethane	4.9 U		39.3	35.9	91	39.7	34.6	4	74-122/13
87-61-6	1,2,3-Trichlorobenzene	4.9 U		39.3	16.6	42* a	39.7	17.5	5	75-128/18
96-18-4	1,2,3-Trichloropropane	4.9 U		39.3	35.1	89	39.7	35.3	1	74-125/15
120-82-1	1,2,4-Trichlorobenzene	4.9 U		39.3	17.4	44* a	39.7	18.7	7	77-128/16
95-63-6	1,2,4-Trimethylbenzene	4.9 U		39.3	36.4	93	39.7	33.2	9	76-121/13
108-67-8	1,3,5-Trimethylbenzene	4.9 U		39.3	38.7	98	39.7	34.5	11	78-123/13
127-18-4	Tetrachloroethylene	4.9 U		39.3	38.0	97	39.7	37.6	1	77-125/14
108-88-3	Toluene	4.9 U		39.3	35.5	90	39.7	34.9	2	78-120/13
79-01-6	Trichloroethylene	4.9 U		39.3	34.8	89	39.7	35.5	2	80-124/13
75-69-4	Trichlorofluoromethane	4.9 U		39.3	35.4	90	39.7	34.5	3	78-130/17
75-01-4	Vinyl chloride	4.9 U		39.3	34.8	89	39.7	35.5	2	69-136/18
1330-20-7	Xylene (total)	9.7 U		118	99.8	85	119	101	1	78-122/13

CAS No.	Surrogate Recoveries	MS	MSD	C42016-1	Limits
1868-53-7	Dibromofluoromethane	95%	93%	98%	75-125%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41959
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C42016-1MS	L44770.D	1	09/30/15	XB	n/a	n/a	VL1344
C42016-1MSD	L44771.D	1	09/30/15	XB	n/a	n/a	VL1344
C42016-1	L44765.D	1	09/30/15	XB	n/a	n/a	VL1344

The QC reported here applies to the following samples:

Method: SW846 8260B

C41959-8

CAS No.	Surrogate Recoveries	MS	MSD	C42016-1	Limits
2037-26-5	Toluene-D8	102%	98%	96%	80-121%
460-00-4	4-Bromofluorobenzene	86%	88%	91%	71-126%

(a) Outside laboratory control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41959
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C42041-1MS	L44796.D	1	09/30/15	XB	n/a	n/a	VL1345
C42041-1MSD	L44797.D	1	09/30/15	XB	n/a	n/a	VL1345
C42041-1	L44787.D	1	09/30/15	XB	n/a	n/a	VL1345

The QC reported here applies to the following samples:

Method: SW846 8260B

C41959-5, C41959-6, C41959-7

CAS No.	Compound	C42041-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	40 U	154	128	83	150	108	72	17	59-143/27
71-43-2	Benzene	5.0 U	38.5	33.4	87	37.5	25.4	68* a	27* a	80-122/13
108-86-1	Bromobenzene	5.0 U	38.5	34.8	90	37.5	26.4	70* a	27* a	76-122/12
74-97-5	Bromochloromethane	5.0 U	38.5	34.3	89	37.5	26.3	70* a	26* a	81-126/13
75-27-4	Bromodichloromethane	5.0 U	38.5	34.9	91	37.5	26.6	71* a	27* a	76-124/13
75-25-2	Bromoform	5.0 U	38.5	37.3	97	37.5	29.6	79	23* a	72-134/14
104-51-8	n-Butylbenzene	5.0 U	38.5	31.5	82	37.5	24.2	64* a	26* a	76-122/14
135-98-8	sec-Butylbenzene	5.0 U	38.5	32.6	85	37.5	24.9	66* a	27* a	77-124/14
98-06-6	tert-Butylbenzene	5.0 U	38.5	33.5	87	37.5	25.2	67* a	28* a	76-124/13
108-90-7	Chlorobenzene	5.0 U	38.5	33.8	88	37.5	26.4	70* a	25* a	78-122/12
75-00-3	Chloroethane	5.0 U	38.5	29.4	76	37.5	23.6	63* a	22* a	71-126/16
67-66-3	Chloroform	5.0 U	38.5	32.3	84	37.5	25.0	67* a	25* a	79-126/13
95-49-8	o-Chlorotoluene	5.0 U	38.5	32.8	85	37.5	24.8	66* a	28* a	73-124/15
106-43-4	p-Chlorotoluene	5.0 U	38.5	31.8	83	37.5	23.6	63* a	30* a	73-127/16
56-23-5	Carbon tetrachloride	5.0 U	38.5	37.6	98	37.5	29.3	78	25* a	78-127/15
75-34-3	1,1-Dichloroethane	5.0 U	38.5	30.3	79	37.5	23.4	62* a	26* a	76-123/14
75-35-4	1,1-Dichloroethylene	5.0 U	38.5	31.4	82	37.5	24.9	66* a	23* a	73-124/15
563-58-6	1,1-Dichloropropene	5.0 U	38.5	34.9	91	37.5	27.3	73* a	24* a	78-126/14
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U	38.5	33.7	88	37.5	27.4	73	21	62-127/21
106-93-4	1,2-Dibromoethane	5.0 U	38.5	33.9	88	37.5	27.0	72* a	23* a	76-123/13
107-06-2	1,2-Dichloroethane	5.0 U	38.5	35.0	91	37.5	26.8	71* a	27* a	74-125/12
78-87-5	1,2-Dichloropropane	5.0 U	38.5	31.6	82	37.5	24.1	64* a	27* a	76-123/12
142-28-9	1,3-Dichloropropane	5.0 U	38.5	32.2	84	37.5	25.4	68* a	24* a	77-121/13
108-20-3	Di-Isopropyl ether	5.0 U	38.5	28.1	73	37.5	21.4	57* a	27* a	71-126/14
594-20-7	2,2-Dichloropropane	5.0 U	38.5	33.0	86	37.5	25.5	68* a	26* a	77-132/17
124-48-1	Dibromochloromethane	5.0 U	38.5	36.2	94	37.5	28.3	75	24* a	73-127/13
75-71-8	Dichlorodifluoromethane	5.0 U	38.5	29.2	76	37.5	24.2	64	19	52-141/20
156-59-2	cis-1,2-Dichloroethylene	5.0 U	38.5	32.4	84	37.5	25.2	67* a	25* a	80-124/13
10061-01-5	cis-1,3-Dichloropropene	5.0 U	38.5	33.7	88	37.5	25.8	69* a	27* a	77-125/13
541-73-1	m-Dichlorobenzene	5.0 U	38.5	33.3	87	37.5	25.2	67* a	28* a	76-123/12
95-50-1	o-Dichlorobenzene	5.0 U	38.5	33.9	88	37.5	25.8	69* a	27* a	76-123/12
106-46-7	p-Dichlorobenzene	5.0 U	38.5	33.2	86	37.5	25.2	67* a	27* a	77-121/12
156-60-5	trans-1,2-Dichloroethylene	5.0 U	38.5	33.0	86	37.5	25.5	68* a	26* a	78-123/15
10061-02-6	trans-1,3-Dichloropropene	5.0 U	38.5	34.1	89	37.5	27.0	72	23* a	71-122/13
100-41-4	Ethylbenzene	5.0 U	38.5	33.6	87	37.5	26.5	71* a	24* a	79-121/13
637-92-3	Ethyl tert-Butyl Ether	5.0 U	38.5	30.3	79	37.5	23.4	62* a	26* a	76-131/13

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41959
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C42041-1MS	L44796.D	1	09/30/15	XB	n/a	n/a	VL1345
C42041-1MSD	L44797.D	1	09/30/15	XB	n/a	n/a	VL1345
C42041-1	L44787.D	1	09/30/15	XB	n/a	n/a	VL1345

The QC reported here applies to the following samples:

Method: SW846 8260B

C41959-5, C41959-6, C41959-7

CAS No.	Compound	C42041-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	20 U	154	131	85	150	109	73	18	65-135/20
87-68-3	Hexachlorobutadiene	5.0 U	38.5	35.0	91	37.5	26.3	70* a	28* a	77-131/17
98-82-8	Isopropylbenzene	5.0 U	38.5	34.2	89	37.5	26.7	71* a	25* a	80-124/14
99-87-6	p-Isopropyltoluene	5.0 U	38.5	33.2	86	37.5	25.5	68* a	26* a	78-122/13
108-10-1	4-Methyl-2-pentanone	20 U	154	152	99	150	124	83	20* a	70-135/18
74-83-9	Methyl bromide	5.0 U	38.5	30.1	78	37.5	24.6	66* a	20* a	74-130/15
74-87-3	Methyl chloride	5.0 U	38.5	29.6	77	37.5	24.1	64* a	20	65-131/22
74-95-3	Methylene bromide	5.0 U	38.5	34.4	89	37.5	26.9	72* a	24* a	78-124/13
75-09-2	Methylene chloride	20 U	38.5	30.4	79	37.5	23.4	62* a	26* a	75-121/16
78-93-3	Methyl ethyl ketone	20 U	154	130	85	150	109	73	18	70-137/21
1634-04-4	Methyl Tert Butyl Ether	5.0 U	38.5	30.9	80	37.5	24.1	64* a	25* a	75-127/16
91-20-3	Naphthalene	5.0 U	38.5	32.3	84	37.5	25.6	68	23* a	67-127/19
103-65-1	n-Propylbenzene	5.0 U	38.5	32.2	84	37.5	24.5	65* a	27* a	75-123/13
100-42-5	Styrene	5.0 U	38.5	33.8	88	37.5	26.3	70* a	25* a	78-122/12
994-05-8	Tert-Amyl Methyl Ether	5.0 U	38.5	31.0	81	37.5	23.9	64* a	26* a	77-127/13
75-65-0	Tert Butyl Alcohol	40 U	192	155	81	188	130	69	18	61-141/32
630-20-6	1,1,1,2-Tetrachloroethane	5.0 U	38.5	34.5	90	37.5	27.3	73* a	23* a	78-124/13
71-55-6	1,1,1-Trichloroethane	5.0 U	38.5	34.3	89	37.5	27.0	72* a	24* a	79-128/15
79-34-5	1,1,2,2-Tetrachloroethane	5.0 U	38.5	30.9	80	37.5	24.0	64* a	25* a	70-125/14
79-00-5	1,1,2-Trichloroethane	5.0 U	38.5	31.5	82	37.5	25.6	68* a	21* a	74-122/13
87-61-6	1,2,3-Trichlorobenzene	5.0 U	38.5	33.4	87	37.5	25.5	68* a	27* a	75-128/18
96-18-4	1,2,3-Trichloropropane	5.0 U	38.5	37.2	97	37.5	31.7	84	16* a	74-125/15
120-82-1	1,2,4-Trichlorobenzene	5.0 U	38.5	33.2	86	37.5	25.3	67* a	27* a	77-128/16
95-63-6	1,2,4-Trimethylbenzene	5.0 U	38.5	33.3	87	37.5	25.0	67* a	28* a	76-121/13
108-67-8	1,3,5-Trimethylbenzene	5.0 U	38.5	33.0	86	37.5	24.9	66* a	28* a	78-123/13
127-18-4	Tetrachloroethylene	5.0 U	38.5	38.1	99	37.5	30.6	82	22* a	77-125/14
108-88-3	Toluene	5.0 U	38.5	33.9	88	37.5	26.7	71* a	24* a	78-120/13
79-01-6	Trichloroethylene	5.0 U	38.5	35.6	93	37.5	27.3	73* a	26* a	80-124/13
75-69-4	Trichlorofluoromethane	5.0 U	38.5	34.1	89	37.5	28.3	75* a	19* a	78-130/17
75-01-4	Vinyl chloride	5.0 U	38.5	34.4	89	37.5	29.1	78	17	69-136/18
1330-20-7	Xylene (total)	10 U	115	103	89	113	80.3	71* a	25* a	78-122/13

CAS No.	Surrogate Recoveries	MS	MSD	C42041-1	Limits
1868-53-7	Dibromofluoromethane	95%	94%	91%	75-125%

* = Outside of Control Limits.

5.4.2
 5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41959
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C42041-1MS	L44796.D	1	09/30/15	XB	n/a	n/a	VL1345
C42041-1MSD	L44797.D	1	09/30/15	XB	n/a	n/a	VL1345
C42041-1	L44787.D	1	09/30/15	XB	n/a	n/a	VL1345

The QC reported here applies to the following samples:

Method: SW846 8260B

C41959-5, C41959-6, C41959-7

CAS No.	Surrogate Recoveries	MS	MSD	C42041-1	Limits
2037-26-5	Toluene-D8	94%	94%	93%	80-121%
460-00-4	4-Bromofluorobenzene	94%	95%	91%	71-126%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

5.4.2
 5

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: C41959
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13169-MB	GG61746.D	1	09/28/15	NN	09/28/15	OP13169	GGG1825

The QC reported here applies to the following samples:

Method: SW846 8015B M

C41959-5, C41959-6, C41959-7, C41959-8

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	3.3	0.83	mg/kg	
	TPH (> C28-C40)	ND	6.7	1.7	mg/kg	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	97% 43-144%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41959
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13169-BS	GG61747.D	1	09/28/15	NN	09/28/15	OP13169	GGG1825
OP13169-BSD	GG61748.D	1	09/28/15	NN	09/28/15	OP13169	GGG1825

The QC reported here applies to the following samples:

Method: SW846 8015B M

C41959-5, C41959-6, C41959-7, C41959-8

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	33.3	27.4	82	28.0	84	2	50-111/13
	TPH (> C28-C40)	33.3	29.8	89	30.7	92	3	59-123/16

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	76%	79%	43-144%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41959
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13169-MS	GG61749.D	1	09/28/15	NN	09/28/15	OP13169	GGG1825
OP13169-MSD	GG61750.D	1	09/28/15	NN	09/28/15	OP13169	GGG1825
C42008-2	GG61752.D	1	09/28/15	NN	09/28/15	OP13169	GGG1825

The QC reported here applies to the following samples:

Method: SW846 8015B M

C41959-5, C41959-6, C41959-7, C41959-8

CAS No.	Compound	C42008-2 mg/kg	Spike Q	mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	1.06	J	33.1	28.3	82	33.2	28.2	82	0	50-111/13
	TPH (> C28-C40)	ND		33.1	31.0	94	33.2	31.4	95	1	59-123/16

CAS No.	Surrogate Recoveries	MS	MSD	C42008-2	Limits
630-01-3	Hexacosane	79%	77%	95%	43-144%

* = Outside of Control Limits.

Technical Report for

ROUX Associates - Oakland CA

2868 Hannah Street, Oakland, CA

Accutest Job Number: C41989

Sampling Date: 09/25/15

Report to:

ROUX Associates, Inc.
555 12th Street Suite 1725
Oakland, CA 94607
dgrunat@rouxinc.com

ATTN: David Grunat

Total number of pages in report: **45**



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.



James J. Rhudy
Lab Director

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)

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

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Summary of Hits	4
Section 3: Sample Results	5
3.1: C41989-5: RB-8 24.5-25.0'	6
3.2: C41989-6: RB-8 27.5'GW	11
Section 4: Misc. Forms	15
4.1: Chain of Custody	16
Section 5: GC/MS Volatiles - QC Data Summaries	18
5.1: Method Blank Summary	19
5.2: Blank Spike/Blank Spike Duplicate Summary	25
5.3: Laboratory Control Sample Summary	31
5.4: Matrix Spike/Matrix Spike Duplicate Summary	33
Section 6: GC Semi-volatiles - QC Data Summaries	39
6.1: Method Blank Summary	40
6.2: Blank Spike/Blank Spike Duplicate Summary	42
6.3: Matrix Spike Summary	44
6.4: Matrix Spike/Matrix Spike Duplicate Summary	45

1

2

3

4

5

6



Sample Summary

ROUX Associates - Oakland CA
2868 Hannah Street, Oakland, CA

Job No: C41989

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
C41989-1	09/25/15	07:40 NR	09/25/15	SO	Soil	RB-8 3.0-3.5'
C41989-5	09/25/15	08:05 NR	09/25/15	SO	Soil	RB-8 24.5-25.0'
C41989-6	09/25/15	08:30 NR	09/25/15	AQ	Ground Water	RB-8 27.5'GW

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

Summary of Hits

Job Number: C41989
Account: ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA
Collected: 09/25/15

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

C41989-5 RB-8 24.5-25.0'

TPH (C10-C28)	1.73 J	3.9	0.98	mg/kg	SW846 8015B M
TPH (> C28-C40)	2.71 J	7.9	2.0	mg/kg	SW846 8015B M

C41989-6 RB-8 27.5'GW

Tetrachloroethylene ^a	3.3	1.0	0.30	ug/l	SW846 8260B
TPH (C10-C28)	0.308	0.099	0.025	mg/l	SW846 8015B M
TPH (> C28-C40)	0.230	0.20	0.050	mg/l	SW846 8015B M

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

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: RB-8 24.5-25.0'		Date Sampled: 09/25/15
Lab Sample ID: C41989-5		Date Received: 09/25/15
Matrix: SO - Soil		Percent Solids: 84.8
Method: SW846 8260B		
Project: 2868 Hannah Street, Oakland, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L44768.D	1	09/30/15	XB	n/a	n/a	VL1344
Run #2							

Run #1	Initial Weight
Run #1	5.64 g
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	42	10	ug/kg	
71-43-2	Benzene	ND	5.2	0.52	ug/kg	
108-86-1	Bromobenzene	ND	5.2	0.52	ug/kg	
74-97-5	Bromochloromethane	ND	5.2	0.52	ug/kg	
75-27-4	Bromodichloromethane	ND	5.2	0.52	ug/kg	
75-25-2	Bromoform	ND	5.2	0.52	ug/kg	
104-51-8	n-Butylbenzene	ND	5.2	0.52	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.2	0.52	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.2	0.52	ug/kg	
108-90-7	Chlorobenzene	ND	5.2	0.52	ug/kg	
75-00-3	Chloroethane	ND	5.2	1.0	ug/kg	
67-66-3	Chloroform	ND	5.2	0.52	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.2	0.52	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.2	0.52	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.2	0.52	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.2	0.52	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.2	0.52	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.2	0.52	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.2	1.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.2	0.52	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.2	0.52	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.2	0.52	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.2	0.52	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.2	0.52	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.2	0.52	ug/kg	
124-48-1	Dibromochloromethane	ND	5.2	0.52	ug/kg	
75-71-8	Dichlorodifluoromethane ^a	ND	5.2	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.2	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.2	0.52	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.2	0.52	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.2	0.52	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.2	0.52	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RB-8 24.5-25.0'	
Lab Sample ID: C41989-5	Date Sampled: 09/25/15
Matrix: SO - Soil	Date Received: 09/25/15
Method: SW846 8260B	Percent Solids: 84.8
Project: 2868 Hannah Street, Oakland, CA	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	5.2	0.52	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.2	0.52	ug/kg	
100-41-4	Ethylbenzene	ND	5.2	0.52	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.2	0.52	ug/kg	
591-78-6	2-Hexanone	ND	21	2.1	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.2	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.2	0.52	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.2	0.52	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	21	2.1	ug/kg	
74-83-9	Methyl bromide	ND	5.2	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.2	1.0	ug/kg	
74-95-3	Methylene bromide	ND	5.2	0.52	ug/kg	
75-09-2	Methylene chloride	ND	21	5.2	ug/kg	
78-93-3	Methyl ethyl ketone	ND	21	2.1	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.2	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.2	1.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.2	0.52	ug/kg	
100-42-5	Styrene	ND	5.2	0.52	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.2	0.52	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	42	10	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.2	0.52	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.2	0.52	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.2	0.52	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.2	0.52	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.2	0.52	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.2	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.2	0.52	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.2	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.2	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.2	0.63	ug/kg	
108-88-3	Toluene	ND	5.2	0.52	ug/kg	
79-01-6	Trichloroethylene	ND	5.2	0.52	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.2	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.2	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	52	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		75-125%

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

Report of Analysis

Client Sample ID: RB-8 24.5-25.0'	
Lab Sample ID: C41989-5	Date Sampled: 09/25/15
Matrix: SO - Soil	Date Received: 09/25/15
Method: SW846 8260B	Percent Solids: 84.8
Project: 2868 Hannah Street, Oakland, CA	

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	95%		80-121%
460-00-4	4-Bromofluorobenzene	92%		71-126%

(a) CCV outside of control limits (biased high); not detected in sample.

