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To Whom it may concern

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

Robert A. Elliott Sr. Power of Attorney Mark C. Elliott

Math C Ellatt



February 17, 2016

REPORT Of SOIL, GROUNDWATER, AND SOIL VAPOR ASSESSMENT ASE JOB NO. 4645

At Elliott Property 745 Kevin Court Oakland, California

Prepared for: Mark Elliott 408 Silver Chief Way Danville, CA 94526

Prepared by: AQUA SCIENCE ENGINEERS, INC. 55 Oak Court, Suite 220 Danville, CA 94526 (925) 820-9391



1.0 INTRODUCTION

This report presents the methods and findings of Aqua Science Engineers, Inc. (ASE)'s soil, groundwater, and soil vapor assessment at 745 Kevin Court in Oakland, California (Figures 1 through 3). This report was prepared for Mark Elliott, the current property owner.

2.0 BACKGROUND

The subject property has been owned by The Elliott Family since the mid 1970's and used by their family as a roofing company warehouse and yard. At the time of the property purchase, the buildings along the western property line and a 1,000 gallon underground storage tank (UST) already existed at the site. The Elliotts built the building on the eastern side of the property some time later.

A Phase I Environmental Site Assessment was completed for the subject site by ERAS Environmental in October 2014. During the Phase I, files from the Alameda County Health Care Services Agency (ACHCSA) and the Oakland Fire Department (OFD) were reviewed, and records were noted that a 1,000 gallon UST that held motor-vehicle fuel (gasoline) was located at the site, and removed in 1991 (by the Elliotts). The files were not complete – items regarding UST use permits and the UST removal report were missing. No files indicating soil or water sampling at the time of the UST's removal were found in the files.

In November 2014, AEI Consultants performed a Phase II Site Assessment at the subject site that included the installation of four shallow soil borings within and surrounding the former UST location for the collection of grab groundwater samples. Total petroleum hydrocarbons as gasoline (TPH-G), benzene, and toluene were identified in groundwater samples collected from three of the four grab water samples. The highest concentrations were identified in soil boring HP-2, located just north of the former UST, and included 6,200 parts per billion (ppb) TPH-G, 73 ppb benzene, and 12 ppb toluene. AEI concluded that the findings of their 2014 investigation indicated that gasoline-impacted soil exists in the area of the former UST, which appears to be acting as the source of groundwater impacts.

3.0 SCOPE OF WORK (SOW)

The scope of work is as follows:

- 1) Obtain drilling permits from the Alameda County Public Works Agency to drill soil borings and to install vapor monitoring wells.
- 2) Notify Underground Service Alert (USA) of the drilling and have drilling locations cleared of subsurface utility lines by a private subsurface utility line locating company.
- 3) Drill four soil borings using a Geoprobe and collect soil and groundwater samples for analysis. One boring in the former UST area will be left open overnight with a temporary casing and will be checked the following day for the presence of free-floating hydrocarbons.



- 4) Analyze two soil samples and one groundwater sample from each boring at a CAL-EPA certified analytical laboratory for total petroleum hydrocarbons as diesel (TPH-D) by modified Method 8015 with and without silica gel cleanup and TPH-G, benzene, toluene, ethyl benzene, and total xylenes (collectively known as BTEX), naphthalene and fuel oxygenates by EPA Method 8260B.
- 5) Drill two soil borings to no greater than 5-feet bgs and install vapor monitoring wells in the borings. Collect soil vapor samples from each of the vapor extraction wells.
- 6) Analyze the soil vapor sample from each boring at a CAL-EPA certified analytical laboratory for TPH-G, BTEX and naphthalene by EPA Method TO-15, and oxygen and helium by ASTM D1946.
- 7) Prepare a report presenting the methods and findings of this assessment.

4.0 OBTAIN A DRILLING PERMIT FROM THE ALAMEDA COUNTY PUBLIC WORKS AGENCY AND CLEAR DRILLING LOCATIONS OF UNDERGROUND LINES

4.1 Drilling Permit

Prior to drilling, ASE obtained drilling permits from the Alameda County Public Works Agency to drill soil borings and to install soil vapor monitoring wells. Copies of the permits are presented in Appendix A.

4.2 Underground Utility Clearance

ASE notified Underground Service Alert (USA) to have public underground utility lines marked in the site vicinity 48-hours prior to drilling. ASE also subcontracted Cruz Brothers Locators of Stockton, California to clear each drilling location of underground utility lines prior to drilling.

5.0 DRILL ONE SOIL BORING OUTSIDE AND DOWNGRADIENT OF 2123 PACHECO STREET FOR COLLECTION OF SOIL AND GROUNDWATER SAMPLES

5.1 Drilling and Soil Sample Collection

On January 28, 2016, Cascade Drilling of Richmond, California drilled borings BH-A through BH-D using a Geoprobe 6600 hydraulic sampling rig. The boring locations are shown on Figure 3. ASE senior geologist Robert E. Kitay, P.G. directed the drilling. Boring BH-A was drilled in the former UST pit, and borings BH-B, BH-C and BH-D were drilled east, west and north of the former UST pit, respectively.



Undisturbed soil samples were collected continuously as drilling progressed for lithologic and hydrogeologic description and for chemical analysis. The samples were collected by driving a sampler lined with acetate tubes using hydraulic direct push methods. Selective soil samples were immediately cut, sealed with Teflon tape and plastic end caps, labeled and chilled in an ice chest with wet ice for transport to McCampbell Analytical, Inc. of Pittsburg, California (DHS ELAP certification #1644) under chain of custody documentation.

Soil from the remaining tubes was described by the site geologist using the Unified Soil Classification System (USCS) and was screened for volatile compounds using a photoionization detector (PID). The soil was screened by emptying soil from one of the sample tubes into a plastic bag. The bag was then sealed and placed in the sun for approximately 10 minutes. After the volatile organic compounds (VOCs) were allowed to volatilize, the PID measured the vapor in the bag through a small hole punched in the bag. PID readings are used as a screening tool only, since the procedures are not as rigorous as those used in the laboratory. The PID readings are shown on the boring log presented in Appendix B. There were no PID readings greater than zero in any of the soil encountered.

5.2 Groundwater Sample Collection

A temporary PVC well casing was driven into place for the collection of groundwater samples from the boring. Groundwater samples were collected with a new polyethylene bailer. Groundwater samples were decanted from the bailer into 40-ml volatile organic analysis (VOA) vials, preserved with hydrochloric acid and sealed without headspace. The samples were then labeled with the site location, sample designation, date and time the samples were collected, and the initials of the person collecting the samples. The samples were then sealed in plastic bags and cooled in an ice chest with wet ice for transport to McCampbell Analytical, Inc. of Pittsburg, California (DHS ELAP certification #1644) under chain-of-custody.

5.3 BH-A Free-Floating Hydrocarbon Measurements

Boring BH-A was secured to prevent rainwater from entering the borings overnight, and was checked the day following to determine whether free-floating petroleum hydrocarbons accumulated in the boring. On January 29, 2016, ASE lowered an interface probe into the casing to determine whether any free-floating hydrocarbons were present. No free-floating hydrocarbons were present. ASE also lowered a bailer to the surface and half filled the bailer with water. No free-floating hydrocarbons or sheen was present on the surface of the water in the bailer.

5.4 Decontamination and Borehole Backfilling

Drilling equipment was cleaned with an Alconox solution and triple rinsed between sampling intervals and between borings to prevent potential cross-contamination. Following collection of the soil and groundwater samples, each boring was backfilled with neat cement to the ground surface. Boring BH-A was backfilled the following day on January 29, 2016 after measurements for potential free-floating hydrocarbons were completed.



5.5 Subsurface Lithology and Hydrogeology

Sediments encountered during drilling generally consisted of gravely sand from beneath the asphalt or concrete surface to approximately 2-feet bgs, clayey silt from 2-feet bgs to 4.5-feet bgs, silty sand from 4.5-feet bgs to 6.5-feet bgs, clayey silt from 6.5-feet bgs to 8-feet bgs, and silty clay from 8-feet bgs to the total depth explored of 12-feet bgs. Groundwater was encountered at approximately 4-feet bgs. Boring logs are presented in Appendix B.

6.0 COLLECT SOIL VAPOR SAMPLES

Prior to conducting the project, ASE verified that there was no significant rainfall (no more than ¹/₄-inch) for 5 days prior to the soil vapor sampling. There were no nearby irrigation systems.

On January 28, 2016, Cascade Drilling of Richmond, California pushed soil vapor points SVS-1 and SVW-2 to a depth of 3-feet bgs using a rotohammer (SVW-1) and drill rig (SVW-2). Each boring had an expendable point at the base of the rods. Once at depth, ¹/₄" Teflon tubing with a 1-inch screen was inserted inside the drive rod and pushed to the bottom of the boring. The drive rod was then retracted approximately 6-inches separating the expendable point and the rods and creating the desired void for the sample collection membrane. Sand was then added to fill the void to 6-inches above the sample point. Above the sand, 6-inches of dry granulated bentonite was added to the surface to prevent ambient air intrusion into the borehole.

The borehole was then allowed to equilibrate for two hours prior to purging and sampling. A "vacuum shut in test" was then conducted to verify there were no leaks in the sample train system. A minimum vacuum of 100-inches of water column was applied to the sampling manifold and valve system between the Summa canister and the probe for at least 5 minutes with all valves closed. A vacuum of 100-inches of water was maintained during the test for both points. The manifold to be used for SVW-2 would not pass the "shut in test" even after multiple attempts and adjustments. For this reason, ASE made a decision to reuse the manifold that was used for SVW-1, although this would make the sample for SVW-2 susceptible to cross-contamination from SVW-1. However, given the final results it does not appear that any significant cross-contamination took place.

For the sampling, the sampling probe and Summa canister were placed in a plastic shroud. Helium was then added to the shroud as a tracer gas at a minimum concentration of 20% by volume. The tubing was then purged of at least three volumes to insure that all ambient air was removed from the tubing using a 5-liter Summa canister. The sample was then collected in a 1-liter Summa canister. The samples were labeled with the site location, sample designation, date and time the samples are collected, and the initials of the person collecting the sample. The samples were delivered under chain of custody to McCampbell Analytical, Inc. of Pittsburg, California (DHS ELAP certification #1644) under chain of custody documentation for analysis.

All disposable equipment and supplies were discarded and non-disposable equipment was cleaned with an Alconox solution and triple rinsed.



7.0 ANALYZE SOIL SAMPLES

The soil sample collected from 3.5-feet bgs (the capillary zone) and 7.5-feet bgs (silty clay interface with more permeable soil above) in borings BH-A, BH-B, BH-C and BH-D were analyzed by McCampbell Analytical, Inc. of Pittsburg, California (DHS ELAP certification #1644) for TPH-D both with and without silica gel cleanup by EPA Method 8015, and TPH-G, BTEX, naphthalene, and fuel oxygenates by EPA Method 8260B. The analytical results are tabulated in Table One, and the certified analytical report and chain of custody forms are included in Appendix C.

The only petroleum hydrocarbons detected were TPH-G at a maximum concentration of 6.7 parts per million (ppm), TPH-D with silica gel cleanup at a maximum concentration of 240 ppm, and TPH-D without silica gel cleanup at 390 ppm. No BTEX, naphthalene or oxygenates were detected in any of the soil samples.

The only concentrations to exceed Environmental Screening Level (ESLs) for commercial sites where groundwater is a current or potential source of drinking water were the TPH-D without silica gel cleanup in BH-B at 3.5-feet bgs, and the TPH-D both with and without silica gel cleanup in BH-D at 3.5-feet bgs. The TPH-D without silica gel cleanup in BH-A at 3.5-feet bgs met, but did not exceed the ESL. These ESLs are presented in the "Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) dated December 2013.

None of the soil samples collected from 7.5-feet bgs contained petroleum hydrocarbons above ESLs, indicating the vertical extent of hydrocarbons in soil.

8.0 ANALYZE THE GROUNDWATER SAMPLES

Groundwater samples collected from borings BH-A through BH-D were analyzed by McCampbell Analytical, Inc. of Pittsburg, California (DHS ELAP certification #1644) for TPH-D both with and without silica gel cleanup by EPA Method 8015, and TPH-G, BTEX, naphthalene, and fuel oxygenates by EPA Method 8260B. The analytical results are tabulated in Table Two, and the certified analytical report and chain of custody forms are included in Appendix D.

The only groundwater sample to contain TPH-G at concentrations exceeding ESLs was BH-C, which contained 1,000 ppb. Groundwater samples collected from all four borings contained TPH-D at concentrations exceeding ESLs, to a maximum concentration of 8,200 ppb when silica gel cleanup was used and 11,000 ppb when no silica gel cleanup was used. In both BH-A and BH-C, it should be noted that TPH-D concentrations were higher in the samples when silica gel cleanup was used. The laboratory explanation for this was the variable amount of sediment in the samples from VOA to VOA since the samples were collected from borings and not wells. The laboratory also noted that the chromatogram pattern in these samples was not recognizable, which indicates hydrocarbons in the diesel carbon range but possibly not actually from diesel fuel.



The benzene, MTBE and TBA concentrations in the groundwater sample collected from BH-C exceeded the ESL for sites where groundwater is a current or potential source of drinking water; however, none of these compounds exceeded ESLs for sites where groundwater is not a current or potential source of drinking water. The MTBE concentration in the water sample collected from BH-D also exceeded the drinking water ESL, but did not exceed the non-drinking water ESL.

9.0 ANALYZE THE SOIL VAPOR SAMPLES

Each vapor sample was analyzed by McCampbell Analytical for TPH-G, BTEX and naphthalene by EPA Method TO-15, and oxygen, carbon dioxide, methane, and helium by ASTM D1946. The analytical results are tabulated in Table Three, and the certified analytical report and chain of custody form are included in Appendix E. No helium was detected in either sample indicating that the sample train was leak free and that the samples are considered valid.

Benzene was detected in the soil vapor samples at concentrations ranging from 5.5 to 6.1 ug/m3 (micrograms per cubic meter). Toluene was detected at concentrations ranging from 8.2 to 9.7 ug/m3. Total xylenes were detected at concentrations ranging from 10 to 12 ug/m3. No TPH-G, ethyl benzene or naphthalene concentrations were detected. None of the detected concentrations exceeded ESLs. It should be noted, however, that the ESLs are based on a sample collected from 5-feet bgs. In this particular case, the soil vapor samples were collected from 3-feet bgs, since the water table was located at 4-feet bgs. However, the detected concentration are well below ESLs (even residential ESLs) and the concentrations not very different from typical background outdoor air samples within the Bay Area. The samples also contained sufficient oxygen (over 4%) to allow for bioremediation. For these reasons, it does not appear that the hydrocarbons detected in soil vapor samples beneath the site present a threat to indoor air for structures at the site.

The ESLs are presented in "Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater" document prepared by the RWQCB dated December 2013.

10.0 CONCLUSIONS AND RECOMMENDATIONS

ASE concludes the following:

- No free-floating hydrocarbons or sheen were detected in BH-A, in the location of the former UST, or in any other boring at the site.
- The only petroleum hydrocarbons detected in soil were TPH-G at a maximum concentration of 6.7 ppm, TPH-D with silica gel cleanup at a maximum concentration of 240 ppm, and TPH-D without silica gel cleanup at a maximum concentration of 390 ppm. No BTEX, naphthalene or oxygenates were detected in any of the soil samples. Although the TPH-D was slightly over the ESL, these concentrations are not indicative of concentrations that usually require active remediation.



- The only groundwater sample to contain TPH-G at concentrations exceeding ESLs was BH-C, which contained 1,000 parts per billion (ppb). Groundwater samples collected from all four borings contained TPH-D at concentrations exceeding ESLs, to a maximum concentration of 8,200 ppb when silica gel cleanup was used and 11,000 ppb when no silica gel cleanup was used. In both BH-A and BH-C, it should be noted that TPH-D concentrations were higher in the samples when silica gel cleanup was used. The laboratory explanation for this was the variable amount of sediment in the samples from VOA to VOA since the samples were collected from borings and not wells. The laboratory also noted that the chromatogram pattern in these samples was not recognizable, which indicates hydrocarbons in the diesel carbon range but possibly not actually from diesel fuel. The benzene, MTBE and TBA concentrations in the groundwater sample collected from BH-C exceeded the ESL for sites where groundwater is a current or potential source of drinking water; however, none of these compounds exceeded ESLs for sites where groundwater is not a current or potential source of drinking water. The MTBE concentration in the water sample collected from BH-D also exceeded the drinking water ESL, but did not exceed the non-drinking water ESL. The TPH-D concentrations are generally considered moderate. Concentrations of this magnitude sometimes require additional investigation. However, in this case these hydrocarbons do not appear to be a significant threat to human health or the environment since no significant BTEX, naphthalene or oxygenates were detected in groundwater (since shallow groundwater would not be considered a potential drinking water source at this site).
- Benzene was detected in the soil vapor samples at concentrations ranging from 5.5 to 6.1 ug/m3. Toluene was detected at concentrations ranging from 8.2 to 9.7 ug/m3. Total xylenes were detected at concentrations ranging from 10 to 12 ug/m3. No TPH-G, ethyl benzene or naphthalene concentrations were detected. None of the detected concentrations exceeded ESLs. It should be noted, however, that the ESLs are based on a sample collected from 5-feet bgs. In this particular case, the soil vapor samples were collected from 3-feet bgs, since the water table was located at 4-feet bgs. However, the detected concentrations not very different from typical background outdoor air samples within the Bay Area. The samples also contained sufficient oxygen (over 4%) to allow for bioremediation. For these reason, it does not appear that the hydrocarbons detected in soil vapor samples beneath the site present a threat to indoor air for structures at the site.

ASE recommends the following:

• ASE recommends that this case be considered for closure given current industrial site usage for the following reasons: (a) only relatively low petroleum hydrocarbon concentrations were detected in soil, below concentrations that generally require remediation, (b) none of the groundwater samples contained BTEX, naphthalene or oxygenates at concentrations above non-drinking water ESLs, (c) moderate TPH-D concentrations were detected in groundwater; however, the concentrations appear to not be consistent with diesel fuel based on the chromatogram patterns and the UST was used to store gasoline and not diesel fuel. Further, the TPH-D did not have any of the more



toxic associated compounds in the same groundwater samples, and (d) the soil vapor survey results did not indicate a threat to human health.

11.0 REPORT LIMITATIONS

The opinions and conclusions presented in this report are based upon the scope of services, information obtained through the performance of the services, and the schedule as agreed upon by ASE and the party for whom this report was originally prepared. The report is an instrument of professional services and was prepared in accordance with the generally accepted standards and level of skill and care under similar conditions and circumstances established by the environmental consulting industry. No representations, warranty, or guarantee, expressed or implied, is intended or given. To the extent that ASE relied upon any information prepared by other parties, ASE makes no representation as to the accuracy or completeness of such information. This report is expressly for the sole and exclusive use of the party for whom this report was originally prepared for a particular purpose. Only the party for whom this report was originally prepared has the right to make use of and rely upon this report. Reuse of this report or any portion thereof for other than its intended purpose, or if modified, or if used by third parties, shall be at the user's sole risk.

Results of any investigation or testing and any findings presented in this report apply solely to conditions existing at the time when ASE's investigative work was performed. It must be recognized that any such investigative or testing activities are inherently limited and do not represent a conclusive or complete characterization. Conditions in other parts of the project site may vary from those locations where data were collected. ASE's ability to interpret investigation results is related to the availability of the data and the extent of the investigational activities. As such, 100% confidence in environmental investigation conclusions cannot be reasonably achieved.

ASE therefore does not provide any guarantees, certifications, or warranties regarding any conclusions regarding environmental contamination of any such property. Furthermore, nothing contained in this document shall relieve any other party of its responsibility to abide by contract documents and applicable laws, codes, regulations, or standards.



Aqua Science Engineers appreciates the opportunity provide environmental consulting services for this project. Should you have any questions or comments, please feel free to call us at (925) 820-9391.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.



Robert E. Kitay, P.G. Senior Geologist

Attachments: Figures 1 through 3 Tables One through Three Appendices A through E



FIGURES



	SITE LOCATION	MAP
NORTH	Elliott Prope 745 Kevin Co Oakland, Calif	erty ourt fornia
NOT TO SCALE	Aqua Science Engineers	Figure 1







TABLES

TABLE ONESummary of Analysis of SOIL Samples745 Kevin Court, Oakland, CaliforniaAll results are in parts per million (ppm)

	Sample		TPH	TPH								
Boring	Depth	TPH	Diesel	Diesel			Ethyl	Total				Other
Location	(ft)	Gasoline	(w/SGCU)	(wo/SGCU)	Benzene	Toluene	Benzene	Xylenes	Naphthalene	MTBE	TBA	Oxygenates
BH-A	3.5	< 0.25	83	110	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.050	< 0.0050
	7.5	5.0	< 1.0	1.1	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.050	< 0.0050
BH-B	3.5	6.7	100	120	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.050	< 0.0050
	7.5	< 0.25	< 1.0	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.050	< 0.0050
BH-C	3.5	1.6	2.5	5.7	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.050	< 0.0050
	7.5	1.6	< 1.0	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.050	< 0.0050
BH-D	3.5	< 0.25	240	390	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.050	< 0.0050
	7.5	< 0.25	< 1.0	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.050	< 0.0050
ECI		500	110	110	0.044	2.0	2.2	2.2	1 2	0 0 2 3	0.075	Varias
LJL		500	110	110	0.044	2.9	5.5	2.5	1.4	0.023	0.075	valles

Notes:

TPH = Total petroleum hydrocarbons

SGCU = Silica Gel Cleanup

MTBE - Methyl-t-butyl ether

TBA = tert-butyl ether

ESL = Environmental Screening Level for soil at commercial sites where groundwater is a current or potential source of drinking water as established by the California Regional Water Quality Control Board, San Francisco Bay Region dated December 2013.

