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

Mark C. Elliott

September 11, 2017

REPORT For ADDITIONAL SOIL AND GROUNDWATER ASSESSMENT AND WORKPLAN FOR SOIL EXCAVATION

at Elliott Property 745 Kevin Court Oakland, California

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

Submitted by: Clean Earth Geologic, LLC 1001 Rolling Woods Way Concord, CA 94521 (925) 413-8604

1.0 INTRODUCTION

This report presents the methods and findings of Aqua Science Engineers, Inc. (ASE)'s soil and groundwater assessment at 745 Kevin Court in Oakland, California (Figure 1). The fieldwork was conducted by Aqua Science Engineers, Inc. (ASE). However, Clean Earth Geologic, LLC (CEG) has prepared this report since ASE is no longer is business. 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.

In January 2016, ASE drilled borings BH-A through BH-D in and surrounding the former UST pit. The boring locations are shown on Figure 1, and the soil and groundwater analytical results are tabulated in Tables One and Two. Two soil vapor sampling points were also drilled. 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. The samples also contained sufficient oxygen (over 4%) to allow for bioremediation.

3.0 PROPOSED SCOPE OF WORK

The purpose of this assessment is to provide additional data to determine whether the soil and groundwater remediation plan for the site needs to be modified. The specific proposed scope of work is as follows:

- 1) Obtain a drilling permit from the Alameda County Public Works Agency.
- 2) Notify Underground Service Alert (USA) and of the drilling and have drilling locations cleared of subsurface utility lines.
- 3) Drill five soil borings at the site using a Geoprobe direct push drill rig and collect soil and groundwater samples from the borings.
- 4) Analyze two soil and one groundwater samples from each boring at a CAL-EPA certified analytical laboratory for TPH-G and TPH-D by modified EPA Method 8015.
- 5) Backfill each boring with neat cement.
- 6) Prepare a report presenting the methods and findings of this assessment.

Details of the assessment are presented below.

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 a drilling permit from the Alameda County Public Works Agency to drill soil borings. A copy of the permit is 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.

5.0 DRILL FIVE SOIL BORINGS FOR COLLECTION OF SOIL AND GROUNDWATER SAMPLES

5.1 Drilling and Soil Sample Collection

On January 12, 2017, V&W Drilling of Stockton, California attempted to drill the borings for this project. However, due to the heavy rain and flooding for the site, it was not possible to complete the drilling for this project until the site dried out after the rainy season.

On May 23, 2017, V&W Drilling returned to the site and drilled borings BH-E through BH-I using a Geoprobe hydraulic sampling rig. The boring locations are shown on Figure 1. ASE senior geologist Robert E. Kitay, P.G. directed the drilling.

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 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.

5.4 Subsurface Lithology and Hydrogeology

Sediments encountered during drilling generally consisted of clayey silt from beneath the concrete surface to approximately 2.5-feet bgs, silty sand from 2.5-feet bgs to 5-feet bgs, and silty clay or clayey silt from 5-feet bgs to the total depth explored of 12-feet bgs. A notable exception was BH-F that contained silty sand for the entire length of the boring to 8-feet bgs. Groundwater was encountered at approximately 4-feet bgs. Boring logs are presented in Appendix B.

6.0 ANALYZE SOIL SAMPLES

The soil sample collected from 3.5-feet bgs (the capillary zone) in all borings and 7.5-feet bgs in borings BH-E through BH-H, and 11.5-feet bgs in BH-I were analyzed by McCampbell Analytical, Inc. of Pittsburg, California (DHS ELAP certification #1644) for TPH-D with silica gel cleanup by SW Method 8015B and TPH-G by SW Method 8021/8015Bm. 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 TPH-G concentration detected in soil during this sampling event was 1.1 parts per million (ppm) at 3.5-feet bgs in boring BH-G. TPH-D concentrations in the soil samples collected from 3.5-feet bgs during this sampling event ranged from 1.5 ppm to 89 ppm. The highest concentration of 89 ppm was in BH-G. The only TPH-D concentration in the samples collected from 7.5-feet bgs or deeper was 32 ppm in the sample collected from BH-F.

7.0 ANALYZE THE GROUNDWATER SAMPLES

Groundwater samples collected from borings BH-E through BH-I were analyzed by McCampbell Analytical, Inc. of Pittsburg, California (DHS ELAP certification #1644) for TPH-D with silica gel cleanup by SW Method 8015, and TPH-G by SW Method 8021B/8015Bm. The analytical results are tabulated in Table Two, and the certified analytical report and chain of custody forms are included in Appendix C.

The only groundwater sample to contain TPH-G was BH-H, which contained 510 ppb TPH-G. Groundwater samples collected from all five borings contained TPH-D at concentrations ranging from 1,500 ppb to 16,000 ppb.

8.0 CONCLUSIONS AND RECOMMENDATIONS

ASE concludes the following:

- TPH-D concentrations in the soil samples collected from 3.5-feet bgs during this sampling event ranged from 1.5 ppm to 89 ppm., with the highest concentration of 89 ppm in BH-G. The only TPH-D concentration in the samples collected from 7.5-feet bgs or deeper was 32 ppm in the sample collected from BH-F. No significant TPH-G concentrations were detected.
- The only groundwater sample to contain TPH-G was BH-H, which contained 510 ppb TPH-G. Groundwater samples collected from all five borings contained TPH-D at concentrations ranging from 1,500 ppb and 16,000 ppb.
- It does not appear that the former USTs at the site are the source of elevated hydrocarbon concentrations in soil and groundwater. There is also no definitive evidence that the source of elevated hydrocarbons on the site is related to an off-site UST on a neighboring property.

Based on discussions with the Alameda County Health Care Services Agency, CEG recommends the following:

- CEG recommends that a limited soil remediation take place in the vicinity of, and including, previous borings BH-D and BH-G. The excavation is planned to be approximately 30 feet long, by 6 feet wide, by 5 feet deep. The actual excavation dimensions will be based on field observations during the excavation. Black and/or odorous soil will be removed. No confirmation soil samples will be collected; however, soil samples will be collected from the stockpile of excavated soil for the purposes of profiling the soil for landfill disposal.
- The excavated soil will be profiled into an appropriate landfill permitted to accept this soil based on the analytical results. Based on the estimated dimensions of the excavation, approximately 45 cubic yards of soil will be generated for off-site disposal. The actual volume will be based on the final size of the excavation.
- The excavation will be backfilled with virgin fill from a local quarry.

9.0 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 CEG 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 CEG relied upon any information prepared by other parties, CEG 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 CEG'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. CEG'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.

CEG 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.

Should you have any questions or comments, please call us at (925) 413-8604.

Respectfully submitted,

CLEAN EARTH GEOLOGIC, LLC

find C. Kitny

Robert E. Kitay, P.G. Principal Geologist

FIGURES





SCALE IN FEET

BORING LOCATION MAP WITH PROPOSED EXCAVATION LOCATION

> 745 Kevin Court Oakland, California

Clean Earth Geologic, LLC

Figure 1

<u>LEGEND</u>

Former UST

Boring Drilled by ASE

Proposed Excavation

Boring Drilled by AEI

TABLES

TABLE ONE
Summary of Analysis of SOIL Samples
745 Kevin Court, Oakland, California
All results are in parts per million (ppm)

Boring Location	Sample Depth (ft)	TPH Gasoline	TPH Diesel (w/SGCU)	TPH Diesel (wo/SGCU)	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Naphthalene	MTBE	TBA	Other Oxygenates
	(-/		()	(,				,	-1			. , ,
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
ВН-В	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
вн-с	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
ВН-Е	3.5	< 1.0	32									
	7.5	< 1.0	< 1.0									
BH-F	3.5	< 1.0	2.8									
	7.5	< 1.0	32									
BH-G	3.5	1.1	89									
	7.5	< 1.0	< 1.0									
ВН-Н	3.5	< 1.0	58									
	7.5	< 1.0	< 1.0									
BH-I	3.5	< 1.0	1.5									
	11.5	< 1.0	< 1.0									
ESL		100	230	230	0.044	2.9	1.4	2.3	0.033	0.023	0.075	Varies

Notes:

TPH = Total petroleum hydrocarbons

SGCU = Silica Gel Cleanup

MTBE - Methyl-t-butyl ether

TBA = tert-butyl ether

TABLE TWO

Summary of Analysis of GROUNDWATER Samples

745 Kevin Court, Oakland, California

All 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
ВН-В	< 50	800	3,600	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.83	2.8	< 0.50
вн-с	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
ВН-Е	< 50	1,500]								
BH-F	< 50	16,000]								
BH-G	< 50	5,900]								
ВН-Н	510	6,900]								
BH-I	< 50	2,500]								
ESL (DW) ESL (NDW)	100 500	100 640	100 640	1.0 46	40 130	13 13	20 100	0.17 20	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.

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: 01/10/2017 By jamesy

Permit Numbers: W2017-0016

Permits Valid from 01/12/2017 to 01/12/2017

Application Id: 1483990586389 City of Project Site:Oakland

Site Location: 745 Kevin Court
Project Start Date: 01/12/2017 Completion Date:01/12/2017

Assigned Inspector: Contact Marcelino Vialpando at (510) 670-5760 or Marcelino@acpwa.org

Applicant: Aqua Science Engineers - Robert Kitay Phone: 925-413-8604

217 Wildflower Drive, Roseville, CA 95678

Property Owner: Mark Elliott Phone: --

408 Silver Chief Way, Danville, CA 94526

Client: ** same as Property Owner **

Total Due: \$265.00
Receipt Number: WR2017-0011 Total Amount Paid: \$265.00

Payer Name : Aqua Science Engineers Paid By: VISA PAID IN FULL

Works Requesting Permits:

Borehole(s) for Investigation-Contamination Study - 5 Boreholes

Driller: V&W Drilling - Lic #: 720904 - Method: DP Work Total: \$265.00

Specifications

Permit Issued Dt Expire Dt # Hole Diam Max Depth

Number Boreholes

W2017- 01/10/2017 04/12/2017 5 2.00 in. 12.00 ft

0016

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. 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.
- 5. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting,

Alameda County Public Works Agency - Water Resources Well Permit

once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

- 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. 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.

8. 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.