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

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

Report of Analysis

3.1
3

Client Sample ID: RB-8 24.5-25.0'	Date Sampled: 09/25/15
Lab Sample ID: C41989-5	Date Received: 09/25/15
Matrix: SO - Soil	Percent Solids: 84.8
Method: SW846 8015B M SW846 3550B	
Project: 2868 Hannah Street, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG61815.D	1	09/30/15	NN	09/28/15	OP13169	GGG1827
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	1.73	3.9	0.98	mg/kg	J
	TPH (> C28-C40)	2.71	7.9	2.0	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	98%		43-144%

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

Report of Analysis

Client Sample ID: RB-8 24.5-25.0'	Date Sampled: 09/25/15
Lab Sample ID: C41989-5	Date Received: 09/25/15
Matrix: SO - Soil	Percent Solids: 84.8
Project: 2868 Hannah Street, Oakland, CA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Moisture, Percent	15.2		%	1	10/01/15 10:37	EA	SM2540MOD G-97

RL = Reporting Limit

Report of Analysis

Client Sample ID: RB-8 27.5' GW	Date Sampled: 09/25/15
Lab Sample ID: C41989-6	Date Received: 09/25/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: 2868 Hannah Street, Oakland, CA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	V29180.D	1	10/06/15	SY	n/a	n/a	VV1188
Run #2							

	Purge Volume
Run #1	10.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	4.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: RB-8 27.5' GW	
Lab Sample ID: C41989-6	Date Sampled: 09/25/15
Matrix: AQ - Ground Water	Date Received: 09/25/15
Method: SW846 8260B	Percent Solids: n/a
Project: 2868 Hannah Street, Oakland, CA	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	3.3	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		78-125%

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

Report of Analysis

Client Sample ID: RB-8 27.5' GW	
Lab Sample ID: C41989-6	Date Sampled: 09/25/15
Matrix: AQ - Ground Water	Date Received: 09/25/15
Method: SW846 8260B	Percent Solids: n/a
Project: 2868 Hannah Street, Oakland, CA	

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	103%		86-114%
460-00-4	4-Bromofluorobenzene	98%		80-113%

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

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

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

Report of Analysis

32
3

Client Sample ID: RB-8 27.5' GW	Date Sampled: 09/25/15
Lab Sample ID: C41989-6	Date Received: 09/25/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8015B M SW846 3510C	
Project: 2868 Hannah Street, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG61770.D	1	09/29/15	NN	09/29/15	OP13175	GGG1826
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1010 ml	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.308	0.099	0.025	mg/l	
	TPH (> C28-C40)	0.230	0.20	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	66%		38-139%

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY

1 of 1

ACCUTEST
LABORATORIES

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

FED-EX Tracking # _____ Bottle Order Control # _____
Accutest Quote # _____ Accutest NC Job #: C **C41989**

Client / Reporting Information			Project Information			Requested Analysis						Matrix Codes			
Company Name: ROUX ASSOCIATES			Project Name: 2868 Hannah St									WW- Wastewater			
Address: 365 12th St, Suite 17B			Street: 2868 Hannah St									GW- Ground Water			
City: Oakland CA State: CA Zip: 94607			City: Oakland State: CA									SW- Surface Water			
Project Contact: DAVE GRUNZT			Project #									SO- Soil			
Phone # 415-967-6097			EMAIL: dgrunz@rouxinc.com									OI-OI WP-Wipe			
Sampler's Name: N. RODRIGUEZ			Client Purchase Order #									LIO- Non aqueous Liquid			
												AIR			
												DW- Drinking Water (Perchlorate Only)			
												LAB USE ONLY			
Collection			Number of preserved Bottles												
Sample ID	Sample ID / Field Point / Point of Collection	Date	Time	Sampled by	Matrix	# of bottles	LD	NADA	MSDS	MSDS	MSDS	MSDS	MSDS	MSDS	MSDS
1	RB-8 3.0-3.5'	9/25/15	740	NRL	S	5									
2	RB-8 9.5-10.0'	9/25/15	745		S	5									
3	RB-8 14.5-15.0'	9/25/15	750		S	5									
4	RB-8 18.5-19.0'	9/25/15	800		S	5									
5	RB-8 24.5-25.0'	9/25/15	805		S	5									
6	RB-8 27.5' GW	9/25/15	830		W	3									
7	RB-8 40.0' GW	9/25/15	930		W	5									
<p>NOV 9/25/15 (written vertically in column 15)</p> <p>PH 9 (826) (written vertically in column 16)</p> <p>TPH 4 (8015) (written vertically in column 17)</p> <p>HOLD ALL SAMPLES. (written in large letters across rows 2-6)</p>															
Turnaround Time (Business days)			Data Deliverable Information			Comments / Remarks									
<input type="checkbox"/> 10 Day <input type="checkbox"/> 5 Day <input type="checkbox"/> 3 Day <input type="checkbox"/> 2 Day <input type="checkbox"/> 1 Day <input type="checkbox"/> Same Day			Approved By / Date: _____			<input type="checkbox"/> Commercial "A" - Results only <input type="checkbox"/> Commercial "B" - Results with QC summaries <input type="checkbox"/> Commercial "B+" - Results, QC, and chromatograms <input type="checkbox"/> FULL1 - Level 4 data package <input type="checkbox"/> EDF for Geotracker <input type="checkbox"/> EDD Format Provide EDF Global ID: _____ Provide EDF Logcode: _____									
Emergency T/A data available via Lablink															
Sample Custody must be documented below each time samples change possession, including courier delivery.															
Relinquished By: <i>[Signature]</i>			Date Time: 9/25/15 11:35			Received By: <i>[Signature]</i>			Date Time: 9/25/15 12:00			Received By: <i>[Signature]</i>			
Relinquished By:			Date Time:			Received By:			Date Time:			Received By:			
3			3			4			4			4			
Relinquished By:			Date Time:			Received By:			Date Time:			Received By:			
5			5			Custody Seal # NONE			Appropriate Bottle / Pres. Y / N			Headspace Y / N			
						Labels match Coc? Y / N			Separate Receiving Check List used: Y / N			Cooler Temp. 2.6/2.6			

4.1
4

C41989: Chain of Custody

Page 1 of 2



Accutest Laboratories Sample Receipt Summary

Accutest Job Number: C41989 Client: ROUX ASSOCIATES Project: 2868 HANNAH ST

Date / Time Received: 9/25/2015 1:00:00 PM Delivery Method: Accutest Courier Airbill #s:

Cooler Temps (Initial/Adjusted): #1: (2.6/2.6):

Cooler Security		<u>Y</u>	<u>or</u>	<u>N</u>		<u>Y</u>	<u>or</u>	<u>N</u>
1. Custody Seals Present:	<input type="checkbox"/>	<input checked="" type="checkbox"/>			3. COC Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Custody Seals Intact:	<input type="checkbox"/>	<input type="checkbox"/>			4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>		<input type="checkbox"/>

Cooler Temperature		<u>Y</u>	<u>or</u>	<u>N</u>
1. Temp criteria achieved:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Therm ID:	IR1;			
3. Cooler media:	Ice (Bag)			
4. No. Coolers:	1			

Quality Control Preservation	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Trip Blank listed on COC:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Sample Integrity - Documentation		<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	

Sample Integrity - Condition		<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
3. Condition of sample:	Intact			

Sample Integrity - Instructions		<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>		
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>		
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>		
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>		<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>		<input checked="" type="checkbox"/>

Comments

4.1
4

GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: C41989
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1344-MB	L44753.D	1	09/29/15	XB	n/a	n/a	VL1344

The QC reported here applies to the following samples:

Method: SW846 8260B

C41989-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	10	ug/kg	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	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	

Method Blank Summary

Job Number: C41989
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1344-MB	L44753.D	1	09/29/15	XB	n/a	n/a	VL1344

The QC reported here applies to the following samples:

Method: SW846 8260B

C41989-5

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	1.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	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	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	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	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.60	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

Method Blank Summary

Job Number: C41989
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1344-MB	L44753.D	1	09/29/15	XB	n/a	n/a	VL1344

The QC reported here applies to the following samples:

Method: SW846 8260B

C41989-5

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	90%	75-125%
2037-26-5	Toluene-D8	93%	80-121%
460-00-4	4-Bromofluorobenzene	92%	71-126%

5.1.1
5

Method Blank Summary

Job Number: C41989
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1188-MB	V29166.D	1	10/06/15	SY	n/a	n/a	VV1188

The QC reported here applies to the following samples:

Method: SW846 8260B

C41989-6

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	4.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	

Method Blank Summary

Job Number: C41989
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1188-MB	V29166.D	1	10/06/15	SY	n/a	n/a	VV1188

The QC reported here applies to the following samples:

Method: SW846 8260B

C41989-6

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

Method Blank Summary

Job Number: C41989
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1188-MB	V29166.D	1	10/06/15	SY	n/a	n/a	VV1188

The QC reported here applies to the following samples:

Method: SW846 8260B

C41989-6

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	101%	78-125%
2037-26-5	Toluene-D8	104%	86-114%
460-00-4	4-Bromofluorobenzene	98%	80-113%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41989
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1344-BS	L44750.D	1	09/29/15	XB	n/a	n/a	VL1344
VL1344-BSD	L44751.D	1	09/29/15	XB	n/a	n/a	VL1344

The QC reported here applies to the following samples:

Method: SW846 8260B

C41989-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	160	139	87	143	89	3	59-143/27
71-43-2	Benzene	40	37.1	93	38.1	95	3	80-122/13
108-86-1	Bromobenzene	40	38.5	96	39.8	100	3	76-122/12
74-97-5	Bromochloromethane	40	38.4	96	39.8	100	4	81-126/13
75-27-4	Bromodichloromethane	40	39.5	99	40.7	102	3	76-124/13
75-25-2	Bromoform	40	41.8	105	43.3	108	4	72-134/14
104-51-8	n-Butylbenzene	40	35.9	90	36.8	92	2	76-122/14
135-98-8	sec-Butylbenzene	40	36.1	90	37.4	94	4	77-124/14
98-06-6	tert-Butylbenzene	40	36.5	91	38.2	96	5	76-124/13
108-90-7	Chlorobenzene	40	38.7	97	39.3	98	2	78-122/12
75-00-3	Chloroethane	40	36.6	92	37.8	95	3	71-126/16
67-66-3	Chloroform	40	36.8	92	37.9	95	3	79-126/13
95-49-8	o-Chlorotoluene	40	34.7	87	37.9	95	9	73-124/15
106-43-4	p-Chlorotoluene	40	35.4	89	36.7	92	4	73-127/16
56-23-5	Carbon tetrachloride	40	41.5	104	42.0	105	1	78-127/15
75-34-3	1,1-Dichloroethane	40	34.6	87	35.5	89	3	76-123/14
75-35-4	1,1-Dichloroethylene	40	34.7	87	35.4	89	2	73-124/15
563-58-6	1,1-Dichloropropene	40	38.8	97	40.0	100	3	78-126/14
96-12-8	1,2-Dibromo-3-chloropropane	40	35.2	88	37.4	94	6	62-127/21
106-93-4	1,2-Dibromoethane	40	38.2	96	39.2	98	3	76-123/13
107-06-2	1,2-Dichloroethane	40	39.3	98	40.5	101	3	74-125/12
78-87-5	1,2-Dichloropropane	40	35.9	90	36.6	92	2	76-123/12
142-28-9	1,3-Dichloropropane	40	36.4	91	37.1	93	2	77-121/13
108-20-3	Di-Isopropyl ether	40	32.4	81	33.0	83	2	71-126/14
594-20-7	2,2-Dichloropropane	40	37.7	94	38.0	95	1	77-132/17
124-48-1	Dibromochloromethane	40	41.1	103	42.1	105	2	73-127/13
75-71-8	Dichlorodifluoromethane	40	49.5	124	49.2	123	1	52-141/20
156-59-2	cis-1,2-Dichloroethylene	40	36.5	91	37.5	94	3	80-124/13
10061-01-5	cis-1,3-Dichloropropene	40	38.2	96	39.6	99	4	77-125/13
541-73-1	m-Dichlorobenzene	40	37.5	94	39.0	98	4	76-123/12
95-50-1	o-Dichlorobenzene	40	37.6	94	38.7	97	3	76-123/12
106-46-7	p-Dichlorobenzene	40	37.4	94	38.8	97	4	77-121/12
156-60-5	trans-1,2-Dichloroethylene	40	37.0	93	38.2	96	3	78-123/15
10061-02-6	trans-1,3-Dichloropropene	40	39.5	99	40.5	101	3	71-122/13
100-41-4	Ethylbenzene	40	38.1	95	38.9	97	2	79-121/13
637-92-3	Ethyl tert-Butyl Ether	40	34.5	86	35.5	89	3	76-131/13

* = Outside of Control Limits.

5.2.1
 5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41989
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1344-BS	L44750.D	1	09/29/15	XB	n/a	n/a	VL1344
VL1344-BSD	L44751.D	1	09/29/15	XB	n/a	n/a	VL1344

The QC reported here applies to the following samples:

Method: SW846 8260B

C41989-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	160	144	90	150	94	4	65-135/20
87-68-3	Hexachlorobutadiene	40	39.0	98	40.3	101	3	77-131/17
98-82-8	Isopropylbenzene	40	38.7	97	38.9	97	1	80-124/14
99-87-6	p-Isopropyltoluene	40	37.0	93	38.5	96	4	78-122/13
108-10-1	4-Methyl-2-pentanone	160	157	98	168	105	7	70-135/18
74-83-9	Methyl bromide	40	40.4	101	41.2	103	2	74-130/15
74-87-3	Methyl chloride	40	44.3	111	44.5	111	0	65-131/22
74-95-3	Methylene bromide	40	38.3	96	39.6	99	3	78-124/13
75-09-2	Methylene chloride	40	34.8	87	35.5	89	2	75-121/16
78-93-3	Methyl ethyl ketone	160	144	90	152	95	5	70-137/21
1634-04-4	Methyl Tert Butyl Ether	40	34.8	87	35.9	90	3	75-127/16
91-20-3	Naphthalene	40	34.7	87	37.4	94	7	67-127/19
103-65-1	n-Propylbenzene	40	35.7	89	37.1	93	4	75-123/13
100-42-5	Styrene	40	38.8	97	39.5	99	2	78-122/12
994-05-8	Tert-Amyl Methyl Ether	40	35.6	89	36.2	91	2	77-127/13
75-65-0	Tert Butyl Alcohol	200	170	85	175	88	3	61-141/32
630-20-6	1,1,1,2-Tetrachloroethane	40	40.0	100	41.4	104	3	78-124/13
71-55-6	1,1,1-Trichloroethane	40	38.3	96	39.0	98	2	79-128/15
79-34-5	1,1,2,2-Tetrachloroethane	40	33.8	85	35.1	88	4	70-125/14
79-00-5	1,1,2-Trichloroethane	40	36.7	92	36.5	91	1	74-122/13
87-61-6	1,2,3-Trichlorobenzene	40	37.0	93	39.4	99	6	75-128/18
96-18-4	1,2,3-Trichloropropane	40	41.5	104	41.8	105	1	74-125/15
120-82-1	1,2,4-Trichlorobenzene	40	37.6	94	39.6	99	5	77-128/16
95-63-6	1,2,4-Trimethylbenzene	40	37.0	93	38.2	96	3	76-121/13
108-67-8	1,3,5-Trimethylbenzene	40	36.8	92	37.9	95	3	78-123/13
127-18-4	Tetrachloroethylene	40	42.3	106	42.5	106	0	77-125/14
108-88-3	Toluene	40	38.8	97	39.1	98	1	78-120/13
79-01-6	Trichloroethylene	40	39.0	98	40.0	100	3	80-124/13
75-69-4	Trichlorofluoromethane	40	40.3	101	41.1	103	2	78-130/17
75-01-4	Vinyl chloride	40	42.3	106	42.3	106	0	69-136/18
1330-20-7	Xylene (total)	120	117	98	119	99	2	78-122/13

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	96%	92%	75-125%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41989
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1344-BS	L44750.D	1	09/29/15	XB	n/a	n/a	VL1344
VL1344-BSD	L44751.D	1	09/29/15	XB	n/a	n/a	VL1344

The QC reported here applies to the following samples:

Method: SW846 8260B

C41989-5

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	96%	94%	80-121%
460-00-4	4-Bromofluorobenzene	95%	93%	71-126%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41989
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1188-BS	V29163.D	1	10/06/15	SY	n/a	n/a	VV1188
VV1188-BSD	V29164.D	1	10/06/15	SY	n/a	n/a	VV1188

The QC reported here applies to the following samples:

Method: SW846 8260B

C41989-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	80	82.8	104	85.7	107	3	58-137/12
71-43-2	Benzene	20	20.0	100	20.4	102	2	77-118/10
108-86-1	Bromobenzene	20	20.8	104	21.3	107	2	78-122/10
74-97-5	Bromochloromethane	20	19.6	98	20.2	101	3	76-124/10
75-27-4	Bromodichloromethane	20	19.2	96	19.5	98	2	74-121/10
75-25-2	Bromoform	20	20.2	101	20.6	103	2	58-133/10
104-51-8	n-Butylbenzene	20	21.1	106	21.1	106	0	75-125/10
135-98-8	sec-Butylbenzene	20	21.2	106	21.4	107	1	76-127/10
98-06-6	tert-Butylbenzene	20	21.3	107	21.6	108	1	76-124/10
108-90-7	Chlorobenzene	20	19.8	99	20.3	102	2	77-120/10
75-00-3	Chloroethane	20	17.8	89	18.3	92	3	63-117/10
67-66-3	Chloroform	20	18.8	94	19.3	97	3	74-123/10
95-49-8	o-Chlorotoluene	20	20.8	104	21.0	105	1	76-125/10
106-43-4	p-Chlorotoluene	20	21.6	108	22.0	110	2	76-123/10
56-23-5	Carbon tetrachloride	20	19.7	99	19.8	99	1	72-128/11
75-34-3	1,1-Dichloroethane	20	18.9	95	19.4	97	3	70-120/10
75-35-4	1,1-Dichloroethylene	20	20.1	101	20.4	102	1	65-120/11
563-58-6	1,1-Dichloropropene	20	18.5	93	18.6	93	1	69-125/10
96-12-8	1,2-Dibromo-3-chloropropane	20	18.1	91	18.4	92	2	63-128/10
106-93-4	1,2-Dibromoethane	20	20.2	101	20.6	103	2	78-123/10
107-06-2	1,2-Dichloroethane	20	18.5	93	18.9	95	2	72-123/10
78-87-5	1,2-Dichloropropane	20	19.9	100	20.3	102	2	76-119/10
142-28-9	1,3-Dichloropropane	20	20.9	105	21.5	108	3	78-122/10
108-20-3	Di-Isopropyl ether	20	18.3	92	18.8	94	3	69-124/10
594-20-7	2,2-Dichloropropane	20	18.2	91	18.6	93	2	68-129/10
124-48-1	Dibromochloromethane	20	19.5	98	20.1	101	3	75-124/10
75-71-8	Dichlorodifluoromethane	20	20.3	102	20.4	102	0	37-149/21
156-59-2	cis-1,2-Dichloroethylene	20	20.6	103	21.3	107	3	74-121/10
10061-01-5	cis-1,3-Dichloropropene	20	20.1	101	20.3	102	1	76-125/10
541-73-1	m-Dichlorobenzene	20	20.8	104	20.9	105	0	77-121/10
95-50-1	o-Dichlorobenzene	20	20.3	102	20.7	104	2	77-120/10
106-46-7	p-Dichlorobenzene	20	20.9	105	21.2	106	1	78-118/10
156-60-5	trans-1,2-Dichloroethylene	20	18.6	93	19.0	95	2	71-118/10
10061-02-6	trans-1,3-Dichloropropene	20	18.7	94	19.4	97	4	73-122/10
100-41-4	Ethylbenzene	20	20.3	102	20.7	104	2	78-121/10
637-92-3	Ethyl Tert Butyl Ether	20	18.0	90	18.5	93	3	76-130/10

* = Outside of Control Limits.