Non-detectable concentrations are noted by the less than symbol (<) followed by the detection limit.

Concentrations exceeding ESLs are boxed.

TABLE TWOSummary of Analysis of GROUNDWATER Samples745 Kevin Court, Oakland, CaliforniaAll results are in parts per billion (ppb)

Boring Location	TPH Gasoline	TPH Diesel (w/SGCU)	TPH Diesel (wo/SGCU)	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Naphthalene	MTBE	ТВА	Other Oxygenates
BH-A	76	8,200	5,500	0.99	< 0.50	< 0.50	< 0.50	< 0.50	1.2	< 2.0	< 0.50
BH-B	< 50	800	3,600	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.83	2.8	< 0.50
BH-C	1,000	1,600	1,200	16	1.3	1.1	2.2	< 0.50	9.4	28] 0.69 DIPE
BH-D	< 50	7,000	11,000	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	7.6	< 2.0	< 0.50
ESL (DW) ESL (NDW)	100 500	100 640	100 640	1.0 27	40 130	30 43	20 100	6.1 24	5.0 1,800	12 18,000	Varies Varies

Notes:

TPH = Total petroleum hydrocarbons

SGCU = Silica Gel Cleanup

MTBE - Methyl-t-butyl ether

TBA = tert-butyl ether

DW = ESL for sites where groundwater is a current or potential source of drinking water

NDW = ESL for sites where groundwater is not a current or potential source of drinking water

ESL = Environmental Screening Level for soil at commercial sites where groundwater is a current or potential source of drinking water as established by the California Regional Water Quality Control Board, San Francisco Bay Region dated December 2013.

Non-detectable concentrations are noted by the less than symbol (<) followed by the detection limit.

Concentrations exceeding ESLs are boxed.

TABLE THREE

Summary of Analytical Results of Soil Vapor Samples Petroleum Hydrocarbons, Atmospheric Gases and Helium Elliott Property, 745 Kevin Court, Oakland, California

	Sample	Date	ТРН			Ethyl	Total	NI 1.1 1		Carbon		
Sample	Depth	Sampled	Gasoline	Benzene	Toluene	Benzene	xylenes	Naphthalene	Oxygen	Dioxide	Methane	Hellum
Location	(ft)		(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)	(%)	(%)	(%)	(%)
SVW-1	3	1/28/16	< 720	5.5	9.7	< 2.2	12	< 5.3	14	0.22	0.00039	< 0.050
SVW-2	3	1/28/16	< 720	6.1	8.2	< 2.2	10	< 5.3	7.2	4.2	< 0.00020	< 0.050
ESL (Resi	idential)		300,000	42	16,000	490	52,000	36	NE	NE	NE	NE
ESL (Con	nmercial))	2,500,000	420	1,300,000	4,900	440,000	360	NE	NE	NE	NE
Low-Risk (With bio	Low-Risk Soil Gas Criteria (With bioattenuation zonel)											
Residenti	al		NE	85,000	NE	280,000	NE	93,000	NE	NE	NE	NE
Commerc	cial		NE	280,000	NE	3,600,000	NE	310,000	NE	NE	NE	NE

Notes:

Non-detectable concentrations are noted by the less than symbol (<) followed by the detection limit.

Detectable concentrations in BOLD

ESL = Environmental Screening Levels presented in the "Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) dated December 2013.

Low-Risk Soil Gas Criteria is from Appendix 4, Scenario 4 - Direct Measurement of Soil Gas Concentrations with Bioattenuation zone from the State Water Resources Control Board, Low-Threat Underground Storage Tank Case Closure Policy, 2012.

NE = Not established



APPENDIX A

Permits

Alameda County Public Works Agency - Water Resources Well Permit



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

Application Approved on: 01/22/2016 By jamesy Permit Numbers: W2016-0031 to W2016-0032 Permits Valid from 01/28/2016 to 01/28/2016 Application Id: 1453424596272 City of Project Site:Oakland Site Location: 745 Kevin Court Project Start Date: 01/28/2016 Completion Date:01/28/2016 Assigned Inspector: Contact Lindsay Furuyama at (925) 956-2311 or Lfuruyama@groundzonees.com Aqua Science Engineers - Robert Kitay Phone: 925-413-8604 Applicant: 55 Oak Court, Suite 220, Danville, CA 94526 **Property Owner:** Mark Elliott Phone: --408 Silver Chief Way, Danville, CA 94526 ** same as Property Owner ** Client: **Total Due:** \$530.00

Receipt Number: WR2016-0022	Total Amount Paid:	<u> </u>
Payer Name : Aqua Science Engineers	Paid By: VISA	PAID IN FULL

Works Requesting Permits:

Borehole(s) for Geo Probes-Sampling 24 to 72 hours only - 4 Boreholes Driller: Cascade Drilling - Lic #: 938110 - Method: DP

Work Total: \$265.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2016-	01/22/2016	04/27/2016	4	2.00 in.	16.00 ft
0031					

Specific Work Permit Conditions

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

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

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

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

5. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

Alameda County Public Works Agency - Water Resources Well Permit

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

7. NOTE:

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

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

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

Well Cons Driller: Ca	Well Construction-Vapor monitoring well-Vapor monitoring well - 2 Wells Driller: Cascade Drilling - Lic #: 938110 - Method: DP Work Total: \$265.00								
Specificatio	ns								
Permit #	Issued Date	Expire Date	Owner Well	Hole Diam.	Casing	Seal Depth	Max. Depth		
			ld		Diam.				
W2016-	01/22/2016	04/27/2016	VW-1	2.00 in.	0.25 in.	3.00 ft	5.00 ft		
0032									
W2016-	01/22/2016	04/27/2016	VW-2	2.00 in.	0.25 in.	3.00 ft	5.00 ft		
0032									

Specific Work Permit Conditions

1. Drilling Permit(s) can be voided/ cancelled only in writing. It is the applicant's responsibility to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.

2. Compliance with the above well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate state reporting-requirements related to well destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days, including permit number and site map.

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

4. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no

Alameda County Public Works Agency - Water Resources Well Permit

case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

5. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

6. No changes in construction procedures or well type shall change, as described on this permit application. This permit may be voided if it contains incorrect information.

7. Applicant shall submit the copies of the approved encroachment permit to this office within 10 days.

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

9. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.

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

11. Electronic Reporting Regulations (Chapter 30, Division 3 of Title 23 & Division 3 of Title 27, CCR) require electronic submission of any report or data required by a regulatory agency from a cleanup site. Submission dates are set by a Regional Water Board or by a regulatory agency. Once a report/data is successfully uploaded, as required, you have met the reporting requirement (i.e. the compliance measure for electronic submittals is the actual upload itself). The upload date should be on or prior to the regulatory due date.

12. Vapor monitoring wells above water level constructed with tubing maybe be backfilled with pancake-batter consistency bentonite. Minimum surface seal thickness is two inches of cement grout around well box.

Vapor monitoring wells above water level constructed with pvc pipe shall have a minimum seal depth (Neat Cement Seal) of 2 feet below ground surface (BGS). Minimum surface seal thickness is two inches of cement grout around well box. All other conditions for monitoring well construction shall apply.



APPENDIX B

Boring Logs

SOIL BORING LOG AND MONI	Toring well (COMPLE	TION DETAIL	LS	BORING: BH-A	
Project Name: Elliott Property	Project Location	ocation: 745 Kevin Ct, Oakland, CA Page				Page 1 of 1
Driller: Cascade Drilling	Type of Rig: Ge	pe of Rig: Geoprobe Size of Drill: 2.0			ll: 2.0" Diameter	
Logged By: Robert E. Kitay, P.G.	inuary 2	8, 2016	Che	cked By: Robert E.	Kitay, P.G.	
WATER AND WELL DATA	Total D	Depth of Well	Completed:	NA		
Depth of Water First Encountered: 4'	Well So	Well Screen Type and Diameter: NA				
Static Depth of Water in Well: NA		Well So	creen Slot Size	e: NA		
Total Depth of Boring: 12'		Type a	nd Size of Soi	il Sampler: 2	2.0" I.D. Macro Sam	pler
SOIL/ROCH	<pre>< SAMPLE DATA</pre>	feet		DESCRIP	TION OF LITHOLC)GY
Depth in F Descripti Interval Interval Descripti	Vater Leve Graphic Log	Depth in F	standard density, s	classificatio stiffness, oc	on, texture, relative lor-staining, USCS o	e moisture, designation.
0 5 10 10 20 20 30		0 5 10 12 20 225 25 30	Asphalt Silty SAND (sand; 15% s K; no odor SAND (SP); l estimated K Silty CLAY (plasticity; ve	(SM); black; silt; 5% grav black; loose ; moderate CH); brown; ery low estin End o	loose; damp; 80% el to 1" diameter; ; wet; 100% fine sa hydrocarbon odor stiff; 90% clay; 10 mated K; no odor	fine to medium high estimated and; medium 0% silt; high
		30				
			A	AQUA SCIEN	CE ENGINEERS, INC	

Project Name: Elliott Property Project Location: 745 Kevin Ct, Oakland, CA Page 1 of 1 Driller: Cascade Drilling Type of Rig: Geoprobe Size of Drill: 2.0° Diameter Logged By: Robert E. Kitay, P.G. Date Drilled: January 28, 2016 Checked By: Robert E. Kitay, P.G. WATER AND WELL DATA Depth of Water First Encountered: 4' Total Depth of Well Completed: NA Static Depth of Water in Well: NA Well Screen Type and Diameter: NA Total Depth of Boring: 12' Type and Size of Soil Sampler: 2.0° LD. Macro Sampler 90 SOIL/ROCK SAMPEE DATA 9 9 9 9 90 SOIL/ROCK SAMPEE DATA 9 9 9 9 9 90 90 9 <th>SOIL BORING LOG AND MONI</th> <th>TORING WELL O</th> <th>COMPLETIO</th> <th>N DETAILS</th> <th>BORING: BH-B</th> <th></th>	SOIL BORING LOG AND MONI	TORING WELL O	COMPLETIO	N DETAILS	BORING: BH-B	
Driller: Cascade Drilling Type of Rig: Geoprobe Size of Drill: 2.0° Diameter Logged By: Robert E. Kitay, P.G. Date Drilled: January 28, 2016 Checked By: Robert E. Kitay, P.G. WATER AND WELL DATA Depth of Water First Encountered: 4' Total Depth of Well Completed: NA Static Depth of Water in Well: NA Well Screen Type and Diameter: NA Total Depth of Boring: 12' Type and Size of Soil Sampler: 2.0° LD. Macro Sampler U Soil/ROCK SAMPLE DATA Depth of Boring: 12' Type and Size of Soil Sampler: 2.0° LD. Macro Sampler BORING DETAIL Soil/ROCK SAMPLE DATA Depth of Boring: 12' Soil/ROCK SAMPLE DATA Depth of Boring: 12' Soil/ROCK SAMPLE DATA Depth of Boring: 12' Soil BORING DETAIL Soil Process Sample: 2.0° LD. Macro Sampler DESCRIPTION OF LITHOLOGY Static Advector Sample: Sample: 2.0° LD. Macro Sampler Soil Soil Detail Soil Process Sample: 2.0° LD. Macro Sampler Soil Process Sample: 2.0° LTHOLOGY Static Sample: 2.0° LTHOLOGY Static Sample: 2.0° LTHOLOGY Static Sample: 2.0° LTHOLOGY Static Sample: 2.0° LTHOLOGY Static Sample: 2.0° LTHOLOGY Soil Sample: 2.0° LTHOLOGY Static Sample: 2.0° LTHOLOGY Static Sample: 2.0° LTHOLOGY Static Sample: 2.0° LTHOLOGY Static Sample: 2.0° LTHOLOGY Static Sample: 2.0° LTHOLOGY Sample: 2.0° LTHOL Sample: 2.0° LTHOLOGY	Project Name: Elliott Property	Project Location	Location: 745 Kevin Ct, Oakland, CA Page 1 of			
Logged By: Robert E. Kitay, P.G. Date Drilled: January 28, 2016 Checked By: Robert E. Kitay, P.G. WATER AND WELL DATA Depth of Water First Encountered: 4' Total Depth of Water First Encountered: 4' Total Depth of Water In Well: NA Static Depth of Boring: 12' Type and Size of Soil Sampler: 2.0" I.D. Macro Sampler Total Depth of Boring: 12' SOIL/ROCK SAMPLE DATA Depth of Boring: 12' Type and Size of Soil Sampler: 2.0" I.D. Macro Sampler BORING DETAIL Use Soil Sampler: 2.0" I.D. Macro Sampler DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. 0 Image: Soil Sampler: 10% Silt, Sild Mick, stiff, moist; 70% Silt, 30% clay; high plasticity; very low est. K; silgh thydrocarbon odor 10 Image: Soil Sample: 12' 10 Image: Soil Sample: 12' 20 Image: Soil Sample: 12' 20 Image: Soil Sample: 12'	Driller: Cascade Drilling	Type of Rig: Ge	Rig: Geoprobe Size of Drill: 2.0" Diameter			
Total Depth of Water First Encountered: 4' Total Depth of Water First Encountered: 4' Static Depth of Water in Well: NA Total Depth of Boring: 12' Type and Diameter: NA Total Depth of Boring: 12' Type and Size of Soil Sampler: 2.0" I.D. Macro Sampler Depth of Water in Well: NA Total Depth of Boring: 12' Type and Size of Soil Sampler: 2.0" I.D. Macro Sampler OUL/ROCK SAMPLE DATA age group of the Soil Colspan="2">DESCRIPTION OF LITHOLOGY Sandard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. O Asphalt Gravely SAND (SW): black and yellow brown; loose; Gravely SAND (SW): black; soft; moist; 70% sit; 20% clay; high plasticity, very low est, Kighth Hydrocarbon odor Sity SAND (SW): black; soft; moist; 70% sit; 30% clay; high plasticity; very low est, Kight Hydrocarbon odor Sity SAND (SW): black; soft; moist; 70% sit; 60% fine to course sand; 25% gravel to 1" Gravely SAND (SW): black; soft; moist; 70% sit; 60% clay; high plasticity; very low est, Kight Hydrocarbon odor Sity CLAY (Ch) brown; sitf; 90% clay; 10% sit; high Sity	Logged By: Robert E. Kitay, P.G.	Date Drilled: Ja	nuary 28, 2	016 Ch	ecked By: Robert E.	Kitay, P.G.
Depth of Water First Encountered: 4' Well Screen Type and Diameter: NA Static Depth of Water in Well: NA Well Screen Slot Size: NA Total Depth of Boring: 12' Type and Size of Soil Sampler: 2.0" I.D. Macro Sampler BORING 0 0	WATER AND WELL DATA		Total Dept	h of Well Completed	: NA	
Static Depth of Water in Well: NA Well Screen Slot Size: NA Total Depth of Boring: 12' Type and Size of Soil Sampler: 2.0" I.D. Macro Sampler Image: Soll_/ROCK SAMPLE DATA BORING DETAIL Image: Soll_/ROCK SAMPLE DATA BORING DETAIL Image: Soll_/ROCK SAMPLE DATA Image:	Depth of Water First Encountered: 4'		Well Screen Type and Diameter: NA			
Total Depth of Boring: 12' Type and Size of Soil Sampler: 2.0" I.D. Macro Sampler Total Depth of Boring: 12' Type and Size of Soil Sampler: 2.0" I.D. Macro Sampler BORING DETAIL Use Boring DETAIL SOIL/ROCK SAMPLE DATA Transformed Boring DETAIL SOIL/ROCK SAMPLE DATA Transformed DETAIL Type and Size of Soil Sampler: 2.0" I.D. Macro Sampler 0 Image: Soil Sampler Sample Sampler Soil Sampler Soil Sampler Soil	Static Depth of Water in Well: NA		Well Scree	n Slot Size: NA		
SOUL/ROCK SAMPLE DATA To any of a standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. 0 Image: Soul / ROCK SAMPLE DATA Image: Soul / ROCK SAMPLE DATA 0 Image: Soul / ROCK SAMPLE DATA Image: Soul / ROCK SAMPLE DATA 0 Image: Soul / ROCK SAMPLE DATA Image: Soul / ROCK SAMPLE DATA 0 Image: Soul / ROCK SAMPLE DATA Image: Soul / ROCK SAMPLE DATA 0 Image: Soul / ROCK SAMPLE DATA Image: Soul / ROCK SAMPLE DATA 0 Image: Soul / ROCK SAMPLE DATA Image: Soul / ROCK SAMPLE DATA 0 Image: Soul / ROCK SAMPLE DATA Image: Soul / ROCK SAMPLE DATA 0 Image: Soul / ROCK SAMPLE DATA Image: Soul / ROCK SAMPLE DATA 0 Image: Soul / ROCK SAMPLE DATA Image: Soul / ROCK SAMPLE DATA 10 Image: Soul / ROCK SAMPLE DATA Image: Soul / ROCK SAMPLE DATA 10 Image: Soul / ROCK SAMPLE DATA Image: Soul / ROCK SAMPLE DATA 10 Image: Soul / ROCK SAMPLE DATA Image: Soul / ROCK SAMPLE DATA 10 Image: Soul / ROCK SAMPLE DATA Image: Soul / ROCK SAMPLE DATA 10 Image: Soul / ROCK SAMPLE DATA Image: Soul / ROCK Sou	Total Depth of Boring: 12'		Type and S	ize of Soil Sampler:	2.0" I.D. Macro Sam	pler
Image: Second Structure Image: Second Structure </td <td>SOIL/ROC</td> <td>K SAMPLE DATA</td> <td>Feet</td> <td>DESCRI</td> <td>TION OF LITHOLC</td> <th>OGY</th>	SOIL/ROC	K SAMPLE DATA	Feet	DESCRI	TION OF LITHOLC	OGY
0 0 Image: Constraint of the second sec	Depth in Descripti Interval 200 (pomv)	Water Leve Graphic Log	Depth in	standard classificati density, stiffness, o	on, texture, relative dor-staining, USCS o	e moisture, designation.
	-0 -5 -5 -10 -10 -15 -20 -25 -30		 0 As Gr da diz Cl hi 5 Sil m hy Cl hi Sil pl: 10 pl: 110 pl: 10 pl: <l< td=""><td>phalt avely SAND (SW); bl mp; 65% fine to cou meter; 10% silt; hig ayey SILT(MH); black diversion sand; 40% silt drocarbon odor ayey SILT (MH); black drocarbon odor ayey SILT (MH); black ty CLAY (CH); brown asticity; very low est End</td><td>ack and yellow brow rse sand; 25% grav <u>h estimated K; no o</u> c; stiff; moist; 70% ; <u>w est. K; slight hydr</u> ; medium dense; we ; medium estimated k; soft; wet; 90% si <u>imated K; slight hyd</u> n; stiff; 90% clay; 10 imated K; no odor of boring at 12'</td><th>n; loose; el to 1" dor silt; 30% clay; <u>ocarbon odor</u> t; 60% fine to 1 K; slight lt; 10% clay; <u>Irocarbon odor</u> 0% silt; high</th></l<>	phalt avely SAND (SW); bl mp; 65% fine to cou meter; 10% silt; hig ayey SILT(MH); black diversion sand; 40% silt drocarbon odor ayey SILT (MH); black drocarbon odor ayey SILT (MH); black ty CLAY (CH); brown asticity; very low est End	ack and yellow brow rse sand; 25% grav <u>h estimated K; no o</u> c; stiff; moist; 70% ; <u>w est. K; slight hydr</u> ; medium dense; we ; medium estimated k; soft; wet; 90% si <u>imated K; slight hyd</u> n; stiff; 90% clay; 10 imated K; no odor of boring at 12'	n; loose; el to 1" dor silt; 30% clay; <u>ocarbon odor</u> t; 60% fine to 1 K; slight lt; 10% clay; <u>Irocarbon odor</u> 0% silt; high
						·