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

APPENDIX B

Boring Logs

Project Name: Elliott Property Project Location: 745 Kevin Ct, Oakland, CA Page 1 of 1 Type of Rig: Geoprobe Size of Drill: 2,0" Diameter Checked By: Robert E. Kitay, P.G. Date Drilled: May 23, 2017 Checked By: Robert E. Kitay, P.G. WATER AND WELL DATA Depth of Water First Encountered: 4' Well Screen Type and Diameter: NA Static Depth of Boring: 8' Type and Size of Soil Sampler: 2.0" LD. Macro Sampler Type and Size of Soil Sampler: 2.0" LD. Macro Sampler DESCRIPTION OF LITHOLOGY Sandy Silt: Medium estimated K: no odor Sandy Silt: (ML): brown; incose; wat; 85% fine to coarse sand: 15% silt; high estimated K: no odor Sandy Silt: (ML): brown; incose; wat; 85% fine to coarse sand: 15% silt; high estimated K: no odor Silty SAND (SM): brown; loose; damp; 70% fine to medium sand: 30% silt: medium estimated K: no odor Sandy Silt: (ML): brown; incose; wat; 85% fine to coarse sand: 15% silt; high estimated K: no odor Silty SAND (SM): brown; loose; damp; 70% fine to coarse sand: 15% silt; high estimated K: no odor Silty CLAV (Ch): dark brown; stiff; wet; 80% clay; 15% silt; Silty CLAV (Ch): dark brown; stiff; wet; 80% clay; 15% silt; Silty CLAV (Ch): dark brown; stiff; wet; 80% clay; 15% silt; Silty CLAV (Ch): dark brown; stiff; wet; 80% clay; 15% silt; Silty CLAV (Ch): dark brown; stiff; wet; 80% clay; 15% silt; Silty CLAV (Ch): dark brown; stiff; wet; 80% clay; 15% silt; Silty CLAV (Ch): dark brown; stiff; wet; 80% clay; 15% silt; Silty CLAV (Ch): dark brown; stiff; wet; 80% clay; 15% silt; Silty CLAV (Ch): dark brown; stiff; wet; 80% clay; 15% silt; Silty CLAV (Ch): dark brown; stiff; wet; 80% clay; 15% silt; Silty CLAV (Ch): dark brown; stiff; wet; 80% clay; 15% silt; Silty CLAV (Ch): dark brown; stiff; wet; 80% clay; 15% silt; Silty CLAV (Ch): dark brown; stiff; wet; 80% clay; 15% silt; Silty CLAV (Ch): dark brown; stiff; wet; 80% clay; 15% silt; Silty CLAV (Ch): dark brown; stiff; wet; 80% clay; 15% silt; Silty CLAV (Ch): dark brown; stiff; wet; 80% clay; 15% silt; Silty CLAV (Ch): dark brown; s	SOIL BORING LOG AND MON	IITORING	G WELL (COMPL	ETION DETAI	LS	BORING: BH-E	
Logged By: Robert E. Kitay, P.G. WATER AND WELL DATA Depth of Water First Encountered: 4¹ Static Depth of Water in Well: NA Static Depth of Boring: 8¹ SOIL/ROCK SAMPLE DATA DETAIL BORING DETAIL DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. Concrete Sity SAND (SM); brown; loose; damp; 70% fine to medium sand; 30% silt; medium estimated K; no odor Sandy SILT (ML); brown; medium dense; damp; 75% silt; 15% fine sand; 10% clay, low plasticity; low estimated K; no odor Sity SAND (SM); brown; loose; wet; 85% fine to coarse sand; 15% silt; high estimated K; no odor Sity SAND (SM); brown; loose; wet; 85% fine to coarse sand; 15% silt; high estimated K; no odor Sity SAND (SM); brown; loose; wet; 85% fine to coarse sand; 15% silt; high estimated K; no odor Sity SAND (SM); brown; loose; wet; 85% fine to coarse sand; 15% silt; high estimated K; no odor Sity SAND (SM); brown; loose; damp; 70% fine to medium sand; 30% silt; medium estimated K; no odor Sity SAND (SM); brown; loose; damp; 70% fine to medium sand; 30% silt; medium estimated K; no odor Sity SAND (SM); b	Project Name: Elliott Property	Proje	ct Locatio	n: 74	5 Kevin Ct, Oal	kland, (CA	Page 1 of 1
WATER AND WELL DATA Depth of Water First Encountered: 4' Depth of Water First Encountered: 4' Well Screen Type and Diameter: NA Well Screen Slot Size: NA Total Depth of Boring: 8' Type and Size of Soil Sampler: 2.0" LD. Macro Sampler DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. Concrete Silty SAND (SM); brown; loose; damp; 70% fine to medium sand; 30% silt: medium estimated K; no odor Sandy Silt: Melly inown; medium dense; admit, 15% fine sand; 10% clay; 15% silt; 15% fine sand; 10% clay; 15% silt; 15% fine sand; 10% clay; 15% silt; 25% fine sand; 10% clay; 15% cl	Driller: V&W Drilling	Туре	of Rig: Ge	Geoprobe Size of Drill: 2			of Drill: 2.0" Diameter	
Depth of Water First Encountered: 4' Static Depth of Water in Well: NA Total Depth of Boring: 8' SOIL/ROCK SAMPLE DATA BORING DETAIL OF BOR	Logged By: Robert E. Kitay, P.G.	Date	Drilled: Ma	ay 23,	2017		Checked By: Robert E	. Kitay, P.G.
Static Depth of Water in Well: NA Total Depth of Boring: 8' SOIL/ROCK SAMPLE DATA BORING DETAIL BORING DETAIL Type and Size of Soil Sampler: 2.0" I.D. Macro Sampler DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. Concrete Silty SAND (SM); brown; loose; damp; 70% fine to medium sand; 30% silt; medium estimated K; no odor Silty SAND (SM); brown; loose; wet; 85% fine to coarse sand; 15% silt; high plasticity; very low estimated K; no odor Silty SAND (SM); brown; loose; wet; 85% fine to coarse sand; 15% silt; high plasticity; very low estimated K; no odor Silty SAND (SM); brown; loose; wet; 85% fine to coarse sand; 15% silt; high plasticity; very low estimated K; no odor End of boring at 8'	WATER AND WELL DATA			Total	Depth of Well	Compl	eted: NA	
Type and Size of Soil Sampler: 2.0" I.D. Macro Sampler DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. Concrete Sity SAND (SM); brown; loose; damp; 70% fine to medium sand; 30% silt; medium estimated K; no odor Sity CLAY (CH); dark brown; sitfr, wet; 80% clay; 15% silt; 15% fine sand; 10% clay; low plasticity; low estimated K; no odor Sity CLAY (CH); dark brown; sitfr, wet; 80% clay; 15% silt; 5% fine sand; high plasticity; very low estimated K; no odor End of boring at 8'	Depth of Water First Encountered: 4'			Well 9	Screen Type ar	nd Dian	neter: NA	
BORING DETAIL Solit_Rock SAMPLE DATA Fig. Solit_Rock SA	Static Depth of Water in Well: NA			Well 9	Screen Slot Siz	e: NA		
BORING DETAIL THE PLAN BORING DETAIL DETAIL THE PLAN BORING T	Total Depth of Boring: 8'			Туре	and Size of So	il Samp	oler: 2.0" I.D. Macro Sa	mpler
Source to the stimated K; no odor staining to set in the stimated K; no odor sity Standard Classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. Source to the stimated K; no odor sand; 30% sit; medium estimated K; no odor sand; 30% sit; medium estimated K; no odor sity SAND (SM); brown; loose; wet; 85% fine to coarse sand; 15% sit; sigh estimated K; no odor sity SAND (SM); brown; loose; wet; 85% fine to coarse sand; 15% sit; sigh estimated K; no odor sity CLAY (CH); dark brown; stiff; wet; 80% clay; 15% silt; 5% fine sand; high plasticity; very low estimated K; no odor sity CLAY (CH); dark brown; stiff; wet; 80% clay; 15% silt; 5% fine sand; high plasticity; very low estimated K; no odor sity CLAY (CH); dark brown; stiff; wet; 80% clay; 15% silt; 5% fine sand; high plasticity; very low estimated K; no odor sity CLAY (CH); dark brown; stiff; wet; 80% clay; 15% silt; 5% fine sand; high plasticity; very low estimated K; no odor sity CLAY (CH); dark brown; stiff; wet; 80% clay; 15% silt; 5% fine sand; high plasticity; very low estimated K; no odor sity CLAY (CH); dark brown; stiff; wet; 80% clay; 15% silt; 5% fine sand; high plasticity; very low estimated K; no odor sity CLAY (CH); dark brown; stiff; wet; 80% clay; 15% silt; 5% fine sand; high plasticity; very low estimated K; no odor sity CLAY (CH); dark brown; stiff; wet; 80% clay; 15% silt; 5% fine sand; high plasticity; very low estimated K; no odor sity clay; 15% silt; 5% fine sand; high plasticity; very low estimated K; no odor silty clay; high plasticity; very low estimated K; no odor sity clay; high plasticity; very low estimated K; no odor sity clay; high plasticity; very low estimated K; no odor sity clay; high plasticity; very low estimated K; no odor sity clay; high plasticity; very low estimated K; no odor sity clay; high plasticity; very low estimated K; no odor sity clay; high plasticity; high estimated K; no odor sity clay; high plasticity; high estimated K; no odor sity clay; high plasticity; high estimat	8	I	LE DATA	-eet		DES	CRIPTION OF LITHOL	OGY
Silty SAND (SM); brown; loose; damp; 70% fine to medium sand; 30% silt; medium edimated K; no odor Sandy SILT (ML); brown; medium dense; damp; 75% silt; 15% fine sand; 10% clay; low plasticity; low estimated K; no odor Silty SAND (SM); brown; loose; wet; 85% fine to coarse sand; 15% silt; high estimated K; no odor Silty CLAY (CH); dark brown; stiff; wet; 80% clay; 15% silt; 5% fine sand; high plasticity; very low estimated K; no odor End of boring at 8'	Description Description Blow Counts	PID (ppmv) Water Leve	Graphic Log	Depth in I				
	Doutland Cement Solution Solution			- 5 - 5 - 10 - 15 - 20 - 25 	Silty SAND (sand; 30% s Sandy SILT 15% fine sa no odor Silty SAND (to coarse sa Silty CLAY (silt; me (ML); b nd; 10 (SM); b and; 15 CH); da d; high	dium estimated K; no divown; medium dense; % clay; low plasticity; low, loose; wet; 85% % silt; high estimated ark brown; stiff; wet; 8 plasticity; very low estimated with the stimated with	odor damp; 75% silt; ow estimated K; fine K; no odor 0% clay; 15% silt;