5.2.2
 5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41989
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1188-BS	V29163.D	1	10/06/15	SY	n/a	n/a	VV1188
VV1188-BSD	V29164.D	1	10/06/15	SY	n/a	n/a	VV1188

The QC reported here applies to the following samples:

Method: SW846 8260B

C41989-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	80	89.3	112	91.6	115	3	71-139/10
87-68-3	Hexachlorobutadiene	20	20.5	103	20.7	104	1	69-127/11
98-82-8	Isopropylbenzene	20	20.4	102	20.5	103	0	77-125/10
99-87-6	p-Isopropyltoluene	20	21.0	105	21.2	106	1	76-125/10
108-10-1	4-Methyl-2-pentanone	80	83.9	105	86.9	109	4	71-132/10
74-83-9	Methyl bromide	20	17.7	89	18.3	92	3	66-123/10
74-87-3	Methyl chloride	20	21.6	108	22.2	111	3	50-138/19
74-95-3	Methylene bromide	20	19.8	99	20.4	102	3	77-125/10
75-09-2	Methylene chloride	20	17.7	89	18.4	92	4	65-124/14
78-93-3	Methyl ethyl ketone	80	85.8	107	87.3	109	2	67-139/11
1634-04-4	Methyl Tert Butyl Ether	20	17.1	86	17.8	89	4	73-124/10
91-20-3	Naphthalene	20	17.3	87	17.7	89	2	68-122/12
103-65-1	n-Propylbenzene	20	21.1	106	21.1	106	0	76-123/10
100-42-5	Styrene	20	20.4	102	20.8	104	2	74-126/10
994-05-8	Tert-Amyl Methyl Ether	20	18.1	91	18.8	94	4	76-127/10
75-65-0	Tert-Butyl Alcohol	100	84.0	84	86.0	86	2	47-161/18
630-20-6	1,1,1,2-Tetrachloroethane	20	20.0	100	20.4	102	2	79-123/10
71-55-6	1,1,1-Trichloroethane	20	19.1	96	19.4	97	2	73-124/10
79-34-5	1,1,2,2-Tetrachloroethane	20	21.0	105	21.3	107	1	77-123/10
79-00-5	1,1,2-Trichloroethane	20	20.5	103	21.0	105	2	77-120/10
87-61-6	1,2,3-Trichlorobenzene	20	18.1	91	18.5	93	2	70-126/11
96-18-4	1,2,3-Trichloropropane	20	17.8	89	18.3	92	3	65-125/10
120-82-1	1,2,4-Trichlorobenzene	20	18.9	95	19.2	96	2	72-123/10
95-63-6	1,2,4-Trimethylbenzene	20	20.3	102	20.6	103	1	77-122/10
108-67-8	1,3,5-Trimethylbenzene	20	21.2	106	21.4	107	1	79-127/10
127-18-4	Tetrachloroethylene	20	20.1	101	20.4	102	1	71-124/10
108-88-3	Toluene	20	20.4	102	20.7	104	1	78-120/10
79-01-6	Trichloroethylene	20	19.6	98	19.9	100	2	75-119/10
75-69-4	Trichlorofluoromethane	20	20.3	102	21.0	105	3	67-129/14
75-01-4	Vinyl chloride	20	20.8	104	21.1	106	1	60-133/15
1330-20-7	Xylene (total)	60	60.3	101	61.1	102	1	78-122/10

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	98%	100%	78-125%

* = Outside of Control Limits.

5.2.2
 5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41989
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1188-BS	V29163.D	1	10/06/15	SY	n/a	n/a	VV1188
VV1188-BSD	V29164.D	1	10/06/15	SY	n/a	n/a	VV1188

The QC reported here applies to the following samples:

Method: SW846 8260B

C41989-6

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	102%	103%	86-114%
460-00-4	4-Bromofluorobenzene	100%	101%	80-113%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: C41989
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL1344-LCS	L44752.D	1	09/29/15	XB	n/a	n/a	VL1344

The QC reported here applies to the following samples:

Method: SW846 8260B

C41989-5

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
	TPH-GRO (C6-C10)	250	213	85	50-150

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	88%	75-125%
2037-26-5	Toluene-D8	96%	80-121%
460-00-4	4-Bromofluorobenzene	94%	71-126%

* = Outside of Control Limits.

5.3.1
 5

Laboratory Control Sample Summary

Job Number: C41989
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1188-LCS	V29165.D	1	10/06/15	SY	n/a	n/a	VV1188

The QC reported here applies to the following samples:

Method: SW846 8260B

C41989-6

CAS No.	Compound	Spike ug/l	LCS ug/l	LCS %	Limits
	TPH-GRO (C6-C10)	125	124	99	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	78-125%
2037-26-5	Toluene-D8	103%	86-114%
460-00-4	4-Bromofluorobenzene	99%	80-113%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41989
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C42016-1MS	L44770.D	1	09/30/15	XB	n/a	n/a	VL1344
C42016-1MSD	L44771.D	1	09/30/15	XB	n/a	n/a	VL1344
C42016-1	L44765.D	1	09/30/15	XB	n/a	n/a	VL1344

The QC reported here applies to the following samples:

Method: SW846 8260B

C41989-5

CAS No.	Compound	C42016-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	39 U	157	267	170* a	159	253	159* a	5	59-143/27
71-43-2	Benzene	4.9 U	39.3	34.6	88	39.7	34.2	86	1	80-122/13
108-86-1	Bromobenzene	4.9 U	39.3	36.1	92	39.7	33.5	84	7	76-122/12
74-97-5	Bromochloromethane	4.9 U	39.3	36.0	92	39.7	37.2	94	3	81-126/13
75-27-4	Bromodichloromethane	4.9 U	39.3	37.4	95	39.7	37.7	95	1	76-124/13
75-25-2	Bromoform	4.9 U	39.3	36.1	92	39.7	36.0	91	0	72-134/14
104-51-8	n-Butylbenzene	4.9 U	39.3	31.3	80	39.7	28.5	72* b	9	76-122/14
135-98-8	sec-Butylbenzene	4.9 U	39.3	38.2	97	39.7	33.7	85	13	77-124/14
98-06-6	tert-Butylbenzene	4.9 U	39.3	40.9	104	39.7	35.5	89	14* c	76-124/13
108-90-7	Chlorobenzene	4.9 U	39.3	31.7	81	39.7	32.7	82	3	78-122/12
75-00-3	Chloroethane	4.9 U	39.3	30.8	78	39.7	30.1	76	2	71-126/16
67-66-3	Chloroform	4.9 U	39.3	34.8	89	39.7	34.7	87	0	79-126/13
95-49-8	o-Chlorotoluene	4.9 U	39.3	36.7	93	39.7	33.3	84	10	73-124/15
106-43-4	p-Chlorotoluene	4.9 U	39.3	32.7	83	39.7	30.5	77	7	73-127/16
56-23-5	Carbon tetrachloride	4.9 U	39.3	40.0	102	39.7	39.6	100	1	78-127/15
75-34-3	1,1-Dichloroethane	4.9 U	39.3	32.9	84	39.7	32.5	82	1	76-123/14
75-35-4	1,1-Dichloroethylene	4.9 U	39.3	31.5	80	39.7	32.4	82	3	73-124/15
563-58-6	1,1-Dichloropropene	4.9 U	39.3	34.6	88	39.7	34.9	88	1	78-126/14
96-12-8	1,2-Dibromo-3-chloropropane	4.9 U	39.3	36.3	92	39.7	32.1	81	12	62-127/21
106-93-4	1,2-Dibromoethane	4.9 U	39.3	35.2	90	39.7	35.4	89	1	76-123/13
107-06-2	1,2-Dichloroethane	4.9 U	39.3	38.8	99	39.7	38.7	98	0	74-125/12
78-87-5	1,2-Dichloropropane	4.9 U	39.3	33.9	86	39.7	34.1	86	1	76-123/12
142-28-9	1,3-Dichloropropane	4.9 U	39.3	35.3	90	39.7	34.6	87	2	77-121/13
108-20-3	Di-Isopropyl ether	4.9 U	39.3	31.4	80	39.7	30.9	78	2	71-126/14
594-20-7	2,2-Dichloropropane	4.9 U	39.3	33.8	86	39.7	32.9	83	3	77-132/17
124-48-1	Dibromochloromethane	4.9 U	39.3	39.4	100	39.7	38.7	98	2	73-127/13
75-71-8	Dichlorodifluoromethane	4.9 U	39.3	31.7	81	39.7	31.2	79	2	52-141/20
156-59-2	cis-1,2-Dichloroethylene	4.9 U	39.3	33.5	85	39.7	34.0	86	1	80-124/13
10061-01-5	cis-1,3-Dichloropropene	4.9 U	39.3	31.3	80	39.7	32.2	81	3	77-125/13
541-73-1	m-Dichlorobenzene	4.9 U	39.3	29.3	75* b	39.7	28.5	72* b	3	76-123/12
95-50-1	o-Dichlorobenzene	4.9 U	39.3	29.2	74* b	39.7	28.5	72* b	2	76-123/12
106-46-7	p-Dichlorobenzene	4.9 U	39.3	28.5	73* b	39.7	27.9	70* b	2	77-121/12
156-60-5	trans-1,2-Dichloroethylene	4.9 U	39.3	33.3	85	39.7	33.8	85	1	78-123/15
10061-02-6	trans-1,3-Dichloropropene	4.9 U	39.3	33.9	86	39.7	34.0	86	0	71-122/13
100-41-4	Ethylbenzene	4.9 U	39.3	34.5	88	39.7	33.9	85	2	79-121/13
637-92-3	Ethyl tert-Butyl Ether	4.9 U	39.3	33.8	86	39.7	33.7	85	0	76-131/13

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41989
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C42016-1MS	L44770.D	1	09/30/15	XB	n/a	n/a	VL1344
C42016-1MSD	L44771.D	1	09/30/15	XB	n/a	n/a	VL1344
C42016-1	L44765.D	1	09/30/15	XB	n/a	n/a	VL1344

The QC reported here applies to the following samples:

Method: SW846 8260B

C41989-5

CAS No.	Compound	C42016-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	19 U	157	89.2	57* b	159	79.8	50* b	11	65-135/20
87-68-3	Hexachlorobutadiene	4.9 U	39.3	31.0	79	39.7	29.6	75* b	5	77-131/17
98-82-8	Isopropylbenzene	4.9 U	39.3	34.2	87	39.7	33.5	84	2	80-124/14
99-87-6	p-Isopropyltoluene	4.9 U	39.3	35.3	90	39.7	30.4	77* b	15* c	78-122/13
108-10-1	4-Methyl-2-pentanone	19 U	157	138	88	159	132	83	4	70-135/18
74-83-9	Methyl bromide	4.9 U	39.3	26.9	68* b	39.7	27.4	69* b	2	74-130/15
74-87-3	Methyl chloride	4.9 U	39.3	30.8	78	39.7	30.3	76	2	65-131/22
74-95-3	Methylene bromide	4.9 U	39.3	37.2	95	39.7	37.6	95	1	78-124/13
75-09-2	Methylene chloride	19 U	39.3	34.4	88	39.7	34.0	86	1	75-121/16
78-93-3	Methyl ethyl ketone	19 U	157	110	70	159	103	65* b	7	70-137/21
1634-04-4	Methyl Tert Butyl Ether	4.9 U	39.3	34.9	89	39.7	33.9	85	3	75-127/16
91-20-3	Naphthalene	4.9 U	39.3	13.9	35* b	39.7	14.8	37* b	6	67-127/19
103-65-1	n-Propylbenzene	4.9 U	39.3	37.9	96	39.7	33.4	84	13	75-123/13
100-42-5	Styrene	4.9 U	39.3	28.1	72* b	39.7	29.8	75* b	6	78-122/12
994-05-8	Tert-Amyl Methyl Ether	4.9 U	39.3	34.7	88	39.7	33.9	85	2	77-127/13
75-65-0	Tert Butyl Alcohol	39 U	196	168	86	198	161	81	4	61-141/32
630-20-6	1,1,1,2-Tetrachloroethane	4.9 U	39.3	38.8	99	39.7	37.8	95	3	78-124/13
71-55-6	1,1,1-Trichloroethane	4.9 U	39.3	37.2	95	39.7	36.2	91	3	79-128/15
79-34-5	1,1,2,2-Tetrachloroethane	4.9 U	39.3	39.5	101	39.7	34.4	87	14	70-125/14
79-00-5	1,1,2-Trichloroethane	4.9 U	39.3	35.9	91	39.7	34.6	87	4	74-122/13
87-61-6	1,2,3-Trichlorobenzene	4.9 U	39.3	16.6	42* b	39.7	17.5	44* b	5	75-128/18
96-18-4	1,2,3-Trichloropropane	4.9 U	39.3	35.1	89	39.7	35.3	89	1	74-125/15
120-82-1	1,2,4-Trichlorobenzene	4.9 U	39.3	17.4	44* b	39.7	18.7	47* b	7	77-128/16
95-63-6	1,2,4-Trimethylbenzene	4.9 U	39.3	36.4	93	39.7	33.2	84	9	76-121/13
108-67-8	1,3,5-Trimethylbenzene	4.9 U	39.3	38.7	98	39.7	34.5	87	11	78-123/13
127-18-4	Tetrachloroethylene	4.9 U	39.3	38.0	97	39.7	37.6	95	1	77-125/14
108-88-3	Toluene	4.9 U	39.3	35.5	90	39.7	34.9	88	2	78-120/13
79-01-6	Trichloroethylene	4.9 U	39.3	34.8	89	39.7	35.5	89	2	80-124/13
75-69-4	Trichlorofluoromethane	4.9 U	39.3	35.4	90	39.7	34.5	87	3	78-130/17
75-01-4	Vinyl chloride	4.9 U	39.3	34.8	89	39.7	35.5	89	2	69-136/18
1330-20-7	Xylene (total)	9.7 U	118	99.8	85	119	101	85	1	78-122/13

CAS No.	Surrogate Recoveries	MS	MSD	C42016-1	Limits
1868-53-7	Dibromofluoromethane	95%	93%	98%	75-125%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41989
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C42016-1MS	L44770.D	1	09/30/15	XB	n/a	n/a	VL1344
C42016-1MSD	L44771.D	1	09/30/15	XB	n/a	n/a	VL1344
C42016-1	L44765.D	1	09/30/15	XB	n/a	n/a	VL1344

The QC reported here applies to the following samples:

Method: SW846 8260B

C41989-5

CAS No.	Surrogate Recoveries	MS	MSD	C42016-1	Limits
2037-26-5	Toluene-D8	102%	98%	96%	80-121%
460-00-4	4-Bromofluorobenzene	86%	88%	91%	71-126%

- (a) Outside laboratory control limits. AZ:M1
- (b) Outside laboratory control limits. AZ:M2
- (c) Outside laboratory control limits. AZ:R9

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41989
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C42139-3RMS	V29182.D	1	10/06/15	SY	n/a	n/a	VV1188
C42139-3RMSD	V29183.D	1	10/06/15	SY	n/a	n/a	VV1188
C42139-3R ^a	V29170.D	1	10/06/15	SY	n/a	n/a	VV1188

The QC reported here applies to the following samples:

Method: SW846 8260B

C41989-6

CAS No.	Compound	C42139-3R ug/l	Spike Q	ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	65.1		80	161	120	80	163	122	1	58-137/12
71-43-2	Benzene	0.24	J	20	21.5	106	20	22.1	109	3	77-118/10
108-86-1	Bromobenzene	ND		20	21.4	107	20	21.7	109	1	78-122/10
74-97-5	Bromochloromethane	ND		20	20.5	103	20	20.9	105	2	76-124/10
75-27-4	Bromodichloromethane	ND		20	20.1	101	20	20.5	103	2	74-121/10
75-25-2	Bromoform	ND		20	21.4	107	20	21.6	108	1	58-133/10
104-51-8	n-Butylbenzene	ND		20	22.0	110	20	22.6	113	3	75-125/10
135-98-8	sec-Butylbenzene	ND		20	22.7	114	20	23.2	116	2	76-127/10
98-06-6	tert-Butylbenzene	ND		20	22.5	113	20	22.9	115	2	76-124/10
108-90-7	Chlorobenzene	ND		20	20.8	104	20	21.1	106	1	77-120/10
75-00-3	Chloroethane	ND		20	19.4	97	20	19.5	98	1	63-117/10
67-66-3	Chloroform	0.25	J	20	20.2	100	20	20.5	101	1	74-123/10
95-49-8	o-Chlorotoluene	ND		20	21.7	109	20	21.7	109	0	76-125/10
106-43-4	p-Chlorotoluene	ND		20	22.1	111	20	22.3	112	1	76-123/10
56-23-5	Carbon tetrachloride	ND		20	21.6	108	20	22.1	111	2	72-128/11
75-34-3	1,1-Dichloroethane	ND		20	20.5	103	20	20.8	104	1	70-120/10
75-35-4	1,1-Dichloroethylene	ND		20	22.1	111	20	22.6	113	2	65-120/11
563-58-6	1,1-Dichloropropene	ND		20	20.1	101	20	20.4	102	1	69-125/10
96-12-8	1,2-Dibromo-3-chloropropane	ND		20	19.6	98	20	19.7	99	1	63-128/10
106-93-4	1,2-Dibromoethane	ND		20	20.6	103	20	21.1	106	2	78-123/10
107-06-2	1,2-Dichloroethane	ND		20	19.4	97	20	19.7	99	2	72-123/10
78-87-5	1,2-Dichloropropane	ND		20	20.7	104	20	21.5	108	4	76-119/10
142-28-9	1,3-Dichloropropane	ND		20	21.9	110	20	22.3	112	2	78-122/10
108-20-3	Di-Isopropyl ether	ND		20	19.4	97	20	19.7	99	2	69-124/10
594-20-7	2,2-Dichloropropane	ND		20	19.0	95	20	19.2	96	1	68-129/10
124-48-1	Dibromochloromethane	ND		20	20.3	102	20	20.5	103	1	75-124/10
75-71-8	Dichlorodifluoromethane	ND		20	22.5	113	20	22.1	111	2	37-149/21
156-59-2	cis-1,2-Dichloroethylene	ND		20	22.2	111	20	22.8	114	3	74-121/10
10061-01-5	cis-1,3-Dichloropropene	ND		20	20.5	103	20	21.0	105	2	76-125/10
541-73-1	m-Dichlorobenzene	ND		20	21.2	106	20	21.3	107	0	77-121/10
95-50-1	o-Dichlorobenzene	ND		20	20.6	103	20	20.8	104	1	77-120/10
106-46-7	p-Dichlorobenzene	ND		20	21.2	106	20	21.2	106	0	78-118/10
156-60-5	trans-1,2-Dichloroethylene	ND		20	20.2	101	20	20.8	104	3	71-118/10
10061-02-6	trans-1,3-Dichloropropene	ND		20	19.6	98	20	19.7	99	1	73-122/10
100-41-4	Ethylbenzene	ND		20	21.6	108	20	22.0	110	2	78-121/10
637-92-3	Ethyl Tert Butyl Ether	ND		20	19.1	96	20	19.5	98	2	76-130/10