SOIL BORING LOG AND MONI	Toring well o	COMPL	ETION DETAI	LS	BORING: BH-C	
Project Name: Elliott Property	Project Locatio	tion: 745 Kevin Ct, Oakland, CA Page 1 of				Page 1 of 1
Driller: Cascade Drilling	Type of Rig: Ge	g: Geoprobe Size of Drill: 2.0" Diameter				
Logged By: Robert E. Kitay, P.G.	nuary 2	28, 2016	Ch	ecked By: Robert E.	Kitay, P.G.	
WATER AND WELL DATA	Total	Depth of Well	Completed	: NA		
Depth of Water First Encountered: 4'	Well S	Screen Type ar	nd Diamete	r: NA		
Static Depth of Water in Well: NA		Well S	Screen Slot Siz	e: NA		
Total Depth of Boring: 12'		Туре	and Size of So	il Sampler:	2.0" I.D. Macro Sam	pler
SOIL/ROCI	K SAMPLE DATA	⁻ eet		DESCRI	TION OF LITHOLC	DGY
Depth in Descripti Interval D(D (Domv))	Water Leve Graphic Log	Depth in	standard density, s	classificat stiffness, c	on, texture, relative dor-staining, USCS (e moisture, designation.
0 10 0 10 0 10 0 10 0 20 0 30 0		- 0 - 5 - 10 - 15 - 20 - 25 - 30	Concrete (4 Clayey SILT high plastici Silty SAND medium sar hydrocarbor Clayey SILT high plastici Silty CLAY (plasticity; v	(MH); blacl ity; very lo (SM); black ad; 40% silt <u>n odor</u> (MH); blac ity; low est (CH); brow ery low est End	c; stiff; moist; 70% w est. K; slight hydr ; medium dense; we ; medium estimated k; soft; wet; 90% si <u>imated K; slight hyd</u> n; stiff; 90% clay; 10 imated K; no odor of boring at 12'	silt; 30% clay; rocarbon odor et; 60% fine to d K; slight ilt; 10% clay; <u>drocarbon odor</u> 0% silt; high
		50				
			/	-20A 30IEI	NGE LINGINEERS, INC	

SOIL BORING LOG AND MONI	Toring well (COMPLE	ETION DETAI	LS	Boring: BH-D	
Project Name: Elliott Property	Project Location	ocation: 745 Kevin Ct, Oakland, CA Page 1 of 1				Page 1 of 1
Driller: Cascade Drilling	Type of Rig: Ge	lig: Geoprobe Size of Drill: 2.0" Diameter				
Logged By: Robert E. Kitay, P.G.	Date Drilled: Ja	inuary 2	uary 28, 2016 Checked By: Robert E. Kitay,			Kitay, P.G.
WATER AND WELL DATA	Total	Depth of Well	Completed:	NA		
Depth of Water First Encountered: 4'	Well S	Well Screen Type and Diameter: NA				
Static Depth of Water in Well: NA		Well S	Screen Slot Siz	e: NA		
Total Depth of Boring: 12'		Туре а	and Size of So	il Sampler: 2	.0" I.D. Macro Sam	pler
SOIL/ROCI	SAMPLE DATA	Feet		DESCRIPT	TION OF LITHOLO	GY
Depth in Descripti Interval Interval Descripti D(ppmv)	Water Leve Graphic Log	Depth in	standard density,	classification stiffness, ode	n, texture, relative or-staining, USCS c	moisture, lesignation.
-0 -5 -10 -10 -15 -20 -25 -30		- 0 - 5 - 10 - 15 - 20 - 25 - 25 - 30	Asphalt Gravely SAN to course sa estimated K Clayey SILT high plastic Silty SAND medium sar Clayey SILT high plastic Silty CLAY of plasticity; v	ND (SW); yell and; 20% gra (MH); black; ity; very low (SM); black; nd; 40% silt; (MH); black; ity; low estin (CH); brown; rery low estin End o	ow brown; loose; o avel to 1" diameter stiff; moist; 70% s <u>est. K; no odor</u> medium dense; we <u>medium estimated</u> soft; wet; 90% sil <u>nated K; no odor</u> stiff; 90% clay; 10 nated K; no odor f boring at 12'	lamp; 70% fine ; 10% silt; high silt; 30% clay; t; 60% fine to IK; no odor It; 10% clay; D% silt; high
		- 30				
				AQUA SCIEN	LE EINGINEERS, INC	•



APPENDIX C

Certified Analytical Report and Chain of Custody Documentation For Soil Samples



McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder:	1601B84
Report Created for:	Aqua Science Engineers, Inc.
	55 Oak Court Suite 220 Danville, CA 94526
Project Contact:	Robert Kitay
Project P.O.: Project Name:	4641; Elliott Property
Project Received:	01/29/2016

Analytical Report reviewed & approved for release on 02/05/2016 by:

Angela Rydelius, Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.



1534 Willow Pass Rd. Pittsburg, CA 94565 ♦ TEL: (877) 252-9262 ♦ FAX: (925) 252-9269 ♦ www.mccampbell.com NELAP: 4033ORELAP ♦ ELAP: 1644 ♦ ISO/IEC: 17025:2005 ♦ WSDE: C972-11 ♦ ADEC: UST-098 ♦ UCMR3



Glossary of Terms & Qualifier Definitions

Client: Aqua Science Engineers, Inc.

Project: 4641; Elliott Property

WorkOrder: 1601B84

Glossary Abbreviation

95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test
DUP	Duplicate
EDL	Estimated Detection Limit
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

Analytical Qualifiers

e2	diesel range compounds are significant; no recognizable pattern
e7	oil range compounds are significant
e11/e8	stoddard solvent/mineral spirit (?); and/or kerosene/kerosene range/jet fuel range



Client:	Aqua Science Engineers, Inc.
Date Received:	1/29/16 20:18
Date Prepared:	1/29/16
Project:	4641; Elliott Property

WorkOrder:	1601B84
Extraction Method:	SW5030B
Analytical Method:	SW8260B
Unit:	mg/kg

TPH(g) by Purge & Trap and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BH-A 3.5'	1601B84-001A	Soil	01/28/2016 13:56	GC18	116033
Analytes	Result		<u>RL</u> <u>DF</u>		Date Analyzed
TPH(g)	ND		0.25 1		02/04/2016 10:53
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	111		70-130		02/04/2016 10:53
Benzene-d6	83		60-140		02/04/2016 10:53
<u>Analyst(s):</u> KF					
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BH-A 7.5'	1601B84-002A	Soil	01/28/2016 14:00	GC18	116033
Analytes	Result		<u>RL</u> <u>DF</u>		Date Analyzed
TPH(g)	5.0		0.25 1		02/04/2016 11:32
Surrogates	<u>REC (%)</u>		Limits		
Dibromofluoromethane	111		70-130		02/04/2016 11:32
Benzene-d6	88		60-140		02/04/2016 11:32
Analyst(s): KF					
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BH-B 3.5'	1601B84-004A	Soil	01/28/2016 09:00	GC18	116033
Analytes	Result		<u>RL DF</u>		Date Analyzed
TPH(g)	6.7		0.25 1		02/04/2016 12:49
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	110		70-130		02/04/2016 12:49
Benzene-d6	92		60-140		02/04/2016 12:49
<u>Analyst(s):</u> KF					



Client:	Aqua Science Engineers, Inc.
Date Received:	1/29/16 20:18
Date Prepared:	1/29/16
Project:	4641; Elliott Property

WorkOrder:	1601B84
Extraction Method:	SW5030B
Analytical Method:	SW8260B
Unit:	mg/kg

TPH(g) by Purge & Trap and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BH-B 7.5'	1601B84-005A	Soil	01/28/2016 09:05	GC18	116033
Analytes	Result		<u>RL</u> <u>DF</u>		Date Analyzed
TPH(g)	ND		0.25 1		02/04/2016 14:43
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	114		70-130		02/04/2016 14:43
Benzene-d6	103		60-140		02/04/2016 14:43
<u>Analyst(s):</u> KF					
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BH-C 3.5'	1601B84-007A	Soil	01/28/2016 13:30	GC18	116033
Analytes	Result		<u>RL</u> <u>DF</u>		Date Analyzed
TPH(g)	1.6		0.25 1		02/04/2016 16:38
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	111		70-130		02/04/2016 16:38
Benzene-d6	105		60-140		02/04/2016 16:38
<u>Analyst(s):</u> KF					
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BH-C 7.5'	1601B84-008A	Soil	01/28/2016 13:36	GC18	116033
Analytes	Result		<u>RL</u> <u>DF</u>		Date Analyzed
TPH(g)	1.6		0.25 1		02/05/2016 11:43
Surrogates	<u>REC (%)</u>		Limits		
Dibromofluoromethane	111		70-130		02/05/2016 11:43
Benzene-d6	90		60-140		02/05/2016 11:43
<u>Analyst(s):</u> KF					



Client:	Aqua Science Engineers, Inc.
Date Received:	1/29/16 20:18
Date Prepared:	1/29/16
Project:	4641; Elliott Property

WorkOrder:	1601B84
Extraction Method:	SW5030B
Analytical Method:	SW8260B
Unit:	mg/kg

TPH(g) by Purge & Trap and GC/MS

Client ID	Lab ID	Matrix	Date Collect	ed Instrument	Batch ID
BH-D 3.5'	1601B84-010A	Soil	01/28/2016 15	:05 GC18	116033
Analytes	Result		<u>RL</u> <u>D</u> F		Date Analyzed
TPH(g)	ND		0.25 1		02/05/2016 11:05
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	111		70-130		02/05/2016 11:05
Benzene-d6	85		60-140		02/05/2016 11:05
<u>Analyst(s):</u> KF					
Client ID	Lab ID	Matrix	Date Collect	ed Instrument	Batch ID
Client ID BH-D 7.5'	Lab ID 1601B84-011A	Matrix Soil	Date Collect 01/28/2016 15	ed Instrument :10 GC18	Batch ID 116033
Client ID BH-D 7.5' Analytes	Lab ID 1601B84-011A <u>Result</u>	Matrix Soil	Date Collect 01/28/2016 15 RL DF	ed Instrument :10 GC18	Batch ID 116033 Date Analyzed
Client ID BH-D 7.5' Analytes TPH(g)	Lab ID 1601B84-011A <u>Result</u> ND	Matrix Soil	Date Collect 01/28/2016 15 RL DF 0.25 1	ed Instrument :10 GC18	Batch ID 116033 Date Analyzed 02/05/2016 12:21
Client ID BH-D 7.5' Analytes TPH(g) Surrogates	Lab ID 1601B84-011A Result ND <u>REC (%)</u>	Matrix Soil	Date Collect 01/28/2016 15 RL DF 0.25 1 Limits	ed Instrument	Batch ID 116033 Date Analyzed 02/05/2016 12:21
Client ID BH-D 7.5' Analytes TPH(g) Surrogates Dibromofluoromethane	Lab ID 1601B84-011A Result ND <u>REC (%)</u> 112	Matrix Soil	Date Collect 01/28/2016 15 RL DF 0.25 1 Limits 70-130	ed Instrument	Batch ID 116033 Date Analyzed 02/05/2016 12:21 02/05/2016 12:21
Client ID BH-D 7.5' Analytes TPH(g) Surrogates Dibromofluoromethane Benzene-d6	Lab ID 1601B84-011A Result ND REC (%) 112 94	Matrix Soil	Date Collect 01/28/2016 15 RL DF 0.25 1 Limits 70-130 60-140 0	ed Instrument	Batch ID 116033 Date Analyzed 02/05/2016 12:21 02/05/2016 12:21



Client:	Aqua Science Engineers, Inc.
Date Received:	1/29/16 20:18
Date Prepared:	1/29/16
Project:	4641; Elliott Property

WorkOrder:	1601B84
Extraction Method:	SW5030B
Analytical Method:	SW8260B
Unit:	mg/Kg

Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collec	ted Instrument	Batch ID
BH-A 3.5'	1601B84-001A	Soil	01/28/2016 13	3:56 GC18	116033
Analytes	<u>Result</u>		<u>RL</u> <u>D</u>	E	Date Analyzed
tert-Amyl methyl ether (TAME)	ND		0.0050 1		02/04/2016 10:53
Benzene	ND		0.0050 1		02/04/2016 10:53
t-Butyl alcohol (TBA)	ND		0.050 1		02/04/2016 10:53
Diisopropyl ether (DIPE)	ND		0.0050 1		02/04/2016 10:53
Ethylbenzene	ND		0.0050 1		02/04/2016 10:53
Ethyl tert-butyl ether (ETBE)	ND		0.0050 1		02/04/2016 10:53
Methyl-t-butyl ether (MTBE)	ND		0.0050 1		02/04/2016 10:53
Naphthalene	ND		0.0050 1		02/04/2016 10:53
Toluene	ND		0.0050 1		02/04/2016 10:53
Xylenes, Total	ND		0.0050 1		02/04/2016 10:53
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	119		70-130		02/04/2016 10:53
Toluene-d8	117		70-130		02/04/2016 10:53
4-BFB	81		70-130		02/04/2016 10:53
Benzene-d6	89		60-140		02/04/2016 10:53
Ethylbenzene-d10	73		60-140		02/04/2016 10:53
1,2-DCB-d4	78		60-140		02/04/2016 10:53
Analyst(s): KF					





Client:	Aqua Science Engineers, Inc.
Date Received:	1/29/16 20:18
Date Prepared:	1/29/16
Project:	4641; Elliott Property

WorkOrder:	1601B84
Extraction Method:	SW5030B
Analytical Method:	SW8260B
Unit:	mg/Kg

Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Coll	ected Instrument	Batch ID
BH-A 7.5'	1601B84-002A	Soil	01/28/2016	14:00 GC18	116033
Analytes	<u>Result</u>		RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND		0.0050	1	02/04/2016 11:32
Benzene	ND		0.0050	1	02/04/2016 11:32
t-Butyl alcohol (TBA)	ND		0.050	1	02/04/2016 11:32
Diisopropyl ether (DIPE)	ND		0.0050	1	02/04/2016 11:32
Ethylbenzene	ND		0.0050	1	02/04/2016 11:32
Ethyl tert-butyl ether (ETBE)	ND		0.0050	1	02/04/2016 11:32
Methyl-t-butyl ether (MTBE)	ND		0.0050	1	02/04/2016 11:32
Naphthalene	ND		0.0050	1	02/04/2016 11:32
Toluene	ND		0.0050	1	02/04/2016 11:32
Xylenes, Total	ND		0.0050	1	02/04/2016 11:32
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	119		70-130		02/04/2016 11:32
Toluene-d8	109		70-130		02/04/2016 11:32
4-BFB	85		70-130		02/04/2016 11:32
Benzene-d6	94		60-140		02/04/2016 11:32
Ethylbenzene-d10	93		60-140		02/04/2016 11:32
1,2-DCB-d4	89		60-140		02/04/2016 11:32
<u>Analyst(s):</u> KF					




Client:	Aqua Science Engineers, Inc.
Date Received:	1/29/16 20:18
Date Prepared:	1/29/16
Project:	4641; Elliott Property

WorkOrder:	1601B84
Extraction Method:	SW5030B
Analytical Method:	SW8260B
Unit:	mg/Kg

Client ID	Lab ID	Matrix	Date Co	llected Instrument	Batch ID
BH-B 3.5'	1601B84-004A	Soil	01/28/201	6 09:00 GC18	116033
Analytes	<u>Result</u>		<u>RL</u>	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND		0.0050	1	02/04/2016 12:49
Benzene	ND		0.0050	1	02/04/2016 12:49
t-Butyl alcohol (TBA)	ND		0.050	1	02/04/2016 12:49
Diisopropyl ether (DIPE)	ND		0.0050	1	02/04/2016 12:49
Ethylbenzene	ND		0.0050	1	02/04/2016 12:49
Ethyl tert-butyl ether (ETBE)	ND		0.0050	1	02/04/2016 12:49
Methyl-t-butyl ether (MTBE)	ND		0.0050	1	02/04/2016 12:49
Naphthalene	ND		0.0050	1	02/04/2016 12:49
Toluene	ND		0.0050	1	02/04/2016 12:49
Xylenes, Total	ND		0.0050	1	02/04/2016 12:49
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	117		70-130		02/04/2016 12:49
Toluene-d8	104		70-130		02/04/2016 12:49
4-BFB	76		70-130		02/04/2016 12:49
Benzene-d6	98		60-140		02/04/2016 12:49
Ethylbenzene-d10	95		60-140		02/04/2016 12:49
1,2-DCB-d4	91		60-140		02/04/2016 12:49
<u>Analyst(s):</u> KF					





Client:	Aqua Science Engineers, Inc.
Date Received:	1/29/16 20:18
Date Prepared:	1/29/16
Project:	4641; Elliott Property

WorkOrder:	1601B84
Extraction Method:	SW5030B
Analytical Method:	SW8260B
Unit:	mg/Kg

Client ID	Lab ID	Matrix	Date Col	llected Instrument	Batch ID
BH-B 7.5'	1601B84-005A	Soil	01/28/201	6 09:05 GC18	116033
Analytes	<u>Result</u>		<u>RL</u>	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND		0.0050	1	02/04/2016 14:43
Benzene	ND		0.0050	1	02/04/2016 14:43
t-Butyl alcohol (TBA)	ND		0.050	1	02/04/2016 14:43
Diisopropyl ether (DIPE)	ND		0.0050	1	02/04/2016 14:43
Ethylbenzene	ND		0.0050	1	02/04/2016 14:43
Ethyl tert-butyl ether (ETBE)	ND		0.0050	1	02/04/2016 14:43
Methyl-t-butyl ether (MTBE)	ND		0.0050	1	02/04/2016 14:43
Naphthalene	ND		0.0050	1	02/04/2016 14:43
Toluene	ND		0.0050	1	02/04/2016 14:43
Xylenes, Total	ND		0.0050	1	02/04/2016 14:43
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	122		70-130		02/04/2016 14:43
Toluene-d8	113		70-130		02/04/2016 14:43
4-BFB	87		70-130		02/04/2016 14:43
Benzene-d6	110		60-140		02/04/2016 14:43
Ethylbenzene-d10	105		60-140		02/04/2016 14:43
1,2-DCB-d4	99		60-140		02/04/2016 14:43
Analyst(s): KF					





Client:	Aqua Science Engineers, Inc.
Date Received:	1/29/16 20:18
Date Prepared:	1/29/16
Project:	4641; Elliott Property

WorkOrder:	1601B84
Extraction Method:	SW5030B
Analytical Method:	SW8260B
Unit:	mg/Kg

Client ID	Lab ID	Matrix	Date Colle	cted Instrument	Batch ID
BH-C 3.5'	1601B84-007A	Soil	01/28/2016	13:30 GC18	116033
Analytes	<u>Result</u>		<u>RL</u>	<u>DF</u>	Date Analyzed
tert-Amyl methyl ether (TAME)	ND		0.0050	1	02/04/2016 16:38
Benzene	ND		0.0050	1	02/04/2016 16:38
t-Butyl alcohol (TBA)	ND		0.050	1	02/04/2016 16:38
Diisopropyl ether (DIPE)	ND		0.0050	1	02/04/2016 16:38
Ethylbenzene	ND		0.0050	1	02/04/2016 16:38
Ethyl tert-butyl ether (ETBE)	ND		0.0050	1	02/04/2016 16:38
Methyl-t-butyl ether (MTBE)	ND		0.0050	1	02/04/2016 16:38
Naphthalene	ND		0.0050	1	02/04/2016 16:38
Toluene	ND		0.0050	1	02/04/2016 16:38
Xylenes, Total	ND		0.0050	1	02/04/2016 16:38
Surrogates	<u>REC (%)</u>		Limits		
Dibromofluoromethane	119		70-130		02/04/2016 16:38
Toluene-d8	114		70-130		02/04/2016 16:38
4-BFB	83		70-130		02/04/2016 16:38
Benzene-d6	112		60-140		02/04/2016 16:38
Ethylbenzene-d10	109		60-140		02/04/2016 16:38
1,2-DCB-d4	104		60-140		02/04/2016 16:38
Analyst(s): KF					





Client:	Aqua Science Engineers, Inc.
Date Received:	1/29/16 20:18
Date Prepared:	1/29/16
Project:	4641; Elliott Property

WorkOrder:	1601B84
Extraction Method:	SW5030B
Analytical Method:	SW8260B
Unit:	mg/Kg

Client ID	Lab ID	Matrix	Date Co	llected Instrument	Batch ID
BH-C 7.5'	1601B84-008A	Soil	01/28/201	l6 13:36 GC18	116033
Analytes	<u>Result</u>		<u>RL</u>	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND		0.0050	1	02/05/2016 11:43
Benzene	ND		0.0050	1	02/05/2016 11:43
t-Butyl alcohol (TBA)	ND		0.050	1	02/05/2016 11:43
Diisopropyl ether (DIPE)	ND		0.0050	1	02/05/2016 11:43
Ethylbenzene	ND		0.0050	1	02/05/2016 11:43
Ethyl tert-butyl ether (ETBE)	ND		0.0050	1	02/05/2016 11:43
Methyl-t-butyl ether (MTBE)	ND		0.0050	1	02/05/2016 11:43
Naphthalene	ND		0.0050	1	02/05/2016 11:43
Toluene	ND		0.0050	1	02/05/2016 11:43
Xylenes, Total	ND		0.0050	1	02/05/2016 11:43
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	119		70-130		02/05/2016 11:43
Toluene-d8	114		70-130		02/05/2016 11:43
4-BFB	88		70-130		02/05/2016 11:43
Benzene-d6	97		60-140		02/05/2016 11:43
Ethylbenzene-d10	97		60-140		02/05/2016 11:43
1,2-DCB-d4	89		60-140		02/05/2016 11:43
<u>Analyst(s):</u> KF					





Client:	Aqua Science Engineers, Inc.
Date Received:	1/29/16 20:18
Date Prepared:	1/29/16
Project:	4641; Elliott Property

WorkOrder:	1601B84
Extraction Method:	SW5030B
Analytical Method:	SW8260B
Unit:	mg/Kg