Project Name: Elliott Property Project Location: 745 Kevin Ct, Oakland, CA Page 1 of 1 Driller: V&W Drilling Logged By: Robert E. Kitay, P.G. Date Drilled: May 23, 2017 Checked By: Robert E. Kitay, P.G. WATER AND WELL DATA Depth of Water First Encountered: 4' Static Depth of Water in Well: NA Total Depth of Boring: 8' Type and Size of Soil Sampler: 2.0" LD. Macro Sampler Well Screen Type and Diameter: NA Total Depth of Boring: 8' Type and Size of Soil Sampler: 2.0" LD. Macro Sampler DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. O O O O O O O O O O O O O O O O O O	SOIL BORING LOG AND MONIT	TORING WELL C	COMPLETION	DETAILS	BORING: BH-F	
Torlier: V&W Drilling Logged By: Robert E. Kitay, P.G. Date Drilled: May 23, 2017 Checked By: Robert E. Kitay, P.G. WATER AND WELL DATA Depth of Water First Encountered: 4' Static Depth of Water in Well: NA Total Depth of Boring: 8' Type and Size of Soil Sampler: 2.0" LD. Macro Sampler DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. Concrete Silty SAND (SM): brown; medium dense; damp; 70% fine to medium sand; 20% silt; 10% gravel to 2" diameter; medium estimated K; no odor moist at 2' wet at 3.8' End of boring at 8' End of boring at 8' End of boring at 8'		I				Page 1 of 1
Logged By: Robert E. Kitay, P.G. WATER AND WELL DATA Depth of Water First Encountered: 4¹ Static Depth of Water in Well: NA Total Depth of Boring: 8¹ BORING DETAIL. BORING DETAIL. Depth of Water in Well: NA Total Depth of Boring: 8¹ SOIL/ROCK SAMPLE DATA Depth of Water in Well: Na Total Depth of Boring: 8¹ SOIL/ROCK SAMPLE DATA DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. Concrete Sity SANID (SM); brown; medium dense; damp; 70% fine to medium sand; 20% sit; 10% gravel to 2° diameter; medium estimated K; no odor moist at 2° weet at 3.8¹ End of boring at 8¹				<u> </u>		Tage 1 of 1
Depth of Water First Encountered: 4' Well Screen Type and Diameter: NA	-	j	•			Vitor D.C
Depth of Water First Encountered: 4' Static Depth of Water in Well: NA Total Depth of Boring: 8' SOIL/ROCK SAMPLE DATA For a Boring BORING DETAIL O O O Concrete Sity SAND (SM); brown; medium dense; damp; 70% fine to medium sand; 20% silt; 10% gravel to 2" diameter; medium estimated K; no odor moist at 2" wet at 3.8' End of boring at 8' End of boring at 8' End of boring at 8'		Date Drilled. Ma			-	Kitay, P.G.
Static Depth of Water in Well: NA Total Depth of Boring: 8' SOIL/ROCK SAMPLE DATA Fig. 1			Total Depth	of Well Complete	ed: NA	
Total Depth of Boring: 8' Type and Size of Soil Sampler: 2.0" I.D. Macro Sampler DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. Concrete Silty SAND (SM); brown; medium dense; damp; 70% fine to medium sand; 20% silt; 10% gravel to 2" diameter; medium estimated K; no odor moist at 2" wet at 3.8' End of boring at 8' End of boring at 8'	Depth of Water First Encountered: 4'		Well Screen	Type and Diamet	er: NA	
SOIL/ROCK SAMPLE DATA Fig. 1.5. Fig	Static Depth of Water in Well: NA		Well Screen	Slot Size: NA		
BORING DETAIL Section	Total Depth of Boring: 8'		Type and Si	ze of Soil Sample	r: 2.0" I.D. Macro San	npler
SERING DETAIL Series BORING DETAIL SERIES BORING DETAIL SERI	I ŏ I ⊆ 		eet	DESCR	RIPTION OF LITHOLO	OGY
Sity SAND (SM); brown; medium dense; damp; 70% fine to medium sand; 20% silt; 10% gravel to 2" diameter; medium estimated K; no odor moist at 2" wet at 3.8" End of boring at 8' 15	Depth in F PINALAG Descriptic Interval Blow Counts PID (ppmv)	Water Leve Graphic Log	Depth in F			
AQUA SCIENCE ENGINEERS, INC.		\	Silty 709 2" 6 moi wet - 5	SAND (SM); bro is fine to medium liameter; medium st at 2' at 3.8'	sand; 20% silt; 10% estimated K; no odo of boring at 8'	gravel to

SOIL BORING LO	G AND I	MONIT	ORING	G WELL C	OMPL	ETION DETAI	LS	BORING: BH-G	
Project Name: Elliott Prop	erty		Proje	ct Locatio	n: 74	5 Kevin Ct, Oal	kland, CA		Page 1 of 1
Driller: V&W Drilling			Туре	of Rig: Ge	eoprobe Size of Drill: 2.0" Diameter				
Logged By: Robert E. Kitay	, P.G.		Date	Drilled: Ma	ay 23,	2017	Che	ecked By: Robert E.	Kitay, P.G.
WATER AND WELL DATA					Total	Depth of Well	Completed	: NA	
Depth of Water First Encountered: 4'						Screen Type ar	nd Diamete	r: NA	
Static Depth of Water in Well: NA						Screen Slot Siz	e: NA		
Total Depth of Boring: 8'					Туре	and Size of So	il Sampler:	2.0" I.D. Macro Sam	pler
Feet	 	$\overline{}$	1	LE DATA	Feet		DESCRIF	TION OF LITHOLO	OGY
Depth in Feet and Bouland Description	Interval	PID (ppmv)	Water Level	Graphic Log	Depth in		e moisture, designation.		
-0 - -5 - -10 - -15 - -20 - -20 - -25 - - -30		0	Y		- 0	5% fine san odor Silty SAND sand; 20% s estimated k Clayey SILT 10% fine sa sewage-like	d; low plast (SM); black silt; 10% gr (; sewage-li (ML); black nd; modera odor End o	s; soft; damp; 85% cicity; low estimated; loose; moist; 70% ravel to 2" diameter ke odor s; soft; wet; 70% silte plasticity; low estimated for the property of the plasticity; low estimated the plasticity is plasticity; low estimated the plasticit	fine to medium; high t; 20% clay; timated K;