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41989
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C42139-3RMS	V29182.D	1	10/06/15	SY	n/a	n/a	VV1188
C42139-3RMSD	V29183.D	1	10/06/15	SY	n/a	n/a	VV1188
C42139-3R ^a	V29170.D	1	10/06/15	SY	n/a	n/a	VV1188

The QC reported here applies to the following samples:

Method: SW846 8260B

C41989-6

CAS No.	Compound	C42139-3R ug/l	Spike Q	ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	3.2	J	80	103	125	80	105	127	2	71-139/10
87-68-3	Hexachlorobutadiene	ND		20	21.1	106	20	22.0	110	4	69-127/11
98-82-8	Isopropylbenzene	ND		20	21.7	109	20	22.0	110	1	77-125/10
99-87-6	p-Isopropyltoluene	ND		20	22.0	110	20	22.5	113	2	76-125/10
108-10-1	4-Methyl-2-pentanone	ND		80	97.2	122	80	99.3	124	2	71-132/10
74-83-9	Methyl bromide	ND		20	19.0	95	20	19.3	97	2	66-123/10
74-87-3	Methyl chloride	ND		20	24.0	120	20	23.6	118	2	50-138/19
74-95-3	Methylene bromide	ND		20	20.4	102	20	21.2	106	4	77-125/10
75-09-2	Methylene chloride	ND		20	19.1	96	20	19.4	97	2	65-124/14
78-93-3	Methyl ethyl ketone	7.8	J	80	105	122	80	107	124	2	67-139/11
1634-04-4	Methyl Tert Butyl Ether	ND		20	18.3	92	20	18.6	93	2	73-124/10
91-20-3	Naphthalene	ND		20	18.7	94	20	19.0	95	2	68-122/12
103-65-1	n-Propylbenzene	ND		20	22.3	112	20	22.3	112	0	76-123/10
100-42-5	Styrene	ND		20	21.3	107	20	21.5	108	1	74-126/10
994-05-8	Tert-Amyl Methyl Ether	ND		20	19.0	95	20	19.2	96	1	76-127/10
75-65-0	Tert-Butyl Alcohol	ND		100	90.9	91	100	92.5	93	2	47-161/18
630-20-6	1,1,1,2-Tetrachloroethane	ND		20	20.6	103	20	20.8	104	1	79-123/10
71-55-6	1,1,1-Trichloroethane	ND		20	21.1	106	20	21.1	106	0	73-124/10
79-34-5	1,1,2,2-Tetrachloroethane	ND		20	22.0	110	20	22.2	111	1	77-123/10
79-00-5	1,1,2-Trichloroethane	ND		20	21.0	105	20	21.4	107	2	77-120/10
87-61-6	1,2,3-Trichlorobenzene	ND		20	18.7	94	20	19.1	96	2	70-126/11
96-18-4	1,2,3-Trichloropropane	ND		20	19.0	95	20	19.3	97	2	65-125/10
120-82-1	1,2,4-Trichlorobenzene	ND		20	19.3	97	20	19.3	97	0	72-123/10
95-63-6	1,2,4-Trimethylbenzene	ND		20	21.0	105	20	21.4	107	2	77-122/10
108-67-8	1,3,5-Trimethylbenzene	ND		20	22.1	111	20	22.5	113	2	79-127/10
127-18-4	Tetrachloroethylene	ND		20	21.4	107	20	22.1	111	3	71-124/10
108-88-3	Toluene	ND		20	21.8	109	20	22.1	111	1	78-120/10
79-01-6	Trichloroethylene	0.51	J	20	27.1	133* ^b	20	23.8	116	13* ^b	75-119/10
75-69-4	Trichlorofluoromethane	ND		20	23.0	115	20	23.2	116	1	67-129/14
75-01-4	Vinyl chloride	ND		20	23.7	119	20	23.7	119	0	60-133/15
1330-20-7	Xylene (total)	ND		60	64.0	107	60	65.3	109	2	78-122/10

CAS No.	Surrogate Recoveries	MS	MSD	C42139-3R	Limits
1868-53-7	Dibromofluoromethane	100%	101%	100%	78-125%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41989
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C42139-3RMS	V29182.D	1	10/06/15	SY	n/a	n/a	VV1188
C42139-3RMSD	V29183.D	1	10/06/15	SY	n/a	n/a	VV1188
C42139-3R ^a	V29170.D	1	10/06/15	SY	n/a	n/a	VV1188

The QC reported here applies to the following samples:

Method: SW846 8260B

C41989-6

CAS No.	Surrogate Recoveries	MS	MSD	C42139-3R	Limits
2037-26-5	Toluene-D8	102%	102%	103%	86-114%
460-00-4	4-Bromofluorobenzene	104%	104%	104%	80-113%

- (a) Sample vial contained more than 0.5cm of sediment.
- (b) Outside laboratory control limits.

* = Outside of Control Limits.

5.4.2
 5

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: C41989
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13169-MB	GG61746.D	1	09/28/15	NN	09/28/15	OP13169	GGG1825

The QC reported here applies to the following samples:

Method: SW846 8015B M

C41989-5

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	3.3	0.83	mg/kg	
	TPH (> C28-C40)	ND	6.7	1.7	mg/kg	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	97% 43-144%

Method Blank Summary

Job Number: C41989
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13175-MB	GG61759.D	1	09/29/15	NN	09/29/15	OP13175	GGG1826

The QC reported here applies to the following samples:

Method: SW846 8015B M

C41989-6

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28) ^a	0.0273	0.10	0.025	mg/l	J
	TPH (> C28-C40)	ND	0.20	0.050	mg/l	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	95% 38-139%

(a) Associated sample(s) with "B" qualifiers indicate analyte is found at concentrations less than 10 times of method blank. Concentration present in blank is less than 1/2 RL; meeting method criteria.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41989
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13169-BS	GG61747.D	1	09/28/15	NN	09/28/15	OP13169	GGG1825
OP13169-BSD	GG61748.D	1	09/28/15	NN	09/28/15	OP13169	GGG1825

The QC reported here applies to the following samples:

Method: SW846 8015B M

C41989-5

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	33.3	27.4	82	28.0	84	2	50-111/13
	TPH (> C28-C40)	33.3	29.8	89	30.7	92	3	59-123/16

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	76%	79%	43-144%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C41989
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13175-BS	GG61760.D	1	09/29/15	NN	09/29/15	OP13175	GGG1826
OP13175-BSD	GG61761.D	1	09/29/15	NN	09/29/15	OP13175	GGG1826

The QC reported here applies to the following samples:

Method: SW846 8015B M

C41989-6

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	1	0.930	93	0.883	88	5	46-109/18
	TPH (> C28-C40)	1	0.968	97	0.943	94	3	54-119/16

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	83%	79%	38-139%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: C41989
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13175-MS	GG61771.D	1	09/29/15	NN	09/29/15	OP13175	GGG1826
C41989-6	GG61770.D	1	09/29/15	NN	09/29/15	OP13175	GGG1826

The QC reported here applies to the following samples:

Method: SW846 8015B M

C41989-6

CAS No.	Compound	C41989-6 mg/l	Spike Q	mg/l	MS mg/l	MS %	Limits
	TPH (C10-C28)	0.308	0.99	1.00	70	46-109	
	TPH (> C28-C40)	0.230	0.99	0.936	71	54-119	

CAS No.	Surrogate Recoveries	MS	C41989-6	Limits
630-01-3	Hexacosane	66%	66%	38-139%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C41989
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13169-MS	GG61749.D	1	09/28/15	NN	09/28/15	OP13169	GGG1825
OP13169-MSD	GG61750.D	1	09/28/15	NN	09/28/15	OP13169	GGG1825
C42008-2	GG61752.D	1	09/28/15	NN	09/28/15	OP13169	GGG1825

The QC reported here applies to the following samples:

Method: SW846 8015B M

C41989-5

CAS No.	Compound	C42008-2 mg/kg	Spike Q	mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	1.06	J	33.1	28.3	82	33.2	28.2	82	0	50-111/13
	TPH (> C28-C40)	ND		33.1	31.0	94	33.2	31.4	95	1	59-123/16

CAS No.	Surrogate Recoveries	MS	MSD	C42008-2	Limits
630-01-3	Hexacosane	79%	77%	95%	43-144%

* = Outside of Control Limits.

Technical Report for

ROUX Associates - Oakland CA

2868 Hannah Street, Oakland, CA

Accutest Job Number: C42157

Sampling Date: 10/06/15

Report to:

ROUX Associates, Inc.
555 12th Street Suite 1725
Oakland, CA 94607
dgrunat@rouxinc.com

ATTN: David Grunat

Total number of pages in report: **85**



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.



James J. Rhudy
Lab Director

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)

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

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Summary of Hits	4
Section 3: Sample Results	6
3.1: C42157-1: MW-1	7
3.2: C42157-1F: MW-1	13
3.3: C42157-2: MW-2	14
3.4: C42157-2F: MW-2	20
3.5: C42157-3: MW-3	21
3.6: C42157-3F: MW-3	27
3.7: C42157-4: DUP-1	28
3.8: C42157-4F: DUP-1	34
3.9: C42157-5: TB-1	35
Section 4: Misc. Forms	38
4.1: Chain of Custody	39
Section 5: GC/MS Volatiles - QC Data Summaries	41
5.1: Method Blank Summary	42
5.2: Blank Spike/Blank Spike Duplicate Summary	51
5.3: Laboratory Control Sample Summary	60
5.4: Matrix Spike/Matrix Spike Duplicate Summary	62
Section 6: GC Volatiles - QC Data Summaries	71
6.1: Method Blank Summary	72
6.2: Blank Spike Summary	73
6.3: Duplicate Summary	74
Section 7: Metals Analysis - QC Data Summaries	75
7.1: Prep QC MP10260: Fe,Mn	76
Section 8: General Chemistry - QC Data Summaries	81
8.1: Method Blank and Spike Results Summary	82
8.2: Blank Spike Duplicate Results Summary	83
8.3: Matrix Spike Results Summary	84
8.4: Matrix Spike Duplicate Results Summary	85

1

2

3

4

5

6

7

8



Sample Summary

ROUX Associates - Oakland CA
 2868 Hannah Street, Oakland, CA

Job No: C42157

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
C42157-1	10/06/15	13:50 BTS	10/06/15	AQ	Ground Water	MW-1
C42157-1F	10/06/15	13:50 BTS	10/06/15	AQ	Groundwater Filtered	MW-1
C42157-2	10/06/15	12:00 BTS	10/06/15	AQ	Ground Water	MW-2
C42157-2F	10/06/15	12:00 BTS	10/06/15	AQ	Groundwater Filtered	MW-2
C42157-3	10/06/15	10:50 BTS	10/06/15	AQ	Ground Water	MW-3
C42157-3F	10/06/15	10:50 BTS	10/06/15	AQ	Groundwater Filtered	MW-3
C42157-4	10/06/15	09:00 BTS	10/06/15	AQ	Ground Water	DUP-1
C42157-4F	10/06/15	09:00 BTS	10/06/15	AQ	Groundwater Filtered	DUP-1
C42157-5	10/06/15	09:10 BTS	10/06/15	AQ	Trip Blank Water	TB-1

Summary of Hits

Job Number: C42157
Account: ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA
Collected: 10/06/15

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
C42157-1	MW-1					
Methane		1.9	0.50	0.25	ug/l	RSK-175
Iron		401	200		ug/l	SW846 6010B
Manganese		196	15		ug/l	SW846 6010B
Bromide		0.91	0.20		mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate		2.1	0.10		mg/l	EPA 300/SW846 9056A
Sulfate		291	13		mg/l	EPA 300/SW846 9056A
Total Organic Carbon		3.7	1.0		mg/l	SM5310 C-00
C42157-1F	MW-1					
Manganese		119	15		ug/l	SW846 6010B
C42157-2	MW-2					
cis-1,2-Dichloroethylene		4.0	1.0	0.20	ug/l	SW846 8260B
trans-1,2-Dichloroethylene		0.28 J	1.0	0.20	ug/l	SW846 8260B
Tetrachloroethylene		655	20	6.0	ug/l	SW846 8260B
Trichloroethylene		22.5	1.0	0.20	ug/l	SW846 8260B
Vinyl chloride		0.39 J	1.0	0.20	ug/l	SW846 8260B
Iron		799	200		ug/l	SW846 6010B
Manganese		537	15		ug/l	SW846 6010B
Bromide		1.2	0.20		mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate		0.56	0.10		mg/l	EPA 300/SW846 9056A
Sulfate		268	10		mg/l	EPA 300/SW846 9056A
Total Organic Carbon		3.7	1.0		mg/l	SM5310 C-00
C42157-2F	MW-2					
Manganese		557	15		ug/l	SW846 6010B
C42157-3	MW-3					
Iron		1850	200		ug/l	SW846 6010B
Manganese		742	15		ug/l	SW846 6010B
Bromide		1.2	0.20		mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate		0.21	0.10		mg/l	EPA 300/SW846 9056A
Sulfate		176	10		mg/l	EPA 300/SW846 9056A
Total Organic Carbon		7.2	1.0		mg/l	SM5310 C-00
C42157-3F	MW-3					
Iron		950	200		ug/l	SW846 6010B
Manganese		813	15		ug/l	SW846 6010B

Summary of Hits

Job Number: C42157
Account: ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA
Collected: 10/06/15

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

C42157-4

DUP-1

cis-1,2-Dichloroethylene	4.7	1.0	0.20	ug/l	SW846 8260B
trans-1,2-Dichloroethylene	0.35 J	1.0	0.20	ug/l	SW846 8260B
Tetrachloroethylene	550	20	6.0	ug/l	SW846 8260B
Trichloroethylene	23.6	1.0	0.20	ug/l	SW846 8260B
Vinyl chloride	0.43 J	1.0	0.20	ug/l	SW846 8260B
Iron	998	200		ug/l	SW846 6010B
Manganese	537	15		ug/l	SW846 6010B
Bromide	1.2	0.20		mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrate	0.59	0.10		mg/l	EPA 300/SW846 9056A
Sulfate	266	10		mg/l	EPA 300/SW846 9056A
Total Organic Carbon	3.8	1.0		mg/l	SM5310 C-00

C42157-4F

DUP-1

Manganese	508	15		ug/l	SW846 6010B
-----------	-----	----	--	------	-------------

C42157-5

TB-1

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: MW-1		Date Sampled: 10/06/15
Lab Sample ID: C42157-1		Date Received: 10/06/15
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260B		
Project: 2868 Hannah Street, Oakland, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V29349.D	1	10/10/15	SY	n/a	n/a	VV1199
Run #2							

Run #1	Purge Volume
Run #1	10.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	4.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	

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

Report of Analysis

Client Sample ID: MW-1	
Lab Sample ID: C42157-1	Date Sampled: 10/06/15
Matrix: AQ - Ground Water	Date Received: 10/06/15
Method: SW846 8260B	Percent Solids: n/a
Project: 2868 Hannah Street, Oakland, CA	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		78-125%
2037-26-5	Toluene-D8	105%		86-114%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-1 Lab Sample ID: C42157-1 Matrix: AQ - Ground Water Method: SW846 8260B Project: 2868 Hannah Street, Oakland, CA	Date Sampled: 10/06/15 Date Received: 10/06/15 Percent Solids: n/a
--	---

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		80-113%

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

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

Report of Analysis

3.1
3

Client Sample ID: MW-1	Date Sampled: 10/06/15
Lab Sample ID: C42157-1	Date Received: 10/06/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: RSK-175	
Project: 2868 Hannah Street, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA008418.D	1	10/09/15	KZ	n/a	n/a	GAA418
Run #2							

Run #	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	38.0 ml	5.0 ml	500 ul	22 Deg. C
Run #2				

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	1.9	0.50	0.25	ug/l	
74-85-1	Ethene	ND	1.0	0.50	ug/l	
74-84-0	Ethane	ND	1.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

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

Report of Analysis

Client Sample ID: MW-1	Date Sampled: 10/06/15
Lab Sample ID: C42157-1	Date Received: 10/06/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: 2868 Hannah Street, Oakland, CA	

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	401	200	ug/l	1	10/08/15	10/08/15 RS	SW846 6010B ¹	SW846 3010A ²
Manganese	196	15	ug/l	1	10/08/15	10/08/15 RS	SW846 6010B ¹	SW846 3010A ²

(1) Instrument QC Batch: MA5276

(2) Prep QC Batch: MP10260

RL = Reporting Limit

Report of Analysis

Client Sample ID: MW-1	Date Sampled: 10/06/15
Lab Sample ID: C42157-1	Date Received: 10/06/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: 2868 Hannah Street, Oakland, CA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Bromide	0.91	0.20	mg/l	1	10/06/15 17:53	RL	EPA 300/SW846 9056A
Nitrogen, Nitrate	2.1	0.10	mg/l	1	10/06/15 17:53	RL	EPA 300/SW846 9056A
Sulfate	291	13	mg/l	25	10/07/15 13:10	RL	EPA 300/SW846 9056A
Sulfide	< 0.020	0.020	mg/l	1	10/12/15 17:03	PH	SM4500S D-00
Total Organic Carbon	3.7	1.0	mg/l	1	10/08/15 13:21	RL	SM5310 C-00

RL = Reporting Limit

Report of Analysis

Client Sample ID: MW-1	Date Sampled: 10/06/15
Lab Sample ID: C42157-1F	Date Received: 10/06/15
Matrix: AQ - Groundwater Filtered	Percent Solids: n/a
Project: 2868 Hannah Street, Oakland, CA	

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	< 200	200	ug/l	1	10/08/15	10/08/15 RS	SW846 6010B ¹	SW846 3010A ²
Manganese	119	15	ug/l	1	10/08/15	10/08/15 RS	SW846 6010B ¹	SW846 3010A ²

(1) Instrument QC Batch: MA5276

(2) Prep QC Batch: MP10260

RL = Reporting Limit

Report of Analysis

Client Sample ID: MW-2		Date Sampled: 10/06/15
Lab Sample ID: C42157-2		Date Received: 10/06/15
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260B		
Project: 2868 Hannah Street, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V29369.D	1	10/11/15	SY	n/a	n/a	VV1197
Run #2	V29396.D	20	10/12/15	SY	n/a	n/a	VV1198

Run #	Purge Volume
Run #1	10.0 ml
Run #2	10.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	4.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	4.0	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	