Client ID	Lab ID	Matrix	Date Collected	d Instrument	Batch ID
BH-D 3.5'	1601B84-010A	Soil	01/28/2016 15:0	5 GC18	116033
Analytes	<u>Result</u>		<u>RL</u> <u>DF</u>		Date Analyzed
tert-Amyl methyl ether (TAME)	ND		0.0050 1		02/04/2016 17:17
Benzene	ND		0.0050 1		02/04/2016 17:17
t-Butyl alcohol (TBA)	ND		0.050 1		02/04/2016 17:17
Diisopropyl ether (DIPE)	ND		0.0050 1		02/04/2016 17:17
Ethylbenzene	ND		0.0050 1		02/04/2016 17:17
Ethyl tert-butyl ether (ETBE)	ND		0.0050 1		02/04/2016 17:17
Methyl-t-butyl ether (MTBE)	ND		0.0050 1		02/04/2016 17:17
Naphthalene	ND		0.0050 1		02/04/2016 17:17
Toluene	ND		0.0050 1		02/04/2016 17:17
Xylenes, Total	ND		0.0050 1		02/04/2016 17:17
<u>Surrogates</u>	<u>REC (%)</u>		Limits		
Dibromofluoromethane	119		70-130		02/04/2016 17:17
Toluene-d8	117		70-130		02/04/2016 17:17
4-BFB	87		70-130		02/04/2016 17:17
Benzene-d6	106		60-140		02/04/2016 17:17
Ethylbenzene-d10	95		60-140		02/04/2016 17:17
1,2-DCB-d4	94		60-140		02/04/2016 17:17
<u>Analyst(s):</u> KF					





Client:	Aqua Science Engineers, Inc.
Date Received:	1/29/16 20:18
Date Prepared:	1/29/16
Project:	4641; Elliott Property

WorkOrder:	1601B84
Extraction Method:	SW5030B
Analytical Method:	SW8260B
Unit:	mg/Kg

Client ID	Lab ID	Matrix	Date Co	llected	Instrument	Batch ID
BH-D 7.5'	1601B84-011A	Soil	01/28/201	6 15:10	GC18	116033
Analytes	<u>Result</u>		<u>RL</u>	DF		Date Analyzed
tert-Amyl methyl ether (TAME)	ND		0.0050	1		02/05/2016 12:21
Benzene	ND		0.0050	1		02/05/2016 12:21
t-Butyl alcohol (TBA)	ND		0.050	1		02/05/2016 12:21
Diisopropyl ether (DIPE)	ND		0.0050	1		02/05/2016 12:21
Ethylbenzene	ND		0.0050	1		02/05/2016 12:21
Ethyl tert-butyl ether (ETBE)	ND		0.0050	1		02/05/2016 12:21
Methyl-t-butyl ether (MTBE)	ND		0.0050	1		02/05/2016 12:21
Naphthalene	ND		0.0050	1		02/05/2016 12:21
Toluene	ND		0.0050	1		02/05/2016 12:21
Xylenes, Total	ND		0.0050	1		02/05/2016 12:21
Surrogates	<u>REC (%)</u>		<u>Limits</u>			
Dibromofluoromethane	120		70-130			02/05/2016 12:21
Toluene-d8	119		70-130			02/05/2016 12:21
4-BFB	83		70-130			02/05/2016 12:21
Benzene-d6	101		60-140			02/05/2016 12:21
Ethylbenzene-d10	95		60-140			02/05/2016 12:21
1,2-DCB-d4	92		60-140			02/05/2016 12:21
Analyst(s): KF						





Client:	Aqua Science Engineers, Inc.
Date Received:	1/29/16 20:18
Date Prepared:	1/29/16
Project:	4641; Elliott Property

WorkOrder:	1601B84
Extraction Method:	SW3550B/3630C
Analytical Method:	SW8015B
Unit:	mg/Kg

Total Extractable Petroleum	ı Hvdrocarbons wit	h Silica Gel Clean-Up
1 otur Entructuole 1 ott oleun	i ilgai ocai sonis mit.	n Smea Ger Crean op

Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID
BH-A 3.5'	1601B84-001A	Soil	01/28/2016 13:56 GC6A	116036
Analytes	<u>Result</u>		<u>RL</u> <u>DF</u>	Date Analyzed
TPH-Diesel (C10-C23)	83		50 50	02/04/2016 12:35
Surrogates	<u>REC (%)</u>		Limits	
C9	102		70-130	02/04/2016 12:35
<u>Analyst(s):</u> TK			Analytical Comments: e7,e2	
Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID
BH-A 7.5'	1601B84-002A	Soil	01/28/2016 14:00 GC39B	116036
Analytes	<u>Result</u>		<u>RL</u> <u>DF</u>	Date Analyzed
TPH-Diesel (C10-C23)	ND		1.0 1	02/01/2016 20:46
Surrogates	<u>REC (%)</u>		Limits	
C9	102		70-130	02/01/2016 20:46
<u>Analyst(s):</u> TK				
Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID
	1601 B84 004 A	Soil	01/28/2016 09:00 GC2A	116036
ВН-В 3.5	1001B04-004A			
Analytes	Result		<u>RL</u> <u>DF</u>	Date Analyzed
Analytes TPH-Diesel (C10-C23)	<u>Result</u> 100		<u>RL DF</u> 20 20	Date Analyzed 02/03/2016 16:25
Analytes TPH-Diesel (C10-C23) Surrogates	Result 100 REC (%)		RL DF 20 20 Limits	Date Analyzed 02/03/2016 16:25
Analytes TPH-Diesel (C10-C23) Surrogates C9	Result 100 REC (%) 98		RL DF 20 20 Limits 70-130	Date Analyzed 02/03/2016 16:25 02/03/2016 16:25
Analytes TPH-Diesel (C10-C23) Surrogates C9 Analyst(s): TK	Result 100 REC (%) 98		RL DF 20 20 Limits 70-130 Analytical Comments: e7,e11/e8	Date Analyzed 02/03/2016 16:25 02/03/2016 16:25
Analytes TPH-Diesel (C10-C23) Surrogates C9 Analyst(s): TK Client ID	Result 100 REC (%) 98 Lab ID	Matrix	RL DF 20 20 Limits 70-130 Analytical Comments: e7,e11/e8 Date Collected Instrument	Date Analyzed 02/03/2016 16:25 02/03/2016 16:25 Batch ID
Analytes TPH-Diesel (C10-C23) Surrogates C9 Analyst(s): TK Client ID BH-B 7.5'	Result 100 REC (%) 98 Lab ID 1601B84-005A	Matrix Soil	RL DF 20 20 Limits 70-130 Analytical Comments: e7,e11/e8 Date Collected Instrument 01/28/2016 09:05 GC39B	Date Analyzed 02/03/2016 16:25 02/03/2016 16:25 Batch ID 116036
Analytes TPH-Diesel (C10-C23) Surrogates C9 Analyst(s): TK Client ID BH-B 7.5' Analytes	Result 100 REC (%) 98 Lab ID 1601B84-005A Result	Matrix Soil	RL DF 20 20 Limits 70-130 Analytical Comments: e7,e11/e8 Date Collected Instrument 01/28/2016 09:05 RL DE	Date Analyzed 02/03/2016 16:25 02/03/2016 16:25 Batch ID 116036 Date Analyzed
Analytes TPH-Diesel (C10-C23) Surrogates C9 Analyst(s): TK Client ID BH-B 7.5' Analytes TPH-Diesel (C10-C23)	Result 100 REC (%) 98 Lab ID 1601B84-005A Result ND	Matrix Soil	RL DF 20 20 Limits 70-130 Analytical Comments: e7,e11/e8 Date Collected Instrument 01/28/2016 09:05 RL DF 1.0 1	Date Analyzed 02/03/2016 16:25 02/03/2016 16:25 Batch ID 116036 Date Analyzed 02/01/2016 21:25
Analytes TPH-Diesel (C10-C23) Surrogates C9 Analyst(s): TK Client ID BH-B 7.5' Analytes TPH-Diesel (C10-C23) Surrogates	Result 100 REC (%) 98 Lab ID 1601B84-005A Result ND REC (%)	Matrix Soil	RL DF 20 20 Limits 70-130 Analytical Comments: e7,e11/e8 Date Collected Instrument 01/28/2016 09:05 RL DF 1.0 1 Limits	Date Analyzed 02/03/2016 16:25 02/03/2016 16:25 Batch ID 116036 Date Analyzed 02/01/2016 21:25
Analytes TPH-Diesel (C10-C23) Surrogates C9 Analyst(s): TK Client ID BH-B 7.5' Analytes TPH-Diesel (C10-C23) Surrogates C9	Result 100 REC (%) 98 Lab ID 1601B84-005A Result ND REC (%) 102	Matrix Soil	RL DF 20 20 Limits 70-130 Analytical Comments: e7,e11/e8 Date Collected Instrument 01/28/2016 09:05 GC39B RL DF 1.0 1 Limits 70-130	Date Analyzed 02/03/2016 16:25 02/03/2016 16:25 Batch ID 116036 Date Analyzed 02/01/2016 21:25



Client:	Aqua Science Engineers, Inc.
Date Received:	1/29/16 20:18
Date Prepared:	1/29/16
Project:	4641; Elliott Property

WorkOrder:	1601B84
Extraction Method:	SW3550B/3630C
Analytical Method:	SW8015B
Unit:	mg/Kg

Total Extractable Petro	leum Hydrocarbons	with Silica Gel	Clean-Up
			1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ВН-С 3.5'	1601B84-007A	Soil	01/28/2016 13:30	GC2B	116036
Analytes	<u>Result</u>		<u>RL</u> DF		Date Analyzed
TPH-Diesel (C10-C23)	2.5		2.0 2		02/02/2016 18:03
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C9	91		70-130		02/02/2016 18:03
<u>Analyst(s):</u> TK			Analytical Comments: e	7,e2	
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BH-C 7.5'	1601B84-008A	Soil	01/28/2016 13:36	GC39B	116036
Analytes	Result		<u>RL</u> DF		Date Analyzed
TPH-Diesel (C10-C23)	ND		1.0 1		02/01/2016 20:08
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C9	101		70-130		02/01/2016 20:08
<u>Analyst(s):</u> TK					
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Client ID BH-D 3.5'	Lab ID 1601B84-010A	Matrix Soil	Date Collected 01/28/2016 15:05	Instrument GC6B	Batch ID 116036
Client ID BH-D 3.5' Analytes	Lab ID 1601B84-010A <u>Result</u>	Matrix Soil	Date Collected 01/28/2016 15:05 RL DF	Instrument GC6B	Batch ID 116036 Date Analyzed
Client ID BH-D 3.5' Analytes TPH-Diesel (C10-C23)	Lab ID 1601B84-010A Result 240	Matrix Soil	Date Collected 01/28/2016 15:05 RL DF 100 100	Instrument GC6B	Batch ID 116036 Date Analyzed 02/04/2016 01:40
Client ID BH-D 3.5' Analytes TPH-Diesel (C10-C23) Surrogates	Lab ID 1601B84-010A Result 240 REC (%)	Matrix Soil	Date Collected 01/28/2016 15:05 RL DF 100 100 Limits DF	Instrument GC6B	Batch ID 116036 Date Analyzed 02/04/2016 01:40
Client ID BH-D 3.5' Analytes TPH-Diesel (C10-C23) Surrogates C9	Lab ID 1601B84-010A Result 240 REC (%) 92	Matrix Soil	RL DF 100 100 Limits 70-130	Instrument GC6B	Batch ID 116036 Date Analyzed 02/04/2016 01:40 02/04/2016 01:40
Client ID BH-D 3.5' Analytes TPH-Diesel (C10-C23) Surrogates C9 Analyst(s): TK	Lab ID 1601B84-010A Result 240 REC (%) 92	Matrix Soil	RL DE 100 100 Limits 70-130 Analytical Comments: e	Instrument GC6B 7,e2	Batch ID 116036 Date Analyzed 02/04/2016 01:40 02/04/2016 01:40
Client ID BH-D 3.5' Analytes TPH-Diesel (C10-C23) Surrogates C9 Analyst(s): TK Client ID	Lab ID 1601B84-010A Result 240 REC (%) 92 Lab ID	Matrix Soil Matrix	Date Collected 01/28/2016 15:05 RL DE 100 100 Limits 70-130 Analytical Comments: e Date Collected E	Instrument GC6B 7,e2 Instrument	Batch ID 116036 Date Analyzed 02/04/2016 01:40 02/04/2016 01:40 Batch ID
Client ID BH-D 3.5' Analytes TPH-Diesel (C10-C23) Surrogates C9 Analyst(s): TK Client ID BH-D 7.5'	Lab ID 1601B84-010A Result 240 REC (%) 92 Lab ID 1601B84-011A	Matrix Soil Matrix Soil	Date Collected 01/28/2016 15:05 RL DF 100 100 Limits 70-130 Analytical Comments: e Date Collected 01/28/2016 15:10	Instrument GC6B 7,e2 Instrument GC39B	Batch ID 116036 Date Analyzed 02/04/2016 01:40 02/04/2016 01:40 Batch ID 116036
Client ID BH-D 3.5' Analytes TPH-Diesel (C10-C23) Surrogates C9 Analyst(s): TK Client ID BH-D 7.5' Analytes	Lab ID 1601B84-010A Result 240 REC (%) 92 Lab ID 1601B84-011A Result	Matrix Soil Matrix Soil	Date Collected 01/28/2016 15:05 RL DF 100 100 Limits 70-130 Analytical Comments: e Date Collected 01/28/2016 15:10 RL DE	Instrument GC6B 7,e2 Instrument GC39B	Batch ID 116036 Date Analyzed 02/04/2016 01:40 02/04/2016 01:40 Batch ID 116036 Date Analyzed
Client ID BH-D 3.5' Analytes TPH-Diesel (C10-C23) Surrogates C9 Analyst(s): TK Client ID BH-D 7.5' Analytes TPH-Diesel (C10-C23)	Lab ID 1601B84-010A Result 240 REC (%) 92 Lab ID 1601B84-011A Result ND	Matrix Soil Matrix Soil	Date Collected 01/28/2016 15:05 RL DE 100 100 Limits 70-130 Analytical Comments: e Date Collected 01/28/2016 15:10 RL DE 1.0 1	Instrument GC6B 7,e2 Instrument GC39B	Batch ID 116036 Date Analyzed 02/04/2016 01:40 02/04/2016 01:40 Batch ID 116036 Date Analyzed 02/01/2016 19:29
Client ID BH-D 3.5' Analytes TPH-Diesel (C10-C23) Surrogates C9 Analyst(s): TK Client ID BH-D 7.5' Analytes TPH-Diesel (C10-C23) Surrogates	Lab ID 1601B84-010A Result 240 REC (%) 92 Lab ID 1601B84-011A Result ND REC (%)	Matrix Soil Matrix Soil	Date Collected 01/28/2016 15:05 RL DF 100 100 Limits 70-130 Analytical Comments: e Date Collected 01/28/2016 15:10 RL DF 1.0 1 Limits 100	Instrument GC6B 7,e2 Instrument GC39B	Batch ID 116036 Date Analyzed 02/04/2016 01:40 02/04/2016 01:40 Batch ID Batch ID 116036 Date Analyzed 02/01/2016 19:29
Client ID BH-D 3.5' Analytes TPH-Diesel (C10-C23) Surrogates C9 Analyst(s): TK Client ID BH-D 7.5' Analytes TPH-Diesel (C10-C23) Surrogates C9 C9	Lab ID 1601B84-010A Result 240 REC (%) 92 Lab ID 1601B84-011A Result ND REC (%) 102	Matrix Soil Matrix Soil	Date Collected 01/28/2016 15:05 RL DF 100 100 Limits 70-130 Analytical Comments: e 01/28/2016 15:10 1 RL DE 1.0 1 Limits 01/28/2016 15:10 Limits 01/28/2016 15:10 Limits 70-130	Instrument GC6B 7,e2 Instrument GC39B	Batch ID 116036 Date Analyzed 02/04/2016 01:40 02/04/2016 01:40 Batch ID 116036 Date Analyzed 02/01/2016 19:29 02/01/2016 19:29



Client:	Aqua Science Engineers, Inc.
Date Received:	1/29/16 20:18
Date Prepared:	1/29/16
Project:	4641; Elliott Property

WorkOrder:	1601B84
Extraction Method:	SW3550B
Analytical Method:	SW8015B
Unit:	mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID
BH-A 3.5'	1601B84-001A	Soil	01/28/2016 13:56 GC6A	116024
Analytes	<u>Result</u>		<u>RL DE</u>	Date Analyzed
TPH-Diesel (C10-C23)	110		100 100	02/04/2016 06:24
<u>Surrogates</u>	<u>REC (%)</u>		Limits	
C9	87		70-130	02/04/2016 06:24
<u>Analyst(s):</u> TK			Analytical Comments: e7,e2	
Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID
BH-A 7.5'	1601B84-002A	Soil	01/28/2016 14:00 GC39B	116024
Analytes	Result		<u>RL</u> <u>DF</u>	Date Analyzed
TPH-Diesel (C10-C23)	1.1		1.0 1	02/01/2016 23:22
Surrogates	<u>REC (%)</u>		Limits	
C9	103		70-130	02/01/2016 23:22
<u>Analyst(s):</u> TK			Analytical Comments: e7,e2	
Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID
BH-B 3.5'	1601B84-004A	Soil	01/28/2016 09:00 GC2A	116024
Analytes	<u>Result</u>		<u>RL DF</u>	Date Analyzed
TPH-Diesel (C10-C23)	120		20 20	02/03/2016 18:58
Surrogates	<u>REC (%)</u>		Limits	
C9	99		70-130	02/03/2016 18:58
Analyst(s): TK			Analytical Comments: e7,e11/e8	
Analyst(s): TK Client ID	Lab ID	Matrix	Analytical Comments: e7,e11/e8 Date Collected Instrument	Batch ID
Analyst(s): TK Client ID BH-B 7.5'	Lab ID 1601B84-005A	Matrix Soil	Analytical Comments: e7,e11/e8 Date Collected Instrument 01/28/2016 09:05 GC39B	Batch ID 116024
Analyst(s): TK Client ID BH-B 7.5' Analytes	Lab ID 1601B84-005A <u>Result</u>	Matrix Soil	Analytical Comments: e7,e11/e8 Date Collected Instrument 01/28/2016 09:05 GC39B RL DE	Batch ID 116024 Date Analyzed
Analyst(s): TK Client ID BH-B 7.5' Analytes TPH-Diesel (C10-C23)	Lab ID 1601B84-005A <u>Result</u> ND	Matrix Soil	Analytical Comments: e7,e11/e8 Date Collected Instrument 01/28/2016 09:05 GC39B RL DF 1.0 1	Batch ID 116024 Date Analyzed 02/01/2016 22:04
Analyst(s): TK Client ID BH-B 7.5' Analytes TPH-Diesel (C10-C23) Surrogates	Lab ID 1601B84-005A <u>Result</u> ND <u>REC (%)</u>	Matrix Soil	Analytical Comments: e7,e11/e8 Date Collected Instrument 01/28/2016 09:05 GC39B RL DF 1.0 1 Limits Limits	Batch ID 116024 Date Analyzed 02/01/2016 22:04
Analyst(s): TK Client ID BH-B 7.5' Analytes TPH-Diesel (C10-C23) Surrogates C9	Lab ID 1601B84-005A Result ND <u>REC (%)</u> 101	Matrix Soil	Analytical Comments: e7,e11/e8 Date Collected Instrument 01/28/2016 09:05 GC39B RL DE 1.0 1 Limits 70-130	Batch ID 116024 Date Analyzed 02/01/2016 22:04



Client:	Aqua Science Engineers, Inc.
Date Received:	1/29/16 20:18
Date Prepared:	1/29/16
Project:	4641; Elliott Property

WorkOrder:	1601B84
Extraction Method:	SW3550B
Analytical Method:	SW8015B
Unit:	mg/Kg

Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID
BH-C 3.5'	1601B84-007A	Soil	01/28/2016 13:30 GC2B	116024
<u>Analytes</u>	<u>Result</u>		<u>RL DF</u>	Date Analyzed
TPH-Diesel (C10-C23)	5.7		5.0 5	02/02/2016 19:19
Surrogates	<u>REC (%)</u>		Limits	
C9	94		70-130	02/02/2016 19:19
<u>Analyst(s):</u> TK			Analytical Comments: e7,e2	
Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID
BH-C 7.5'	1601B84-008A	Soil	01/28/2016 13:36 GC39B	116024
<u>Analytes</u>	<u>Result</u>		<u>RL DF</u>	Date Analyzed
TPH-Diesel (C10-C23)	ND		1.0 1	02/01/2016 22:43
Surrogates	<u>REC (%)</u>		Limits	
C9	101		70-130	02/01/2016 22:43
<u>Analyst(s):</u> TK				
Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID
BH-D 3.5'	1601B84-010A	Soil	01/28/2016 15:05 GC6B	116024
<u>Analytes</u>	<u>Result</u>		<u>RL</u> <u>DF</u>	Date Analyzed
TPH-Diesel (C10-C23)	390		100 100	02/04/2016 05:13
<u>Surrogates</u>	<u>REC (%)</u>		Limits	
C9	105		70-130	02/04/2016 05:13
<u>Analyst(s):</u> TK			Analytical Comments: e7,e2	
Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID
BH-D 7.5'	1601B84-011A	Soil	01/28/2016 15:10 GC39B	116024

<u>RL</u>

1.0

<u>Limits</u>

70-130

<u>DF</u>

1

Analytes

C9

Surrogates

Analyst(s): TK

TPH-Diesel (C10-C23)

Result

<u>REC (%)</u>

ND

102

Date Analyzed

02/02/2016 00:01

02/02/2016 00:01

McCampbell Analytical, Inc.