Project Name: Elliott Property Driller: V&W Drilling Type of Rig: Geoprobe Size of Drill: 2.0" Diameter Logged By: Robert E. Kitay, P.G. WATER AND WELL DATA Depth of Water First Encountered: 4' Static Depth of Water in Well: NA Total Depth of Boring: 8' BORING DETAIL BORING DETAIL Depth of Water in Well: NA Total Depth of Boring: 8' SOIL/ROCK SAMPLE DATA DEPTH AND WELL DATA DEPTH AND WELL DATA DEPTH AND WELL DATA STATE AND WELL DATA DEPTH OF Well Completed: NA Well Screen Type and Diameter: NA Well Screen Slot Size: NA Type and Size of Soil Sampler: 2.0" LD. Macro Sampler DESCRIPTION OF LITHOLOGY density, stiffness, odor-staining, USCS designation. DESCRIPTION OF LITHOLOGY density, stiffness, odor-staining, USCS designation. Description of Water in Well: NA Total Depth of Well Completed: NA Well Screen Type and Diameter: NA Type and Size of Soil Sampler: 2.0" LD. Macro Sampler DESCRIPTION OF LITHOLOGY density, stiffness, odor-staining, USCS designation. DESCRIPTION OF LITHOLOGY density, stiffness, odor-staining, USCS designation. Description of Soil Sampler: 2.0" LD. Macro Sampler DESCRIPTION OF LITHOLOGY density, stiffness, odor-staining, USCS designation. DESCRIPTION OF LITHOLOGY Silty SAND (SM); Black; medium stiff; damp; 85% silt; 10% clay: 5% sand; low plasticity; low estimated K; swage-like odor Silty CLAY (CIV), black; medium stiff; welt; 65% clay; 25% silt; 10% fine sand; moderate plasticity; low estimated K; swage-like odor Silty CLAY (CIV), black; medium stiff; welt; 65% clay; 25% silt; 10% fine sand; moderate plasticity; low estimated K; swage-like odor Silty CLAY (CIV), black; medium stiff; welt; 65% clay; 25% silt; 10% fine sand; moderate plasticity; low estimated K; swage-like odor Silty CLAY (CIV), black; medium stiff; welt; 65% clay; 25% silt; 10% fine sand; moderate plasticity; low estimated K; swage-like odor Silty CLAY (CIV), black; medium stiff; welt; 65% clay; 25% clay;	Driller: V&W Drilling Logged By: Robert E. Kitay, P.G. Date Drilled: May 23, 2017 Checked By: Robert E. Kitay, P.G. WATER AND WELL DATA Depth of Water First Encountered: 41 Static Depth of Water in Well: NA Static Depth of Boring: 81 Total Depth of Boring: 81 Type and Diameter: NA Well Screen Type and Diameter: NA Well Screen Slot Size: NA Type and Size of Soil Sampler: 2.0" LiD. Macro Sampler DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. DETAIL Detail Detail Detail Detail Description of Lithology Size of Drill: 2.0" Diameter Total Depth of Well Completed: NA Well Screen Type and Diameter: NA Well Screen Slot Size: NA Type and Size of Soil Sampler: 2.0" LiD. Macro Sampler DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. Description of Lithology Size of Drill: 2.0" Diameter Total Depth of Well Completed: NA Well Screen Type and Diameter: NA Well Screen Type and Diameter: NA DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. Description of Lithology Size NA Description of Lithology Stiff Salve Sand; tow plasticity; low plasticity; low estimated K; no odor Sity CLAY (Chicked By: Robert E. Kitay, P.G. Concrete Type and Diameter: NA Well Screen Type and Diameter: NA Description of Lithology Standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. Description of Lithology Sity Sand; (SM), Islack; medium stiff, vet; 55% clay; 25% sit; 10% fine sand; 20% sit; 10% gravel to 2" diameter; high estimated K; no odor End of boring at 8' Description of Lithology Sity Sand; (SM), Islack; medium stiff, vet; 55% clay; 25% sit; 10% fine sand; 20% sit; 10% gravel to 2" diameter; high estimated K; no odor Sity Sand; (SM), Islack; medium stiff, vet; 55% clay; 25% sit; 10% fine sand; 20% sit; 10% gr	SOIL BORING LOG AND MONI	TORING WELL (COMPLETION DETAI	ILS	BORING: BH-H			
Logged By: Robert E. Kitay, P.G. WATER AND WELL DATA Depth of Water First Encountered: 4' Static Depth of Water in Well: NA Total Depth of Boring: 8' SOIL/ROCK SAMPLE DATA DETAIL BORING DETAIL BORING DETAIL BORING DETAIL Total Depth of Water in Well: NA SOIL/ROCK SAMPLE DATA DESCRIPTION OF LITHOLOGY Standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. Concrete Clayer SLT. (ML): black; medium stiff; damp; 85% slit; 10% clay; 5% sand; low plasticity; low estimated K; mooder Slity CLAY (CH): black; medium stiff; wet; 65% clay; 25% slit; 10% fine sand; moderate plasticity; low estimated K; sewage-like odor End of boring at 8'	Logged By: Robert E. Kitay, P.G. WATER AND WELL DATA Depth of Water First Encountered: 4* Static Depth of Water in Well: NA Total Depth of Boring: 8* Type and Diameter: NA Well Screen Type and Diameter: NA Well Screen Slot Size: NA Type and Size of Soil Sampler: 2.0** LD. Macro Sampler DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. DETAIL DETAIL DETAIL DESCRIPTION OF LITHOLOGY Standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. DESCRIPTION OF LITHOLOGY Standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. DESCRIPTION OF LITHOLOGY Standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. DESCRIPTION OF LITHOLOGY Standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. DESCRIPTION OF LITHOLOGY Standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. DESCRIPTION OF LITHOLOGY Standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. DETAIL DESCRIPTION OF LITHOLOGY Standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. DESCRIPTION OF LITHOLOGY Stiff SAND (SM); black; medium stiff, wet; 65% clay; 25% silt; 10% fine sandt moderate plasticity; low estimated K; no odor End of boring at 8' DESCRIPTION OF LITHOLOGY Standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. DESCRIPTION OF LITHOLOGY Standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. DESCRIPTION OF LITHOLOGY Standard classification, texture, relative moisture, density most classification, texture, relative moisture, density most classification, texture, relative most classification, texture, rela	Project Name: Elliott Property	Project Location	on: 745 Kevin Ct, Oa	ıkland, CA		Page 1 of 1		
WATER AND WELL DATA Depth of Water First Encountered: 4' Static Depth of Water in Well: NA Total Depth of Boring: 8' SOIL/ROCK SAMPLE DATA BORING DETAIL BORING DETAIL DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. Concrete Clayer SILT (ML); black; medium stiff; damp; 85% slit; 10% clay; 5% sand; low plasticity; low estimated K; no odor Slity CLAY (CH): black; medium dense; moist; 70% fine to medium sand; 20% silt; 10% gravel to 2" diameter; highlighted to the medium sand; 20% silt; 10% gravel to 2" diameter; highlighted to the medium sand; 20% silt; 10% gravel to 2" diameter; highlighted to the medium sand; 20% silt; 10% gravel to 2" diameter; highlighted K; sewage-like odor End of boring at 8'	## ATER AND WELL DATA Depth of Water First Encountered: 4' Vell Screen Type and Diameter: NA	Driller: V&W Drilling	Type of Rig: Ge	oprobe	Size of Drill:	2.0" Diameter			
Depth of Water First Encountered: 4' Static Depth of Water in Well: NA Total Depth of Boring: 8' SOIL/ROCK SAMPLE DATA BORING DETAIL BORING DETAIL SOIL ROCK SAMPLE DATA O DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. Concrete Clayey SILT (ML); black; medium stiff; damp; 85% silt; 10% clay; 5% sand; low plasticity; low estimated K; sewage-like odor Sitty SAND (SM); black; medium dense; moist; 70% fine to medium sand; 20% silt; 10% grave! to 2" diameter; high estimated K; sewage-like odor Sitty CATA (CH); black; medium stiff; wet; 65% clay; 25% silt; 10% fine sand; moderate plasticity; low estimated K; sewage-like odor End of boring at 8'	Depth of Water First Encountered: 4' Static Depth of Water in Well: NA Total Depth of Boring: 8' Type and Size of Soil Sampler: 2.0" LD. Macro Sampler DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. DETAIL DETAIL	Logged By: Robert E. Kitay, P.G.	Date Drilled: Ma	ay 23, 2017	y 23, 2017 Checked By: Robert E. Kitay, P.G.				
Static Depth of Water in Well: NA Total Depth of Boring: 8' Soll_ROCK SAMPLE DATA BORING DETAIL DETAIL DETAIL DETAIL O O O O O O O O O O O O O	Static Depth of Water in Well: NA Total Depth of Boring: 8' SOIL/ROCK SAMPLE DATA Type and Size of Soil Sampler: 2.0" LD. Macro Sampler DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. Concrete Clayey SILT (ML); black; medium stiff; damp; 85% slit; 10% clay; 5% sand; low plasticity; low estimated K; sewage-like odor Slity SAND (SM); black; medium dense; moist; 70% fine to medium sand; 20% slit; 10% gravel to 2" diameter; high estimated K; sewage-like odor Slity CATA (CH); black; medium stiff; wet; 65% clay; 25% slit; 10% fine sand; moderate plasticity; low estimated K; sewage-like odor End of boring at 8'	WATER AND WELL DATA		Total Depth of Well	Completed: I	NA			
Total Depth of Boring: 8' Type and Size of Soil Sampler: 2.0" I.D. Macro Sampler DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. O Concrete Clayey SILT (ML); black; medium stiff; damp; 85% silt; 10% for clay; 5% sand; low plasticity; low estimated K; no odor Silty CLAY (CH); black; medium dense; moist; 70% fine to medium sand; 20% silt; 10% gravel to 2" diameter; high estimated K; sewage-like odor 10 10 25 25 25 25 25 25 25 25 25 2	Total Depth of Boring: 8' Type and Size of Soil Sampler: 2.0" LD. Macro Sampler	Depth of Water First Encountered: 4'		Well Screen Type a	nd Diameter:	NA			
BORING HEAD DETAIL BORING HEAD DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. Concrete Clayey SILT (ML); black; medium stiff; damp; 85% silt; 10% clay; 5% sand; low plasticity; low estimated K; no odor Silty SLAND (SM); black; medium stiff; wet; 65% clay; 25% silt; 10% fine sand; moderate plasticity; low estimated K; sewage-like odor End of boring at 8' End of boring at 8'	SOIL/ROCK SAMPLE DATA BORING DETAIL BORING DETAIL	Static Depth of Water in Well: NA		Well Screen Slot Siz	ze: NA				
BORING DETAIL Section	BORING DETAIL BORING STANDARD RETAIL RETAINING LOST SHIPLY SHARD (SM): black; medium stiff; damp; 85% silt; 10% clay; 5% sand; low plasticity; low estimated K; sewage-like odor Silty CLAY (CH): black; medium stiff; wet; 65% clay; 25% silt; 10% fine to medium sand; 20% silt; 10% gravel to 2" diameter; high estimated K; sewage-like odor End of boring at 8' BORING DETAIL BORIN	Total Depth of Boring: 8'		Type and Size of So	oil Sampler: 2.0	0" I.D. Macro Sam	pler		
SERING DETAIL O O O O O O O O O O O O O	Sorring Detail. Sorring Detail Sorr	ŏ	T 1	eet	DESCRIPTI	ION OF LITHOLO)GY		
Clayey SILT (ML.); black; medium stiff; damp; 85% silt; 10% clay; 5% sand; low plasticity; low estimated K; no odor Silty SAND (SM); black; medium dense; moist; 70% fine to medium sand; 20% silt; 10% gravel to 2" diameter; high estimated K; sewage-like odor Silty CLAY (CH); black; medium stiff; wer; 65% clay; 25% silt; 10% fine sand; moderate plasticity; low estimated K; sewage-like odor End of boring at 8'	Clayey Sil.T (ML); black; medium stiff; damp; 85% silt; 10% clay; 5% sand; low plasticity; low estimated K; no odor Silty SAND (SM); black; medium dense; moist; 70% fine to medium sand; 20% silt; 10% gravel to 2" diameter; high estimated K; sewage-like odor Silty CLAY (CH); black; medium stiff; wet; 65% clay; 25% silt; 10% fine sand; moderate plasticity; low estimated K; sewage-like odor 10 10 20 20 20 30 30 30	Depth in F TIVE DESCRIPTION Interval Blow Counts PID (page)	Water Leve Graphic Log	standard density,					
	AQUA SCIENCE ENGINEERS, INC.	5	Ţ	Clayey SILT 10% clay; Some odor Silty SAND to medium high estimated keep silty CLAY (25% silt; 10 estimated keep 10	(SM); black; m sand; 20% silfated K; sewage (CH); black; m 0% fine sand; K; sewage-like End of k	plasticity; low estinedium dense; mo t; 10% gravel to 2 e-like odor edium stiff; wet; moderate plastici odor poring at 8'	mated K; pist; 70% fine 2" diameter; 65% clay; ty; low		

Project Name: Elliott Property Project Location: 745 Kevin Ct, Oak-Ind. Size of Drill: 2.0" Diameter Driller: V&W Drilling Type of Rig: Geoprobe Size of Drill: 2.0" Diameter Date Drilled: May 23, 2017 Checked By: Robert E. Kitay, P.G.	Driller: V&W Drilling Type of Rig: Geoprobe Size of Drill: 2.0" Diameter Logged By: Robert E. Kitay, P.G. Date Drilled: May 23, 2017 Checked By: Robert E. Kitay, P.G. WATER AND WELL DATA 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	SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS BORING: BH-I								
Logged By: Robert E. Kitay, P.G. Date Drilled: May 23, 2017 Checked By: Robert E. Kitay, P.G.	Logged By: Robert E. Kitay, P.G. Date Drilled: May 23, 2017 Checked By: Robert E. Kitay, P.G. WATER AND WELL DATA Depth of Water First Encountered: 4' Well Screen Type and Diameter: NA Well Screen Slot Size: NA Total Depth of Boring: 12' Type and Size of Soil Sampler: 2.0" I.D. Macro Sampler	Project Name: Elliott Property	Project Location	on: 745 Kevin Ct, Oa	akland, CA	Page 1 of 1				
### ATER AND WELL DATA Depth of Water First Encountered: 4' Static Depth of Water First Encountered: 4' Well Screen Type and Diameter: NA	WATER AND WELL DATA 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	Driller: V&W Drilling	Type of Rig: Ge	eoprobe	Size of Drill: 2.0" Diameter					
Depth of Water First Encountered: 4' Static Depth of Water in Well: NA Total Depth of Boring: 12' BORING DETAIL BORING DETAIL O O O O O O O O O O O O O	Depth of Water First Encountered: 4' Static Depth of Water in Well: NA Well Screen Type and Diameter: NA Well Screen Slot Size: NA Total Depth of Boring: 12' Type and Size of Soil Sampler: 2.0" I.D. Macro Sampler	Logged By: Robert E. Kitay, P.G.	Date Drilled: M	lay 23, 2017	Checked By: Robert E	. Kitay, P.G.				
Static Depth of Water in Well: NA Total Depth of Boring: 12' SOIL/ROCK SAMPLE DATA Type and Size of Soil Sampler: 2.0" I.D. Macro Sampler Soil Sampler: 2.0" I.D. Macro Sampler Type and Size of Soil Sampler: 2.0"	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	WATER AND WELL DATA		Total Depth of Well	l Completed: NA					
Total Depth of Boring: 12' Type and Size of Soil Sampler: 2.0" I.D. Macro Sampler DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation. Concrete Clayey SILT (MH); black; medium stiff; damp; 60% silt; 30% clay; 10% sand; moderate plasticity; very low est. K; no odor Silty SAND (SM); black; loose; wet; 70% fine to coarse sand; 20% silt; 10% gravel to 2" diameter; high estimated K; no odor End of boring at 12' End of boring at 12'	Total Depth of Boring: 12' Type and Size of Soil Sampler: 2.0" I.D. Macro Sampler	Depth of Water First Encountered: 4'		Well Screen Type a	and Diameter: NA					
BORING DETAIL Solity Sample Description of Lithology Solity Sample Data Solity Sample Description Solity		Static Depth of Water in Well: NA		Well Screen Slot Siz	ze: NA					
BORING DETAIL Secondary S	SOII /POCK SAMDIE DATA	Total Depth of Boring: 12'		Type and Size of So	oil Sampler: 2.0" I.D. Macro Sar	mpler				
Source to the part of the part	I ŏ I	ŭ		-eet	DESCRIPTION OF LITHOL	OGY				
Clayey SILT (MH); black; medium stiff; damp; 60% silt; 30% clay; 10% sand; moderate plasticity; very low est. K; no odor Silty SAND (SM); black; loose; wet; 70% fine to coarse sand; 20% silt; 10% gravel to 2" diameter; high estimated K; no odor Silty CLAY (CH); dark yellow brown; very stiff; 90% clay; 10% silt; high plasticity; very low estimated K; no odor End of boring at 12'	BORING DETAIL BO	Depth in l Descripti	Water Leve Graphic Log	standard density,						
AQUA SCIENCE ENGINEERS, INC.	Clayey SILT (MH); black; medium stiff; damp; 60% silt; 30% clay; 10% sand; moderate plasticity; very low est. K; no odor Silty SAND (SM); black; loose; wet; 70% fine to coarse sand; 20% silt; 10% gravel to 2" diameter; high estimated K; no odor Silty CLAY (CH); dark yellow brown; very stiff; 90% clay; 10% silt; high plasticity; very low estimated K; no odor End of boring at 12' 20 20 30 30 30 30	-5 -5	Y	Clayey SILT 30% clay; 1 K; no odor Silty SAND sand; 20% estimated I Silty CLAY 10% silt; hi	(SM); black; loose; wet; 70% is silt; 10% gravel to 2" diamete K; no odor (CH); dark yellow brown; very igh plasticity; very low estimat End of boring at 12'	fine to coarse er; high stiff; 90% clay; ed K; no odor				

APPENDIX C

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



McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: Amended: 1705B08 06/06/2017

Report Created for: Aqua Science Engineers, Inc.