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

Report of Analysis

Client Sample ID: MW-2		Date Sampled: 10/06/15
Lab Sample ID: C42157-2		Date Received: 10/06/15
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260B		
Project: 2868 Hannah Street, Oakland, CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	0.28	1.0	0.20	ug/l	J
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	655 ^a	20	6.0	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	22.5	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	0.39	1.0	0.20	ug/l	J
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	101%	78-125%
2037-26-5	Toluene-D8	105%	106%	86-114%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-2 Lab Sample ID: C42157-2 Matrix: AQ - Ground Water Method: SW846 8260B Project: 2868 Hannah Street, Oakland, CA	Date Sampled: 10/06/15 Date Received: 10/06/15 Percent Solids: n/a
--	---

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%	101%	80-113%

(a) Result is from Run# 2

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

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

Report of Analysis

Client Sample ID: MW-2	Date Sampled: 10/06/15
Lab Sample ID: C42157-2	Date Received: 10/06/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: RSK-175	
Project: 2868 Hannah Street, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA008421.D	1	10/09/15	KZ	n/a	n/a	GAA418
Run #2							

Run #	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	38.0 ml	5.0 ml	500 ul	22 Deg. C
Run #2				

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.50	0.25	ug/l	
74-85-1	Ethene	ND	1.0	0.50	ug/l	
74-84-0	Ethane	ND	1.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

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

Report of Analysis

Client Sample ID: MW-2	Date Sampled: 10/06/15
Lab Sample ID: C42157-2	Date Received: 10/06/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: 2868 Hannah Street, Oakland, CA	

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	799	200	ug/l	1	10/08/15	10/08/15 RS	SW846 6010B ¹	SW846 3010A ²
Manganese	537	15	ug/l	1	10/08/15	10/08/15 RS	SW846 6010B ¹	SW846 3010A ²

(1) Instrument QC Batch: MA5276

(2) Prep QC Batch: MP10260

RL = Reporting Limit

Report of Analysis

Client Sample ID: MW-2	Date Sampled: 10/06/15
Lab Sample ID: C42157-2	Date Received: 10/06/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: 2868 Hannah Street, Oakland, CA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Bromide	1.2	0.20	mg/l	1	10/06/15 18:11	RL	EPA 300/SW846 9056A
Nitrogen, Nitrate	0.56	0.10	mg/l	1	10/06/15 18:11	RL	EPA 300/SW846 9056A
Sulfate	268	10	mg/l	20	10/07/15 13:28	RL	EPA 300/SW846 9056A
Sulfide	< 0.020	0.020	mg/l	1	10/12/15 17:04	PH	SM4500S D-00
Total Organic Carbon	3.7	1.0	mg/l	1	10/08/15 13:21	RL	SM5310 C-00

RL = Reporting Limit

Report of Analysis

Client Sample ID: MW-2	Date Sampled: 10/06/15
Lab Sample ID: C42157-2F	Date Received: 10/06/15
Matrix: AQ - Groundwater Filtered	Percent Solids: n/a
Project: 2868 Hannah Street, Oakland, CA	

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	< 200	200	ug/l	1	10/08/15	10/08/15 RS	SW846 6010B ¹	SW846 3010A ²
Manganese	557	15	ug/l	1	10/08/15	10/08/15 RS	SW846 6010B ¹	SW846 3010A ²

(1) Instrument QC Batch: MA5276

(2) Prep QC Batch: MP10260

RL = Reporting Limit

Report of Analysis

Client Sample ID: MW-3		Date Sampled: 10/06/15
Lab Sample ID: C42157-3		Date Received: 10/06/15
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260B		
Project: 2868 Hannah Street, Oakland, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V29392.D	1	10/12/15	SY	n/a	n/a	VV1198
Run #2							

Run #1	Purge Volume
Run #1	10.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	4.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-3		Date Sampled: 10/06/15
Lab Sample ID: C42157-3		Date Received: 10/06/15
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260B		
Project: 2868 Hannah Street, Oakland, CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		78-125%
2037-26-5	Toluene-D8	102%		86-114%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-3		Date Sampled: 10/06/15
Lab Sample ID: C42157-3		Date Received: 10/06/15
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260B		
Project: 2868 Hannah Street, Oakland, CA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	100%		80-113%

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

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

Report of Analysis

3.5
3

Client Sample ID: MW-3	Date Sampled: 10/06/15
Lab Sample ID: C42157-3	Date Received: 10/06/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: RSK-175	
Project: 2868 Hannah Street, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA008422.D	1	10/09/15	KZ	n/a	n/a	GAA418
Run #2							

Run #	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	38.0 ml	5.0 ml	500 ul	22 Deg. C
Run #2				

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.50	0.25	ug/l	
74-85-1	Ethene	ND	1.0	0.50	ug/l	
74-84-0	Ethane	ND	1.0	0.50	ug/l	

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

Report of Analysis

Client Sample ID: MW-3	Date Sampled: 10/06/15
Lab Sample ID: C42157-3	Date Received: 10/06/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: 2868 Hannah Street, Oakland, CA	

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	1850	200	ug/l	1	10/08/15	10/08/15 RS	SW846 6010B ¹	SW846 3010A ²
Manganese	742	15	ug/l	1	10/08/15	10/08/15 RS	SW846 6010B ¹	SW846 3010A ²

(1) Instrument QC Batch: MA5276

(2) Prep QC Batch: MP10260

RL = Reporting Limit

Report of Analysis

Client Sample ID: MW-3	Date Sampled: 10/06/15
Lab Sample ID: C42157-3	Date Received: 10/06/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: 2868 Hannah Street, Oakland, CA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Bromide	1.2	0.20	mg/l	1	10/06/15 18:28	RL	EPA 300/SW846 9056A
Nitrogen, Nitrate	0.21	0.10	mg/l	1	10/06/15 18:28	RL	EPA 300/SW846 9056A
Sulfate	176	10	mg/l	20	10/07/15 13:45	RL	EPA 300/SW846 9056A
Sulfide	< 0.020	0.020	mg/l	1	10/12/15 17:04	PH	SM4500S D-00
Total Organic Carbon	7.2	1.0	mg/l	1	10/08/15 13:21	RL	SM5310 C-00

RL = Reporting Limit

Report of Analysis

Client Sample ID: MW-3	Date Sampled: 10/06/15
Lab Sample ID: C42157-3F	Date Received: 10/06/15
Matrix: AQ - Groundwater Filtered	Percent Solids: n/a
Project: 2868 Hannah Street, Oakland, CA	

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	950	200	ug/l	1	10/08/15	10/08/15 RS	SW846 6010B ¹	SW846 3010A ²
Manganese	813	15	ug/l	1	10/08/15	10/08/15 RS	SW846 6010B ¹	SW846 3010A ²

(1) Instrument QC Batch: MA5276

(2) Prep QC Batch: MP10260

RL = Reporting Limit

Report of Analysis

Client Sample ID: DUP-1		Date Sampled: 10/06/15
Lab Sample ID: C42157-4		Date Received: 10/06/15
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260B		
Project: 2868 Hannah Street, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V29371.D	1	10/11/15	SY	n/a	n/a	VV1197
Run #2	V29397.D	20	10/12/15	SY	n/a	n/a	VV1198

Run #	Purge Volume
Run #1	10.0 ml
Run #2	10.0 ml

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	4.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	4.7	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP-1	Date Sampled:	10/06/15
Lab Sample ID:	C42157-4	Date Received:	10/06/15
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	2868 Hannah Street, Oakland, CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	0.35	1.0	0.20	ug/l	J
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	550 ^a	20	6.0	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	23.6	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	0.43	1.0	0.20	ug/l	J
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	102%	78-125%
2037-26-5	Toluene-D8	103%	102%	86-114%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: DUP-1		Date Sampled: 10/06/15
Lab Sample ID: C42157-4		Date Received: 10/06/15
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260B		
Project: 2868 Hannah Street, Oakland, CA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%	99%	80-113%

(a) Result is from Run# 2

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

Report of Analysis

37
3

Client Sample ID: DUP-1	Date Sampled: 10/06/15
Lab Sample ID: C42157-4	Date Received: 10/06/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: RSK-175	
Project: 2868 Hannah Street, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA008426.D	1	10/09/15	KZ	n/a	n/a	GAA418
Run #2							

Run #	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	38.0 ml	5.0 ml	500 ul	22 Deg. C
Run #2				

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.50	0.25	ug/l	
74-85-1	Ethene	ND	1.0	0.50	ug/l	
74-84-0	Ethane	ND	1.0	0.50	ug/l	

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

Report of Analysis

Client Sample ID: DUP-1	Date Sampled: 10/06/15
Lab Sample ID: C42157-4	Date Received: 10/06/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: 2868 Hannah Street, Oakland, CA	

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	998	200	ug/l	1	10/08/15	10/08/15 RS	SW846 6010B ¹	SW846 3010A ²
Manganese	537	15	ug/l	1	10/08/15	10/08/15 RS	SW846 6010B ¹	SW846 3010A ²

(1) Instrument QC Batch: MA5276

(2) Prep QC Batch: MP10260

RL = Reporting Limit

Report of Analysis

Client Sample ID: DUP-1	Date Sampled: 10/06/15
Lab Sample ID: C42157-4	Date Received: 10/06/15
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: 2868 Hannah Street, Oakland, CA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Bromide	1.2	0.20	mg/l	1	10/06/15 18:45	RL	EPA 300/SW846 9056A
Nitrogen, Nitrate	0.59	0.10	mg/l	1	10/06/15 18:45	RL	EPA 300/SW846 9056A
Sulfate	266	10	mg/l	20	10/07/15 14:03	RL	EPA 300/SW846 9056A
Sulfide	< 0.020	0.020	mg/l	1	10/12/15 17:05	PH	SM4500S D-00
Total Organic Carbon	3.8	1.0	mg/l	1	10/08/15 13:21	RL	SM5310 C-00

RL = Reporting Limit

Report of Analysis



Client Sample ID: DUP-1	Date Sampled: 10/06/15
Lab Sample ID: C42157-4F	Date Received: 10/06/15
Matrix: AQ - Groundwater Filtered	Percent Solids: n/a
Project: 2868 Hannah Street, Oakland, CA	

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	< 200	200	ug/l	1	10/08/15	10/08/15 RS	SW846 6010B ¹	SW846 3010A ²
Manganese	508	15	ug/l	1	10/08/15	10/08/15 RS	SW846 6010B ¹	SW846 3010A ²

(1) Instrument QC Batch: MA5276

(2) Prep QC Batch: MP10260

RL = Reporting Limit

Report of Analysis

Client Sample ID: TB-1		Date Sampled: 10/06/15
Lab Sample ID: C42157-5		Date Received: 10/06/15
Matrix: AQ - Trip Blank Water		Percent Solids: n/a
Method: SW846 8260B		
Project: 2868 Hannah Street, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V29366.D	1	10/11/15	SY	n/a	n/a	VV1197
Run #2							

Run #	Purge Volume
Run #1	10.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	4.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TB-1		Date Sampled: 10/06/15
Lab Sample ID: C42157-5		Date Received: 10/06/15
Matrix: AQ - Trip Blank Water		Percent Solids: n/a
Method: SW846 8260B		
Project: 2868 Hannah Street, Oakland, CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		78-125%
2037-26-5	Toluene-D8	105%		86-114%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TB-1		Date Sampled: 10/06/15
Lab Sample ID: C42157-5		Date Received: 10/06/15
Matrix: AQ - Trip Blank Water		Percent Solids: n/a
Method: SW846 8260B		
Project: 2868 Hannah Street, Oakland, CA		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	101%		80-113%

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

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

BLAINE

TECH SERVICES, INC.

1680 ROGERS AVENUE
 SAN JOSE, CALIFORNIA 95112-1105
 FAX (408) 573-7771
 PHONE (408) 573-0555

CONDUCT ANALYSIS TO DETECT

LAB Accutest **C42157** | DHS #
 ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND
 EPA
 LIA
 OTHER
 RWQCB REGION

CHAIN OF CUSTODY
 BTS # 151006-121

CLIENT Roux Associates, Inc.

SITE 2868 Hannah St.

Oakland, CA

SPECIAL INSTRUCTIONS
 Invoice & Report to: Roux Associates, Inc.
 Attn: Nicole Rodriguez

SAMPLE I.D.	DATE	TIME	MATRIX S=SOIL W=H ₂ O	CONTAINERS TOTAL	C = COMPOSITE ALL CONTAINERS	CONDUCT ANALYSIS TO DETECT							ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
						VOCs 8260B	Diss. Gases (Ethane, Ethene, Methan	Total Iron and Mn	Diss. Iron and Mn (Field Filtered)	Nitrate, Sulfate, Bromide (300)	Sulfide	TOC (9060)				
MW-1	10/6/15	1310	W	12		X	X	X	X	X	X	X				1
MW-2	10/6/15	1200	W	12		X	X	X	X	X	X	X				2
MW-3	10/6/15	1050	W	12		X	X	X	X	X	X	X				3
DWP-1	10/6/15	0900	W	12		X	X	X	X	X	X	X				4
TB-1	10/6/15	0900	W	2		X										5

SAMPLING COMPLETED DATE 10/6/15 TIME PERFORMED BY Milce Nusskatz RESULTS NEEDED NO LATER THAN **Standard TAT**

RELEASED BY [Signature] DATE 10/6/15 TIME 1655 RECEIVED BY [Signature] DATE 10/6/15 TIME 1655

RELEASED BY _____ DATE _____ TIME _____ RECEIVED BY _____ DATE _____ TIME _____

RELEASED BY _____ DATE _____ TIME _____ RECEIVED BY _____ DATE _____ TIME _____

SHIPPED VIA _____ DATE SENT _____ TIME SENT _____ COOLER # _____

NO CUSTODY SEALS TEMP = 33/33 **13**



Accutest Laboratories Sample Receipt Summary

Accutest Job Number: C42157 Client: BLAINE TECH Project: ROUX ASSOCIATES
 Date / Time Received: 10/6/2015 4:55:00 PM Delivery Method: Client Airbill #s: _____
 Cooler Temps (Initial/Adjusted): #1: (3.3/3.3)

Cooler Security Y or N Y or N
 1. Custody Seals Present: 3. COC Present:
 2. Custody Seals Intact: 4. Smpl Dates/Time OK

Cooler Temperature Y or N
 1. Temp criteria achieved:
 2. Therm ID: IR1;
 3. Cooler media: Ice (Bag)
 4. No. Coolers: 1

Quality Control Preservation Y or N N/A
 1. Trip Blank present / cooler:
 2. Trip Blank listed on COC:
 3. Samples preserved properly:
 4. VOCs headspace free:

Sample Integrity - Documentation Y or N
 1. Sample labels present on bottles:
 2. Container labeling complete:
 3. Sample container label / COC agree:

Sample Integrity - Condition Y or N
 1. Sample recvd within HT:
 2. All containers accounted for:
 3. Condition of sample: Intact

Sample Integrity - Instructions Y or N N/A
 1. Analysis requested is clear:
 2. Bottles received for unspecified tests:
 3. Sufficient volume recvd for analysis:
 4. Compositing instructions clear:
 5. Filtering instructions clear:

Comments

Accutest Laboratories
V:408.588.0200

2105 Lundy Avenue
F: 408.588.0201

San Jose, CA 95131
www.accutest.com

4.1
4

GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1199-MB	V29339.D	1	10/10/15	SY	n/a	n/a	VV1199

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	4.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	

Method Blank Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1199-MB	V29339.D	1	10/10/15	SY	n/a	n/a	VV1199

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-1

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	100% 78-125%

Method Blank Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1199-MB	V29339.D	1	10/10/15	SY	n/a	n/a	VV1199

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-1

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	104% 86-114%
460-00-4	4-Bromofluorobenzene	99% 80-113%

5.1.1
5

Method Blank Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1197-MB	V29364.D	1	10/11/15	SY	n/a	n/a	VV1197

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-2, C42157-4, C42157-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	4.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	

Method Blank Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1197-MB	V29364.D	1	10/11/15	SY	n/a	n/a	VV1197

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-2, C42157-4, C42157-5

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	100% 78-125%

Method Blank Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1197-MB	V29364.D	1	10/11/15	SY	n/a	n/a	VV1197

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-2, C42157-4, C42157-5

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	102% 86-114%
460-00-4	4-Bromofluorobenzene	96% 80-113%

5.1.2
5

Method Blank Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1198-MB	V29391.D	1	10/12/15	SY	n/a	n/a	VV1198

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-2, C42157-3, C42157-4

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	4.0	ug/l	
71-43-2	Benzene	ND	1.0	0.20	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.20	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.20	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.20	ug/l	
75-25-2	Bromoform	ND	1.0	0.22	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.20	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.20	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.28	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	1.0	0.20	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.20	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.26	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.20	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.40	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.20	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.20	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.20	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.22	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.20	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.20	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.20	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.20	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.20	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	2.0	0.22	ug/l	

Method Blank Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1198-MB	V29391.D	1	10/12/15	SY	n/a	n/a	VV1198

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-2, C42157-3, C42157-4

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.20	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.20	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	1.0	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.20	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	10	2.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	2.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.20	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.20	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	2.0	0.40	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	2.4	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.22	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.20	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.20	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.20	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.20	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.20	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.20	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.20	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.20	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.20	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.46	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	100% 78-125%

Method Blank Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1198-MB	V29391.D	1	10/12/15	SY	n/a	n/a	VV1198

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-2, C42157-3, C42157-4

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	107% 86-114%
460-00-4	4-Bromofluorobenzene	102% 80-113%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1199-BS	V29336.D	1	10/10/15	SY	n/a	n/a	VV1199
VV1199-BSD	V29337.D	1	10/10/15	SY	n/a	n/a	VV1199

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	80	85.3	107	89.2	112	4	58-137/12
71-43-2	Benzene	20	19.9	100	20.1	101	1	77-118/10
108-86-1	Bromobenzene	20	20.0	100	20.7	104	3	78-122/10
74-97-5	Bromochloromethane	20	19.9	100	20.1	101	1	76-124/10
75-27-4	Bromodichloromethane	20	19.2	96	19.5	98	2	74-121/10
75-25-2	Bromoform	20	21.1	106	21.3	107	1	58-133/10
104-51-8	n-Butylbenzene	20	19.4	97	19.7	99	2	75-125/10
135-98-8	sec-Butylbenzene	20	19.8	99	20.2	101	2	76-127/10
98-06-6	tert-Butylbenzene	20	19.9	100	20.1	101	1	76-124/10
108-90-7	Chlorobenzene	20	19.6	98	19.6	98	0	77-120/10
75-00-3	Chloroethane	20	16.5	83	16.6	83	1	63-117/10
67-66-3	Chloroform	20	19.0	95	19.0	95	0	74-123/10
95-49-8	o-Chlorotoluene	20	19.5	98	19.9	100	2	76-125/10
106-43-4	p-Chlorotoluene	20	20.1	101	20.9	105	4	76-123/10
56-23-5	Carbon tetrachloride	20	19.8	99	19.3	97	3	72-128/11
75-34-3	1,1-Dichloroethane	20	19.1	96	19.3	97	1	70-120/10
75-35-4	1,1-Dichloroethylene	20	20.1	101	19.7	99	2	65-120/11
563-58-6	1,1-Dichloropropene	20	18.2	91	18.1	91	1	69-125/10
96-12-8	1,2-Dibromo-3-chloropropane	20	17.8	89	18.5	93	4	63-128/10
106-93-4	1,2-Dibromoethane	20	20.1	101	20.3	102	1	78-123/10
107-06-2	1,2-Dichloroethane	20	18.9	95	18.7	94	1	72-123/10
78-87-5	1,2-Dichloropropane	20	20.1	101	20.0	100	0	76-119/10
142-28-9	1,3-Dichloropropane	20	20.8	104	21.2	106	2	78-122/10
108-20-3	Di-Isopropyl ether	20	18.7	94	19.1	96	2	69-124/10
594-20-7	2,2-Dichloropropane	20	18.4	92	18.0	90	2	68-129/10
124-48-1	Dibromochloromethane	20	19.9	100	20.0	100	1	75-124/10
75-71-8	Dichlorodifluoromethane	20	17.6	88	18.8	94	7	37-149/21
156-59-2	cis-1,2-Dichloroethylene	20	21.0	105	21.3	107	1	74-121/10
10061-01-5	cis-1,3-Dichloropropene	20	20.4	102	20.4	102	0	76-125/10
541-73-1	m-Dichlorobenzene	20	19.4	97	20.0	100	3	77-121/10
95-50-1	o-Dichlorobenzene	20	19.3	97	19.7	99	2	77-120/10
106-46-7	p-Dichlorobenzene	20	19.8	99	20.2	101	2	78-118/10
156-60-5	trans-1,2-Dichloroethylene	20	18.7	94	18.7	94	0	71-118/10
10061-02-6	trans-1,3-Dichloropropene	20	19.1	96	19.2	96	1	73-122/10
100-41-4	Ethylbenzene	20	19.7	99	19.8	99	1	78-121/10
637-92-3	Ethyl Tert Butyl Ether	20	18.6	93	18.9	95	2	76-130/10

* = Outside of Control Limits.

5.2.1
 5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1199-BS	V29336.D	1	10/10/15	SY	n/a	n/a	VV1199
VV1199-BSD	V29337.D	1	10/10/15	SY	n/a	n/a	VV1199

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	80	92.1	115	94.6	118	3	71-139/10
87-68-3	Hexachlorobutadiene	20	19.3	97	20.1	101	4	69-127/11
98-82-8	Isopropylbenzene	20	19.8	99	19.5	98	2	77-125/10
99-87-6	p-Isopropyltoluene	20	19.6	98	19.8	99	1	76-125/10
108-10-1	4-Methyl-2-pentanone	80	90.7	113	92.0	115	1	71-132/10
74-83-9	Methyl bromide	20	16.8	84	17.2	86	2	66-123/10
74-87-3	Methyl chloride	20	20.1	101	20.8	104	3	50-138/19
74-95-3	Methylene bromide	20	20.2	101	20.2	101	0	77-125/10
75-09-2	Methylene chloride	20	17.9	90	18.0	90	1	65-124/14
78-93-3	Methyl ethyl ketone	80	91.5	114	93.9	117	3	67-139/11
1634-04-4	Methyl Tert Butyl Ether	20	17.9	90	18.5	93	3	73-124/10
91-20-3	Naphthalene	20	16.5	83	17.6	88	6	68-122/12
103-65-1	n-Propylbenzene	20	19.5	98	19.9	100	2	76-123/10
100-42-5	Styrene	20	20.1	101	20.2	101	0	74-126/10
994-05-8	Tert-Amyl Methyl Ether	20	18.6	93	18.6	93	0	76-127/10
75-65-0	Tert-Butyl Alcohol	100	85.7	86	86.8	87	1	47-161/18
630-20-6	1,1,1,2-Tetrachloroethane	20	19.8	99	19.8	99	0	79-123/10
71-55-6	1,1,1-Trichloroethane	20	19.1	96	19.0	95	1	73-124/10
79-34-5	1,1,2,2-Tetrachloroethane	20	20.5	103	21.2	106	3	77-123/10
79-00-5	1,1,2-Trichloroethane	20	20.5	103	20.7	104	1	77-120/10
87-61-6	1,2,3-Trichlorobenzene	20	17.2	86	18.0	90	5	70-126/11
96-18-4	1,2,3-Trichloropropane	20	18.0	90	18.4	92	2	65-125/10
120-82-1	1,2,4-Trichlorobenzene	20	17.7	89	18.5	93	4	72-123/10
95-63-6	1,2,4-Trimethylbenzene	20	19.1	96	19.4	97	2	77-122/10
108-67-8	1,3,5-Trimethylbenzene	20	19.8	99	20.5	103	3	79-127/10
127-18-4	Tetrachloroethylene	20	20.0	100	19.6	98	2	71-124/10
108-88-3	Toluene	20	20.1	101	20.2	101	0	78-120/10
79-01-6	Trichloroethylene	20	19.5	98	19.5	98	0	75-119/10
75-69-4	Trichlorofluoromethane	20	17.7	89	18.9	95	7	67-129/14
75-01-4	Vinyl chloride	20	18.1	91	19.0	95	5	60-133/15
1330-20-7	Xylene (total)	60	59.7	100	59.4	99	1	78-122/10

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	100%	100%	78-125%

* = Outside of Control Limits.

5.2.1
 5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1199-BS	V29336.D	1	10/10/15	SY	n/a	n/a	VV1199
VV1199-BSD	V29337.D	1	10/10/15	SY	n/a	n/a	VV1199

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-1

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	102%	102%	86-114%
460-00-4	4-Bromofluorobenzene	99%	99%	80-113%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1197-BS	V29361.D	1	10/11/15	SY	n/a	n/a	VV1197
VV1197-BSD	V29362.D	1	10/11/15	SY	n/a	n/a	VV1197

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-2, C42157-4, C42157-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	80	94.0	118	89.4	112	5	58-137/12
71-43-2	Benzene	20	20.4	102	20.6	103	1	77-118/10
108-86-1	Bromobenzene	20	20.8	104	21.5	108	3	78-122/10
74-97-5	Bromochloromethane	20	20.8	104	21.0	105	1	76-124/10
75-27-4	Bromodichloromethane	20	20.0	100	20.4	102	2	74-121/10
75-25-2	Bromoform	20	21.8	109	21.6	108	1	58-133/10
104-51-8	n-Butylbenzene	20	20.5	103	20.6	103	0	75-125/10
135-98-8	sec-Butylbenzene	20	21.0	105	21.3	107	1	76-127/10
98-06-6	tert-Butylbenzene	20	21.0	105	21.3	107	1	76-124/10
108-90-7	Chlorobenzene	20	20.4	102	20.7	104	1	77-120/10
75-00-3	Chloroethane	20	18.0	90	17.9	90	1	63-117/10
67-66-3	Chloroform	20	19.8	99	20.1	101	2	74-123/10
95-49-8	o-Chlorotoluene	20	20.4	102	20.7	104	1	76-125/10
106-43-4	p-Chlorotoluene	20	21.3	107	21.8	109	2	76-123/10
56-23-5	Carbon tetrachloride	20	20.5	103	20.6	103	0	72-128/11
75-34-3	1,1-Dichloroethane	20	19.8	99	20.0	100	1	70-120/10
75-35-4	1,1-Dichloroethylene	20	21.2	106	21.3	107	0	65-120/11
563-58-6	1,1-Dichloropropene	20	18.8	94	19.1	96	2	69-125/10
96-12-8	1,2-Dibromo-3-chloropropane	20	18.8	94	18.4	92	2	63-128/10
106-93-4	1,2-Dibromoethane	20	20.9	105	20.8	104	0	78-123/10
107-06-2	1,2-Dichloroethane	20	19.3	97	19.6	98	2	72-123/10
78-87-5	1,2-Dichloropropane	20	20.5	103	20.9	105	2	76-119/10
142-28-9	1,3-Dichloropropane	20	22.0	110	21.9	110	0	78-122/10
108-20-3	Di-Isopropyl ether	20	19.4	97	19.5	98	1	69-124/10
594-20-7	2,2-Dichloropropane	20	19.4	97	19.2	96	1	68-129/10
124-48-1	Dibromochloromethane	20	20.6	103	20.6	103	0	75-124/10
75-71-8	Dichlorodifluoromethane	20	20.5	103	19.7	99	4	37-149/21
156-59-2	cis-1,2-Dichloroethylene	20	21.9	110	22.2	111	1	74-121/10
10061-01-5	cis-1,3-Dichloropropene	20	20.9	105	21.1	106	1	76-125/10
541-73-1	m-Dichlorobenzene	20	20.4	102	20.5	103	0	77-121/10
95-50-1	o-Dichlorobenzene	20	20.3	102	20.4	102	0	77-120/10
106-46-7	p-Dichlorobenzene	20	20.7	104	20.9	105	1	78-118/10
156-60-5	trans-1,2-Dichloroethylene	20	19.4	97	19.8	99	2	71-118/10
10061-02-6	trans-1,3-Dichloropropene	20	19.8	99	20.0	100	1	73-122/10
100-41-4	Ethylbenzene	20	20.7	104	20.9	105	1	78-121/10
637-92-3	Ethyl Tert Butyl Ether	20	19.3	97	19.2	96	1	76-130/10

* = Outside of Control Limits.

5.2.2
 5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1197-BS	V29361.D	1	10/11/15	SY	n/a	n/a	VV1197
VV1197-BSD	V29362.D	1	10/11/15	SY	n/a	n/a	VV1197

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-2, C42157-4, C42157-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	80	97.1	121	93.5	117	4	71-139/10
87-68-3	Hexachlorobutadiene	20	20.7	104	21.0	105	1	69-127/11
98-82-8	Isopropylbenzene	20	20.7	104	20.8	104	0	77-125/10
99-87-6	p-Isopropyltoluene	20	20.5	103	21.0	105	2	76-125/10
108-10-1	4-Methyl-2-pentanone	80	95.3	119	91.9	115	4	71-132/10
74-83-9	Methyl bromide	20	18.1	91	18.0	90	1	66-123/10
74-87-3	Methyl chloride	20	21.3	107	21.3	107	0	50-138/19
74-95-3	Methylene bromide	20	20.9	105	21.0	105	0	77-125/10
75-09-2	Methylene chloride	20	18.6	93	18.9	95	2	65-124/14
78-93-3	Methyl ethyl ketone	80	95.9	120	92.7	116	3	67-139/11
1634-04-4	Methyl Tert Butyl Ether	20	19.0	95	18.8	94	1	73-124/10
91-20-3	Naphthalene	20	17.8	89	17.4	87	2	68-122/12
103-65-1	n-Propylbenzene	20	20.5	103	20.8	104	1	76-123/10
100-42-5	Styrene	20	21.2	106	21.2	106	0	74-126/10
994-05-8	Tert-Amyl Methyl Ether	20	19.4	97	19.5	98	1	76-127/10
75-65-0	Tert-Butyl Alcohol	100	94.1	94	89.7	90	5	47-161/18
630-20-6	1,1,1,2-Tetrachloroethane	20	20.6	103	20.8	104	1	79-123/10
71-55-6	1,1,1-Trichloroethane	20	20.3	102	20.1	101	1	73-124/10
79-34-5	1,1,2,2-Tetrachloroethane	20	21.5	108	21.3	107	1	77-123/10
79-00-5	1,1,2-Trichloroethane	20	21.2	106	21.4	107	1	77-120/10
87-61-6	1,2,3-Trichlorobenzene	20	18.3	92	18.5	93	1	70-126/11
96-18-4	1,2,3-Trichloropropane	20	18.9	95	18.9	95	0	65-125/10
120-82-1	1,2,4-Trichlorobenzene	20	19.2	96	19.2	96	0	72-123/10
95-63-6	1,2,4-Trimethylbenzene	20	20.1	101	19.9	100	1	77-122/10
108-67-8	1,3,5-Trimethylbenzene	20	20.9	105	21.1	106	1	79-127/10
127-18-4	Tetrachloroethylene	20	20.5	103	20.6	103	0	71-124/10
108-88-3	Toluene	20	21.1	106	21.0	105	0	78-120/10
79-01-6	Trichloroethylene	20	20.3	102	20.5	103	1	75-119/10
75-69-4	Trichlorofluoromethane	20	21.1	106	21.1	106	0	67-129/14
75-01-4	Vinyl chloride	20	21.0	105	20.6	103	2	60-133/15
1330-20-7	Xylene (total)	60	62.1	104	62.2	104	0	78-122/10

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	100%	101%	78-125%

* = Outside of Control Limits.

5.2.2
 5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1197-BS	V29361.D	1	10/11/15	SY	n/a	n/a	VV1197
VV1197-BSD	V29362.D	1	10/11/15	SY	n/a	n/a	VV1197

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-2, C42157-4, C42157-5

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	103%	102%	86-114%
460-00-4	4-Bromofluorobenzene	100%	100%	80-113%

* = Outside of Control Limits.

5.2.2
 5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1198-BS	V29388.D	1	10/12/15	SY	n/a	n/a	VV1198
VV1198-BSD	V29389.D	1	10/12/15	SY	n/a	n/a	VV1198

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-2, C42157-3, C42157-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	80	80.1	100	85.3	107	6	58-137/12
71-43-2	Benzene	20	20.6	103	22.4	112	8	77-118/10
108-86-1	Bromobenzene	20	20.7	104	20.9	105	1	78-122/10
74-97-5	Bromochloromethane	20	20.0	100	20.9	105	4	76-124/10
75-27-4	Bromodichloromethane	20	20.2	101	20.6	103	2	74-121/10
75-25-2	Bromoform	20	21.1	106	21.5	108	2	58-133/10
104-51-8	n-Butylbenzene	20	20.3	102	20.1	101	1	75-125/10
135-98-8	sec-Butylbenzene	20	20.8	104	20.8	104	0	76-127/10
98-06-6	tert-Butylbenzene	20	20.8	104	20.8	104	0	76-124/10
108-90-7	Chlorobenzene	20	19.9	100	20.3	102	2	77-120/10
75-00-3	Chloroethane	20	15.7	79	17.3	87	10	63-117/10
67-66-3	Chloroform	20	19.4	97	19.9	100	3	74-123/10
95-49-8	o-Chlorotoluene	20	20.3	102	20.2	101	0	76-125/10
106-43-4	p-Chlorotoluene	20	21.2	106	21.5	108	1	76-123/10
56-23-5	Carbon tetrachloride	20	20.5	103	21.8	109	6	72-128/11
75-34-3	1,1-Dichloroethane	20	19.3	97	19.3	97	0	70-120/10
75-35-4	1,1-Dichloroethylene	20	19.7	99	20.8	104	5	65-120/11
563-58-6	1,1-Dichloropropene	20	19.0	95	20.0	100	5	69-125/10
96-12-8	1,2-Dibromo-3-chloropropane	20	17.6	88	18.3	92	4	63-128/10
106-93-4	1,2-Dibromoethane	20	20.2	101	20.7	104	2	78-123/10
107-06-2	1,2-Dichloroethane	20	19.3	97	20.8	104	7	72-123/10
78-87-5	1,2-Dichloropropane	20	20.7	104	20.9	105	1	76-119/10
142-28-9	1,3-Dichloropropane	20	21.3	107	21.6	108	1	78-122/10
108-20-3	Di-Isopropyl ether	20	18.7	94	18.7	94	0	69-124/10
594-20-7	2,2-Dichloropropane	20	18.5	93	18.6	93	1	68-129/10
124-48-1	Dibromochloromethane	20	20.1	101	20.5	103	2	75-124/10
75-71-8	Dichlorodifluoromethane	20	19.4	97	18.7	94	4	37-149/21
156-59-2	cis-1,2-Dichloroethylene	20	21.0	105	21.6	108	3	74-121/10
10061-01-5	cis-1,3-Dichloropropene	20	21.2	106	22.0	110	4	76-125/10
541-73-1	m-Dichlorobenzene	20	20.0	100	20.4	102	2	77-121/10
95-50-1	o-Dichlorobenzene	20	20.1	101	20.2	101	0	77-120/10
106-46-7	p-Dichlorobenzene	20	20.6	103	20.9	105	1	78-118/10
156-60-5	trans-1,2-Dichloroethylene	20	19.0	95	18.9	95	1	71-118/10
10061-02-6	trans-1,3-Dichloropropene	20	19.4	97	19.9	100	3	73-122/10
100-41-4	Ethylbenzene	20	20.1	101	20.4	102	1	78-121/10
637-92-3	Ethyl Tert Butyl Ether	20	18.6	93	19.3	97	4	76-130/10

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1198-BS	V29388.D	1	10/12/15	SY	n/a	n/a	VV1198
VV1198-BSD	V29389.D	1	10/12/15	SY	n/a	n/a	VV1198

The QC reported here applies to the following samples: **Method:** SW846 8260B

C42157-2, C42157-3, C42157-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	80	92.1	115	92.4	116	0	71-139/10
87-68-3	Hexachlorobutadiene	20	20.0	100	20.4	102	2	69-127/11
98-82-8	Isopropylbenzene	20	20.1	101	20.2	101	0	77-125/10
99-87-6	p-Isopropyltoluene	20	20.4	102	20.4	102	0	76-125/10
108-10-1	4-Methyl-2-pentanone	80	92.0	115	94.9	119	3	71-132/10
74-83-9	Methyl bromide	20	16.0	80	17.3	87	8	66-123/10
74-87-3	Methyl chloride	20	19.0	95	19.0	95	0	50-138/19
74-95-3	Methylene bromide	20	20.6	103	21.0	105	2	77-125/10
75-09-2	Methylene chloride	20	18.2	91	18.9	95	4	65-124/14
78-93-3	Methyl ethyl ketone	80	90.6	113	94.2	118	4	67-139/11
1634-04-4	Methyl Tert Butyl Ether	20	18.0	90	18.1	91	1	73-124/10
91-20-3	Naphthalene	20	16.7	84	17.3	87	4	68-122/12
103-65-1	n-Propylbenzene	20	20.3	102	20.6	103	1	76-123/10
100-42-5	Styrene	20	20.4	102	20.8	104	2	74-126/10
994-05-8	Tert-Amyl Methyl Ether	20	18.5	93	19.2	96	4	76-127/10
75-65-0	Tert-Butyl Alcohol	100	78.7	79	88.3	88	11	47-161/18
630-20-6	1,1,1,2-Tetrachloroethane	20	20.1	101	20.3	102	1	79-123/10
71-55-6	1,1,1-Trichloroethane	20	19.3	97	19.6	98	2	73-124/10
79-34-5	1,1,2,2-Tetrachloroethane	20	20.8	104	21.0	105	1	77-123/10
79-00-5	1,1,2-Trichloroethane	20	20.7	104	20.9	105	1	77-120/10
87-61-6	1,2,3-Trichlorobenzene	20	17.9	90	18.2	91	2	70-126/11
96-18-4	1,2,3-Trichloropropane	20	18.7	94	19.2	96	3	65-125/10
120-82-1	1,2,4-Trichlorobenzene	20	18.6	93	18.8	94	1	72-123/10
95-63-6	1,2,4-Trimethylbenzene	20	19.8	99	20.0	100	1	77-122/10
108-67-8	1,3,5-Trimethylbenzene	20	21.0	105	20.7	104	1	79-127/10
127-18-4	Tetrachloroethylene	20	20.1	101	20.6	103	2	71-124/10
108-88-3	Toluene	20	20.4	102	20.7	104	1	78-120/10
79-01-6	Trichloroethylene	20	20.3	102	20.5	103	1	75-119/10
75-69-4	Trichlorofluoromethane	20	19.2	96	20.4	102	6	67-129/14
75-01-4	Vinyl chloride	20	18.7	94	18.5	93	1	60-133/15
1330-20-7	Xylene (total)	60	60.2	100	61.7	103	2	78-122/10

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	99%	100%	78-125%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1198-BS	V29388.D	1	10/12/15	SY	n/a	n/a	VV1198
VV1198-BSD	V29389.D	1	10/12/15	SY	n/a	n/a	VV1198

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-2, C42157-3, C42157-4

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	101%	102%	86-114%
460-00-4	4-Bromofluorobenzene	101%	100%	80-113%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1199-LCS	V29338.D	1	10/10/15	SY	n/a	n/a	VV1199

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-1

CAS No.	Compound	Spike ug/l	LCS ug/l	LCS %	Limits
---------	----------	---------------	-------------	----------	--------

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	78-125%
2037-26-5	Toluene-D8	104%	86-114%
460-00-4	4-Bromofluorobenzene	99%	80-113%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VV1198-LCS	V29390.D	1	10/12/15	SY	n/a	n/a	VV1198

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-2, C42157-3, C42157-4

CAS No.	Compound	Spike ug/l	LCS ug/l	LCS %	Limits
---------	----------	---------------	-------------	----------	--------

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	78-125%
2037-26-5	Toluene-D8	103%	86-114%
460-00-4	4-Bromofluorobenzene	97%	80-113%

* = Outside of Control Limits.

5.3.2
 5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C42157-1MS	V29379.D	1	10/11/15	SY	n/a	n/a	VV1199
C42157-1MSD	V29380.D	1	10/11/15	SY	n/a	n/a	VV1199
C42157-1	V29349.D	1	10/10/15	SY	n/a	n/a	VV1199

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-1

CAS No.	Compound	C42157-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	80	92.1	115	80	89.8	112	3	58-137/12
71-43-2	Benzene	ND	20	21.5	108	20	21.4	107	0	77-118/10
108-86-1	Bromobenzene	ND	20	21.7	109	20	20.9	105	4	78-122/10
74-97-5	Bromochloromethane	ND	20	21.4	107	20	20.9	105	2	76-124/10
75-27-4	Bromodichloromethane	ND	20	20.9	105	20	20.7	104	1	74-121/10
75-25-2	Bromoform	ND	20	21.0	105	20	22.1	111	5	58-133/10
104-51-8	n-Butylbenzene	ND	20	21.1	106	20	21.5	108	2	75-125/10
135-98-8	sec-Butylbenzene	ND	20	22.1	111	20	22.1	111	0	76-127/10
98-06-6	tert-Butylbenzene	ND	20	22.3	112	20	22.3	112	0	76-124/10
108-90-7	Chlorobenzene	ND	20	21.1	106	20	21.1	106	0	77-120/10
75-00-3	Chloroethane	ND	20	19.1	96	20	18.6	93	3	63-117/10
67-66-3	Chloroform	ND	20	20.8	104	20	20.4	102	2	74-123/10
95-49-8	o-Chlorotoluene	ND	20	21.4	107	20	21.2	106	1	76-125/10
106-43-4	p-Chlorotoluene	ND	20	22.1	111	20	21.9	110	1	76-123/10
56-23-5	Carbon tetrachloride	ND	20	22.7	114	20	22.2	111	2	72-128/11
75-34-3	1,1-Dichloroethane	ND	20	20.7	104	20	20.3	102	2	70-120/10
75-35-4	1,1-Dichloroethylene	ND	20	22.8	114	20	22.6	113	1	65-120/11
563-58-6	1,1-Dichloropropene	ND	20	20.3	102	20	20.0	100	1	69-125/10
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	18.8	94	20	18.6	93	1	63-128/10
106-93-4	1,2-Dibromoethane	ND	20	20.8	104	20	21.0	105	1	78-123/10
107-06-2	1,2-Dichloroethane	ND	20	20.1	101	20	19.6	98	3	72-123/10
78-87-5	1,2-Dichloropropane	ND	20	21.3	107	20	21.2	106	0	76-119/10
142-28-9	1,3-Dichloropropane	ND	20	22.0	110	20	22.0	110	0	78-122/10
108-20-3	Di-Isopropyl ether	ND	20	19.8	99	20	19.2	96	3	69-124/10
594-20-7	2,2-Dichloropropane	ND	20	17.6	88	20	17.0	85	3	68-129/10
124-48-1	Dibromochloromethane	ND	20	21.0	105	20	20.9	105	0	75-124/10
75-71-8	Dichlorodifluoromethane	ND	20	22.1	111	20	21.2	106	4	37-149/21
156-59-2	cis-1,2-Dichloroethylene	ND	20	22.7	114	20	22.1	111	3	74-121/10
10061-01-5	cis-1,3-Dichloropropene	ND	20	21.1	106	20	20.4	102	3	76-125/10
541-73-1	m-Dichlorobenzene	ND	20	20.9	105	20	20.8	104	0	77-121/10
95-50-1	o-Dichlorobenzene	ND	20	20.6	103	20	20.5	103	0	77-120/10
106-46-7	p-Dichlorobenzene	ND	20	21.4	107	20	21.0	105	2	78-118/10
156-60-5	trans-1,2-Dichloroethylene	ND	20	19.6	98	20	19.5	98	1	71-118/10
10061-02-6	trans-1,3-Dichloropropene	ND	20	19.3	97	20	19.7	99	2	73-122/10
100-41-4	Ethylbenzene	ND	20	21.4	107	20	21.5	108	0	78-121/10
637-92-3	Ethyl Tert Butyl Ether	ND	20	19.5	98	20	19.0	95	3	76-130/10

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C42157-1MS	V29379.D	1	10/11/15	SY	n/a	n/a	VV1199
C42157-1MSD	V29380.D	1	10/11/15	SY	n/a	n/a	VV1199
C42157-1	V29349.D	1	10/10/15	SY	n/a	n/a	VV1199

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-1

CAS No.	Compound	C42157-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	ND	80	96.0	120	80	95.6	120	0	71-139/10
87-68-3	Hexachlorobutadiene	ND	20	21.0	105	20	21.3	107	1	69-127/11
98-82-8	Isopropylbenzene	ND	20	20.5	103	20	21.7	109	6	77-125/10
99-87-6	p-Isopropyltoluene	ND	20	21.7	109	20	21.7	109	0	76-125/10
108-10-1	4-Methyl-2-pentanone	ND	80	92.4	116	80	91.2	114	1	71-132/10
74-83-9	Methyl bromide	ND	20	18.5	93	20	18.3	92	1	66-123/10
74-87-3	Methyl chloride	ND	20	21.4	107	20	20.8	104	3	50-138/19
74-95-3	Methylene bromide	ND	20	21.7	109	20	20.9	105	4	77-125/10
75-09-2	Methylene chloride	ND	20	18.6	93	20	17.7	89	5	65-124/14
78-93-3	Methyl ethyl ketone	ND	80	96.6	121	80	92.2	115	5	67-139/11
1634-04-4	Methyl Tert Butyl Ether	ND	20	17.9	90	20	17.7	89	1	73-124/10
91-20-3	Naphthalene	ND	20	17.6	88	20	17.8	89	1	68-122/12
103-65-1	n-Propylbenzene	ND	20	21.8	109	20	20.8	104	5	76-123/10
100-42-5	Styrene	ND	20	21.0	105	20	21.1	106	0	74-126/10
994-05-8	Tert-Amyl Methyl Ether	ND	20	19.4	97	20	19.0	95	2	76-127/10
75-65-0	Tert-Butyl Alcohol	ND	100	93.2	93	100	90.6	91	3	47-161/18
630-20-6	1,1,1,2-Tetrachloroethane	ND	20	21.1	106	20	20.9	105	1	79-123/10
71-55-6	1,1,1-Trichloroethane	ND	20	21.5	108	20	21.1	106	2	73-124/10
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	20.4	102	20	21.2	106	4	77-123/10
79-00-5	1,1,2-Trichloroethane	ND	20	21.4	107	20	21.4	107	0	77-120/10
87-61-6	1,2,3-Trichlorobenzene	ND	20	18.4	92	20	18.4	92	0	70-126/11
96-18-4	1,2,3-Trichloropropane	ND	20	18.4	92	20	18.0	90	2	65-125/10
120-82-1	1,2,4-Trichlorobenzene	ND	20	19.0	95	20	18.9	95	1	72-123/10
95-63-6	1,2,4-Trimethylbenzene	ND	20	20.7	104	20	20.8	104	0	77-122/10
108-67-8	1,3,5-Trimethylbenzene	ND	20	22.0	110	20	21.9	110	0	79-127/10
127-18-4	Tetrachloroethylene	ND	20	21.8	109	20	22.2	111	2	71-124/10
108-88-3	Toluene	ND	20	21.7	109	20	22.0	110	1	78-120/10
79-01-6	Trichloroethylene	ND	20	21.7	109	20	21.5	108	1	75-119/10
75-69-4	Trichlorofluoromethane	ND	20	22.8	114	20	22.3	112	2	67-129/14
75-01-4	Vinyl chloride	ND	20	22.3	112	20	21.2	106	5	60-133/15
1330-20-7	Xylene (total)	ND	60	64.3	107	60	64.5	108	0	78-122/10

CAS No.	Surrogate Recoveries	MS	MSD	C42157-1	Limits
1868-53-7	Dibromofluoromethane	101%	98%	99%	78-125%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C42157-1MS	V29379.D	1	10/11/15	SY	n/a	n/a	VV1199
C42157-1MSD	V29380.D	1	10/11/15	SY	n/a	n/a	VV1199
C42157-1	V29349.D	1	10/10/15	SY	n/a	n/a	VV1199

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-1

CAS No.	Surrogate Recoveries	MS	MSD	C42157-1	Limits
2037-26-5	Toluene-D8	100%	101%	105%	86-114%
460-00-4	4-Bromofluorobenzene	98%	95%	99%	80-113%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C42098-1MS	V29381.D	2000	10/11/15	SY	n/a	n/a	VV1197
C42098-1MSD	V29382.D	2000	10/11/15	SY	n/a	n/a	VV1197
C42098-1 ^a	V29378.D	2000	10/11/15	SY	n/a	n/a	VV1197

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-2, C42157-4, C42157-5

CAS No.	Compound	C42098-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	575000	160000	865000	181* ^b	160000	826000	157* ^b	5	58-137/12
71-43-2	Benzene	ND	40000	40500	101	40000	41200	103	2	77-118/10
108-86-1	Bromobenzene	ND	40000	40500	101	40000	42500	106	5	78-122/10
74-97-5	Bromochloromethane	ND	40000	41100	103	40000	41700	104	1	76-124/10
75-27-4	Bromodichloromethane	ND	40000	39800	100	40000	41000	103	3	74-121/10
75-25-2	Bromoform	ND	40000	44300	111	40000	44800	112	1	58-133/10
104-51-8	n-Butylbenzene	ND	40000	38600	97	40000	39700	99	3	75-125/10
135-98-8	sec-Butylbenzene	ND	40000	40300	101	40000	42000	105	4	76-127/10
98-06-6	tert-Butylbenzene	ND	40000	40700	102	40000	43000	108	5	76-124/10
108-90-7	Chlorobenzene	ND	40000	40400	101	40000	41000	103	1	77-120/10
75-00-3	Chloroethane	ND	40000	35900	90	40000	35500	89	1	63-117/10
67-66-3	Chloroform	ND	40000	40800	102	40000	39700	99	3	74-123/10
95-49-8	o-Chlorotoluene	ND	40000	39600	99	40000	41200	103	4	76-125/10
106-43-4	p-Chlorotoluene	ND	40000	41300	103	40000	42700	107	3	76-123/10
56-23-5	Carbon tetrachloride	ND	40000	40200	101	40000	41200	103	2	72-128/11
75-34-3	1,1-Dichloroethane	ND	40000	40700	102	40000	40600	102	0	70-120/10
75-35-4	1,1-Dichloroethylene	ND	40000	40000	100	40000	41200	103	3	65-120/11
563-58-6	1,1-Dichloropropene	ND	40000	37200	93	40000	38000	95	2	69-125/10
96-12-8	1,2-Dibromo-3-chloropropane	ND	40000	37900	95	40000	37700	94	1	63-128/10
106-93-4	1,2-Dibromoethane	ND	40000	39900	100	40000	42900	107	7	78-123/10
107-06-2	1,2-Dichloroethane	ND	40000	38500	96	40000	39500	99	3	72-123/10
78-87-5	1,2-Dichloropropane	ND	40000	41100	103	40000	42200	106	3	76-119/10
142-28-9	1,3-Dichloropropane	ND	40000	44100	110	40000	45400	114	3	78-122/10
108-20-3	Di-Isopropyl ether	ND	40000	39600	99	40000	39200	98	1	69-124/10
594-20-7	2,2-Dichloropropane	ND	40000	32300	81	40000	30100	75	7	68-129/10
124-48-1	Dibromochloromethane	ND	40000	41800	105	40000	42500	106	2	75-124/10
75-71-8	Dichlorodifluoromethane	ND	40000	41000	103	40000	40100	100	2	37-149/21
156-59-2	cis-1,2-Dichloroethylene	ND	40000	44500	111	40000	42100	105	6	74-121/10
10061-01-5	cis-1,3-Dichloropropene	ND	40000	40400	101	40000	41100	103	2	76-125/10
541-73-1	m-Dichlorobenzene	ND	40000	39200	98	40000	41200	103	5	77-121/10
95-50-1	o-Dichlorobenzene	ND	40000	39500	99	40000	40500	101	3	77-120/10
106-46-7	p-Dichlorobenzene	ND	40000	40200	101	40000	41800	105	4	78-118/10
156-60-5	trans-1,2-Dichloroethylene	ND	40000	38700	97	40000	38900	97	1	71-118/10
10061-02-6	trans-1,3-Dichloropropene	ND	40000	38800	97	40000	39900	100	3	73-122/10
100-41-4	Ethylbenzene	ND	40000	41000	103	40000	41100	103	0	78-121/10
637-92-3	Ethyl Tert Butyl Ether	ND	40000	39500	99	40000	36800	92	7	76-130/10

* = Outside of Control Limits.

5.4.2
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C42098-1MS	V29381.D	2000	10/11/15	SY	n/a	n/a	VV1197
C42098-1MSD	V29382.D	2000	10/11/15	SY	n/a	n/a	VV1197
C42098-1 ^a	V29378.D	2000	10/11/15	SY	n/a	n/a	VV1197

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-2, C42157-4, C42157-5

CAS No.	Compound	C42098-1 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD	
591-78-6	2-Hexanone	ND		160000	201000	126	160000	197000	123	2	71-139/10
87-68-3	Hexachlorobutadiene	ND		40000	39400	99	40000	40000	100	2	69-127/11
98-82-8	Isopropylbenzene	ND		40000	40900	102	40000	42000	105	3	77-125/10
99-87-6	p-Isopropyltoluene	ND		40000	39700	99	40000	41300	103	4	76-125/10
108-10-1	4-Methyl-2-pentanone	ND		160000	196000	123	160000	190000	119	3	71-132/10
74-83-9	Methyl bromide	ND		40000	35800	90	40000	35800	90	0	66-123/10
74-87-3	Methyl chloride	ND		40000	40400	101	40000	39900	100	1	50-138/19
74-95-3	Methylene bromide	ND		40000	41700	104	40000	42600	107	2	77-125/10
75-09-2	Methylene chloride	ND		40000	37500	94	40000	37500	94	0	65-124/14
78-93-3	Methyl ethyl ketone	ND		160000	202000	126	160000	178000	111	13* ^c	67-139/11
1634-04-4	Methyl Tert Butyl Ether	ND		40000	37800	95	40000	37400	94	1	73-124/10
91-20-3	Naphthalene	ND		40000	35600	89	40000	34800	87	2	68-122/12
103-65-1	n-Propylbenzene	ND		40000	39800	100	40000	41300	103	4	76-123/10
100-42-5	Styrene	ND		40000	41300	103	40000	43100	108	4	74-126/10
994-05-8	Tert-Amyl Methyl Ether	ND		40000	39600	99	40000	38700	97	2	76-127/10
75-65-0	Tert-Butyl Alcohol	ND		200000	187000	94	200000	187000	94	0	47-161/18
630-20-6	1,1,1,2-Tetrachloroethane	ND		40000	40900	102	40000	41300	103	1	79-123/10
71-55-6	1,1,1-Trichloroethane	ND		40000	40800	102	40000	40300	101	1	73-124/10
79-34-5	1,1,2,2-Tetrachloroethane	ND		40000	42700	107	40000	42700	107	0	77-123/10
79-00-5	1,1,2-Trichloroethane	ND		40000	43300	108	40000	43800	110	1	77-120/10
87-61-6	1,2,3-Trichlorobenzene	ND		40000	35900	90	40000	35100	88	2	70-126/11
96-18-4	1,2,3-Trichloropropane	ND		40000	37900	95	40000	38400	96	1	65-125/10
120-82-1	1,2,4-Trichlorobenzene	ND		40000	36600	92	40000	37700	94	3	72-123/10
95-63-6	1,2,4-Trimethylbenzene	ND		40000	38800	97	40000	40200	101	4	77-122/10
108-67-8	1,3,5-Trimethylbenzene	ND		40000	39500	99	40000	41700	104	5	79-127/10
127-18-4	Tetrachloroethylene	ND		40000	40800	102	40000	41700	104	2	71-124/10
108-88-3	Toluene	ND		40000	41500	104	40000	42400	106	2	78-120/10
79-01-6	Trichloroethylene	705	J	40000	40100	98	40000	41000	101	2	75-119/10
75-69-4	Trichlorofluoromethane	ND		40000	43100	108	40000	41000	103	5	67-129/14
75-01-4	Vinyl chloride	ND		40000	40700	102	40000	39800	100	2	60-133/15
1330-20-7	Xylene (total)	ND		120000	122000	102	120000	127000	106	4	78-122/10

CAS No.	Surrogate Recoveries	MS	MSD	C42098-1	Limits
1868-53-7	Dibromofluoromethane	102%	100%	100%	78-125%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C42098-1MS	V29381.D	2000	10/11/15	SY	n/a	n/a	VV1197
C42098-1MSD	V29382.D	2000	10/11/15	SY	n/a	n/a	VV1197
C42098-1 ^a	V29378.D	2000	10/11/15	SY	n/a	n/a	VV1197

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-2, C42157-4, C42157-5

CAS No.	Surrogate Recoveries	MS	MSD	C42098-1	Limits
2037-26-5	Toluene-D8	103%	102%	95%	86-114%
460-00-4	4-Bromofluorobenzene	101%	103%	97%	80-113%

- (a) Dilution required due to nature of sample matrix. Sample vial contained more than 0.5cm of sediment.
- (b) Outside control limits due to high level in sample relative to spike amount. AZ:M3
- (c) Outside laboratory control limits. AZ:R5

* = Outside of Control Limits.

5.4.2
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C42106-10MS	V29408.D	100	10/12/15	SY	n/a	n/a	VV1198
C42106-10MSD	V29409.D	100	10/12/15	SY	n/a	n/a	VV1198
C42106-10 ^a	V29395.D	100	10/12/15	SY	n/a	n/a	VV1198

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-2, C42157-3, C42157-4

CAS No.	Compound	C42106-10		MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q							
67-64-1	Acetone	ND		8000	111	8000	9960	125	12	58-137/12
71-43-2	Benzene	44.7	J	2000	103	2000	2140	105	1	77-118/10
108-86-1	Bromobenzene	ND		2000	103	2000	2110	106	2	78-122/10
74-97-5	Bromochloromethane	ND		2000	101	2000	2110	106	4	76-124/10
75-27-4	Bromodichloromethane	ND		2000	94	2000	2050	103	9	74-121/10
75-25-2	Bromoform	ND		2000	107	2000	2150	108	0	58-133/10
104-51-8	n-Butylbenzene	ND		2000	99	2000	1990	100	1	75-125/10
135-98-8	sec-Butylbenzene	ND		2000	102	2000	2070	104	1	76-127/10
98-06-6	tert-Butylbenzene	ND		2000	103	2000	2120	106	3	76-124/10
108-90-7	Chlorobenzene	ND		2000	99	2000	2030	102	2	77-120/10
75-00-3	Chloroethane	ND		2000	88	2000	1810	91	3	63-117/10
67-66-3	Chloroform	ND		2000	98	2000	1990	100	2	74-123/10
95-49-8	o-Chlorotoluene	ND		2000	99	2000	2050	103	3	76-125/10
106-43-4	p-Chlorotoluene	ND		2000	103	2000	2150	108	5	76-123/10
56-23-5	Carbon tetrachloride	ND		2000	104	2000	2040	102	2	72-128/11
75-34-3	1,1-Dichloroethane	ND		2000	98	2000	2080	104	6	70-120/10
75-35-4	1,1-Dichloroethylene	ND		2000	99	2000	2260	113	13* b	65-120/11
563-58-6	1,1-Dichloropropene	ND		2000	97	2000	1830	92	5	69-125/10
96-12-8	1,2-Dibromo-3-chloropropane	ND		2000	93	2000	1740	87	7	63-128/10
106-93-4	1,2-Dibromoethane	ND		2000	102	2000	2080	104	2	78-123/10
107-06-2	1,2-Dichloroethane	ND		2000	99	2000	1970	99	0	72-123/10
78-87-5	1,2-Dichloropropane	ND		2000	95	2000	2100	105	11* b	76-119/10
142-28-9	1,3-Dichloropropane	ND		2000	107	2000	2170	109	1	78-122/10
108-20-3	Di-Isopropyl ether	ND		2000	96	2000	2040	102	7	69-124/10
594-20-7	2,2-Dichloropropane	ND		2000	86	2000	1760	88	2	68-129/10
124-48-1	Dibromochloromethane	ND		2000	101	2000	2040	102	1	75-124/10
75-71-8	Dichlorodifluoromethane	ND		2000	95	2000	1960	98	4	37-149/21
156-59-2	cis-1,2-Dichloroethylene	ND		2000	106	2000	2190	110	4	74-121/10
10061-01-5	cis-1,3-Dichloropropene	ND		2000	95	2000	2070	104	9	76-125/10
541-73-1	m-Dichlorobenzene	ND		2000	100	2000	2040	102	2	77-121/10
95-50-1	o-Dichlorobenzene	ND		2000	99	2000	2020	101	3	77-120/10
106-46-7	p-Dichlorobenzene	ND		2000	100	2000	2070	104	3	78-118/10
156-60-5	trans-1,2-Dichloroethylene	ND		2000	95	2000	1960	98	3	71-118/10
10061-02-6	trans-1,3-Dichloropropene	ND		2000	91	2000	1900	95	5	73-122/10
100-41-4	Ethylbenzene	54.7	J	2000	99	2000	2090	102	2	78-121/10
637-92-3	Ethyl Tert Butyl Ether	ND		2000	94	2000	1920	96	3	76-130/10

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C42106-10MS	V29408.D	100	10/12/15	SY	n/a	n/a	VV1198
C42106-10MSD	V29409.D	100	10/12/15	SY	n/a	n/a	VV1198
C42106-10 ^a	V29395.D	100	10/12/15	SY	n/a	n/a	VV1198

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-2, C42157-3, C42157-4

CAS No.	Compound	C42106-10 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	ND	8000	9460	118	8000	9440	118	0	71-139/10
87-68-3	Hexachlorobutadiene	ND	2000	1980	99	2000	1900	95	4	69-127/11
98-82-8	Isopropylbenzene	ND	2000	2010	101	2000	2020	101	0	77-125/10
99-87-6	p-Isopropyltoluene	ND	2000	1990	100	2000	2040	102	2	76-125/10
108-10-1	4-Methyl-2-pentanone	ND	8000	8820	110	8000	9490	119	7	71-132/10
74-83-9	Methyl bromide	ND	2000	1750	88	2000	1800	90	3	66-123/10
74-87-3	Methyl chloride	ND	2000	1940	97	2000	2110	106	8	50-138/19
74-95-3	Methylene bromide	ND	2000	1950	98	2000	2110	106	8	77-125/10
75-09-2	Methylene chloride	ND	2000	1680	84	2000	1960	98	15* c	65-124/14
78-93-3	Methyl ethyl ketone	ND	8000	9450	118	8000	9360	117	1	67-139/11
1634-04-4	Methyl Tert Butyl Ether	ND	2000	1740	87	2000	1910	96	9	73-124/10
91-20-3	Naphthalene	ND	2000	1760	88	2000	1680	84	5	68-122/12
103-65-1	n-Propylbenzene	ND	2000	2010	101	2000	2060	103	2	76-123/10
100-42-5	Styrene	ND	2000	2010	101	2000	2080	104	3	74-126/10
994-05-8	Tert-Amyl Methyl Ether	ND	2000	1880	94	2000	2050	103	9	76-127/10
75-65-0	Tert-Butyl Alcohol	ND	10000	8680	87	10000	9980	100	14	47-161/18
630-20-6	1,1,1,2-Tetrachloroethane	ND	2000	1980	99	2000	2050	103	3	79-123/10
71-55-6	1,1,1-Trichloroethane	ND	2000	1960	98	2000	2020	101	3	73-124/10
79-34-5	1,1,2,2-Tetrachloroethane	ND	2000	2120	106	2000	2150	108	1	77-123/10
79-00-5	1,1,2-Trichloroethane	ND	2000	2080	104	2000	2090	105	0	77-120/10
87-61-6	1,2,3-Trichlorobenzene	ND	2000	1770	89	2000	1730	87	2	70-126/11
96-18-4	1,2,3-Trichloropropane	ND	2000	1820	91	2000	1830	92	1	65-125/10
120-82-1	1,2,4-Trichlorobenzene	ND	2000	1830	92	2000	1770	89	3	72-123/10
95-63-6	1,2,4-Trimethylbenzene	58.2	J 2000	1980	96	2000	2060	100	4	77-122/10
108-67-8	1,3,5-Trimethylbenzene	ND	2000	2040	102	2000	2090	105	2	79-127/10
127-18-4	Tetrachloroethylene	ND	2000	1990	100	2000	1990	100	0	71-124/10
108-88-3	Toluene	ND	2000	1910	96	2000	2080	104	9	78-120/10
79-01-6	Trichloroethylene	ND	2000	1880	94	2000	2020	101	7	75-119/10
75-69-4	Trichlorofluoromethane	ND	2000	2090	105	2000	2210	111	6	67-129/14
75-01-4	Vinyl chloride	ND	2000	1880	94	2000	2030	102	8	60-133/15
1330-20-7	Xylene (total)	57.8	J 6000	6040	100	6000	6210	103	3	78-122/10

CAS No.	Surrogate Recoveries	MS	MSD	C42106-10	Limits
1868-53-7	Dibromofluoromethane	100%	100%		78-125%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C42106-10MS	V29408.D	100	10/12/15	SY	n/a	n/a	VV1198
C42106-10MSD	V29409.D	100	10/12/15	SY	n/a	n/a	VV1198
C42106-10 ^a	V29395.D	100	10/12/15	SY	n/a	n/a	VV1198

The QC reported here applies to the following samples:

Method: SW846 8260B

C42157-2, C42157-3, C42157-4

CAS No.	Surrogate Recoveries	MS	MSD	C42106-10	Limits
2037-26-5	Toluene-D8	93%	99%		86-114%
460-00-4	4-Bromofluorobenzene	100%	101%		80-113%

- (a) Sample used for QC purposes only.
- (b) RPD exceeded laboratory acceptance limit; MS/MSD recoveries met acceptance criteria. AZ:R5
- (c) Outside laboratory control limits.

* = Outside of Control Limits.

5.4.3
 5

GC Volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAA418-MB	AA008417.D	1	10/09/15	KZ	n/a	n/a	GAA418

The QC reported here applies to the following samples:

Method: RSK-175

C42157-1, C42157-2, C42157-3, C42157-4

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.50	0.25	ug/l	
74-85-1	Ethene	ND	1.0	0.50	ug/l	
74-84-0	Ethane	ND	1.0	0.50	ug/l	

Blank Spike Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAA418-BS	AA008416.D	1	10/09/15	KZ	n/a	n/a	GAA418

The QC reported here applies to the following samples:

Method: RSK-175

C42157-1, C42157-2, C42157-3, C42157-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
74-82-8	Methane	215	198	92	70-130
74-85-1	Ethene	574	508	89	70-130
74-84-0	Ethane	433	438	101	70-130

* = Outside of Control Limits.

Duplicate Summary

Job Number: C42157
Account: ROUXCAO ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C42157-1DUP	AA008420.D	1	10/09/15	KZ	n/a	n/a	GAA418
C42157-1	AA008418.D	1	10/09/15	KZ	n/a	n/a	GAA418

The QC reported here applies to the following samples:

Method: RSK-175

C42157-1, C42157-2, C42157-3, C42157-4

CAS No.	Compound	C42157-1 ug/l	DUP Q ug/l	Q RPD	Limits
74-82-8	Methane	1.9	1.4	30	30
74-85-1	Ethene	ND	ND	nc	30
74-84-0	Ethane	ND	ND	nc	30

* = Outside of Control Limits.

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C42157
Account: ROUXCAO - ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

QC Batch ID: MP10260
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 10/08/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	27		
Antimony	6.0	1.2	1.2		
Arsenic	10	1.6	2.5		
Barium	200	.2	.5		
Beryllium	5.0	.2	.6		
Boron	100	1.8	3.2		
Cadmium	2.0	.2	.3		
Calcium	5000	28	69		
Chromium	10	.4	.6		
Cobalt	5.0	.3	.4		
Copper	10	1.2	1.8		
Iron	200	5.3	11	3.9	<200
Lead	10	1	1.7		
Lithium	50	1.1	2.9		
Magnesium	5000	16	23		
Manganese	15	.2	.2	0.20	<15
Molybdenum	20	.5	.6		
Nickel	5.0	.4	.6		
Potassium	10000	35	35		
Selenium	10	1.7	3.3		
Silicon	100	2.4	2.4		
Silver	5.0	.5	1.5		
Sodium	10000	11	25		
Strontium	10	.1	.2		
Thallium	10	1.7	4.8		
Tin	50	.8	1.3		
Titanium	10	.8	.8		
Vanadium	10	.6	.6		
Zinc	20	.5	3.1		

Associated samples MP10260: C42157-1, C42157-2, C42157-3, C42157-4, C42157-1F, C42157-2F, C42157-3F, C42157-4F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

7.1.1
7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C42157
 Account: ROUXCAO - ROUX Associates - Oakland CA
 Project: 2868 Hannah Street, Oakland, CA

QC Batch ID: MP10260
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date: 10/08/15

Metal	C42145-1 Original MS	SpikeLot MPIR5	% Rec	QC Limits	
Aluminum					
Antimony	anr				
Arsenic	anr				
Barium	anr				
Beryllium	anr				
Boron					
Cadmium	anr				
Calcium					
Chromium	anr				
Cobalt					
Copper	anr				
Iron	55.2	12400	12500	98.8	75-125
Lead	anr				
Lithium					
Magnesium					
Manganese	22.5	543	500	104.2	75-125
Molybdenum					
Nickel	anr				
Potassium					
Selenium	anr				
Silicon					
Silver					
Sodium					
Strontium					
Thallium	anr				
Tin					
Titanium					
Vanadium					
Zinc	anr				

Associated samples MP10260: C42157-1, C42157-2, C42157-3, C42157-4, C42157-1F, C42157-2F, C42157-3F, C42157-4F

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

7.1.2
 7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C42157
 Account: ROUXCAO - ROUX Associates - Oakland CA
 Project: 2868 Hannah Street, Oakland, CA

QC Batch ID: MP10260
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date: 10/08/15

Metal	C42145-1 Original MSD	Spike MPIR5	lot % Rec	MSD RPD	QC Limit	
Aluminum						
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Boron						
Cadmium	anr					
Calcium						
Chromium	anr					
Cobalt						
Copper	anr					
Iron	55.2	12200	12500	97.2	1.6	20
Lead	anr					
Lithium						
Magnesium						
Manganese	22.5	539	500	103.4	0.7	20
Molybdenum						
Nickel	anr					
Potassium						
Selenium	anr					
Silicon						
Silver						
Sodium						
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium						
Zinc	anr					

Associated samples MP10260: C42157-1, C42157-2, C42157-3, C42157-4, C42157-1F, C42157-2F, C42157-3F, C42157-4F

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

7.1.2
 7

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C42157
 Account: ROUXCAO - ROUX Associates - Oakland CA
 Project: 2868 Hannah Street, Oakland, CA

QC Batch ID: MP10260
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date: 10/08/15

Metal	BSP Result	Spikelot MPIR5	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper	anr			
Iron	12100	12500	96.8	80-120
Lead	anr			
Lithium				
Magnesium				
Manganese	506	500	101.2	80-120
Molybdenum				
Nickel	anr			
Potassium				
Selenium	anr			
Silicon				
Silver				
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP10260: C42157-1, C42157-2, C42157-3, C42157-4, C42157-1F, C42157-2F, C42157-3F, C42157-4F

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

7.1.3
7

SERIAL DILUTION RESULTS SUMMARY

Login Number: C42157
 Account: ROUXCAO - ROUX Associates - Oakland CA
 Project: 2868 Hannah Street, Oakland, CA

QC Batch ID: MP10260
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date: 10/08/15

Metal	C42145-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper	anr			
Iron	55.2	43.1	11.1 (a)	0-10
Lead	anr			
Lithium				
Magnesium				
Manganese	22.5	22.7	2.3	0-10
Molybdenum				
Nickel	anr			
Potassium				
Selenium	anr			
Silicon				
Silver				
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP10260: C42157-1, C42157-2, C42157-3, C42157-4, C42157-1F, C42157-2F, C42157-3F, C42157-4F

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

7.1.4
 7

General Chemistry

QC Data Summaries

Includes the following where applicable:

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

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C42157
Account: ROUXCAO - ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Bromide	GP8452/GN17528	0.20	0.0	mg/l	5	4.83	96.6	90-110%
Chloride	GP8460/GN17543	0.50	0.0	mg/l	5	4.66	93.2	90-110%
Fluoride	GP8452/GN17528	0.10	0.0	mg/l	5	5.00	100.0	90-110%
Nitrogen, Nitrate	GP8452/GN17528	0.10	0.0	mg/l	5	4.85	97.0	90-110%
Nitrogen, Nitrite	GP8452/GN17528	0.10	0.0	mg/l	5	4.68	93.6	90-110%
Sulfate	GP8460/GN17543	0.50	0.0	mg/l	5	5.11	102.2	90-110%
Sulfide	GN17559	0.020	0.0	mg/l	0.2	0.20	99.1	75-125%
Total Organic Carbon	GP8475/GN17562	1.0	0.0	mg/l	25	25.3	101.4	75-125%

Associated Samples:

Batch GP8452: C42157-1, C42157-2, C42157-3, C42157-4
 Batch GP8460: C42157-1, C42157-2, C42157-3, C42157-4
 Batch GP8475: C42157-1, C42157-2, C42157-3, C42157-4
 Batch GN17559: C42157-1, C42157-2, C42157-3, C42157-4
 (*) Outside of QC limits

8.1

8

BLANK SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C42157
Account: ROUXCAO - ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Analyte	Batch ID	Units	Spike Amount	BSD Result	RPD	QC Limit
Bromide	GP8452/GN17528	mg/l	5	4.81	0.4	25%
Chloride	GP8460/GN17543	mg/l	5	4.68	0.4	25%
Fluoride	GP8452/GN17528	mg/l	5	4.96	0.8	25%
Nitrogen, Nitrate	GP8452/GN17528	mg/l	5	4.83	0.4	25%
Nitrogen, Nitrite	GP8452/GN17528	mg/l	5	4.71	0.6	25%
Sulfate	GP8460/GN17543	mg/l	5	5.16	1.0	25%
Sulfide	GN17559	mg/l	0.2	0.20	0.3	
Total Organic Carbon	GP8475/GN17562	mg/l	25	25.4	0.2	

Associated Samples:

Batch GP8452: C42157-1, C42157-2, C42157-3, C42157-4
 Batch GP8460: C42157-1, C42157-2, C42157-3, C42157-4
 Batch GP8475: C42157-1, C42157-2, C42157-3, C42157-4
 Batch GN17559: C42157-1, C42157-2, C42157-3, C42157-4
 (*) Outside of QC limits

82

8

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C42157
Account: ROUXCAO - ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Bromide	GP8452/GN17528	C42145-1	mg/l	24.2	5	29.9	114.0	80-120%
Chloride	GP8460/GN17543	C42116-8	mg/l	139	125	255	92.8	80-120%
Fluoride	GP8452/GN17528	C42145-1	mg/l	0.62	5	4.8	83.6	80-120%
Nitrogen, Nitrate	GP8452/GN17528	C42145-1	mg/l	0.83	5	5.8	99.4	80-120%
Nitrogen, Nitrite	GP8452/GN17528	C42145-1	mg/l	0.0	5	4.8	96.0	80-120%
Sulfate	GP8460/GN17543	C42116-8	mg/l	48.4	125	163	91.7	80-120%
Sulfide	GN17559	C42157-4	mg/l	0.0	0.2	0.0058	2.5*(a)	75-125%
Total Organic Carbon	GP8475/GN17562	C42157-1	mg/l	3.7	25	27.7	96.1	75-125%

Associated Samples:

Batch GP8452: C42157-1, C42157-2, C42157-3, C42157-4
Batch GP8460: C42157-1, C42157-2, C42157-3, C42157-4
Batch GP8475: C42157-1, C42157-2, C42157-3, C42157-4
Batch GN17559: C42157-1, C42157-2, C42157-3, C42157-4

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(a) Spike recovery indicates possible matrix interference.



MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C42157
Account: ROUXCAO - ROUX Associates - Oakland CA
Project: 2868 Hannah Street, Oakland, CA

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Bromide	GP8452/GN17528	C42145-1	mg/l	24.2	5	28.4	5.1	
Chloride	GP8460/GN17543	C42116-8	mg/l	139	125	255	0.0	
Fluoride	GP8452/GN17528	C42145-1	mg/l	0.62	5	4.8	0.0	
Nitrogen, Nitrate	GP8452/GN17528	C42145-1	mg/l	0.83	5	5.9	1.7	
Nitrogen, Nitrite	GP8452/GN17528	C42145-1	mg/l	0.0	5	4.3	11.0	
Sulfate	GP8460/GN17543	C42116-8	mg/l	48.4	125	163	0.0	
Sulfide	GN17559	C42157-4	mg/l	0.0	0.2	0.0058	0.0	25%

Associated Samples:

Batch GP8452: C42157-1, C42157-2, C42157-3, C42157-4
Batch GP8460: C42157-1, C42157-2, C42157-3, C42157-4
Batch GN17559: C42157-1, C42157-2, C42157-3, C42157-4
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

8.4

8