CLIENT:Aqua Science Engineers, Inc.Work Order:1601B84Project:4641; Elliott Property

ANALYTICAL QC SUMMARY REPORT

BatchID: 116033

SampleID MB-116033 Batch ID: 116033	TestCode: 8260gas_s TestNo: SW8260B	Uni Run II	ts: mg/kg D: GC16_1	60208C	Prep Date: 1/29/2016 Analysis Date: 1/30/2016
Analyte	Result	PQL SPKValue SPKRefVa	al %REC	Limits	RPDRefVal %RPD RPDLimit Qual
TPH(g)	ND	0.25		-	
Surrogate Recovery					
Dibromofluoromethane	0.138	0.125	111	70 - 130	
Benzene-d6	0.124	0.1	124	60 - 140	

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range



CLIENT: Aqua Science Engineers, Inc. Work Order: 1601B84

Project: 4641; Elliott Property

ANALYTICAL QC SUMMARY REPORT

BatchID: 116033

SampleID LCS-116033	TestCode: 8260gas_s		Units: I	mg/kg		Prep Date: 1/29/2016	
Batch ID: 116033	TestNo: SW8260B		Run ID: C	GC16_160	208C	Analysis Date: 1/30/2016	
Analyte	Result	PQL SPKValue S	PKRefVal	%REC	Limits	RPDRefVal %RPD RPDLimit (Qual
VOC (C6-C12)	3.30	0.25 3.2	0	103 7	74 - 142		
Surrogate Recovery							
Dibromofluoromethane	0.137	0.125		110 7	70 - 130		
Benzene-d6	0.135	0.1		135 6	60 - 140		

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range





Client:	Aqua Science Engineers, Inc.
Date Prepared:	1/29/16
Date Analyzed:	1/30/16
Instrument:	GC16
Matrix:	Soil
Project:	4641; Elliott Property

WorkOrder:	1601B84
BatchID:	116033
Extraction Method:	SW5030B
Analytical Method:	SW8260B
Unit:	mg/Kg
Sample ID:	MB/LCS-116033
	1601B83-004AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0433	0.0050	0.050	-	87	53-116
Benzene	ND	0.0526	0.0050	0.050	-	105	63-137
Bromobenzene	ND	-	0.0050	-	-	-	-
Bromochloromethane	ND	-	0.0050	-	-	-	-
Bromodichloromethane	ND	-	0.0050	-	-	-	-
Bromoform	ND	-	0.0050	-	-	-	-
Bromomethane	ND	-	0.0050	-	-	-	-
2-Butanone (MEK)	ND	-	0.020	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.182	0.050	0.20	-	91	41-135
n-Butyl benzene	ND	-	0.0050	-	-	-	-
sec-Butyl benzene	ND	-	0.0050	-	-	-	-
tert-Butyl benzene	ND	-	0.0050	-	-	-	-
Carbon Disulfide	ND	-	0.0050	-	-	-	-
Carbon Tetrachloride	ND	-	0.0050	-	-	-	-
Chlorobenzene	ND	0.0510	0.0050	0.050	-	102	77-121
Chloroethane	ND	-	0.0050	-	-	-	-
Chloroform	ND	-	0.0050	-	-	-	-
Chloromethane	ND	-	0.0050	-	-	-	-
2-Chlorotoluene	ND	-	0.0050	-	-	-	-
4-Chlorotoluene	ND	-	0.0050	-	-	-	-
Dibromochloromethane	ND	-	0.0050	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0040	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0485	0.0040	0.050	-	97	67-119
Dibromomethane	ND	-	0.0050	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.0050	-	-	-	-
Dichlorodifluoromethane	ND	-	0.0050	-	-	-	-
1,1-Dichloroethane	ND	-	0.0050	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0478	0.0040	0.050	-	96	58-135
1,1-Dichloroethene	ND	0.0443	0.0050	0.050	-	89	42-145
cis-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
1,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,3-Dichloropropane	ND	-	0.0050	-	-	-	-
2,2-Dichloropropane	ND	-	0.0050	-	-	-	-

QA/QC Officer



Client:Aqua Science Engineers, Inc.Date Prepared:1/29/16Date Analyzed:1/30/16Instrument:GC16Matrix:SoilProject:4641; Elliott Property

WorkOrder:	1601B84
BatchID:	116033
Extraction Method:	SW5030B
Analytical Method:	SW8260B
Unit:	mg/Kg
Sample ID:	MB/LCS-116033
	1601B83-004AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	-	0.0050	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
Diisopropyl ether (DIPE)	ND	0.0520	0.0050	0.050	-	104	52-129
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0479	0.0050	0.050	-	96	53-125
Freon 113	ND	-	0.0050	-	-	-	-
Hexachlorobutadiene	ND	-	0.0050	-	-	-	-
Hexachloroethane	ND	-	0.0050	-	-	-	-
2-Hexanone	ND	-	0.0050	-	-	-	-
Isopropylbenzene	ND	-	0.0050	-	-	-	-
4-Isopropyl toluene	ND	-	0.0050	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0450	0.0050	0.050	-	90	58-122
Methylene chloride	ND	-	0.0050	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.0050	-	-	-	-
Naphthalene	ND	-	0.0050	-	-	-	-
n-Propyl benzene	ND	-	0.0050	-	-	-	-
Styrene	ND	-	0.0050	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
Tetrachloroethene	ND	-	0.0050	-	-	-	-
Toluene	ND	0.0566	0.0050	0.050	-	113	76-130
1,2,3-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.0050	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.0050	-	-	-	-
Trichloroethene	ND	0.0558	0.0050	0.050	-	112	72-132
Trichlorofluoromethane	ND	-	0.0050	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.0050	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.0050	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.0050	-	-	-	-
Vinyl Chloride	ND	-	0.0050	-	-	-	-
Xvlenes. Total	ND	-	0.0050	-	-	-	-



Client:	Aqua Science Engineers, Inc.	WorkOrder:	1601B84
Date Prepared:	1/29/16	BatchID:	116033
Date Analyzed:	1/30/16	Extraction Method:	SW5030B
Instrument:	GC16	Analytical Method:	SW8260B
Matrix:	Soil	Unit:	mg/Kg
Project:	4641; Elliott Property	Sample ID:	MB/LCS-116033 1601B83-004AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	0.110	0.109		0.12	88	87	70-130
Toluene-d8	0.118	0.117		0.12	95	94	70-130
4-BFB	0.0119	0.0124		0.012	96	99	70-130
Benzene-d6	0.102	0.110		0.10	102	110	60-140
Ethylbenzene-d10	0.109	0.121		0.10	109	121	60-140
1,2-DCB-d4	0.0769	0.0900		0.10	77	90	60-140

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	0.0449	0.0460	0.050	ND	90	92	56-94	2.25	20
Benzene	0.0418	0.0433	0.050	ND	84	87	60-106	3.61	20
t-Butyl alcohol (TBA)	0.165	0.174	0.20	ND	83	87	56-140	5.04	20
Chlorobenzene	0.0425	0.0430	0.050	ND	85	86	61-108	1.10	20
1,2-Dibromoethane (EDB)	0.0435	0.0431	0.050	ND	87	86	54-119	1.01	20
1,2-Dichloroethane (1,2-DCA)	0.0447	0.0457	0.050	ND	89	91	48-115	2.18	20
1,1-Dichloroethene	0.0276	0.0312	0.050	ND	55	62	46-111	12.3	20
Diisopropyl ether (DIPE)	0.0440	0.0458	0.050	ND	88	92	53-111	4.02	20
Ethyl tert-butyl ether (ETBE)	0.0440	0.0453	0.050	ND	88	91	61-104	2.89	20
Methyl-t-butyl ether (MTBE)	0.0414	0.0426	0.050	ND	83	85	58-107	2.75	20
Toluene	0.0387	0.0393	0.050	ND	77	79	64-114	1.45	20
Trichloroethene	0.0513	0.0512	0.050	ND	103	102	60-116	0.202	20
Surrogate Recovery									
Dibromofluoromethane	0.150	0.149	0.12		120	120	70-130	0	20
Toluene-d8	0.131	0.130	0.12		105	104	70-130	1.08	20
4-BFB	0.0120	0.0124	0.012		96	99	88-121	2.72	20
Benzene-d6	0.0937	0.0984	0.10		94	98	60-140	4.90	20
Ethylbenzene-d10	0.0916	0.0942	0.10		92	94	60-140	2.73	20
1,2-DCB-d4	0.0920	0.0922	0.10		92	92	60-140	0	20

Client:	Aqua Science Engineers, Inc.	WorkOrd
Date Prepared:	1/29/16	BatchID:
Date Analyzed:	1/30/16	Extractio
Instrument:	GC11B	Analytica
Matrix:	Soil	Unit:
Project:	4641; Elliott Property	Sample II

WorkOrder:	1601B84
BatchID:	116024
Extraction Method:	SW3550B
Analytical Method:	SW8015B
Unit:	mg/Kg
Sample ID:	MB/LCS-116024 1601B69-001AMS/MSD

QC Report for SW8015B w/out SG Clean-Up										
Analyte	MB Result	LCS Result		RL	SPK Val	MI %I	B SS REC	LCS %REC	;	LCS Limits
TPH-Diesel (C10-C23)	ND	43.3		1.0	40	-		108		70-130
TPH-Motor Oil (C18-C36)	ND	-		5.0	-	-		-		-
Surrogate Recovery										
C9	26.3	26.5			25	10	5	106		70-130
Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/N Limi	MSD ts	RPD	RPD Limit
TPH-Diesel (C10-C23)	NR	NR		62	NR	NR	-		NR	
Surrogate Recovery										
C9	NR	NR			NR	NR	-		NR	



Client:Aqua Science Engineers, Inc.Date Prepared:1/29/16Date Analyzed:2/1/16Instrument:GC2A, GC39AMatrix:SoilProject:4641; Elliott Property

WorkOrder:	1601B84
BatchID:	116036
Extraction Method:	SW3550B/3630C
Analytical Method:	SW8015B
Unit:	mg/Kg
Sample ID:	MB/LCS-116036
	1601B84-001AMS/MSD

QC Report for SW8015B w/SG Clean-Up

Analyte	MB Result	LCS Result		RL	SPK Val	M %	B SS REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	47.6		1.0	40	-		119	70-130
TPH-Motor Oil (C18-C36)	ND	-		5.0	-	-		-	-
Surrogate Recovery									
C9	24.2	23.4			25	97		94	62-139
Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/N Limit	ISD RF	D RPD Limit
TPH-Diesel (C10-C23)	NR	NR		83	NR	NR	-	NF	2
Surrogate Recovery									
C9	NR	NR			NR	NR	-	NF	R

A QA/QC Officer Page 24 of 31

McCampbell Analytical, Inc.



1534 Willow Pass Rd

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Pittsburg (925) 25	g, CA 94565-1701 2-9262				WorkOrder: 1601B84				ClientCode: ASED								
		WaterTrax	WriteOn	EDF		Excel		EQuIS	✓	Email		HardC	ору	ThirdP	arty	J-fl≀	ag
Report to:						В	ill to:						Reque	sted TAT	:	5 days;	
Robert KitayEmail: rkitay@aquascienceengineers.comDiane SchiellAqua Science Engineers, Inc.cc/3rd Party:Aqua Science Engineers, Inc.55 Oak Court Suite 220PO:217 Wild Flower DriveDanville, CA 94526ProjectNo: 4641; Elliott PropertyRoseville, CA 95678(925) 820-9391FAX: (925) 837-4853deezthng22@yahoo.com				C.		Date Date	Received Logged:	!:	01/29/2 01/29/2	2016 2016							
									Re	quested	l Tests	(See leg	jend be	low)			
Lab ID	Client ID		Matrix	Collection Date	Hold	1	2	3	4	5	6	7	8	9	10	11	12
1601B84-001	BH-A 3.5'		Soil	1/28/2016 13:56		А	Α	A	A								
1601B84-002	BH-A 7.5'		Soil	1/28/2016 14:00		Α	Α	Α	Α							-	-
1601B84-003	BH-A 11.5'		Soil	1/28/2016 14:05		Α	Α	Α	Α								-
1601B84-004	BH-B 3.5'		Soil	1/28/2016 9:00		Α	Α	Α	Α								
1601B84-005	BH-B 7.5'		Soil	1/28/2016 9:05		Α	Α	А	А								
1601B84-006	BH-B 11.5'		Soil	1/28/2016 9:10	✓	А	Α	А	Α								
1601B84-007	BH-C 3.5'		Soil	1/28/2016 13:30		А	Α	А	Α								
1601B84-008	BH-C 7.5'		Soil	1/28/2016 13:36		А	Α	А	Α								
1601B84-009	BH-C 11.5'		Soil	1/28/2016 13:40	✓	Α	Α	Α	Α								
1601B84-010	BH-D 3.5'		Soil	1/28/2016 15:05		Α	Α	Α	А							-	1
1601B84-011	BH-D 7.5'		Soil	1/28/2016 15:10		Α	Α	А	А							-	-
1601B84-012	BH-D 11.5'		Soil	1/28/2016 15:15	✓	А	Α	Α	А							-	-

Test Legend:

1	8260GAS_S	2	
5		6	
9		10	

2	8260VOC_S
5	
0	

3	TPH(D)_S
7	
11	

4	TPH(D)WSG_S
8	
12	

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A, 011A, 012A contain testgroup.

Prepared by: Briana Cutino

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: AQUA SCIENCE ENGINEERS, INC.

Project: 4641; Elliott Property

Comments:

QC Level: LEVEL 2 Client Contact: Robert Kitay

Contact's Email: rkitay@aquascienceengineers.com

Work Order: 1601B84 **Date Logged:** 1/29/2016

		WaterTrax		Excel	Fax 🖌 Email	HardC	opy	ty	J-flag
Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	ТАТ	Sediment Hold SubOut Content
1601B84-001A	BH-A 3.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner		1/28/2016 13:56	5 days	
			SW8015B (Diesel)					5 days	
			TPH(g) & 8260 (Misc. Compounds) by P&T GCMS					5 days	
1601B84-002A	BH-A 7.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner		1/28/2016 14:00	5 days	
			SW8015B (Diesel)					5 days	
			TPH(g) & 8260 (Misc. Compounds) by P&T GCMS					5 days	
1601B84-003A	BH-A 11.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner		1/28/2016 14:05	5 days	
			SW8015B (Diesel)					5 days	✓
			TPH(g) & 8260 (Misc. Compounds) by P&T GCMS					5 days	
1601B84-004A	BH-B 3.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner		1/28/2016 9:00	5 days	
			SW8015B (Diesel)					5 days	
			TPH(g) & 8260 (Misc. Compounds) by P&T GCMS					5 days	
1601B84-005A	BH-B 7.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner		1/28/2016 9:05	5 days	
			SW8015B (Diesel)					5 days	
			TPH(g) & 8260 (Misc. Compounds) by P&T GCMS					5 days	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



WORK ORDER SUMMARY

Client Name: AQUA SCIENCE ENGINEERS, INC.

Project: 4641; Elliott Property

Comments:

QC Level: LEVEL 2 Client Contact: Robert Kitay

Contact's Email: rkitay@aquascienceengineers.com

Work Order: 1601B84 **Date Logged:** 1/29/2016

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		Water I rax		Excel	Fax 🖌 Email	HardC	opy	iy 📋	J-flag
Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	ТАТ	Sediment Hold SubOut Content
1601B84-006A	BH-B 11.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner		1/28/2016 9:10	5 days	
			SW8015B (Diesel)					5 days	
			TPH(g) & 8260 (Misc. Compounds) by P&T GCMS					5 days	
1601B84-007A	BH-C 3.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner		1/28/2016 13:30	5 days	
			SW8015B (Diesel)					5 days	
			TPH(g) & 8260 (Misc. Compounds) by P&T GCMS					5 days	
1601B84-008A	BH-C 7.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner		1/28/2016 13:36	5 days	
			SW8015B (Diesel)					5 days	
			TPH(g) & 8260 (Misc. Compounds) by P&T GCMS					5 days	
1601B84-009A	BH-C 11.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner		1/28/2016 13:40	5 days	
			SW8015B (Diesel)					5 days	\checkmark
			TPH(g) & 8260 (Misc. Compounds) by P&T GCMS					5 days	
1601B84-010A	BH-D 3.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner		1/28/2016 15:05	5 days	
			SW8015B (Diesel)					5 days	
			TPH(g) & 8260 (Misc. Compounds) by P&T GCMS					5 days	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

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WORK ORDER SUMMARY

Client Name	: AQUA SCIE	ENCE ENGINEERS, I	INC.		QC Level:	LEVEL 2				Worl	k Order:	1601B84
Project:	4641; Elliott	Property		Cl	ient Contact:	Robert Ki	tay			Date	Logged:	1/29/2016
Comments:				Cor	ntact's Email:	rkitay@aq	uascienceengin	eers.com				
		WaterTrax	WriteOn	EDF	Excel	Fax	∢ Email	HardCo	opyThirdPart	y 🗍	I-flag	
Lab ID	Client ID	Matrix	Test Name		Containe /Composi	rs Bottle tes	& Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold SubOut
1601B84-011A	BH-D 7.5'	Soil	SW8015B (Di	esel w/ S.G. Clean-Uj	p) 1	А	cetate Liner		1/28/2016 15:10	5 days		
			SW8015B (Di	esel)						5 days		
			TPH(g) & 826 P&T GCMS	0 (Misc. Compounds) by					5 days		
1601B84-012A	BH-D 11.5'	Soil	SW8015B (Di	esel w/ S.G. Clean-U	p) 1	А	cetate Liner		1/28/2016 15:15	5 days		✓
			SW8015B (Di	esel)						5 days		\checkmark
			TPH(g) & 826 P&T GCMS	0 (Misc. Compounds) by					5 days		

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

Aqua Science E	+		NT.			4			1. 1.						61	DIE	384	2		
55 Oak Court, Suite 220 Danville, CA 94526 (925) 820-9391 FAX (925) 837-4853			(C	h	ai	n	01	C	cu	st	:0	dy	1						
ANALYSIS BEOLU	T					PRO ADD	JECT I RESS		<u>E</u> 15	lliot. Kev	t f	ropen	ty	akla	nd,	CA	PAGE	1 40	.41	2
SPECIAL INSTRUCTIONS: TPIT-P to be and with and without cleanup	lyzed silice	bot - gr	4		S / MTBE & BTEX 30/8015-8020)	IO/BOIS) Silizon Cal	SEL & MOTOR OIL 10/8015)	E ORGANICS /8240/8260)	LATILE ORGANICS (8270)	EASE 0)	TALS (5) 0+7000)	1ETALS 0+7000)	2)	DCHLORINATED DES (EPA 8081A)	YGENATES	AL. or DISSOLVED)	TEX & 5 OXY's +)) Nighthalene	ΤΕ		
SAMPLE ID.	DATE	TIME	MATRIX	UANTITY .	TPH-GA (EPA 50)	TPH-DIE (EPA 35	TPH-DIE (EPA 351	VOLATIL (EPA 624	SEMI-VO (EPA 625	OIL & GR (EPA 552)	LUFT ME (EPA 6010	CAM 17 N (EPA 6010	PCBs (EPA 808	ORGANC	FUEL OX (EPA 8260	Pb (TOT/ (EPA 6010	TPH-G, B (EPA 8260	COMPOSI	EDF	U IOH
BH 4 75'	1-28-10	1356	5	1		×		-									x			-
BH-A 11.5'		1900	$\left \right $	-		×											X			1
BH-B 3.5'		900	-																	×
BH-B 7.5-		905		+		3											×			
BH-B 11.5'		910		+		X											X			1
BH-C 25'		1330				1	-						1							×
BIT-C 7-5'		1336			-	S					-		6				×			
BH-C 11.5'		1340				^											×			T
BH-D 3.5'	V	15.09	V	V		X				-		_								X
RELINQUISHED BY:	RECEIVE	D BY:	la		-	DEL					T						X			
Row Entry 1005 Signature) (time) 1-25.1	(signature	190	((bos	(sigr	alure)		r: (time	745 =) +	REC : (sigr	EIVED	BY LAI	BORAT	ORY e)	CO	MMENTS:			
printed name) (date)	(printed n	ame)	,	data	110	100	M	1	X	129			_			=	TURN AROUND TIME			
Company-ASE, INC.	Company	- <u>M</u>	41	uale	;)	(prin Corr	ted nan Ipany-	ne)	(date	э)	(prin Com	ted nan pany-	ne)	· (da	te)	ST/ OTI	ANDARD :	24Hr 48	Hr 72	2Hr