> 55 Oak Court Suite 220 Danville, CA 94526

Project Contact: Robert Kitay

Project P.O.:

Project Name: 745 Kevin Ct.

Project Received: 05/24/2017

Analytical Report reviewed & approved for release on 06/01/2017 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



Glossary of Terms & Qualifier Definitions

Client: Aqua Science Engineers, Inc.

Project: 745 Kevin Ct. **WorkOrder:** 1705B08

Glossary Abbreviation

%D Serial Dilution Percent Difference

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 (Serial Dilution)

DUP Duplicate

EDL Estimated Detection Limit

ERS External reference sample. Second source calibration verification.

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

ST Sorbent Tube

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: 745 Kevin Ct. **WorkOrder:** 1705B08

Analytical Qualifiers

b1 aqueous sample that contains greater than ~1 vol. % sediment

d1 weakly modified or unmodified gasoline is significant

d7 Strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram

e2 diesel range compounds are significant; no recognizable pattern

e4 gasoline range compounds are significant.

e7 oil range compounds are significant

Quality Control Qualifiers

F2 LCS/LCSD recovery and/or RPD is out of acceptance criteria.

Analytical Report

Client:Aqua Science Engineers, Inc.WorkOrder:1705B08Date Received:5/24/17 15:25Extraction Method:SW5030B

Date Prepared: 5/24/17-5/31/17 **Analytical Method:** SW8021B/8015Bm

Project: 745 Kevin Ct. Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Co	ollected Instrument	Batch ID
BH-E 3.5'	1705B08-001A	Soil	05/23/20	17 08:25 GC19	139433
Analytes	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
TPH(g) (C6-C12)	ND		1.0	1	05/31/2017 16:35
MTBE			0.050	1	05/31/2017 16:35
Benzene			0.0050	1	05/31/2017 16:35
Toluene			0.0050	1	05/31/2017 16:35
Ethylbenzene			0.0050	1	05/31/2017 16:35
Xylenes			0.015	1	05/31/2017 16:35
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
2-Fluorotoluene	72		62-126		05/31/2017 16:35
Analyst(s): IA					

Client ID	Lab ID N	Matrix	Date Co	ollected Instrument	Batch ID
BH-E 7.5'	1705B08-002A S	ioil	05/23/20	17 08:40 GC19	139433
Analytes	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
TPH(g) (C6-C12)	ND		1.0	1	05/31/2017 03:11
MTBE			0.050	1	05/31/2017 03:11
Benzene			0.0050	1	05/31/2017 03:11
Toluene			0.0050	1	05/31/2017 03:11
Ethylbenzene			0.0050	1	05/31/2017 03:11
Xylenes			0.015	1	05/31/2017 03:11
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
2-Fluorotoluene	100		62-126		05/31/2017 03:11
Analyst(s): IA					

1705B08

Analytical Report

Client: Aqua Science Engineers, Inc. WorkOrder: **Date Received:** 5/24/17 15:25 **Extraction Method: SW5030B**

Date Prepared: 5/24/17-5/31/17 Analytical Method: SW8021B/8015Bm

Project: 745 Kevin Ct. Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Co	ollected Instrument	Batch ID
BH-F 3.5'	1705B08-003A	Soil	05/23/20	17 09:22 GC19	139433
Analytes	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
TPH(g) (C6-C12)	ND		1.0	1	05/31/2017 03:41
MTBE			0.050	1	05/31/2017 03:41
Benzene			0.0050	1	05/31/2017 03:41
Toluene			0.0050	1	05/31/2017 03:41
Ethylbenzene			0.0050	1	05/31/2017 03:41
Xylenes			0.015	1	05/31/2017 03:41
Surrogates	REC (%)		<u>Limits</u>		
2-Fluorotoluene	91		62-126		05/31/2017 03:41
Analyst(s): IA					

Client ID	Lab ID	Matrix	Date Co	ollected Instrument	Batch ID
BH-F 7.5'	1705B08-004A	Soil	05/23/20	17 09:30 GC19	139433
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	Date Analyzed
TPH(g) (C6-C12)	ND		1.0	1	05/31/2017 04:11
MTBE			0.050	1	05/31/2017 04:11
Benzene			0.0050	1	05/31/2017 04:11
Toluene			0.0050	1	05/31/2017 04:11
Ethylbenzene			0.0050	1	05/31/2017 04:11
Xylenes			0.015	1	05/31/2017 04:11
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
2-Fluorotoluene	100		62-126		05/31/2017 04:11
Analyst(s): IA					

Analytical Report

Client:Aqua Science Engineers, Inc.WorkOrder:1705B08Date Received:5/24/17 15:25Extraction Method:SW5030B

Date Prepared: 5/24/17-5/31/17 **Analytical Method:** SW8021B/8015Bm

Project: 745 Kevin Ct. Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID Ma	trix Date C	ollected Instrument	Batch ID
BH-G 3.5'	1705B08-005A Soil	05/23/20	17 10:20 GC19	139740
<u>Analytes</u>	Result	<u>RL</u>	<u>DF</u>	Date Analyzed
TPH(g) (C6-C12)	1.1	1.0	1	06/01/2017 11:25
MTBE		0.050	1	06/01/2017 11:25
Benzene		0.0050	1	06/01/2017 11:25
Toluene		0.0050	1	06/01/2017 11:25
Ethylbenzene		0.0050	1	06/01/2017 11:25
Xylenes		0.015	1	06/01/2017 11:25
Surrogates	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	93	62-126		06/01/2017 11:25
Analyst(s): IA		Analytical Com	ments: d7	

Client ID	Lab ID	Matrix	Date Co	ollected Instrument	Batch ID
BH-G 7.5'	1705B08-006A	Soil	05/23/20	17 10:30 GC19	139433
Analytes	<u>Result</u>		<u>RL</u>	<u>DF</u>	Date Analyzed
TPH(g) (C6-C12)	ND		1.0	1	05/31/2017 05:41
MTBE			0.050	1	05/31/2017 05:41
Benzene			0.0050	1	05/31/2017 05:41
Toluene			0.0050	1	05/31/2017 05:41
Ethylbenzene			0.0050	1	05/31/2017 05:41
Xylenes			0.015	1	05/31/2017 05:41
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
2-Fluorotoluene	93		62-126		05/31/2017 05:41

Analyst(s): IA

Analytical Report

Client: Aqua Science Engineers, Inc. WorkOrder: 1705B08

Date Received: 5/24/17 15:25

Extraction Method: SW5030B

Date Prepared: 5/24/17-5/31/17 **Analytical Method:** SW8021B/8015Bm

Project: 745 Kevin Ct. Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Co	ollected Instrument	Batch ID
ВН-Н 3.5'	1705B08-007A	A Soil	05/23/20	17 11:16 GC19	139740
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
TPH(g) (C6-C12)	ND		1.0	1	06/01/2017 11:56
MTBE			0.050	1	06/01/2017 11:56
Benzene			0.0050	1	06/01/2017 11:56
Toluene			0.0050	1	06/01/2017 11:56
Ethylbenzene			0.0050	1	06/01/2017 11:56
Xylenes			0.015	1	06/01/2017 11:56
Surrogates	REC (%)		<u>Limits</u>		
2-Fluorotoluene	85		62-126		06/01/2017 11:56
Analyst(s): IA					

Client ID	Lab ID Mat	rix Date C	ollected Instrument	Batch ID
ВН-Н 7.5'	1705B08-008A Soil	05/23/20	017 11:22 GC19	139433
<u>Analytes</u>	Result	<u>RL</u>	<u>DF</u>	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	05/31/2017 06:41
MTBE		0.050	1	05/31/2017 06:41
Benzene		0.0050	1	05/31/2017 06:41
Toluene		0.0050	1	05/31/2017 06:41
Ethylbenzene		0.0050	1	05/31/2017 06:41
Xylenes		0.015	1	05/31/2017 06:41
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		

62-126

96

2-Fluorotoluene

Analyst(s): IA

05/31/2017 06:41

1705B08

Analytical Report

Client: Aqua Science Engineers, Inc. WorkOrder: **Extraction Method: SW5030B**

Date Received: 5/24/17 15:25

Date Prepared: 5/24/17-5/31/17 Analytical Method: SW8021B/8015Bm

Project: 745 Kevin Ct. Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Co	ollected Instrument	Batch ID
BH-I 3.5'	1705B08-009A	Soil	05/23/20	17 12:20 GC19	139433
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
TPH(g) (C6-C12)	ND		1.0	1	05/31/2017 07:11
MTBE			0.050	1	05/31/2017 07:11
Benzene			0.0050	1	05/31/2017 07:11
Toluene			0.0050	1	05/31/2017 07:11
Ethylbenzene			0.0050	1	05/31/2017 07:11
Xylenes			0.015	1	05/31/2017 07:11
<u>Surrogates</u>	REC (%)		<u>Limits</u>		
2-Fluorotoluene	92		62-126		05/31/2017 07:11
Analyst(s): IA					

Analyst(s):

Client ID	Lab ID	Matrix	Date Co	ollected Instrument	Batch ID
BH-I 11.5'	1705B08-011A	Soil	05/23/20	17 12:40 GC19	139433
Analytes	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
TPH(g) (C6-C12)	ND		1.0	1	05/31/2017 07:41
MTBE			0.050	1	05/31/2017 07:41
Benzene			0.0050	1	05/31/2017 07:41
Toluene			0.0050	1	05/31/2017 07:41
Ethylbenzene			0.0050	1	05/31/2017 07:41
Xylenes			0.015	1	05/31/2017 07:41
<u>Surrogates</u>	REC (%)		<u>Limits</u>		
2-Fluorotoluene	95		62-126		05/31/2017 07:41
Analyst(s): IA					

Analytical Report

Client: Aqua Science Engineers, Inc. WorkOrder: 1705B08

Date Received: 5/24/17 15:25

Extraction Method: SW5030B

Date Prepared: 5/28/17-5/29/17 **Analytical Method:** SW8021B/8015Bm

Project: 745 Kevin Ct. Unit: μg/L

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Co	ollected Instrument	Batch ID
вн-е	1705B08-012A	Water	05/23/20	17 09:00 GC12	139631
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
TPH(g) (C6-C12)	ND		50	1	05/28/2017 21:00
MTBE			5.0	1	05/28/2017 21:00
Benzene			0.50	1	05/28/2017 21:00
Toluene			0.50	1	05/28/2017 21:00
Ethylbenzene			0.50	1	05/28/2017 21:00
Xylenes			1.5	1	05/28/2017 21:00
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
aaa-TFT	107		89-115		05/28/2017 21:00
Analyst(s): IA			Analytical Comr	nents: b1	

Client ID Lab ID Matrix Date Collected Instrument Batch ID

BH-F 1705B08-013A Water 05/23/2017 10:00 GC12 139631

Result ND	<u>RL</u> <u>DF</u> 50 1	<u>Date Analyzed</u> 05/28/2017 21:32
		05/28/2017 21:32
	5.0 1	05/28/2017 21:32
	0.50 1	05/28/2017 21:32
	0.50 1	05/28/2017 21:32
	0.50 1	05/28/2017 21:32
	1.5 1	05/28/2017 21:32
REC (%)	<u>Limits</u>	
109	89-115	05/28/2017 21:32
	Analytical Comments: b1	
	 REC (%)	0.50 1 0.50 1 0.50 1 1.5 1 REC (%) Limits 109 89-115

Analytical Report

Client:Aqua Science Engineers, Inc.WorkOrder:1705B08Date Received:5/24/17 15:25Extraction Method:SW5030B

Date Prepared: 5/28/17-5/29/17 Analytical Method: SW8021B/8015Bm

Project: 745 Kevin Ct. Unit: μg/L

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date C	ollected Instrument	Batch ID
BH-G	1705B08-014A	Water	05/23/20	017 10:40 GC3	139651
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
TPH(g) (C6-C12)	ND		50	1	05/29/2017 01:49
MTBE			5.0	1	05/29/2017 01:49
Benzene			0.50	1	05/29/2017 01:49
Toluene			0.50	1	05/29/2017 01:49
Ethylbenzene			0.50	1	05/29/2017 01:49
Xylenes			1.5	1	05/29/2017 01:49
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
aaa-TFT	107		89-115		05/29/2017 01:49
Analyst(s): IA			Analytical Com	iments: b1	

Client ID	Lab ID	Matrix	Date C	ollected Instrument	Batch ID
Вн-н	1705B08-015A	Water	05/23/20	17 11:20 GC12	139631
Analytes	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
TPH(g) (C6-C12)	510		50	1	05/28/2017 22:04
MTBE			5.0	1	05/28/2017 22:04
Benzene			0.50	1	05/28/2017 22:04
Toluene			0.50	1	05/28/2017 22:04
Ethylbenzene			0.50	1	05/28/2017 22:04
Xylenes			1.5	1	05/28/2017 22:04
<u>Surrogates</u>	REC (%)		<u>Limits</u>		
aaa-TFT	109		89-115		05/28/2017 22:04
Analyst(s): IA			Analytical Com	ments: d1,b1	

Analytical Report

Client:Aqua Science Engineers, Inc.WorkOrder:1705B08Date Received:5/24/17 15:25Extraction Method:SW5030B

Date Prepared: 5/28/17-5/29/17 **Analytical Method:** SW8021B/8015Bm

Project: 745 Kevin Ct. Unit: μg/L

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date C	ollected Instrument	Batch ID
вн-і	1705B08-016A	Water	05/23/20	17 12:53 GC3	139651
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
TPH(g) (C6-C12)	ND		50	1	05/29/2017 02:19
MTBE			5.0	1	05/29/2017 02:19
Benzene			0.50	1	05/29/2017 02:19
Toluene			0.50	1	05/29/2017 02:19
Ethylbenzene			0.50	1	05/29/2017 02:19
Xylenes			1.5	1	05/29/2017 02:19
<u>Surrogates</u>	REC (%)		<u>Limits</u>		
aaa-TFT	105		89-115		05/29/2017 02:19
Analyst(s): IA			Analytical Com	ments: b1	



Analytical Report

Client: Aqua Science Engineers, Inc. WorkOrder: 1705B08

Date Received:5/24/17 15:25Extraction Method:SW3550B/3630CDate Prepared:5/24/17Analytical Method:SW8015BProject:745 Kevin Ct.Unit:mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up						
Client ID	Lab ID	Matrix	Date Collected Ins	trument Batch ID		
BH-E 3.5'	1705B08-001A	Soil	05/23/2017 08:25 GCS	9b 139475		
Analytes	Result		<u>RL</u> <u>DF</u>	Date Analyzed		
TPH-Diesel (C10-C23)	32		10 10	05/27/2017 02:28		
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>			
C9	89		78-109	05/27/2017 02:28		
Analyst(s): TK			Analytical Comments: e7,e2			
Client ID	Lab ID	Matrix	Date Collected Ins	trument Batch ID		
BH-E 7.5'	1705B08-002A	Soil	05/23/2017 08:40 GCS	9b 139475		
Analytes	Result		<u>RL</u> <u>DF</u>	Date Analyzed		
TPH-Diesel (C10-C23)	ND		1.0 1	05/26/2017 20:00		
Surrogates	<u>REC (%)</u>		<u>Limits</u>			
C9	93		78-109	05/26/2017 20:00		
Analyst(s): TK						
Client ID	Lab ID	Matrix	Date Collected Ins	trument Batch ID		
BH-F 3.5'	1705B08-003A	Soil	05/23/2017 09:22 GC6	6B 139475		
<u>Analytes</u>	Result		<u>RL</u> <u>DF</u>	Date Analyzed		
TPH-Diesel (C10-C23)	2.8		2.0 2	05/27/2017 22:06		
Surrogates	<u>REC (%)</u>		<u>Limits</u>			
C9	89		78-109	05/27/2017 22:06		
Analyst(s): TK			Analytical Comments: e7,e2			
Client ID	Lab ID	Matrix	Date Collected Ins	trument Batch ID		
BH-F 7.5'	1705B08-004A	Soil	05/23/2017 09:30 GC1	11A 139475		
Analytes	Result		<u>RL</u> <u>DF</u>	Date Analyzed		
TPH-Diesel (C10-C23)	32		20 20	05/27/2017 07:25		
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>			
C9	103		78-109	05/27/2017 07:25		
Analyst(s): TK			Analytical Comments: e7,e2			

1705B08



Analytical Report

Client: Aqua Science Engineers, Inc. WorkOrder:

Date Received:5/24/17 15:25Extraction Method:SW3550B/3630CDate Prepared:5/24/17Analytical Method:SW8015BProject:745 Kevin Ct.Unit:mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up						
Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID		
BH-G 3.5'	1705B08-005A	Soil	05/23/2017 10:20 GC6B	139475		
<u>Analytes</u>	Result		<u>RL</u> <u>DF</u>	Date Analyzed		
TPH-Diesel (C10-C23)	89		50 50	05/30/2017 14:46		
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>			
C9	96		78-109	05/30/2017 14:46		
Analyst(s): TK			Analytical Comments: e7,e2			
Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID		
BH-G 7.5'	1705B08-006A	Soil	05/23/2017 10:30 GC9b	139475		
<u>Analytes</u>	<u>Result</u>		<u>RL</u> <u>DF</u>	Date Analyzed		
TPH-Diesel (C10-C23)	ND		1.0 1	05/26/2017 21:18		
Surrogates	<u>REC (%)</u>		<u>Limits</u>			
C9	92		78-109	05/26/2017 21:18		
Analyst(s): TK						
Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID		
ВН-Н 3.5'	1705B08-007A	Soil	05/23/2017 11:16 GC6B	139475		
<u>Analytes</u>	Result		<u>RL</u> <u>DF</u>	Date Analyzed		
TPH-Diesel (C10-C23)	58		20 20	05/27/2017 19:31		
Surrogates	<u>REC (%)</u>		<u>Limits</u>			
C9	95		78-109	05/27/2017 19:31		
Analyst(s): TK			Analytical Comments: e7,e2			
Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID		
BH-H 7.5'	1705B08-008A	Soil	05/23/2017 11:22 GC9b	139475		
<u>Analytes</u>	Result		<u>RL</u> <u>DF</u>	Date Analyzed		
TPH-Diesel (C10-C23)	ND		1.0 1	05/27/2017 01:10		
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>			
C9	92		78-109	05/27/2017 01:10		
Analyst(s): TK						

Analytical Report

Client: Aqua Science Engineers, Inc. WorkOrder: 1705B08

Date Received:5/24/17 15:25Extraction Method:SW3550B/3630CDate Prepared:5/24/17Analytical Method:SW8015BProject:745 Kevin Ct.Unit:mg/Kg

Total	Extractable Petroleu	ım Hydroc	carbons with Silica Gel Clean-Up)
Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID
BH-I 3.5'	1705B08-009A	Soil	05/23/2017 12:20 GC9b	139475
Analytes	Result		<u>RL</u> <u>DF</u>	Date Analyzed
TPH-Diesel (C10-C23)	1.5		1.0 1	05/26/2017 22:35
Surrogates	<u>REC (%)</u>		<u>Limits</u>	
C9	92		78-109	05/26/2017 22:35
Analyst(s): TK			Analytical Comments: e7,e2	
Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID
BH-I 11.5'	1705B08-011A	Soil	05/23/2017 12:40 GC9b	139475
Analytes	Result		<u>RL</u> <u>DF</u>	Date Analyzed
TPH-Diesel (C10-C23)	ND		1.0 1	05/26/2017 23:53
Surrogates	<u>REC (%)</u>		<u>Limits</u>	
C9	93		78-109	05/26/2017 23:53
Analyst(s): TK				



Analytical Report

Client: Aqua Science Engineers, Inc. WorkOrder: 1705B08

 Date Received:
 5/24/17 15:25
 Extraction Method:
 SW3510C/3630C

 Date Prepared:
 5/24/17
 Analytical Method:
 SW8015B

 Project:
 745 Kevin Ct.
 Unit:
 μg/L

Total	l Extractable Petrole	um Hydr	ocarbons w/ Silica G	el Clean-Up	
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ВН-Е	1705B08-012A	Water	05/23/2017 09:00	GC11A	139465
<u>Analytes</u>	Result		<u>RL</u> <u>DF</u>		Date Analyzed
TPH-Diesel (C10-C23)	1500		1000 20		05/27/2017 09:22
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
C9	107		66-138		05/27/2017 09:22
Analyst(s): TK			Analytical Comments: e7	7,e2,b1	
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ВН-F	1705B08-013A	Water	05/23/2017 10:00	GC11A	139465
Analytes	Result		<u>RL</u> <u>DF</u>		Date Analyzed
TPH-Diesel (C10-C23)	16,000		7500 50		05/27/2017 11:20
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
C9	112		66-138		05/27/2017 11:20
Analyst(s): TK			Analytical Comments: e7	7,e2,b1	
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
BH-G	1705B08-014A	Water	05/23/2017 10:40	GC11A	139465
Analytes	Result		<u>RL</u> <u>DF</u>		Date Analyzed
TPH-Diesel (C10-C23)	5900		2500 50		05/27/2017 13:19
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
C9	117		66-138		05/27/2017 13:19
Analyst(s): TK			Analytical Comments: e7	7,e2,b1	
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
ВН-Н	1705B08-015A	Water	05/23/2017 11:20	GC11B	139465
Analytes	Result		<u>RL</u> <u>DF</u>		Date Analyzed
TPH-Diesel (C10-C23)	6900		1000 20		05/27/2017 11:20
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C9	113		66-138		05/27/2017 11:20
Analyst(s): TK			Analytical Comments: e7	7,e2,e4,b1	

Analytical Report

Client: Aqua Science Engineers, Inc. WorkOrder: 1705B08

Date Received:5/24/17 15:25Extraction Method:SW3510C/3630CDate Prepared:5/24/17Analytical Method:SW8015B

Project: 745 Kevin Ct. Unit: μg/L

Total Extractable Petroleum Hydrocarbons w/ Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Co	ollected Instrument	Batch ID
ВН-І	1705B08-016A	Water	05/23/20	17 12:53 GC11A	139465
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
TPH-Diesel (C10-C23)	2500		1500	10	05/30/2017 17:04
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C9	96		66-138		05/30/2017 17:04
Analyst(s): TK			Analytical Comr	ments: e7,e2,b1	

Quality Control Report

Client: Aqua Science Engineers, Inc.

Date Prepared: 5/23/17

Date Analyzed: 5/25/17 - 5/31/17

Instrument: GC19, GC3, GC7

Matrix: Soil

Project: 745 Kevin Ct.

WorkOrder: 1705B08

BatchID: 139433

Extraction Method: SW5030B

Analytical Method: SW8021B/8015Bm

Unit: mg/Kg

Sample ID: MB/LCS-139433

1705A71-001AMS/MSD

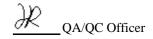
QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.519	0.40	0.60	-	86	82-118
MTBE	ND	0.0902	0.050	0.10	-	90	61-119
Benzene	ND	0.104	0.0050	0.10	-	104	77-128
Toluene	ND	0.106	0.0050	0.10	-	106	74-132
Ethylbenzene	ND	0.103	0.0050	0.10	-	103	84-127
Xylenes	ND	0.282	0.015	0.30	-	94	86-129
Surrogata Basayary							

Surrogate Recovery

2-Fluorotoluene 0.0943 0.0936 0.10 94 94 75-134

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.525	0.518	0.60	ND	87	86	58-129	1.23	20
MTBE	0.0749	0.0905	0.10	ND	70	85	47-118	18.8	20
Benzene	0.0802	0.0794	0.10	ND	80	79	55-129	0.966	20
Toluene	0.0847	0.0843	0.10	ND	85	84	56-130	0.489	20
Ethylbenzene	0.0896	0.0893	0.10	ND	90	89	63-129	0.258	20
Xylenes	0.280	0.279	0.30	ND	93	93	64-131	0	20
Surrogate Recovery									
2-Fluorotoluene	0.0892	0.0883	0.10		89	88	62-126	1.02	20



Quality Control Report

Client:Aqua Science Engineers, Inc.WorkOrder:1705B08Date Prepared:5/31/17BatchID:139740

Date Analyzed: 6/2/17 **Extraction Method:** SW5030B

Instrument:GC19Analytical Method:SW8021B/8015BmMatrix:SoilUnit:mg/Kg

Project: 745 Kevin Ct. **Sample ID:** MB/LCS-139740

	QC Summary	Report for S	W8021B/8015	Bm			
Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.560	0.40	0.60	-	93	82-118
MTBE	ND	0.0930	0.050	0.10	-	93	61-119
Benzene	ND	0.113	0.0050	0.10	-	113	77-128
Toluene	ND	0.118	0.0050	0.10	-	118	74-132
Ethylbenzene	ND	0.117	0.0050	0.10	-	117	84-127
Xylenes	ND	0.333	0.015	0.30	-	111	86-129
Surrogate Recovery							
2-Fluorotoluene	0.09774	0.106		0.10	98	106	75-134

1705B08

Quality Control Report

Client: Aqua Science Engineers, Inc. WorkOrder:
Date Prepared: 5/28/17 BatchID:

Date Prepared:5/28/17BatchID:139631Date Analyzed:5/28/17Extraction Method:SW5030B

Instrument: GC12 **Analytical Method:** SW8021B/8015Bm

Matrix: Water Unit: μg/L

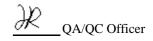
Project: 745 Kevin Ct. **Sample ID:** MB/LCS-139631

1705997-002AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	55.2	40	60	-	92	78-116
MTBE	ND	9.52	5.0	10	-	95	72-122
Benzene	ND	9.44	0.50	10	-	94	81-123
Toluene	ND	9.51	0.50	10	-	95	83-129
Ethylbenzene	ND	9.07	0.50	10	-	91	88-126
Xylenes	ND	25.7	1.5	30	-	86, F2	87-131
Surrogate Recovery							
aaa-TFT	10.61	10.5		10	106	105	89-116

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	NR	NR		ND<8000	NR	NR	=	NR	_
MTBE	NR	NR		ND<1000	NR	NR	-	NR	-
Benzene	NR	NR		1200	NR	NR	-	NR	-
Toluene	NR	NR		810	NR	NR	-	NR	_
Ethylbenzene	NR	NR		340	NR	NR	-	NR	_
Xylenes	NR	NR		3300	NR	NR	-	NR	-
Surrogate Recovery									
aaa-TFT	NR	NR			NR	NR	-	NR	-



Quality Control Report

Client: Aqua Science Engineers, Inc.

Date Prepared: 5/28/17 Date Analyzed: 5/28/17

Instrument: GC3

Matrix: Water

Project: 745 Kevin Ct.

WorkOrder: 1705B08

BatchID: 139651

Extraction Method: SW5030B

Analytical Method: SW8021B/8015Bm

Unit: $\mu g/L$

Sample ID: MB/LCS-139651

1705B34-005AMS/MSD

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	56.0	40	60	-	93	78-116
MTBE	ND	10.0	5.0	10	-	100	72-122
Benzene	ND	8.86	0.50	10	-	89	81-123
Toluene	ND	9.40	0.50	10	-	94	83-129
Ethylbenzene	ND	9.88	0.50	10	-	99	88-126
Xylenes	ND	31.0	1.5	30	-	103	87-131
Surrogate Recovery							
aaa-TFT	9.969	9.93		10	100	99	89-116

Analysis	MS	MSD	SPK	SPKRef	MS	MSD	MS/MSD	RPD	RPD
Analyte	Result	Result	Val	Val	%REC	%REC	Limits	KPD	Limit
TPH(btex)	NR	NR		120	NR	NR	-	NR	
MTBE	NR	NR		ND	NR	NR	-	NR	-
Benzene	NR	NR		ND	NR	NR	-	NR	-
Toluene	NR	NR		2.7	NR	NR	-	NR	_
Ethylbenzene	NR	NR		2	NR	NR	-	NR	_
Xylenes	NR	NR		5.2	NR	NR	-	NR	-
Surrogate Recovery									
aaa-TFT	NR	NR			NR	NR	-	NR	-

Quality Control Report

Client: Aqua Science Engineers, Inc.

Date Prepared: 5/24/17

Date Analyzed: 5/25/17

Instrument: GC9b **Matrix:** Soil

Project: 745 Kevin Ct.

WorkOrder: 1705B08

BatchID: 139475

Extraction Method: SW3550B/3630C

Analytical Method: SW8015B **Unit:** mg/Kg

Sample ID: MB/LCS-139475

1705B08-001AMS/MSD

QC Report for SW8015B w/ Silica Gel Clean-Up										
Analyte	MB Result	LCS Result		RL	SPK Val		B SS REC	LCS %REC	;	LCS Limits
TPH-Diesel (C10-C23)	ND	37.0		1.0	40	-		92		79-133
TPH-Motor Oil (C18-C36)	ND	=		5.0	-	-		-		-
Surrogate Recovery										
C9	22.86	22.9			25	91		92		77-109
Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/N	-	RPD	RPD Limit
TPH-Diesel (C10-C23)	NR	NR		32	NR	NR	-		NR	-
Surrogate Recovery										
C9	NR	NR			NR	NR	-		NR	-

Quality Control Report

Client: Aqua Science Engineers, Inc.

Date Prepared: 5/24/17

Date Analyzed: 5/25/17

Instrument: GC9a

Matrix: Water

Project: 745 Kevin Ct.

WorkOrder: 1705B08

BatchID: 139465

Extraction Method: SW3510C/3630C

Analytical Method: SW8015B

Unit: $\mu g/L$

Sample ID: MB/LCS/LCSD-139465

QC Report for SW8015B w/ Silica Gel Clean-Up									
Analyte	MB Result			RL	SPK Val		B SS REC		MB SS Limits
TPH-Diesel (C10-C23)	ND			50	-	-		-	
TPH-Motor Oil (C18-C36)	ND			250	-	-		-	
Surrogate Recovery									
C9	674.5				625	10	08	7	79-111
Analyte	LCS Result	LCSD Result	SPK Val		LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	1040	989	1000		104	99	88-134	5.01	30
Surrogate Recovery									
C9	690	679	625		110	109	79-111	1.67	30

McCampbell Analytical, Inc.

CHAIN-OF-CUSTODY RECORD

Page	1	of	
Page	1	OI	

1534 Willow Pass Rd Pittsburg, CA 94565-1701 (925) 252-9262

ittsburg, CA 94565-1701 WorkOrder: **1705B08** ClientCode: ASED

✓ EDF □HardCopy □WaterTrax WriteOn **EQuIS** ☐ ThirdParty □ Excel ✓ Email ☐ J-flag Report to: Bill to: Requested TAT: 5 days; Robert Kitay Email: rkitay@aquascienceengineers.com Diane Schiell cc/3rd Party: Aqua Science Engineers, Inc. Aqua Science Engineers, Inc. Date Received: 05/24/2017 PO: 55 Oak Court Suite 220 217 Wild Flower Drive ProjectNo: 745 Kevin Ct. Danville, CA 94526 Roseville, CA 95678 Date Logged: 05/24/2017 (925) 820-9391 FAX: (925) 837-4853 deezthng22@yahoo.com

					Requested Tests (See legend below)											
Lab ID	Client ID	Matrix	Collection Date	Hold	1	2	3	4	5	6	7	8	9	10	11	12
1705B08-001	BH-E 3.5'	Soil	5/23/2017 08:25		А		Α									
1705B08-002	BH-E 7.5'	Soil	5/23/2017 08:40		Α		Α									
1705B08-003	BH-F 3.5'	Soil	5/23/2017 09:22		Α		Α									
1705B08-004	BH-F 7.5'	Soil	5/23/2017 09:30		Α		Α									
1705B08-005	BH-G 3.5'	Soil	5/23/2017 10:20		Α		Α									
1705B08-006	BH-G 7.5'	Soil	5/23/2017 10:30		Α		Α									
1705B08-007	BH-H 3.5'	Soil	5/23/2017 11:16		Α		Α									
1705B08-008	BH-H 7.5'	Soil	5/23/2017 11:22		Α		Α									
1705B08-009	BH-I 3.5'	Soil	5/23/2017 12:20		Α		Α									
1705B08-011	BH-I 11.5'	Soil	5/23/2017 12:40		Α		Α									
1705B08-012	ВН-Е	Water	5/23/2017 09:00			Α		Α								
1705B08-013	BH-F	Water	5/23/2017 10:00			Α		Α								
1705B08-014	BH-G	Water	5/23/2017 10:40			Α		Α								
1705B08-015	BH-H	Water	5/23/2017 11:20			Α		Α								
1705B08-016	BH-I	Water	5/23/2017 12:53			Α		Α								

Test Legend:

1 G-MBTEX_S	2 G-MBTEX_W	3 TPH(DMO)WSG_S	4 TPH(DMO)WSG_W
5	6	7	8
9	10	11	12

Prepared by: Kena Ponce

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 011A contain testgroup Multi RangeWSG_S.; The following SampIDs: 012A, 013A, 014A, 015A, 016A contain testgroup Multi RangeWSG_W.

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.



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

WORK ORDER SUMMARY

Client Name: AQUA SCIENCE ENGINEERS, INC. Project: 745 Kevin Ct. Work Order	: 1705B	308
---	---------	-----

Client Contact: Robert Kitay

QC Level: LEVEL 2

Contact's Email: rkitay@aquascienceengineers.com

Comments:

Date Logged: 5/24/2017

WaterTrax WriteOn **✓** EDF Excel Fax ✓ Email HardCopy □ ThirdParty ☐ J-flag Lab ID Sediment Hold SubOut Client ID Matrix **Test Name** Containers **Bottle & Preservative** De-**Collection Date** TAT /Composites chlorinated & Time Content 1705B08-001A BH-E 3.5' Multi-Range TPH(g,d,mo) w/ S.G. Soil Acetate Liner 5/23/2017 8:25 5 days Clean-Up 1705B08-002A BH-E 7.5' Multi-Range TPH(g,d,mo) w/ S.G. Soil 1 Acetate Liner 5/23/2017 8:40 5 days Clean-Up 1705B08-003A BH-F 3.5' Soil Multi-Range TPH(g,d,mo) w/ S.G. 1 Acetate Liner 5/23/2017 9:22 5 days Clean-Up 1705B08-004A BH-F 7.5' Multi-Range TPH(g,d,mo) w/ S.G. 5/23/2017 9:30 Soil Acetate Liner 5 days Clean-Up 1705B08-005A BH-G 3.5' Multi-Range TPH(g,d,mo) w/ S.G. 5/23/2017 10:20 Soil Acetate Liner 5 days Clean-Up 1705B08-006A BH-G 7.5' Multi-Range TPH(g,d,mo) w/ S.G. Soil Acetate Liner 5/23/2017 10:30 5 days 1 Clean-Up 1705B08-007A BH-H 3.5' Multi-Range TPH(g,d,mo) w/ S.G. 5/23/2017 11:16 Soil Acetate Liner 5 days Clean-Up 1705B08-008A BH-H 7.5' Soil Multi-Range TPH(g,d,mo) w/ S.G. 1 5/23/2017 11:22 Acetate Liner 5 days Clean-Up 1705B08-009A BH-I 3.5' Soil Multi-Range TPH(g,d,mo) w/ S.G. Acetate Liner 5/23/2017 12:20 5 days Clean-Up 1705B08-010A BH-I 7.5 Soil Acetate Liner 5/23/2017 12:30 **✓** 1705B08-011A BH-I 11.5' Soil Multi-Range TPH(g,d,mo) w/ S.G. 1 Acetate Liner 5/23/2017 12:40 5 days VOA 1705B08-012A BH-E Multi-Range TPH(g,d,mo) w/ S.G. Water 5 5/23/2017 9:00 5 days 25% +Clean-Up

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.



Client Contact:

Robert Kitay

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

WORK ORDER SUMMARY

Client Name: AQUA SCIENCE ENGINEERS, INC. Project: 745 Kevin Ct. Work Order: 1705B08

QC Level: LEVEL 2

Contact's Email: rkitay@aquascienceengineers.com

Comments:

Date Logged: 5/24/2017

		WaterTrax	WriteOn _ ✓ EDF	Excel	Fax Email	HardC	opyThirdPar	ty 🔲	J-flag	
Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold SubOut
1705B08-013A	ВН-F	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	6	VOA		5/23/2017 10:00	5 days	75%+	
1705B08-014A	BH-G	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	5	VOA		5/23/2017 10:40	5 days	35%+	
1705B08-015A	ВН-Н	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	5	VOA		5/23/2017 11:20	5 days	35%+	
1705B08-016A	ВН-І	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	5	VOA		5/23/2017 12:53	5 days	35%+	

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. 55 Oak Court, Suite 220 Danville, CA 94526 (925) 820-9391 FAX (925) 837-4853

Chain of Custody

DDO JECT NAME OUE 1)	2
JOB NO.	
ANALYSIS PEOLITICE ADDRESS 745 REVIN 4 Oakland, CA	
ANALYSIS REQUEST	=
SPECIAL INSTRUCTIONS:	
SOLY OXY OXY	
DATE DATE TIME WATRIX QUANTITY TPH-GAS / MTBE (EPA 5030/8015) TPH-DIESEL & M (EPA 5210/8015) TPH-DIESEL & M (EPA 3510/8015) TPH-DIESEL & M (EPA 624/8240/82) OLL & GREASE (EPA 625/8270) OLL & GREASE (EPA 6210-7000) PCBS (EPA 6010+7000) PCBS (EPA 8082) PCBS (EPA 8082) PCBS (EPA 8082) PCBS (EPA 8082) PCBS (EPA 8080) TPH-G, BTEX & E (EPA 8260)	
DATE DATE DATE TIME MATHIX QUANTITY TPH-GAS // (EPA 5030/8 VOLATILE OF (EPA 624/824 SEMI-VOLATI (EPA 625/827 OIL & GREAS CAM 17 META (EPA 6010+70 (EPA 6010+70 CAM 17 META (EPA 6010+70 CAM 17 META (EPA 6010+70 CAM 17 META (EPA 6010) PCBS (EPA 8082) PCBS (EPA 8082) PCBS (EPA 8080) COMPOSITE COMPOSITE	
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1517-6 75	-
BH-F 3.5 922	
BH-F 7.5' 930 X X	
BH-6 35' 1020 X X	
BH-675' 1030 XX	
BH-1+35° NIG	
BH-H 75 1122	
BH-T 3.5' 1220 X	
BH-I 75' \ 1239 J J	
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Nobert L. Kit.	
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Company-ASE, INC. Company-	2Hr
Company- Company- Company-	

Temp 3.5

Aqua Science Engineers, Inc. 55 Oak Court, Suite 220 Danville, CA 94526 (925) 820-9391 Chain of Custody FAX (925) 837-4853 PAGE SAMPLER (SIGNATURE) PROJECT NAME 745 Revin C+ JOB NO. **ADDRESS** Oakland or DISSOLVED) SPECIAL INSTRUCTIONS: SEMI-VOLATILE ORGANICS (EPA 625/8270) ORGANOCHLORINATED PESTICIDES (EPA 8081A) TPH-GAS / MTBE & BTEX (EPA 5030/8015-8020) TPH-G, BTEX & 5 OXY's (EPA 8260) TPH-DIESEL & MOTOR ((EPA 3510/8015) VOLATILE ORGANICS EPA 624/8240/8260) FUEL OXYGENATES (EPA 8260) 55 TPH-DIESEL (EPA 3510/8015) CAM 17 METALS (EPA 6010+7000) LUFT METALS (5) (EPA 6010+7000) OIL & GREASE (EPA 5520) PCBs (EPA 8082) QUANTITY SAMPLE ID. 5-23-17 1240 S 900 5 5-23-17 X 1000 5 1040 5 1120 2 RELINQUISHED BY: RECEIVED BY: RELINQUISHED BY: RECEIVED BY LABORATORY COMMENTS: 951 52447 1430 (signature) (time) (signature) (time) (signature)

(printed name)

Company-ASE, INC.

(printed name)

Company-

(date)

(printed name)

Company-

(date)

Tenawhitney

(date)

(printed name)

Company-

TURN AROUND TIME

24Hr 48Hr 72Hr

STANDARD

OTHER:

Sample Receipt Checklist

Client Name: Aqua Science Engineers, Inc.			Date and Time Received	5/24/2017 15:25
Project Name: 745 Kevin Ct.			Date Logged: Received by:	5/24/2017 Jena Alfaro
WorkOrder №: 1705B08 Matrix: Soil/Water			Logged by:	Kena Ponce
Carrier: Benjamin Yslas (MAI Courier)			30 7	
<u>Chain of</u>	Custody	(COC) Inform	mation	
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 by Client on COC?	Yes	•	No 🗆	
Date and Time of collection noted by Client on COC?	Yes	✓	No 🗆	
Sampler's name noted on COC?	Yes	✓	No 🗆	
<u>Sam</u>	ple Rece	ipt Information	<u>on</u>	
Custody seals intact on shipping container/cooler?	Yes		No 🗆	NA 🗸
Shipping container/cooler in good condition?	Yes	•	No 🗌	
Samples in proper containers/bottles?	Yes	✓	No 🗌	
Sample containers intact?	Yes	✓	No 🗆	
Sufficient sample volume for indicated test?	Yes	✓	No 🗆	
Sample Preserva	ntion and	Hold Time (H	IT) Information	
All samples received within holding time?	Yes	✓	No 🗆	NA 🗌
Sample/Temp Blank temperature		Temp: 3.5	°C	NA 🗌
Water - VOA vials have zero headspace / no bubbles?	Yes	✓	No 🗆	na 🗆
Sample labels checked for correct preservation?	Yes	✓	No 🗌	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes		No 🗆	NA 🗹
Samples Received on Ice?	Yes	✓	No 🗆	
	ype: WE	TICE)		
<u>UCMR3 Samples:</u> Total Chlorine tested and acceptable upon receipt for EPA 522	? Yes		No 🗆	NA 🗹
Free Chlorine tested and acceptable upon receipt for EPA 218. 300.1, 537, 539?	7, Yes		No 🗆	NA 🗹
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