Aqua Science Engineers, Inc. 55 Oak Court, Suite 220 Danville, CA 94526 (925) 820-9391 FAX (925) 837-4853	3			C	h	ai	n	01	FC	Cu	st	to	dy	/		_	- -				
SAMPLER (SIGNATURE)	PT -					PRO ADD	JECT	NAME	15	lliet Kev	+ f	Prop.	rty Oakl	and	, с,	4	PAGE JOB NO	2)	- 46	2	
SPECIAL INSTRUCTIONS:					/ MTBE & BTEX)/8015-8020)	18015) 5:11:00 20	EL & MOTOR OIL /8015)	ORGANICS \$240/8260)	ATILE ORGANICS 270)	ASE	7000) 7000)	TALS 7000)		CHLORINATED ES (EPA 8081A)	GENATES	or DISSOLVED)	EX & 5 OXY's F Naphthaline		ш	,	
SAMPLE ID.	DATE	TIME	MATRIX	QUANTITY	TPH-GAS (EPA 5030	TPH-DIES (EPA 3510	TPH-DIES (EPA 3510	VOLATILE (EPA 624/8	SEMI-VOL/ (EPA 625/8	OIL & GRE (EPA 5520)	LUFT META (EPA 6010+	CAM 17 ME (EPA 6010+	PCBs (EPA 8082)	ORGANOC	FUEL OXY (EPA 8260)	Pb (TOTAL (EPA 6010)	TPH-G, BTI (EPA 8260)		COMPOSIT	EDF	НОГД
BH-D 11.5'	1-28-44	1510	5	1	•	×											X				×
RELINQUISHED BY: Relinquished BY: (signature) Robert E-Kity 1-2946	RECEIVER (signature) Ben	BY:		(time	605	REL B (SIOT			Y:	¥45-	REC : (sigi	DEIVED	BY LA	BORAT (tim	ORY e)	CO	MMENTS:				
(printed name) (date) (printed name) (date) Company-ASE, INC. Company- M 4 /				:)	(printed name) (date) Company-					(printed name) (date) ST Company-					ST/	TURN AROUND TIME TANDARD 24Hr 48Hr 72Hr THER:					



Sample Receipt Checklist

Client Name: Project Name: WorkOrder №: Carrier:	Aqua Science Engineers, Inc.4641; Elliott Property1601B84Matrix: SoilBenjamin Yslas (MAI Courier)			Date and Time Received: Date Logged: Received by: Logged by:	1/29/2016 17:45 1/29/2016 Briana Cutino Briana Cutino
	Chain of C	ustody	<u>/ (COC) Ir</u>	nformation	
Chain of custody	present?	Yes	✓	No 🗌	
Chain of custody	signed when relinquished and received?	Yes	✓	No	
Chain of custody	agrees with sample labels?	Yes	✓	No 🗌	
Sample IDs noted	d by Client on COC?	Yes	✓	No 🗌	
Date and Time of	f collection noted by Client on COC?	Yes	✓	No 🗌	
Sampler's name	noted on COC?	Yes	✓	No 🗌	
	Sample	e Rece	eipt Inforr	nation	
Custody seals int	act on shipping container/cooler?	Yes		No	NA 🗹
Shipping containe	er/cooler in good condition?	Yes	✓	No 🗌	
Samples in prope	er containers/bottles?	Yes	✓	No 🗌	
Sample container	rs intact?	Yes	✓	No 🗌	
Sufficient sample	volume for indicated test?	Yes		No 🗌	
	Sample Preservation	on and	Hold Tim	ne (HT) Information	
All samples recei	ved within holding time?	Yes	✓	No 🗌	
Sample/Temp Bla	ank temperature		Temp:	2.9°C	
Water - VOA vial	s have zero headspace / no bubbles?	Yes		No 🗌	NA 🖌
Sample labels ch	ecked for correct preservation?	Yes	✓	No 🗌	
pH acceptable up	oon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes		No 🗌	NA 🖌
Samples Receive	ed on Ice?	Yes	✓	No 🗌	
	(Ісе Туре	: WE	TICE)		
UCMR3 Samples Total Chlorine t	x: rested and acceptable upon receipt for EPA 522?	Yes		No 🗌	NA 🖌
Free Chlorine to 300.1, 537, 539	ested and acceptable upon receipt for EPA 218.7, ??	Yes		No 🗌	NA 🗹

* NOTE: If the "No" box is checked, see comments below.

Comments:



Aqua Science Engineers, Inc. 55 Oak Court, Suite 220, Danville, CA 94526 (925) 820-9391 - Fax (925) 837-4853

APPENDIX D

Certified Analytical Report and Chain of Custody Documentation For Groundwater Samples



McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder:1601B85Report Created for:Aqua Science Engineers, Inc.55 Oak Court Suite 220
Danville, CA 94526Project Contact:Robert Kitay
4641; Elliott PropertyProject Received:01/29/2016

Analytical Report reviewed & approved for release on 02/05/2016 by:

Angela Rydelius, Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.



1534 Willow Pass Rd. Pittsburg, CA 94565 ♦ TEL: (877) 252-9262 ♦ FAX: (925) 252-9269 ♦ www.mccampbell.com NELAP: 4033ORELAP ♦ ELAP: 1644 ♦ ISO/IEC: 17025:2005 ♦ WSDE: C972-11 ♦ ADEC: UST-098 ♦ UCMR3



Glossary of Terms & Qualifier Definitions

Client: Aqua Science Engineers, Inc.

Project: 4641; Elliott Property

WorkOrder: 1601B85

Glossary Abbreviation

95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test
DUP	Duplicate
EDL	Estimated Detection Limit
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

Glossary of Terms & Qualifier Definitions

Client: Aqua Science Engineers, Inc.

Project: 4641; Elliott Property

WorkOrder: 1601B85

Analytical Qualifiers

b1	aqueous sample that contains greater than ~1 vol. % sediment
c8	sample pH is greater than 2
e2	diesel range compounds are significant; no recognizable pattern
e7	oil range compounds are significant
e11	stoddard solvent/mineral spirit (?)



Client:	Aqua Science Engineers, Inc.
Date Received:	1/29/16 20:18
Date Prepared:	2/3/16
Project:	4641; Elliott Property

WorkOrder:	1601B85
Extraction Method:	SW5030B
Analytical Method:	SW8260B
Unit:	μg/L

TPH(g) by Purge & Trap and GC/MS **Date Collected Instrument** Client ID Lab ID Matrix **Batch ID** BH-A Water 1601B85-001C Water 01/28/2016 14:45 GC16 116242 <u>DF</u> **Analytes** Result <u>RL</u> Date Analyzed TPH(g) 76 50 1 02/03/2016 13:55 Surrogates **REC (%)** Limits Dibromofluoromethane 116 70-130 02/03/2016 13:55 <u>Analyst(s):</u> KF Analytical Comments: c8,b1 **Date Collected Instrument Client ID** Lab ID Matrix **Batch ID** BH-B Water 1601B85-002C Water 01/28/2016 09:40 GC16 116242 <u>DF</u> Analytes Result <u>RL</u> Date Analyzed TPH(g) ND 50 1 02/03/2016 13:16 REC (%) Limits Surrogates Dibromofluoromethane 113 70-130 02/03/2016 13:16 Analyst(s): KF Client ID Lab ID Matrix **Date Collected Instrument Batch ID** BH-C Water 1601B85-003C 01/28/2016 14:20 GC16 116242 Water **Result** <u>RL</u> <u>DF</u> Date Analyzed **Analytes** TPH(g) 1000 50 1 02/03/2016 14:35 **REC (%)** Limits Surrogates Dibromofluoromethane 119 70-130 02/03/2016 14:35 Analyst(s): KF Analytical Comments: c8,b1 **Client ID** Lab ID Matrix **Date Collected Instrument Batch ID** BH-D Water 1601B85-004C 01/28/2016 15:30 GC16 116242 Water <u>DF</u> Analytes Result <u>RL</u> Date Analyzed TPH(g) ND 50 02/03/2016 15:15 1 Surrogates REC (%) Limits Dibromofluoromethane 117 70-130 02/03/2016 15:15 Analytical Comments: c8 Analyst(s): KF





Client:	Aqua Science Engineers, Inc.
Date Received:	1/29/16 20:18
Date Prepared:	2/4/16
Project:	4641; Elliott Property

WorkOrder:	1601B85
Extraction Method:	SW5030B
Analytical Method:	SW8260B
Unit:	μg/L

Client ID	Lab ID	Matrix	Date Co	ollected Instrument	Batch ID
BH-A Water	1601B85-001C	Water	01/28/201	16 14:45 GC10	116242
Analytes	Result		<u>RL</u>	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND		0.50	1	02/04/2016 16:10
Benzene	0.99		0.50	1	02/04/2016 16:10
t-Butyl alcohol (TBA)	ND		2.0	1	02/04/2016 16:10
Diisopropyl ether (DIPE)	ND		0.50	1	02/04/2016 16:10
Ethylbenzene	ND		0.50	1	02/04/2016 16:10
Ethyl tert-butyl ether (ETBE)	ND		0.50	1	02/04/2016 16:10
Methyl-t-butyl ether (MTBE)	1.2		0.50	1	02/04/2016 16:10
Naphthalene	ND		0.50	1	02/04/2016 16:10
Toluene	ND		0.50	1	02/04/2016 16:10
Xylenes, Total	ND		0.50	1	02/04/2016 16:10
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	110		70-130		02/04/2016 16:10
Toluene-d8	115		70-130		02/04/2016 16:10
4-BFB	85		70-130		02/04/2016 16:10
Analyst(s): KF			Analytical Comm	nents: b1	
Client ID	Lab ID	Matrix	Date Co	llected Instrument	Batch ID

Client ID	Lab ID	Matrix	Date Co	ollected Instrument	Batch ID
BH-B Water	1601B85-002C	Water	01/28/20	16 09:40 GC10	116242
Analytes	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
tert-Amyl methyl ether (TAME)	ND		0.50	1	02/04/2016 16:50
Benzene	ND		0.50	1	02/04/2016 16:50
t-Butyl alcohol (TBA)	2.8		2.0	1	02/04/2016 16:50
Diisopropyl ether (DIPE)	ND		0.50	1	02/04/2016 16:50
Ethylbenzene	ND		0.50	1	02/04/2016 16:50
Ethyl tert-butyl ether (ETBE)	ND		0.50	1	02/04/2016 16:50
Methyl-t-butyl ether (MTBE)	0.83		0.50	1	02/04/2016 16:50
Naphthalene	ND		0.50	1	02/04/2016 16:50
Toluene	ND		0.50	1	02/04/2016 16:50
Xylenes, Total	ND		0.50	1	02/04/2016 16:50
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	110		70-130		02/04/2016 16:50
Toluene-d8	115		70-130		02/04/2016 16:50
4-BFB	86		70-130		02/04/2016 16:50
Analyst(s): KF					





Client:	Aqua Science Engineers, Inc.
Date Received:	1/29/16 20:18
Date Prepared:	2/4/16
Project:	4641; Elliott Property

WorkOrder:	1601B85
Extraction Method:	SW5030B
Analytical Method:	SW8260B
Unit:	μg/L

Client ID	Lab ID	Matrix	Date Collecte	d Instrument	Batch ID
BH-C Water	1601B85-003C	Water	01/28/2016 14:2	0 GC10	116242
Analytes	Result		<u>RL</u> <u>DF</u>		Date Analyzed
tert-Amyl methyl ether (TAME)	ND		0.50 1		02/04/2016 17:29
Benzene	16		0.50 1		02/04/2016 17:29
t-Butyl alcohol (TBA)	28		2.0 1		02/04/2016 17:29
Diisopropyl ether (DIPE)	0.69		0.50 1		02/04/2016 17:29
Ethylbenzene	1.1		0.50 1		02/04/2016 17:29
Ethyl tert-butyl ether (ETBE)	ND		0.50 1		02/04/2016 17:29
Methyl-t-butyl ether (MTBE)	9.4		0.50 1		02/04/2016 17:29
Naphthalene	ND		0.50 1		02/04/2016 17:29
Toluene	1.3		0.50 1		02/04/2016 17:29
Xylenes, Total	2.2		0.50 1		02/04/2016 17:29
<u>Surrogates</u>	<u>REC (%)</u>		Limits		
Dibromofluoromethane	111		70-130		02/04/2016 17:29
Toluene-d8	112		70-130		02/04/2016 17:29
4-BFB	107		70-130		02/04/2016 17:29
<u>Analyst(s):</u> KF			Analytical Comments:	b1	
Client ID	Lab ID	Matrix	Date Collecte	d Instrument	Batch ID
BH-D Water	1601B85-004C	Water	01/28/2016 15:3	0 GC10	116242

Analytes	Result	<u>RL</u>	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.50	1	02/04/2016 22:10
Benzene	ND	0.50	1	02/04/2016 22:10
t-Butyl alcohol (TBA)	ND	2.0	1	02/04/2016 22:10
Diisopropyl ether (DIPE)	ND	0.50	1	02/04/2016 22:10
Ethylbenzene	ND	0.50	1	02/04/2016 22:10
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	02/04/2016 22:10
Methyl-t-butyl ether (MTBE)	7.6	0.50	1	02/04/2016 22:10
Naphthalene	ND	0.50	1	02/04/2016 22:10
Toluene	ND	0.50	1	02/04/2016 22:10
Xylenes, Total	ND	0.50	1	02/04/2016 22:10
Surrogates	<u>REC (%)</u>	Limits		
Dibromofluoromethane	113	70-130		02/04/2016 22:10
Toluene-d8	116	70-130		02/04/2016 22:10
4-BFB	85	70-130		02/04/2016 22:10
Analyst(s): KF				



Client:	Aqua Science Engineers, Inc.
Date Received:	1/29/16 20:18
Date Prepared:	1/29/16
Project:	4641; Elliott Property

WorkOrder:	1601B85
Extraction Method:	SW3510C/3630C
Analytical Method:	SW8015B
Unit:	μg/L

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID
BH-A Water	1601B85-001B	Water	01/28/2016 14:45 GC6B	116003
Analytes	Result		<u>RL</u> <u>DE</u>	Date Analyzed
TPH-Diesel (C10-C23)	8200		2000 20	02/03/2016 20:54
<u>Surrogates</u>	<u>REC (%)</u>		Limits	
C9	104		70-130	02/03/2016 20:54
<u>Analyst(s):</u> TK			Analytical Comments: e7,e2,b1	
Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID
BH-B Water	1601B85-002B	Water	01/28/2016 09:40 GC2A	116003
Analytes	Result		<u>RL</u> <u>DF</u>	Date Analyzed
TPH-Diesel (C10-C23)	800		500 10	02/04/2016 12:43
Surrogates	<u>REC (%)</u>		Limits	
C9	100		70-130	02/04/2016 12:43
<u>Analyst(s):</u> TK			Analytical Comments: e7,e2	
Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID
BH-C Water	1601B85-003B	Water	01/28/2016 14:20 GC11A	116003
Analytes	Result		<u>RL DF</u>	Date Analyzed
TPH-Diesel (C10-C23)	1600		500 5	02/02/2016 14:58
Surrogates	<u>REC (%)</u>		Limits	
C9	88		70-130	02/02/2016 14:58
<u>Analyst(s):</u> TK			Analytical Comments: e7,e11,b1	
Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID
BH-D Water	1601B85-004B	Water	01/28/2016 15:30 GC11B	116003
Analytes	<u>Result</u>		<u>RL DF</u>	Date Analyzed
TPH-Diesel (C10-C23)	7000		5000 100	02/02/2016 17:15
Surrogates	<u>REC (%)</u>		Limits	
C9	107		70-130	02/02/2016 17:15



Client:	Aqua Science Engineers, Inc.
Date Received:	1/29/16 20:18
Date Prepared:	1/29/16
Project:	4641; Elliott Property

WorkOrder:	1601B85
Extraction Method:	SW3510C
Analytical Method:	SW8015B
Unit:	μg/L

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID
BH-A Water	1601B85-001A	Water	01/28/2016 14:45 GC11A	116038
Analytes	<u>Result</u>		<u>RL</u> <u>DF</u>	Date Analyzed
TPH-Diesel (C10-C23)	5500		2000 20	02/02/2016 18:23
Surrogates	<u>REC (%)</u>		Limits	
C9	85		70-130	02/02/2016 18:23
<u>Analyst(s):</u> TK			Analytical Comments: e7,e2,b1	
Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID
BH-B Water	1601B85-002A	Water	01/28/2016 09:40 GC6A	116038
Analytes	<u>Result</u>		<u>RL DE</u>	Date Analyzed
TPH-Diesel (C10-C23)	3600		2500 50	02/02/2016 02:58
Surrogates	<u>REC (%)</u>		Limits	
C9	92		70-130	02/02/2016 02:58
<u>Analyst(s):</u> TK			Analytical Comments: e2	
Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID
BH-C Water	1601B85-003A	Water	01/28/2016 14:20 GC6A	116038
Analytes	<u>Result</u>		<u>RL DE</u>	Date Analyzed
TPH-Diesel (C10-C23)	1200		100 2	02/02/2016 07:45
				02/02/2010 07.45
<u>Surrogates</u>	<u>REC (%)</u>		Limits	02/02/2010 07.40
<u>Surrogates</u> C9	<u>REC (%)</u> 91		<u>Limits</u> 70-130	02/02/2016 07:45
<u>Surrogates</u> C9 <u>Analyst(s):</u> TK	<u>REC (%)</u> 91		<u>Limits</u> 70-130 <u>Analytical Comments:</u> e11,b1	02/02/2016 07:45
Surrogates C9 Analyst(s): TK Client ID	<u>REC (%)</u> 91 Lab ID	Matrix	Limits 70-130 Analytical Comments: e11,b1 Date Collected Instrument	02/02/2016 07:45 Batch ID
Surrogates C9 Analyst(s): TK Client ID BH-D Water	REC (%) 91 Lab ID 1601B85-004A	Matrix Water	Limits 70-130 Analytical Comments: e11,b1 Date Collected Instrument 01/28/2016 15:30 GC11B	02/02/2016 07:45 Batch ID 116038
Surrogates C9 Analyst(s): TK Client ID BH-D Water Analytes	REC (%) 91 Lab ID 1601B85-004A Result	Matrix Water	Limits 70-130 Analytical Comments: e11,b1 Date Collected Instrument 01/28/2016 15:30 GC11B RL DE	02/02/2016 07:45 Batch ID 116038 Date Analyzed
Surrogates C9 Analyst(s): TK Client ID BH-D Water Analytes TPH-Diesel (C10-C23)	REC (%) 91 Lab ID 1601B85-004A Result 11,000	Matrix Water	Limits 70-130 Analytical Comments: e11,b1 Date Collected Instrument 01/28/2016 15:30 RL DF 7500 50	02/02/2016 07:45 02/02/2016 07:45 Batch ID 116038 Date Analyzed 02/02/2016 18:23
Surrogates C9 Analyst(s): TK Client ID BH-D Water Analytes TPH-Diesel (C10-C23) Surrogates	REC (%) 91 Lab ID 1601B85-004A Result 11,000 REC (%)	Matrix Water	Limits 70-130 Analytical Comments: e11,b1 Date Collected Instrument 01/28/2016 15:30 GC11B RL DE 7500 50 Limits E	02/02/2016 07:45 Batch ID 116038 Date Analyzed 02/02/2016 18:23
Surrogates C9 Analyst(s): TK Client ID BH-D Water Analytes TPH-Diesel (C10-C23) Surrogates C9	REC (%) 91 Lab ID 1601B85-004A Result 11,000 REC (%) 100	Matrix Water	Limits 70-130 Analytical Comments: e11,b1 Date Collected Instrument 01/28/2016 15:30 GC11B RL<	02/02/2016 07:45 Batch ID 116038 Date Analyzed 02/02/2016 18:23 02/02/2016 18:23

McCampbell Analytical, Inc.

CLIENT:Aqua Science Engineers, Inc.Work Order:1601B85Project:4641; Elliott Property

ANALYTICAL QC SUMMARY REPORT

BatchID: 116242

SampleID MB-116242 Batch ID: 116242	TestCode: 8260GAS_W TestNo: SW8260B	Units: µg/L Prep Da Run ID: GC16_160204B Analysis Da	ate: 2/3/2016 ate: 2/3/2016
Analyte	Result	PQL SPKValue SPKRefVal %REC Limits RPDRefVal	%RPD RPDLimit Qual
TPH(g)	ND	50 -	
Surrogate Recovery Dibromofluoromethane	29.6	25 118 70 - 130	

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range



CLIENT: Aqua Science Engineers, Inc. Work Order: 1601B85

Project: 4641; Elliott Property

ANALYTICAL QC SUMMARY REPORT

BatchID: 116242

SampleID LCS-116242	TestCode: 8260GAS_W			Units:	µg/L		Prep Date: 2/3/2016
Batch ID: 116242	TestNo: SW8260B			Run ID:	GC16_	160204B	Analysis Date: 2/3/2016
Analyte	Result	PQL	SPKValue	SPKRefVal	%REC	Limits	RPDRefVal %RPD RPDLimit Qual
VOC (C6-C12)	542	50	644	0	84	75 - 105	
Surrogate Recovery Dibromofluoromethane	29.6		25		118	70 - 130	

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range



CDPH ELAP 1644 ♦ NELAP 4033ORELAP

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Client:Aqua Science Engineers, Inc.Date Prepared:1/29/16Date Analyzed:1/29/16 - 1/30/16Instrument:GC39AMatrix:WaterProject:4641; Elliott Property

WorkOrder:	1601B85
BatchID:	116003
Extraction Method:	SW3510C/3630C
Analytical Method:	SW8015B
Unit:	μg/L
Sample ID:	MB/LCS-116003

QC Report for SW8015B w/SG Clean-Up

MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
ND	1030	50	1000	-	103	59-151
ND	-	250	-	-	-	-
631	622		625	101	99	65-122
	MB Result ND ND 631	MB ResultLCS ResultND1030ND-631622	MB ResultLCS ResultRLND103050ND-250631622	MB Result LCS Result RL SPK Val ND 1030 50 1000 ND - 250 - 631 622 625 625	MB Result LCS Result RL SPK Val MB SS %REC ND 1030 50 1000 - ND - 250 - - 631 622 625 101	MB Result LCS Result RL SPK Val MB SS %REC LCS %REC ND 1030 50 1000 - 103 ND - 250 - - - 631 622 - 625 101 99


Client:	Aqua Science Engineers, Inc.	WorkO
Date Prepared:	1/29/16	BatchI
Date Analyzed:	2/1/16	Extract
Instrument:	GC39A, GC39B	Analyti
Matrix:	Water	Unit:
Project:	4641; Elliott Property	Sample

1601B85
116038
SW3510C
SW8015B
μg/L
MB/LCS-116038

QC Report for SW8015B w/out SG Clean-Up

MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
ND	1050	50	1000	-	105	61-157
ND	-	250	-	-	-	-
615	628		625	98	100	65-122
	MB Result ND ND 615	MB ResultLCS ResultND1050ND-615628	MB ResultLCS ResultRLND105050ND-250615628	MB Result LCS Result RL SPK Val ND 1050 50 1000 ND - 250 - 615 628 625 625	MB Result LCS Result RL SPK Val MB SS %REC ND 1050 50 1000 - ND - 250 - - 615 628 625 98	MB Result LCS Result RL SPK Val MB SS %REC LCS %REC ND 1050 50 1000 - 105 ND - 250 - - - 615 628 - 625 98 100

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Client:	Aqua Science Engineers, Inc.
Date Prepared:	2/3/16
Date Analyzed:	2/3/16
Instrument:	GC16
Matrix:	Water
Project:	4641; Elliott Property

WorkOrder:	1601B85
BatchID:	116242
Extraction Method:	SW5030B
Analytical Method:	SW8260B
Unit:	μg/L
Sample ID:	MB/LCS-116242
	1601B85-002CMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	10.4	0.50	10	-	104	54-140
Benzene	ND	9.72	0.50	10	-	97	47-158
Bromobenzene	ND	-	0.50	-	-	-	-
Bromochloromethane	ND	-	0.50	-	-	-	-
Bromodichloromethane	ND	-	0.50	-	-	-	-
Bromoform	ND	-	0.50	-	-	-	-
Bromomethane	ND	-	0.50	-	-	-	-
2-Butanone (MEK)	ND	-	2.0	-	-	-	-
t-Butyl alcohol (TBA)	ND	42.8	2.0	40	-	107	42-140
n-Butyl benzene	ND	-	0.50	-	-	-	-
sec-Butyl benzene	ND	-	0.50	-	-	-	-
tert-Butyl benzene	ND	-	0.50	-	-	-	-
Carbon Disulfide	ND	-	0.50	-	-	-	-
Carbon Tetrachloride	ND	-	0.50	-	-	-	-
Chlorobenzene	ND	9.70	0.50	10	-	97	43-157
Chloroethane	ND	-	0.50	-	-	-	-
Chloroform	ND	-	0.50	-	-	-	-
Chloromethane	ND	-	0.50	-	-	-	-
2-Chlorotoluene	ND	-	0.50	-	-	-	-
4-Chlorotoluene	ND	-	0.50	-	-	-	-
Dibromochloromethane	ND	-	0.50	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.20	-	-	-	-
1,2-Dibromoethane (EDB)	ND	10.0	0.50	10	-	100	44-155
Dibromomethane	ND	-	0.50	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.50	-	-	-	-
Dichlorodifluoromethane	ND	-	0.50	-	-	-	-
1,1-Dichloroethane	ND	-	0.50	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	10.6	0.50	10	-	106	66-125
1,1-Dichloroethene	ND	9.58	0.50	10	-	96	47-149
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-

_____QA/QC Officer

Client:	Aqua Science Engineers, Inc.
Date Prepared:	2/3/16
Date Analyzed:	2/3/16
Instrument:	GC16
Matrix:	Water
Project:	4641; Elliott Property

WorkOrder:	1601B85
BatchID:	116242
Extraction Method:	SW5030B
Analytical Method:	SW8260B
Unit:	μg/L
Sample ID:	MB/LCS-116242
	1601B85-002CMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
Diisopropyl ether (DIPE)	ND	10.1	0.50	10	-	101	57-136
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	10.4	0.50	10	-	104	55-137
Freon 113	ND	-	0.50	-	-	-	-
Hexachlorobutadiene	ND	-	0.50	-	-	-	-
Hexachloroethane	ND	-	0.50	-	-	-	-
2-Hexanone	ND	-	0.50	-	-	-	-
Isopropylbenzene	ND	-	0.50	-	-	-	-
4-Isopropyl toluene	ND	-	0.50	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	10.3	0.50	10	-	103	53-139
Methylene chloride	ND	-	0.50	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.50	-	-	-	-
Naphthalene	ND	-	0.50	-	-	-	-
n-Propyl benzene	ND	-	0.50	-	-	-	-
Styrene	ND	-	0.50	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
Tetrachloroethene	ND	-	0.50	-	-	-	-
Toluene	ND	9.38	0.50	10	-	94	52-137
1,2,3-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.50	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.50	-	-	-	-
Trichloroethene	ND	9.66	0.50	10	-	97	43-157
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	-

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Client:	Aqua Science Engineers, Inc.	WorkOrder:	1601B85
Date Prepared:	2/3/16	BatchID:	116242
Date Analyzed:	2/3/16	Extraction Method:	SW5030B
Instrument:	GC16	Analytical Method:	SW8260B
Matrix:	Water	Unit:	μg/L
Project:	4641; Elliott Property	Sample ID:	MB/LCS-116242 1601B85-002CMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	26.5	26.6		25	106	106	70-130
Toluene-d8	27.1	26.4		25	108	105	70-130
4-BFB	2.41	2.63		2.5	96	105	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	10.2	9.64	10	ND	102	96	69-139	5.93	20
Benzene	9.64	9.02	10	ND	95	89	69-141	6.58	20
t-Butyl alcohol (TBA)	42.4	41.2	40	2.2	101	98	41-152	2.86	20
Chlorobenzene	9.37	8.80	10	ND	94	88	77-120	6.26	20
1,2-Dibromoethane (EDB)	9.83	9.43	10	ND	98	94	76-135	4.15	20
1,2-Dichloroethane (1,2-DCA)	10.5	9.82	10	ND	105	98	73-139	6.42	20
1,1-Dichloroethene	9.52	8.73	10	ND	95	87	59-140	8.56	20
Diisopropyl ether (DIPE)	10.1	9.47	10	ND	101	95	72-140	6.60	20
Ethyl tert-butyl ether (ETBE)	10.3	9.65	10	ND	103	97	71-140	6.42	20
Methyl-t-butyl ether (MTBE)	10.3	9.64	10	0.83	95	88	73-139	6.47	20
Toluene	9.31	8.84	10	0.54	88	83	71-128	5.19	20
Trichloroethene	9.54	8.80	10	ND	95	88	64-132	8.05	20
Surrogate Recovery									
Dibromofluoromethane	27.0	26.9	25		108	108	73-131	0	20
Toluene-d8	26.0	26.6	25		104	107	72-117	2.47	20
4-BFB	2.62	2.50	2.5		105	100	74-116	4.95	20

_____QA/QC Officer Page 15 of 19

McCampbell Analytical, I	nc.	C. CHAIN-OF-CUSTODY RECORD Page 1 of 1												
Pittsburg, CA 94565-1701 (925) 252-9262				WorkO	rder: 160	Clien	ClientCode: ASED							
	□WaterTrax	WriteOn	EDF		el 🗌	EQuIS	Email	[HardCop	ру	ThirdParty		J-flag	
Report to: Robert Kitay Aqua Science Engineers, Inc. 55 Oak Court Suite 220 Danville, CA 94526 (925) 820-9391 FAX: (925) 837-4853	Email: rk cc/3rd Party: PO: ProjectNo: 46	iitay@aquascie 641; Elliott Prop	enceengineers.co perty	m	Bill to: Diane Aqua 217 V Rosev deezt	e Schiell Science Vild Flowe ville, CA s thng22@y	Engineers, li er Drive 95678 yahoo.com	าC.	F I I	Reque Date 1 Date 1	sted TAT: Received: Logged:	5 c 01 01	days; 1/29/20 1/29/20	16 16
							Requeste	d Tests	(See lege	nd be	low)			
Lab ID Client ID		Matrix	Collection Date	Hold	1 2	3	4 5	6	7	8	9 1	0	11	12

1601B85-001	BH-A Water	Water	1/28/2016 14:45	С	С	Α	В				<u> </u>
1601B85-002	BH-B Water	Water	1/28/2016 9:40	С	С	Α	В	-			
1601B85-003	BH-C Water	Water	1/28/2016 14:20	С	С	Α	В				
1601B85-004	BH-D Water	Water	1/28/2016 15:30	С	С	Α	В				

Test Legend:

1	8260GAS_W
5	
9	

2	8260VOC_W
6	
10	

3	TPH(D)_W
7	
11	

4	TPH(D)WSG_W
8	
12	

The following SampIDs: 001C, 002C, 003C, 004C contain testgroup.

Prepared by: Briana Cutino

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: AQUA SCIENCE ENGINEERS, INC.

Project:

4641; Elliott Property

Comments:

QC Level: LEVEL 2

Client Contact: Robert Kitay

Contact's Email: rkitay@aquascienceengineers.com

Work Order: 1601B85 Date Logged: 1/29/2016

		WaterTrax		Excel	Fax Fax		opyThirdPart	y 🗌 .	l-flag	
Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	ТАТ	Sediment Content	Hold SubOut
1601B85-001A	BH-A Water	Water	SW8015B (Diesel)	3	VOA w/ HCl		1/28/2016 14:45	5 days	Present	
1601B85-001B	BH-A Water	Water	SW8015B (Diesel w/ S.G. Clean-Up)	3	VOA w/ HCl		1/28/2016 14:45	5 days	Present	
1601B85-001C	BH-A Water	Water	TPH(g) & 8260 (Misc. Compounds) by P&T GCMS	3	VOA w/ HCl		1/28/2016 14:45	5 days	Present	
1601B85-002A	BH-B Water	Water	SW8015B (Diesel)	3	VOA w/ HCl		1/28/2016 9:40	5 days	Present	
1601B85-002B	BH-B Water	Water	SW8015B (Diesel w/ S.G. Clean-Up)	3	VOA w/ HCl		1/28/2016 9:40	5 days	Present	
1601B85-002C	BH-B Water	Water	TPH(g) & 8260 (Misc. Compounds) by P&T GCMS	3	VOA w/ HCl		1/28/2016 9:40	5 days	Present	
1601B85-003A	BH-C Water	Water	SW8015B (Diesel)	3	VOA w/ HCl		1/28/2016 14:20	5 days	Present	
1601B85-003B	BH-C Water	Water	SW8015B (Diesel w/ S.G. Clean-Up)	3	VOA w/ HCl		1/28/2016 14:20	5 days	Present	
1601B85-003C	BH-C Water	Water	TPH(g) & 8260 (Misc. Compounds) by P&T GCMS	3	VOA w/ HCl		1/28/2016 14:20	5 days	Present	
1601B85-004A	BH-D Water	Water	SW8015B (Diesel)	3	VOA w/ HCl		1/28/2016 15:30	5 days	Present	
1601B85-004B	BH-D Water	Water	SW8015B (Diesel w/ S.G. Clean-Up)	3	VOA w/ HCl		1/28/2016 15:30	5 days	Present	
1601B85-004C	BH-D Water	Water	TPH(g) & 8260 (Misc. Compounds) by P&T GCMS	3	VOA w/ HCl		1/28/2016 15:30	5 days	Present	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

Aqua Science Engineers Inc.													1	100	B	Ø	5			
55 Oak Court, Suite 220 Danville, CA 94526 (925) 820-9391 FAX (925) 837-4853			1	C	h	ai	n	oí		Cu	st	to	dy	/		-			-	-
ANALYSIS REOLU	-97		<u></u> *			PRO ADD	JECTI	NAME	E 5 1	llion Revi	tt	Prop	Cart	y	1, 0	A	PAGE JOB NO.	49	41	/
SPECIAL INSTRUCTIONS: TPH-D to be analyzed and without silica g	zed bot	th w anup	ith :		S / MTBE & BTEX 30/8015-8020)	SEL Mith + Withon 10/8015) Silica Cal	SEL & MOTOR OIL (0/8015)	E ORGANICS /8240/8260)	LATILE ORGANICS (8270)	EASE	1ALS (5) +7000)	IETALS +7000)	2)	OCHLORINATED DES (EPA 8081A)	YGENATES	() ()	TEX & 5 OXY's t Nophthalene	TE		
SAMPLEID. BH-A Watur	DATE DATE	I445	E MATRIX		TPH-GA (EPA 50)	TPH-DIE (EPA 35-	TPH-DIE (EPA 351	VOLATIL (EPA 624	SEMI-VO (EPA 625	OIL & GR (EPA 552)	LUFT ME (EPA 6010	CAM 17 N (EPA 6010	PCBs (EPA 808	ORGANC	FUEL OX' (EPA 8260	Pb (TOTA (EPA 6010	TPH-G, B (EPA 8260	COMPOSI	EDF	НОГР
BH-B Water BH-E Water BH-D Water		940	,]	99		XX											×			X
		1770	~	1		X					•	-					X			
RELINQUISHED BY:	RECEIVE	D BY:		11	15	REL	NQUIS	HED B'	Y:		REC	EIVED	BY LAI	BORAT	ORY	Со	MMENTS:			
Signature) (time) hart E. Kity 1-29-15	(signature Ben Y	slas		(time	129/16	(signature) (time)					(sıgr	(signature) (time)				-				
orinted name) (date)	(printed name) (date) Company- MA					(print Com	printed name) (date) (printed name) (date) (STANDARD 2 company- Company- OTHER:					AROUND TIME 24Hr 48Hr 72Hr								



Sample Receipt Checklist

Client Name: Project Name: WorkOrder №: Carrier:	Aqua Science Engineers, Inc.4641; Elliott Property1601B85Matrix:Benjamin Yslas (MAI Courier)			Date and Time Received: Date Logged: Received by: Logged by:	1/29/2016 17:45 1/29/2016 Briana Cutino Briana Cutino				
	Chain of C	ustody	<u>/ (COC) </u>	nformation					
Chain of custody	present?	Yes	✓	No 🗌					
Chain of custody	signed when relinquished and received?	Yes	✓	No 🗌					
Chain of custody	agrees with sample labels?	Yes	✓	No 🗌					
Sample IDs noted	d by Client on COC?	Yes	✓	No 🗌					
Date and Time of	f collection noted by Client on COC?	Yes	✓	No 🗌					
Sampler's name	noted on COC?	Yes	✓	No 🗌					
	Sampl	e Rece	eipt Infor	mation					
Custody seals int	act on shipping container/cooler?	Yes		No 🗌					
Shipping containe	er/cooler in good condition?	Yes	✓	No 🗌					
Samples in prope	er containers/bottles?	Yes	✓	No 🗌					
Sample containe	rs intact?	Yes	✓	No 🗌					
Sufficient sample	volume for indicated test?	Yes	✓	No 🗌					
	Sample Preservation	on and	Hold Tir	me (HT) Information					
All samples recei	ved within holding time?	Yes	✓	No 🗌					
Sample/Temp Bla	ank temperature		Temp	: 2.9°C					
Water - VOA vial	s have zero headspace / no bubbles?	Yes		No 🗌	NA 🖌				
Sample labels ch	ecked for correct preservation?	Yes	✓	No 🗌					
pH acceptable up	oon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes		No 🗌	NA 🗹				
Samples Receive	ed on Ice?	Yes	✓	No 🗌					
(Ice Type: WET ICE)									
UCMR3 Samples Total Chlorine 1	Sector 22 Sec	Yes		No 🗌	NA 🗹				
Free Chlorine t 300.1, 537, 539	ested and acceptable upon receipt for EPA 218.7, ??	Yes		No 🗌	NA 🗹				

* NOTE: If the "No" box is checked, see comments below.

Comments:



Aqua Science Engineers, Inc. 55 Oak Court, Suite 220, Danville, CA 94526 (925) 820-9391 - Fax (925) 837-4853

APPENDIX E

Certified Analytical Report and Chain of Custody Documentation For Soil Vapor Samples



McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder:1601B91Report Created for:Aqua Science Engineers, Inc.55 Oak Court Suite 220
Danville, CA 94526Project Contact:Robert Kitay
4641; Elliott PropertyProject Received:01/29/2016

Analytical Report reviewed & approved for release on 02/04/2016 by:

Angela Rydelius, Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.



1534 Willow Pass Rd. Pittsburg, CA 94565 ♦ TEL: (877) 252-9262 ♦ FAX: (925) 252-9269 ♦ www.mccampbell.com NELAP: 4033ORELAP ♦ ELAP: 1644 ♦ ISO/IEC: 17025:2005 ♦ WSDE: C972-11 ♦ ADEC: UST-098 ♦ UCMR3



Glossary of Terms & Qualifier Definitions

Client: Aqua Science Engineers, Inc.

Project: 4641; Elliott Property

WorkOrder: 1601B91

Glossary Abbreviation

95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test
DUP	Duplicate
EDL	Estimated Detection Limit
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

Quality Control Qualifiers

LCS recovery for this compound is outside of acceptance limits.



Case Narrative

Client: Aqua Science Engineers, Inc.

Project: 4641; Elliott Property

Work Order: 1601B91 February 04, 2016

TO-15 ANALYSIS

All summa canisters are EVACUATED 5 days after the reporting of the results. Please call or email if a longer retention time is required.

In an effort to attain the lowest reporting limits possible for the majority of the TO-15 target list, high level compounds may be analyzed using EPA Method 8260B.

Polymer (Tedlar) bags are not recommended for TO15 samples. The disadvantages are listed in Appendix B of the DTSC Active Soil Gas Advisory of July 2015.





Client:	Aqua Science Engineers, Inc.
Date Received:	1/29/16 21:45
Date Prepared:	2/2/16
Project:	4641; Elliott Property

WorkOrder:	1601B91
Extraction Method:	ASTM D 1946-90
Analytical Method:	ASTM D 1946-90
Unit:	%

		Heliun	1			
Client ID	Lab ID	Matrix	Date Collected	Instrum	nent	Batch ID
SVW-1	1601B91-001A	SoilGas	01/28/2016 14:15	GC26		116174
Initial Pressure (psia)	Final Pressure	e (psia)				Analyst(s)
14.60	29.18					MW
<u>Analytes</u> Helium		<u>Result</u> ND		<u>RL</u> 0.050	<u>DF</u> 1	Date Analyzed 02/02/2016 15:16

SVW-2	1601B91-002A	SoilGas	01/28/2016 16:50	GC26		116174
Initial Pressure (psia)	Final Pressure	e (psia)				Analyst(s)
13.54	27.01					MW
Analytes		<u>Result</u>		<u>RL</u>	<u>DF</u>	Date Analyzed
Helium		ND		0.050	1	02/02/2016 15:29

Angela Rydelius, Lab Manager



Client:	Aqua Science Engineers, Inc.
Date Received:	1/29/16 21:45
Date Prepared:	2/1/16
Project:	4641; Elliott Property

WorkOrder:	1601B91
Extraction Method:	ASTM D 1946-90
Analytical Method:	ASTM D 1946-90
Unit:	%

Light Gases						
Client ID	Lab ID Matrix	Date Collected Instrume	nt	Batch ID		
SVW-1	1601B91-001A SoilGas	01/28/2016 14:15 GC26		116137		
Initial Pressure (psia)	Final Pressure (psia)	Final Pressure (psia)				
14.60	29.18			MW		
Analytes	<u>Result</u>	<u>RL</u>	DF	Date Analyzed		
Carbon Dioxide	0.22	0.016	4	02/01/2016 17:34		
Methane	0.00039	0.00020	1	02/01/2016 16:15		
Oxygen	14	0.40	1	02/01/2016 19:47		

SVW-2	1601B91-002A SoilGas	01/28/2016 16:50 GC26	116137
Initial Pressure (psia)	Final Pressure (psia)		Analyst(s)
13.54	27.01		MW
Analytes	Result	<u>RL</u> <u>DF</u>	Date Analyzed
Carbon Dioxide	4.2	0.16 40	02/01/2016 17:04
Methane	ND	0.00020 1	02/01/2016 16:36
Oxygen	7.2	0.40 1	02/01/2016 20:08



Client: Aqua Science Engineers, Inc.		Wo
Date Received:	1/29/16 21:45	Ext
Date Prepared:	2/2/16	An
Project:	4641; Elliott Property	Uni

WorkOrder:	1601B91
Extraction Method:	TO15
Analytical Method:	TO15
Unit:	$\mu g/m^3$

		TPH ga	as			
Client ID	Lab ID	Matrix	Date Collected	Instru	nent	Batch ID
SVW-1	1601B91-001A	SoilGas	01/28/2016 14:15	GC24		116173
Initial Pressure (psia)	Final Pressure	e (psia)				Analyst(s)
14.60	29.18					MW
<u>Analytes</u>		<u>Result</u>		<u>RL</u>	DF	Date Analyzed
TPH(g)		ND		720	1	02/02/2016 17:33
<u>Surrogates</u>		<u>REC (%)</u>		<u>Limits</u>		
1,2-DCA-d4		93		70-130		02/02/2016 17:33
SVW-2	1601B91-002A	SoilGas	01/28/2016 16:50	GC24		116173
Initial Pressure (psia)	Final Pressure	e (psia)				Analyst(s)
13.54	27.01					MW
Analytes		<u>Result</u>		<u>RL</u>	<u>DF</u>	Date Analyzed
TPH(g)		ND		720	1	02/02/2016 18:13
Surrogates		<u>REC (%)</u>		<u>Limits</u>		
1,2-DCA-d4		94		70-130		02/02/2016 18:13



Client:	Aqua Science Engineers, Inc.
Date Received:	1/29/16 21:45
Date Prepared:	2/2/16
Project:	4641; Elliott Property

WorkOrder:	1601B91
Extraction Method:	TO15
Analytical Method:	TO15
Unit:	$\mu g/m^3$

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instru	iment	Batch ID
SVW-1	1601B91-001A	SoilGas	01/28/2016 14:15	GC24		116173
Initial Pressure (psia)	Final Pressur	e (psia)				Analyst(s)
14.60	29.18					MW
Analytes		<u>Result</u>		<u>RL</u>	DF	Date Analyzed
Benzene		5.5		1.6	1	02/02/2016 17:33
Ethylbenzene		ND		2.2	1	02/02/2016 17:33
Naphthalene		ND		5.3	1	02/02/2016 17:33
Toluene		9.7		1.9	1	02/02/2016 17:33
Xylenes, Total		12		6.6	1	02/02/2016 17:33
<u>Surrogates</u>		<u>REC (%)</u>		<u>Limits</u>		
1,2-DCA-d4		101		70-130		02/02/2016 17:33
Toluene-d8		97		70-130		02/02/2016 17:33
4-BFB		94		70-130		02/02/2016 17:33

SVW-2	1601B91-002A	SoilGas	01/28/2016 16:50	GC24		116173
Initial Pressure (psia)	Final Pressure	e (psia)				Analyst(s)
13.54	27.01					MW
Analytes		<u>Result</u>		<u>RL</u>	<u>DF</u>	Date Analyzed
Benzene		6.1		1.6	1	02/02/2016 18:13
Ethylbenzene		ND		2.2	1	02/02/2016 18:13
Naphthalene		ND		5.3	1	02/02/2016 18:13
Toluene		8.2		1.9	1	02/02/2016 18:13
Xylenes, Total		10		6.6	1	02/02/2016 18:13
Surrogates		<u>REC (%)</u>		<u>Limits</u>		
1,2-DCA-d4		99		70-130		02/02/2016 18:13
Toluene-d8		99		70-130		02/02/2016 18:13
4-BFB		95		70-130		02/02/2016 18:13

Client:	Aqua Science Engineers, Inc.	WorkOrder:	1601B91
Date Prepared:	2/2/16	BatchID:	116174
Date Analyzed:	2/2/16	Extraction Method:	ASTM D 1946-90
Instrument:	GC26	Analytical Method:	ASTM D 1946-90
Matrix:	Soilgas	Unit:	%
Project:	4641; Elliott Property	Sample ID:	MB/LCS-116174

QC Summary Report for ASTM D1946-90 SPK Analyte MB LCS RL MB SS LCS LCS %REC %REC Val Limits Result Result ND 0.025 88 Helium 0.0875 0.10 60-140 -



Client:	Aqua Science Engineers, Inc.	WorkOrder:	1601B91
Date Prepared:	2/1/16	BatchID:	116137
Date Analyzed:	2/1/16	Extraction Method:	ASTM D 1946-90
Instrument:	GC26	Analytical Method:	ASTM D 1946-90
Matrix:	SoilGas	Unit:	%
Project:	4641; Elliott Property	Sample ID:	MB/LCS-116137

QC Summary Report for ASTM D1946-90 SPK Analyte MB LCS RL MB SS LCS LCS %REC %REC Val Result Result Limits ND 0.010 Carbon Dioxide 0.00826 0.0020 83 70-130 _ Methane ND 0.0112 0.00010 0.010 112 70-130 _ ND 0.524 0.20 0.70 75 70-130 Oxygen -

QA/QC Officer

Client:	Aqua Science Engineers, Inc.	WorkOrder:	1601B91
Date Prepared:	2/2/16	BatchID:	116173
Date Analyzed:	2/2/16	Extraction Method:	TO15
Instrument:	GC24	Analytical Method:	TO15
Matrix:	Soilgas	Unit:	$\mu g/m^3$
Project:	4641; Elliott Property	Sample ID:	MB-116173

QC Summary Report for TO15

Analyte	MB Bosult	LCS Bosult	RL	SPK	MB SS		LCS Limits
	Nesun	Result		vai			Linits
TPH(g)	ND	-	360	-	-	-	-
Surrogate Recovery							
1,2-DCA-d4	466	-		500	93	-	-
Toluene-d8	489	-		500	98	-	-
4-BFB	465	-		500	93	-	-

QA/QC Officer

Aqua Science Engineers, Inc.	WorkOrder:
2/2/16	BatchID:
2/2/16	Extraction Met
GC24	Analytical Met
SoilGas	Unit:
4641; Elliott Property	Sample ID:
	Aqua Science Engineers, Inc. 2/2/16 2/2/16 GC24 SoilGas 4641; Elliott Property

WorkOrder:	1601B91
BatchID:	116173
Extraction Method:	TO15
Analytical Method:	TO15
Unit:	$\mu g/m^3$
Sample ID:	MB/LCS-116173

QC Summary Report for TO15

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	50.3	30	60	-	84	60-140
Acrolein	ND	55.5	2.9	58.25	-	95	60-140
Acrylonitrile	ND	50.2	0.55	55	-	91	60-140
tert-Amyl methyl ether (TAME)	ND	114	1.0	105	-	109	60-140
Benzene	ND	78.7	0.80	80	-	98	60-140
Benzyl chloride	ND	176	1.3	132.5	-	133	60-140
Bromodichloromethane	ND	210	1.8	175	-	120	60-140
Bromoform	ND	293	2.6	262.5	-	112	60-140
Bromomethane	ND	143	1.0	97.5	-	146, F2	60-140
1,3-Butadiene	ND	54.0	0.55	55	-	98	60-140
2-Butanone (MEK)	ND	68.3	38	75	-	91	60-140
t-Butyl alcohol (TBA)	ND	73.8	16	77.5	-	95	60-140
Carbon Disulfide	ND	76.6	0.80	80	-	96	60-140
Carbon Tetrachloride	ND	177	1.6	160	-	111	60-140
Chlorobenzene	ND	115	1.2	117.5	-	98	60-140
Chloroethane	ND	66.2	0.65	67.5	-	98	60-140
Chloroform	ND	106	1.2	122.5	-	86	60-140
Chloromethane	ND	38.1	0.50	52.5	-	73	60-140
Cyclohexane	ND	76.7	9.0	87.5	-	88	60-140
Dibromochloromethane	ND	272	2.2	217.5	-	125	60-140
1,2-Dibromo-3-chloropropane	ND	264	0.060	245	-	108	60-140
1,2-Dibromoethane (EDB)	ND	185	2.0	195	-	95	60-140
1,2-Dichlorobenzene	ND	158	1.5	152.5	-	104	60-140
1,3-Dichlorobenzene	ND	158	1.5	152.5	-	104	60-140
1,4-Dichlorobenzene	ND	140	1.5	152.5	-	92	60-140
Dichlorodifluoromethane	ND	116	1.2	125	-	93	60-140
1,1-Dichloroethane	ND	95.2	1.0	102.5	-	93	60-140
1,2-Dichloroethane (1,2-DCA)	ND	88.3	1.0	102.5	-	86	60-140
1,1-Dichloroethene	ND	86.4	1.0	100	-	86	60-140
cis-1,2-Dichloroethene	ND	92.8	1.0	100	-	93	60-140
trans-1,2-Dichloroethene	ND	102	1.0	100	-	102	60-140
1,2-Dichloropropane	ND	109	1.2	117.5	-	93	60-140
cis-1,3-Dichloropropene	ND	122	1.2	115	-	106	60-140
trans-1,3-Dichloropropene	ND	132	1.2	115	-	115	60-140
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	161	1.8	177.5	-	91	60-140
Diisopropyl ether (DIPE)	ND	89.4	1.0	105	-	85	60-140
1,4-Dioxane	ND	86.6	0.90	92.5	-	94	60-140

QA/QC Officer

Quality	Control	Report
---------	---------	--------

Client:	Aqua Science Engineers, Inc.
Date Prepared:	2/2/16
Date Analyzed:	2/2/16
Instrument:	GC24
Matrix:	SoilGas
Project:	4641; Elliott Property

WorkOrder:	1601B91
BatchID:	116173
Extraction Method:	TO15
Analytical Method:	TO15
Unit:	$\mu g/m^3$
Sample ID:	MB/LCS-116173

QC Summary Report for TO15

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Ethanol	ND	ND	48	47.5	-	89	60-140
Ethyl acetate	ND	88.6	0.90	92.5	-	96	60-140
Ethyl tert-butyl ether (ETBE)	ND	97.3	1.0	105	-	93	60-140
Ethylbenzene	ND	98.4	1.1	110	-	89	60-140
4-Ethyltoluene	ND	129	1.2	125	-	103	60-140
Freon 113	ND	178	2.0	195	-	91	60-140
Heptane	ND	102	10	105	-	97	60-140
Hexachlorobutadiene	ND	295	2.7	270	-	109	60-140
Hexane	ND	77.8	9.0	90	-	86	60-140
2-Hexanone	ND	98.3	1.0	105	-	94	60-140
Isopropyl Alcohol	ND	57.1	25	62.5	-	91	60-140
4-Methyl-2-pentanone (MIBK)	ND	99.9	1.0	105	-	95	60-140
Methyl-t-butyl ether (MTBE)	ND	109	0.90	92.5	-	118	60-140
Methylene chloride	ND	75.3	4.4	87.5	-	86	60-140
Methyl methacrylate	ND	116	1.0	104	-	112	60-140
Naphthalene	ND	281	2.6	265	-	106	60-140
Propene	ND	ND	44	42.5	-	90	60-140
Styrene	ND	113	1.1	107.5	-	105	60-140
1,1,1,2-Tetrachloroethane	ND	184	1.8	175	-	105	60-140
1,1,2,2-Tetrachloroethane	ND	152	1.8	175	-	87	60-140
Tetrachloroethene	ND	164	1.7	172	-	95	60-140
Tetrahydrofuran	ND	62.7	1.5	75	-	84	60-140
Toluene	ND	89.9	0.95	95	-	95	60-140
1,2,4-Trichlorobenzene	ND	203	1.9	187.5	-	108	60-140
1,1,1-Trichloroethane	ND	163	1.4	137.5	-	119	60-140
1,1,2-Trichloroethane	ND	128	1.4	137.5	-	93	60-140
Trichloroethene	ND	129	1.4	137.5	-	94	60-140
Trichlorofluoromethane	ND	170	1.4	142.5	-	119	60-140
1,2,4-Trimethylbenzene	ND	132	1.2	125	-	106	60-140
1,3,5-Trimethylbenzene	ND	130	1.2	125	-	104	60-140
Vinyl Acetate	ND	94.8	9.0	90	-	105	60-140
Vinyl Chloride	ND	56.5	0.65	65	-	87	60-140
Xylenes, Total	ND	328	3.3	330	-	100	60-140



Client:	Aqua Science Engineers, Inc.	WorkOrder:	1601B91
Date Prepared:	2/2/16	BatchID:	116173
Date Analyzed:	2/2/16	Extraction Method:	TO15
Instrument:	GC24	Analytical Method:	TO15
Matrix:	SoilGas	Unit:	$\mu g/m^3$
Project:	4641; Elliott Property	Sample ID:	MB/LCS-116173

QC Summary Report for TO15 Analyte MB LCS RL SPK MB SS LCS LCS %REC Result Val %REC Limits Result Surrogate Recovery 1,2-DCA-d4 485 472 500 97 94 70-130 Toluene-d8 491 500 98 98 70-130 492 4-BFB 500 464 475 93 95 70-130



	bell Analytical, low Pass Rd	Inc.			CHA	IN-O	F-CU	STO	DY	RECOR	D	Pa	.ge 1	1 of	1
Pittsburg, (925) 252	CA 94565-1701 -9262				WorkO	rder: 16	01B91	С	lientCo	de: ASED					
		WaterTrax	WriteOn	EDF	Exce	el 🗌	EQuIS	🖌 Er	mail	HardCo	ру	ThirdPart	у	_]J-fla	g
Report to: Robert Kitay		Email: rkitay@aquascienceengineers.com					e Schiell	_ .			Requested TAT:			5 days;	
Aqua Science 55 Oak Court S	Engineers, Inc. Suite 220	PO:			Aqua Science Engineers, Inc. 217 Wild Flower Drive					Date Received: 01/29/)1/29/2	016
Danville, CA 9 (925) 820-9391	94526 FAX: (925) 837-4853	ProjectNo: 4	641; Elliott Pro	perty		Rose deez	ville, CA thng22@y	95678 yahoo.cc	om		Date 1	Logged:	0)1/29/2	016
								Requ	lested Te	ests (See lege	end be	low)			
Lab ID	Client ID		Matrix	Collection Date	Hold	2	3	4	5	6 7	8	9	10	11	12
1601B91-001	SVW-1		SoilGas	1/28/2016 14:15		A A	Α	A	A	A A					

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1/28/2016 16:50

Test Legend:

1601B91-002

1 HELIUM_LC_SOILGAS(%)	2 LG_SUMMA_SOILGAS(%)	3 PRCOURIER TRIP	4 PRHELIUM SHROUD
5 TO15_Scan-SIM_SOIL(UG/M3)	6 TO15-8260_SOIL(UG/M3)	7 TO15GAS_Scan-SIM_SOIL(UG/M3)	8
9	10	11	12

The following SampIDs: 001A, 002A contain testgroup.

SVW-2

SoilGas

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.

Prepared by: Jena Alfaro

	McCampbell Analytical, Inc. "When Quality Counts"					1534 Willow Pass Road, Pittsburg, CA 94565-1701 Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269 http://www.mccampbell.com / E-mail: main@mccampbell.com										
				WOR	K ORDER S	SUMM	ARY									
Client Name: AQUA SCIENCE ENGINEERS, INC. QC Level: LEVEL 2									Wor	k Order:	1601B91					
Project:	4641; Elliott P	roperty		(Client Contact: H	Robert Kita	ıy			Date	Logged:	1/29/2016				
Comments:	nments: Contact's Email: rkitay@aquascienceengineers.com															
		WaterTrax	WriteOn	EDF	Excel	Fax	🖌 Email	HardCo	opy ThirdParty	/	J-flag					
Lab ID	Client ID	Matrix	Test Name		Containers /Composite	s Bottle & es	& Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	t Hold SubOu				
1601B91-001A	SVW-1	SoilGas	ASTM D1946 <carbon diox<br="">Oxygen></carbon>	-90 (Light Gases) ide_2, Methane_4,	1	1	L Summa		1/28/2016 14:15	5 days						
			TO15 + Gas w	// Helium						5 days						

1

1L Summa

1/28/2016 16:50

 \square

5 days

5 days

 \square

1601B91-002A SVW-2

SoilGas

ASTM D1946-90 (Light Gases)

<Carbon Dioxide_2, Methane_4,

TO15 + Gas w/ Helium

Oxygen>

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

Report To: Robert Kitay Company: Agna Science Engineers 55 Ock Ct, Ste 220 Panyille, CA 94522 Tele: (925) 413-8607 Tele: (925) 413-8607 McCampbell Analytical, Inc. 1534 Willow Pass Rd. / Pittsburg, Ca. 94565-1701 www.mccampbell.com / main@mccampbell.com Telephone: (877) 252-9262 / Fax: (925) 252-9269 Bill To: Robert Kitay Bill To: Robert Kitay E-Mail: rKitay e agnascience S5 Ock Ct, Ste 220 Panyille, CA 94522 Fax: (925) 837-9853					TUI Geo UST	RN . Trac	AROU ker ED an Up A	CH JND TI F I Fund Pro Analysis	ME: jject Rec T/Tn (alpha)	PD ques		Aromatic	I Day EI	Hel OD Hel Oth Not defa uL/I	DY 2 Day ium S ner: tes: Ple nults VC L. Leak	RECORD 3 Day 5 EQUIS 10 hroud SN# ase Specify units OCs is ug/m3 and c check default is b yrussed d) DAY DAY if different than fixed gas is IPA. uc for
Project Location: 745 K	lin C	t. Oa	Kland erf	TOFF Proparty	5 (ug/m3)	5 (ug/m3) 3) + 1) [E>	CH, Form	letha e, CC	(ples	pane uL/I	PA, Norfl ane) ug/m.	c and/or A	In 1 -	MAN 316T-1310 not passin			
Sampler Signature: R	E.K.	y						D2, M	, N2				010	56	utin	n ++5+.	
	Colle	ction			-01	I-D	c. 4P Cs)	Acet	5: 02	s: Pro	ck (I	phati	10	Ma	atrix	Can	nister
Field Sample ID (Location)			Canister SN#	Sampler Kit SN#	Cs by	1) (a)	D (in	d Gas dene,	d Ga	ed Gau	um L c Che	H: Ali	SI: C	gas	oor	Pressure	/ vacuum
(Listinion)	Date	Time		•	VOC	TPH	LEE Tota	Fixe Ethy or in	Fixe	Fixe	Heli Leak	APF (nless	Othe	Soil	Ind Air	Initial	Final
5UW-1	1-28-16	1415	CAN 7517 -865	MAN 316-686		Y	<				×		X	×		- 30	-5
5VW-2	1-28-16	1650	CAN6202-743	MAN 316-686+		X					X		X	×		-30	-3
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Relinquished By:	Date:	Time:	Received By:	L									1		<u> </u>		
hut C.Ken	1-29-14	16-5	Bit		Temp (°C) : Work Order #:												
Relinquished By:	Date:	Time:	Received By:		Cor	nditi	on:										
3 the	429	1745	$\left(\right)$		Cus	stody	/ Seals	Intact?	: Ye	es_	1	10	_ N	None_			
Relinquished By:	Date:	Time:	Received By:		Shipped Via:												
				and the second													

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Sample Receipt Checklist

Client Name: Project Name: WorkOrder №: Carrier:	Aqua Science Engineers, Inc.4641; Elliott Property1601B91Matrix: SoilGasBernie Cummins (MAI Courier)			Date and Time Received: Date Logged: Received by: Logged by:	1/29/2016 17:45 1/29/2016 Jena Alfaro Jena Alfaro
	Chain of C	ustody	<u>(COC) Ir</u>	formation	
Chain of custody	present?	Yes	✓	No 🗌	
Chain of custody	signed when relinquished and received?	Yes	✓	No 🗌	
Chain of custody	agrees with sample labels?	Yes	✓	No 🗌	
Sample IDs note	d by Client on COC?	Yes	✓	No 🗌	
Date and Time of	f collection noted by Client on COC?	Yes	✓	No 🗌	
Sampler's name	noted on COC?	Yes	✓	No	
	Sampl	e Rece	ipt Inforn	nation	
Custody seals int	act on shipping container/cooler?	Yes		No 🗌	NA 🗹
Shipping containe	er/cooler in good condition?	Yes	✓	No 🗌	
Samples in prope	er containers/bottles?	Yes	✓	No 🗌	
Sample containe	rs intact?	Yes	✓	No 🗌	
Sufficient sample	volume for indicated test?	Yes	✓	No 🗌	
	Sample Preservation	on and	Hold Tim	e (HT) Information	
All samples recei	ived within holding time?	Yes	✓	No	
Sample/Temp Bla	ank temperature		Temp:		NA 🗹
Water - VOA vial	s have zero headspace / no bubbles?	Yes		No 🗌	NA 🗹
Sample labels ch	ecked for correct preservation?	Yes	✓	No	
pH acceptable up	oon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes		No	NA 🗹
Samples Receive	ed on Ice?	Yes		No 🖌	
UCMR3 Samples Total Chlorine t Free Chlorine t 300.1, 537, 539	Ested and acceptable upon receipt for EPA 522? ested and acceptable upon receipt for EPA 218.7,	Yes Yes		No 🗌 No 🗌	NA 🗹

* NOTE: If the "No" box is checked, see comments below.

Comments:
