Alameda County Health Care Services Agency

1131 Harbor Bay Pkwy, Suite 250

Alameda, CA 94502

Subject: RO#0000262

Albany Hill Mini Mart

800 San Pablo Avenue

Albany, CA

Attached please find a copy of the most recent groundwater sampling report for the above referenced site. 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.

Sincerely,

Jasminder Sikand

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

July 23, 2015

SOIL AND SOIL VAPOR ASSESSMENT REPORT
ASE JOB NO. 3834

At
Albany Hill Mini Mart
800 San Pablo Avenue
Albany, CA 94706

Prepared by:
AQUA SCIENCE ENGINEERS, INC.
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1.0 INTRODUCTION

This report presents the methods and findings of Aqua Science Engineers, Inc. (ASE)'s soil and soil vapor survey assessment performed at and surrounding the Albany Hill Mini Mart located at 800 San Pablo Avenue in Albany, California (Figures 1 and 2). The site assessment activities were initiated by Jasminder and Sonia Sikand, owners of the property, as requested by the Alameda County Health Care Services Agency (ACHCSA) in their directive letter dated May 7, 2015.

2.0 SITE HISTORY

Please see ASE's "Updated Site Conceptual Model" document dated August 4, 2011 and September 20, 2012 "Soil, Groundwater, and Soil Vapor Assessment Report" for detailed description of the site history and environmental condition of the site.

3.0 SCOPE OF WORK (SOW)

The purpose of this assessment is to provide additional data to be used to determine whether the site may be closed as a low-threat case under the new California Regional Water Quality Control Board, San Francisco Bay Region Low-Threat Closure Policy. ASE attempted to collect this data previously; however, due to an unusual shallow groundwater condition, the collection of soil vapor samples was not possible. The previous assessment was described in a report prepared by ASE dated July 11, 2014. The specific scope of work was as follows:

1) Obtain a drilling permit from the Alameda County Public Works Agency and an encroachment permit from the City of Albany.

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 in locations on and off-site using a Geoprobe and install vapor monitoring wells.

4) Analyze soil samples from each boring in Washington Street at a CAL-EPA certified analytical laboratory for total petroleum hydrocarbons as diesel (TPH-D) by modified Method 8015 and total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethyl benzene, and total xylenes (collectively known as BTEX), naphthalene, and fuel oxygenates by EPA Method 8260B.

5) Collect soil vapor samples from the five vapor monitoring wells.

6) Analyze the soil vapor sample from each boring at a CAL-EPA certified analytical laboratory for total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethylbenzene and total xylenes (collectively known as BTEX), fuel oxygenates, and naphthalene by EPA Method TO-15, and carbon dioxide, oxygen, methane and helium by ASTM D1946.

7) Prepare a report presenting the methods and findings of this assessment.

Details of the assessment are presented below.

4.0 DRILL SOIL BORINGS AND COLLECT SOIL SAMPLES

4.1 Permits and Subsurface Utility Line Clearance

Prior to drilling, ASE obtained a drilling permit from the Alameda County Public Works Agency. ASE also obtained an encroachment permit from the City of Albany to allow for drilling in the city's right-of-way. Copies of these permits are presented in Appendix A.

ASE also notified Underground Service Alert (USA) to have public underground utility lines marked in the site vicinity. A private underground utility line locating service, Cruz Brothers Locators of Scott's Valley, California, was also contracted to clear each boring location of underground utility lines.

4.2 Drilling and Soil Sample Collection

On June 30, 2015, Vironex Environmental Field Services of Concord, California drilled soil borings SVW-2, SVW-4 and SVW-5 using a Geoprobe direct push drilling rig. Boring SVW-3 was drilled with a sampler driven into place with a rotohammer since this location was not accessible to a Geoprobe rig. ASE senior geologist Robert E. Kitay, P.G. directed the drilling.

Undisturbed soil samples were collected continuously in SVW-2, SVW-4 and SVW-5 as drilling progressed for lithologic and hydrogeologic description and for possible 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 of Pittsburgs, California (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 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 logs presented in Appendix B.

4.3 Decontamination and Borehole Backfilling

Drilling equipment was cleaned with an Alconox solution between sampling intervals and between borings to prevent potential cross-contamination.

4.4 Subsurface Lithology and Hydrogeology

Sediments encountered in these borings generally consisted of low-permeability silty clay. No groundwater was encountered in any of these borings. Boring logs are presented as Appendix B.

5.0 COLLECT SOIL VAPOR SAMPLES

Prior to conducting the project, ASE verified that there was no significant rainfall (no more than ¼-inch) for 5 days prior to the soil vapor sampling. There were no nearby irrigation systems.

On June 30, 2015, Vironex pushed soil vapor point SVW-2 and SW-4 to a depth of 5-feet bgs using a Geoprobe. Soil vapor point SVW-5 was pushed to a depth of 10-feet bgs using a Geoprobe. Soil vapor point SVW-3 was pushed to a depth of 5-feet bgs using a rotohammer, since the limited access in this location would not allow for use of a Geoprobe. The locations are shown on Figure 2. ASE senior geologist Robert E. Kitay, P.G. directed the drilling.

Once at depth, ¼" Teflon tubing with a 1-inch screen was inserted inside the drive rod. 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 followed by a cement sanitary seal to the surface to prevent ambient air intrusion into the borehole. A traffic rated wellbox was also installed to protect this vapor well.

The borehole was then allowed to equilibrate for at least 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.

For the sampling, the sampling probe and Summa canister were placed in a plastic shroud with glove entry. Helium was then added to the shroud as a tracer gas at a minimum concentration between 25 to 30% 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 at a vacuum of approximately 100-inches of water. The sample was 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 a CAL-EPA certified analytical laboratory for analysis.

It should be noted that all of the Summa canisters were very slow filling due to tight soil conditions, and in most cases the Summa canisters never completely filled. Since the flow rate

was so slow, it was not possible to collect the desired sample in the TO-17 cartridge for analysis since TO-17 canisters require a steady flow of vapor through relatively high permeability soil.

Previously installed soil vapor well SVW-1 (installed in August 2012) was also sampled in the same manner as the other wells. However, since some of the soil vapor manifolds did not pass the "vacuum shut-in test," the sampling for this well did not take place until the next day (July 1st) after a new manifold was obtained from the laboratory.

6.0 ANALYTICAL RESULTS FOR SOIL

Two soil samples were collected from both SVW-4 and SVW-5 and were analyzed by McCampbell Analytical of Pittsburg, California (ELAP certification 1644) for TPH-G by EPA Method 8015, BTEX, naphthalene, and the fuel oxygenates methyl-t-butyl ether (MTBE), diisopropyl ether (DIPE), ethyl-t-butyl ether (ETBE), tert-amyl methyl ether (TAME), and tert-butanol (TBA) by EPA Method 8260B. These soil samples were also analyzed for TPH-D by EPA Method 8015 (with silica gel cleanup). The analytical results are tabulated along with previous results in Table One, and the certified analytical report and chain of custody record are included in Appendix C.

- The soil sample collected from 5.0-feet bgs in SVW-5 contained 0.67 parts per million (ppm) TPH-G and 0.012 ppm benzene.

- The soil sample collected from 3.5-feet bgs in boring SVW-4 contained 2.5 ppm TPH-D.

- No other hydrocarbons, BTEX, naphthalene or fuel oxygenates were detected in any of other samples analyzed.

These results were compared to Environmental Screening Levels (ESLs) for soil in areas where groundwater is a current or potential source of drinking water. These ESLs were presented in Table A of 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 detected concentrations exceeded any ESL.

In addition, all of the total TPH concentrations (gasoline plus diesel) were well below 100 ppm, as required for soil to be considered a bioattenuation zone per the RWQCB "Low-Threat Underground Storage Tank Closure Policy" guidelines.

7.0 ANALYTICAL RESULTS FOR SOIL VAPOR SAMPLES

The vapor samples were analyzed by McCampbell Analytical of Pittsburg, California (ELAP certification 1644) for TPH-G, BTEX, five fuel oxygenates, and naphthalene by EPA Method TO-15 and oxygen, carbon dioxide, methane and helium by ASTM D1946. Nitrogen analysis wasn't performed since the Summa canisters were pressurized with nitrogen. The analytical results are tabulated in Table Two, and the certified analytical report and chain of custody form are included in Appendix D. Helium, used as a leak check gas, was detected in SVW-2 at 0.060% and in SVW-3 at 1.7%. Both of these results are less than 10% of the helium concentration in the shroud, which was always kept between 25-30%. This indicates that these results are considered valid. No helium was detected in any of the remaining samples.

The laboratory had a contamination issue with the soil vapor sample collected from SVW-1 related to the low-pressure in the Summa canister. For this reason, the laboratory considered the analytical results for this sample invalid. Please see the recommendation section of this report for recommendations related to this sample.

- The soil vapor sample collected from SVW-2 contained 8,500 ug/m3 TPH-G, 74 ug/m3 benzene, 180 ug/m3 toluene, 60 ug/m3 ethyl benzene, and 170 ug/m3 total xylenes. No naphthalene or oxygenates were detected. The benzene concentration exceeded the residential environmental screening level (ESL), but did not exceed the commercial ESL. These ESLs are established by the California Regional Water Quality Control Board, San Francisco Bay Region in their "Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater" document dated December 2013. This vapor well is outside and adjacent to an auto repair facility, so these results will not present a risk to either the site or the adjacent commercial auto repair shop.

- The soil vapor sample collected from SVW-3 contained 3,100 ug/m3 TPH-G, 27 ug/m3 benzene, 120 ug/m3 toluene, 35 ug/m3 ethyl benzene, 190 ug/m3 total xylenes, and 43 ug/m3 TBA. No naphthalene or oxygenates other than the TBA were detected. None of these results exceeded either residential or commercial ESLs. This vapor well is inside the bathroom of the on-site store, and may also be used to evaluate the adjacent residential apartment building. These results do not indicate a threat to either the on-site commercial building or to the adjacent residential building.

- The soil vapor sample collected from SVW-4 contained 11,000 ug/m3 TPH-G, 17 ug/m3 benzene, 41 ug/m3 toluene, 49 ug/m3 ethyl benzene, and 390 ug/m3 total xylenes. No naphthalene or oxygenates were detected. None of these results exceeded either residential or commercial ESLs.

- The soil vapor sample collected from SVW-5 contained 190,000 ug/m3 TPH-G, 12,000 ug/m3 benzene, 210 ug/m3 toluene, and 320 ug/m3 ethyl benzene. No naphthalene or oxygenates were detected. The benzene concentration exceeded both residential and commercial ESLs. This vapor sample is from a depth of 10-feet bgs. These results are only relevant to the basement beneath the adjacent Mallard Club, as the results from SVW-4, which was collected from 5-feet bgs, is more relevant to the first story of the

building. The adjacent building is approximately 12-feet from this boring. Closer borings are not possible due to the numerous underground utility lines in the sidewalk.

Besides the ESLs, ASE also compared the results to the Low-Risk Soil Gas Criteria outlined in 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. This scenario is relevant since a) there is minimum of five vertical feet of soil between the soil vapor measurement and the foundation of the building (except for the Mallard Club basement, which will be discussed below), b) all of the soil above 5-feet have total petroleum hydrocarbon concentrations well below 100 ppm (highest actual concentration is 2.5 ppm), and c) the oxygen concentration in the soil vapor samples exceeds 4% (actual concentration ranges from 15 to 40%). All of the soil vapor results were below both the residential and commercial Low-Risk Soil Gas Criteria where a bioattenuation zone is present.

However, for the soil vapor sample from SVW-5, this sample was collected from a depth of 10-feet bgs. It is unknown what the depth of the basement in the Mallard Club may be, but it is likely deeper than 5-feet, which would invalidate the use of the bioattenuation zone criteria since the sample was not deeper than 5-feet beneath the building foundation. There is no scenario within the Low-Risk Soil Gas Criteria for horizontal distances. It is not possible to collect a deeper sample or a closer sample to the building due to the depth to groundwater and the presence of utility lines within the sidewalk. For this reason, given the current data, it is not possible to determine whether the results from SVW-5 present a risk to indoor air in the basement of the Mallard Club.

8.0 CONCLUSIONS

The soil vapor results indicate that there is no risk to indoor air based on current usage for either the site, the adjacent auto repair shop to the south, or the residential property to the east. This is based on ESLs. When applying the Low-Risk Soil Gas Criteria with bioattenuation zone (which is valid for the on-site building, the building to the south and the building to the west), all of the soil vapor results show low risk for even residential usage.

However, the Mallard Club across the street and to the north has a basement, and the bioattenuation zone scenario does not fit the actual situation. It is not possible to determine, with the current data, whether the soil vapors identified in SVW-5 may present a risk to the basement beneath the Mallard Club.

9.0 RECOMMENDATIONS

ASE recommends repeating the soil vapor sampling from soil vapor well SVW-5 in September to check the validity of these results. In addition, ASE recommends collecting a sample from SVW-1 at the same time, since the laboratory was not able to provide reliable results from the sample collected from that well during this sampling event.

ASE also recommends collecting an indoor air sample from the basement in the Mallard Club.

10.0 REPORT LIMITATIONS

The opinions and recommendations 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.

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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 and 2
Tables One and Two
Appendices A through D

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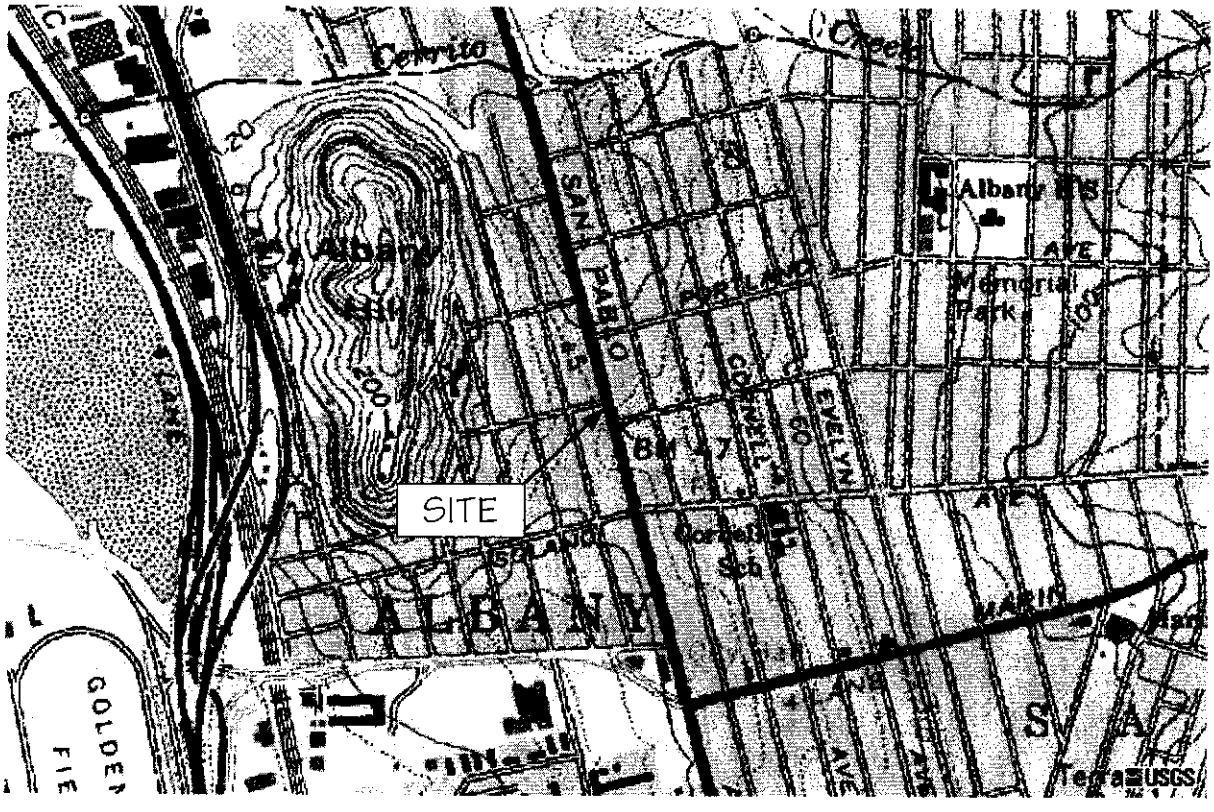
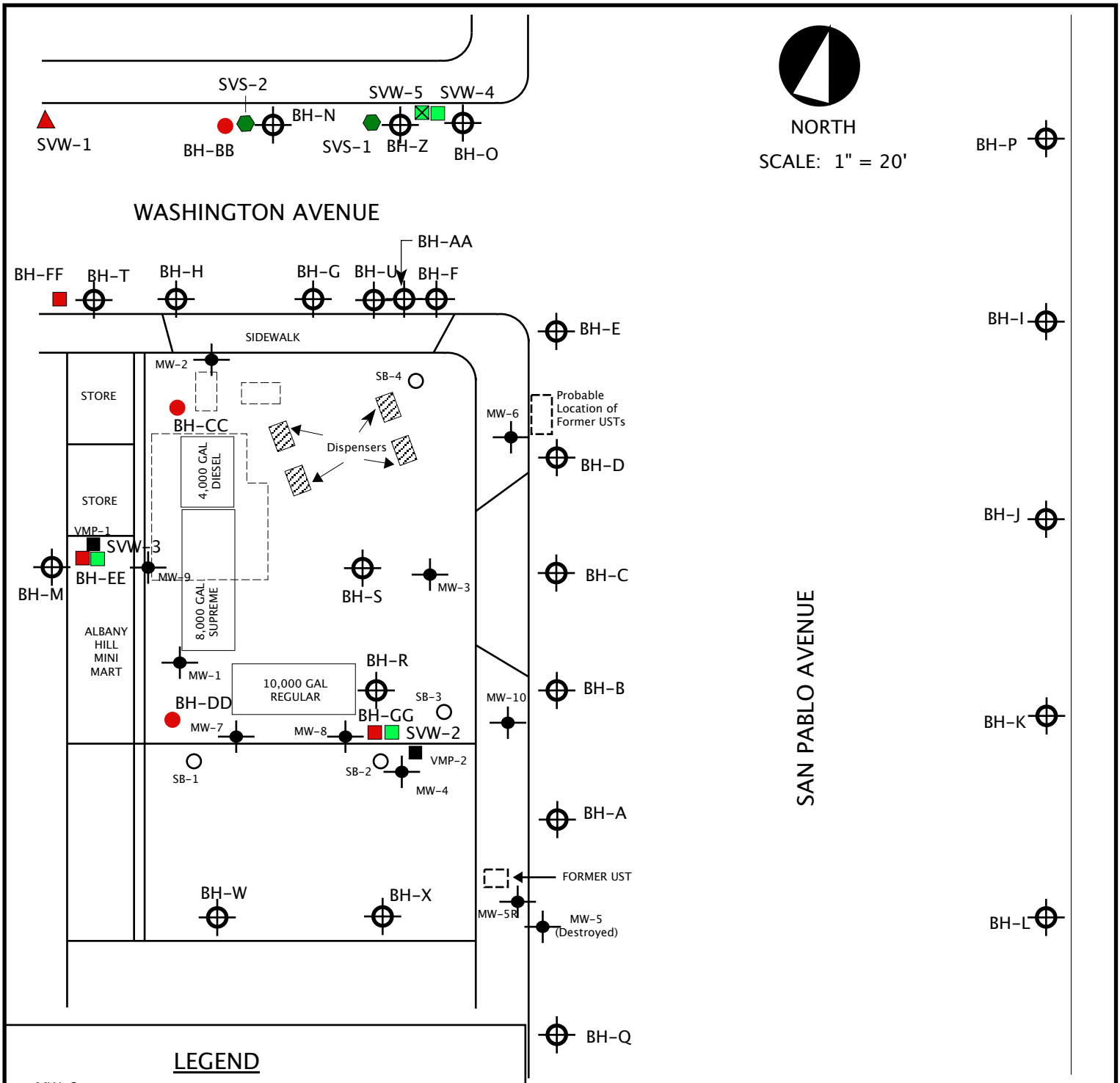
FIGURES

NORTH



LOCATION MAP	
ALBANY HILL MINI MART 800 SAN PABLO AVENUE ALBANY, CALIFORNIA	
AQUA SCIENCE ENGINEERS, INC.	Figure 1



LEGEND

- MW-2 — MONITORING WELL
- SB-2 — AARS SOIL BORING
- BH-A — ASE ADVANCED SOIL BORING
- SOIL VAPOR SURVEY LOCATION
- SOIL VAPOR MONITORING WELL (2/14)
- SOIL BORING/ATTEMPTED VAPOR SAMPLE (2/14)
- SOIL BORING (2/14)
- SOIL VAPOR MONITORING WELL - 5-FEET (6/15)
- SOIL VAPOR MONITORING WELL - 10-FEET (6/15)

SOIL VAPOR WELL LOCATION MAP

ALBANY HILL MINI MART
800 SAN PABLO AVENUE
ALBANY, CALIFORNIA

AQUA SCIENCE ENGINEERS | Figure 2

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TABLES

TABLE ONE

Certified Analytical Results for **SOIL** Samples
Albany Hill Mini Mart
800 San Pablo Avenue, Albany, CA
All results are in **parts per million (ppm)**

Well or Boring	Sample Depth (feet)	Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Naphthalene	TAME	TBA	MTBE	Other VOCs
BH-BB	3.5	2/25/14	**0.99**	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.050	< 0.0050	< 0.0050
BH-CC	4.0	2/25/14	< 0.25	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.050	< 0.0050	< 0.0050
BH-DD	3.0	2/25/14	< 0.25	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.050	< 0.0050	< 0.0050
BH-EE	3.5	2/25/14	< 0.25	**16**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.050	< 0.0050	< 0.0050
BH-FF	3.0	2/25/14	< 0.25	**2.3**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.050	< 0.0050	< 0.0050
BH-GG	3.0	2/25/14	< 0.25	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.050	< 0.0050	< 0.0050
	6.5	2/25/14	< 0.25	**1.6**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.050	< 0.0050	< 0.0050
SVW-1	3.0	2/25/14	< 0.25	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.050	< 0.0050	< 0.0050
SVW-4	3.5	6/30/15	< 0.25	**2.5**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.050	< 0.0050	< 0.0050
	5.0	6/30/15	< 0.25	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.050	< 0.0050	< 0.0050
SVW-5	5.0	6/30/15	**0.67**	< 1.0	**0.012**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.050	< 0.0050	< 0.0050
	10.0	6/30/15	< 0.25	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.050	< 0.0050	< 0.0050
ESL (Drinking Water)			100	100	0.044	2.9	3.3	2.3	1.2	NE	0.075	0.023	Varies

Notes:

ESL = Environmental screening levels presented in the "Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater (December 2013)" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region for commercial sites where groundwater is used for drinking water (Table A) and not used for drinking water (Table A).

Detectable concentrations in Bold.

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

NE means that no ESL has been established for this compound.

TABLE TWO
Summary of Analytical Results of Soil Vapor Samples
Petroleum Hydrocarbons, Atmospheric Gases and Helium
Albany Hill Mini Mart, 800 San Pablo Avenue, Albany, California

Sample Location	Sample Depth (ft)	Date Sampled	TPH Gasoline (ug/m3)	Benzene (ug/m3)	Toluene (ug/m3)	Ethyl Benzene (ug/m3)	m,p-Xylenes (ug/m3)	o' Xylenes (ug/m3)	Total Xylenes (ug/m3)	Naphthalene (ug/m3)	TBA (ug/m3)	Oxygen (%)	Nitrogen (%)	Carbon Dioxide (%)	Methane (%)	Helium (%)
SVS-1	5	8/2/12	**24,000**	**12**	**86**	< 8.7	**28**	**9.4**	---	---	---	**16**	**84**	**0.42**	**0.0037**	< 0.34
SVS-2	5	8/2/12	**1,100,000**	**440**	**55**	< 37	< 37	< 37	---	---	---	**18**	**81**	**0.24**	**0.51**	< 0.086
VMP-1	1.5	8/2/12	**970**	< 2.7	< 3.2	< 3.6	< 3.6	< 3.6	---	---	---	**21**	**79**	**0.14**	< 0.00029	< 0.15
VMP-2	1.5	8/2/12	**950**	< 2.5	< 2.9	< 3.4	< 3.4	< 3.4	---	---	---	**16**	**79**	**5.0**	< 0.00026	< 0.13
SVW-1	5	2/25/14 7/1/15	**11,000**	**20**	**120**	**20**	**71** Laboratory issue resulted in this sample being considered invalid	**20**	---	< 10		**20**	**80**	**0.42**	**0.036**	< 0.12
SVW-2	5	6/30/15	**8,500**	**74**	**180**	**60**	---	---	**170**	< 7.0	< 41	**40**	---	**0.11**	**0.00049**	**0.060**
SVW-3	5	6/30/15	**3,100**	**27**	**120**	**35**	---	---	**190**	< 5.3	**43**	**15**	---	**0.080**	**0.00022**	**1.7**
SVW-4	5	6/30/15	**11,000**	**17**	**41**	**49**	---	---	**390**	< 11	< 62	**30**	---	**0.52**	**0.011**	< 0.050
SVW-5	10	6/30/15	**190,000**	**12,000**	**210**	**320**	---	---	**< 150**	< 120	< 720	**35**	---	**0.15**	**0.0053**	< 0.050
ESL (Residential)			300000	42	16000	490	52000	52000	52000	36	NE	NE	NE	NE	NE	NE
ESL (Commercial)			2500000	420	1300000	4,900	440000	440000	440000	360	NE	NE	NE	NE	NE	NE
Low-Risk Soil Gas Criteria (With bioattenuation zonel)																
Residential			NE	85000	NE	280000	NE	NE	NE	93000	NE	NE	NE	NE	NE	NE
Commercial			NE	280000	NE	3600000	NE	NE	NE	310000	NE	NE	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

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APPENDIX A

Drilling Permit

Alameda County Public Works Agency - Water Resources Well Permit

Public Works Agency
Alameda County

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

Application Approved on: 06/24/2015 By jamesy

Permit Numbers: W2015-0567
Permits Valid from 07/01/2015 to 07/01/2015

Application Id: 1434650612839 **City of Project Site:** Albany
Site Location: 800 San Pablo Avenue
Project Start Date: 07/01/2015 **Completion Date:** 07/01/2015
Assigned Inspector: Contact Lindsay Furuyama at (925) 956-2311 or Lfuruyama@groundzonees.com

Applicant: Aqua Science Engineers - Robert Kitay **Phone:** 925-413-8604
55 Oak Court, Suite 220, Danville, CA 94526
Property Owner: Jasminder and Sonia Sikand **Phone:** --
1066 Rock Harbor Point, Hercules, CA 94547
Client: ** same as Property Owner **
Contact: Robert Kitay **Phone:** --
Cell: --

Total Due: $265.00
Receipt Number: WR2015-0314 **Total Amount Paid:** $265.00
Payer Name : Aqua Science Engineers Paid By: VISA **PAID IN FULL**

Works Requesting Permits:

Well Construction-Vapor monitoring well-Vapor monitoring well - 4 Wells
Driller: Vironex - Lic #: 705927 - Method: DP **Work Total: $265.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2015-0567	06/24/2015	09/29/2015	SVW-2	2.00 in.	0.25 in.	4.00 ft	5.00 ft
W2015-0567	06/24/2015	09/29/2015	SVW-3	2.00 in.	0.25 in.	4.00 ft	5.00 ft
W2015-0567	06/24/2015	09/29/2015	SVW-4	2.00 in.	0.25 in.	4.00 ft	5.00 ft
W2015-0567	06/24/2015	09/29/2015	SVW-5	2.00 in.	0.25 in.	9.00 ft	10.00 ft

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 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. 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.

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

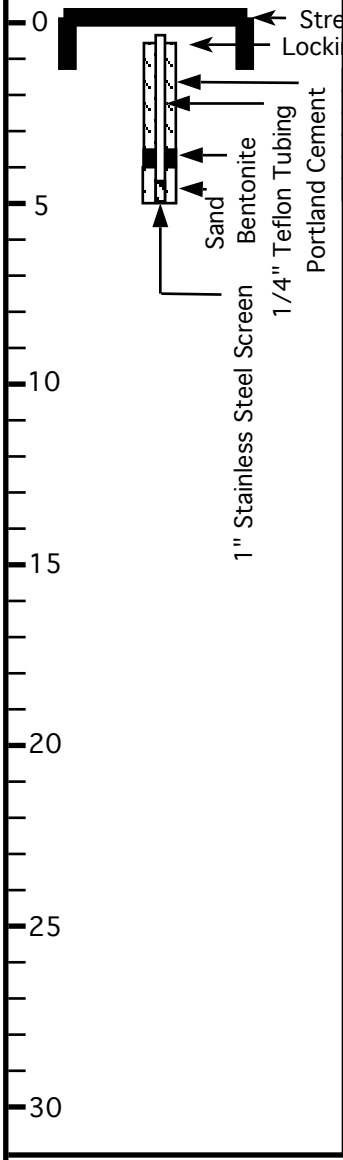
APPENDIX B

Boring Logs

SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS		BORING: SVW-2
Project Name: Albany Hill	Project Location: 800 San Pablo Ave, Albany, CA	Page 1 of 1
Driller: Vironex	Type of Rig: Geoprobe 6600	Size of Drill: 2.0" Diameter
Logged By: Robert E. Kitay, P.G.	Date Drilled: June 30, 2015	Checked By: Robert E. Kitay, P.G.

WATER AND WELL DATA

Depth of Water First Encountered: NA	Total Depth of Well Completed: 5'
	Well Screen Type and Diameter: Stainless Steel Sampling Point
Static Depth of Water in Well: NA	Well Screen Slot Size: NA
Total Depth of Boring: 5'	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.

Note that the lithology is from previous boring BH-EE

Asphalt

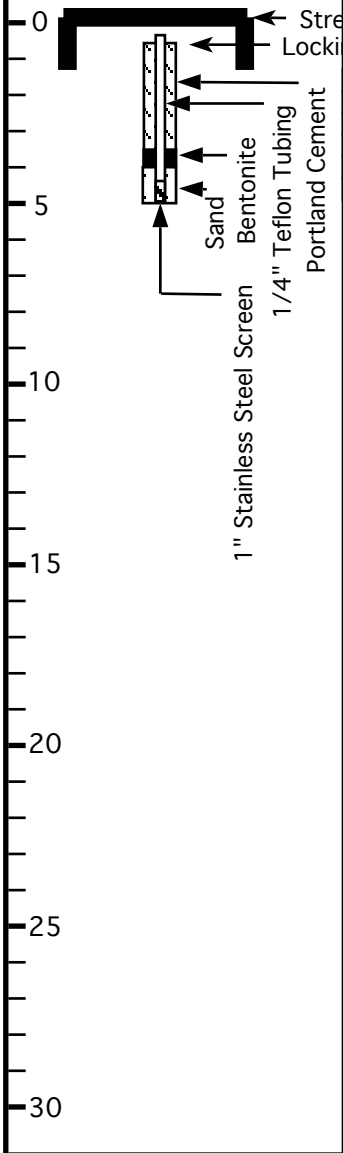
Silty CLAY (CH); dark yellow brown; dry; stiff; 80% clay; 20% silt; trace gravel; moderate plasticity; very low estimated K; no odor

End of boring

AQUA SCIENCE ENGINEERS, INC.

SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS		BORING: SVW-3
Project Name: Albany Hill	Project Location: 800 San Pablo Ave, Albany, CA	Page 1 of 1
Driller: Vironex	Type of Rig: Geoprobe 6600	Size of Drill: 2.0" Diameter
Logged By: Robert E. Kitay, P.G.	Date Drilled: June 30, 2015	Checked By: Robert E. Kitay, P.G.

WATER AND WELL DATA	
Depth of Water First Encountered: NA	Total Depth of Well Completed: 5'
	Well Screen Type and Diameter: Stainless Steel Sampling Point
Static Depth of Water in Well: NA	Well Screen Slot Size: NA
Total Depth of Boring: 5'	Type and Size of Soil Sampler: 2.0" I.D. Macro Sampler



SOIL/ROCK SAMPLE DATA				
Interval	Blow Counts	PID (ppmv)	Water Level	Graphic Log

Depth in Feet	DESCRIPTION OF LITHOLOGY
	standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.
	Note that the lithology is from previous boring BH-EE
0	Concrete
	Silty SAND (SM); yellow brown; dry; medium dense; 70% fine sand; 30% silt; high estimated K; no odor
5	Silty CLAY (CH); olive; moist; stiff; 80% clay; 20% silt; trace gravel; moderate plasticity; very low estimated K; no odor
	End of boring
10	
15	
20	
25	
30	

AQUA SCIENCE ENGINEERS, INC.

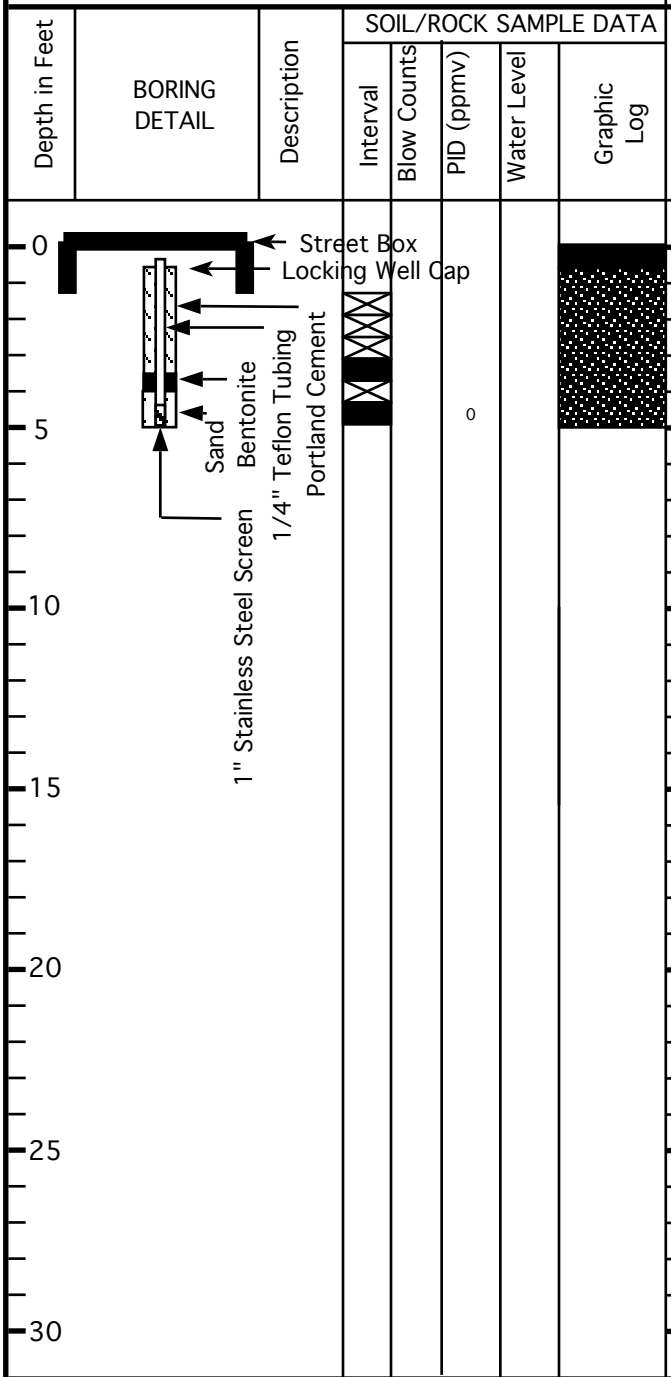
SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS

BORING: SVW-4

Project Name: Albany Hill	Project Location: 800 San Pablo Ave, Albany, CA	Page 1 of 1
Driller: Vironex	Type of Rig: Geoprobe 6600	Size of Drill: 2.0" Diameter
Logged By: Robert E. Kitay, P.G.	Date Drilled: June 30, 2015	Checked By: Robert E. Kitay, P.G.

WATER AND WELL DATA

Depth of Water First Encountered: NA	Total Depth of Well Completed: 5'
	Well Screen Type and Diameter: Stainless Steel Sampling Point
Static Depth of Water in Well: NA	Well Screen Slot Size: NA
Total Depth of Boring: 5'	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.

Asphalt

Silty CLAY (CH); yellow brown; dry; very stiff; 80% clay; 20% silt; high plasticity; very low estimated K; no odor

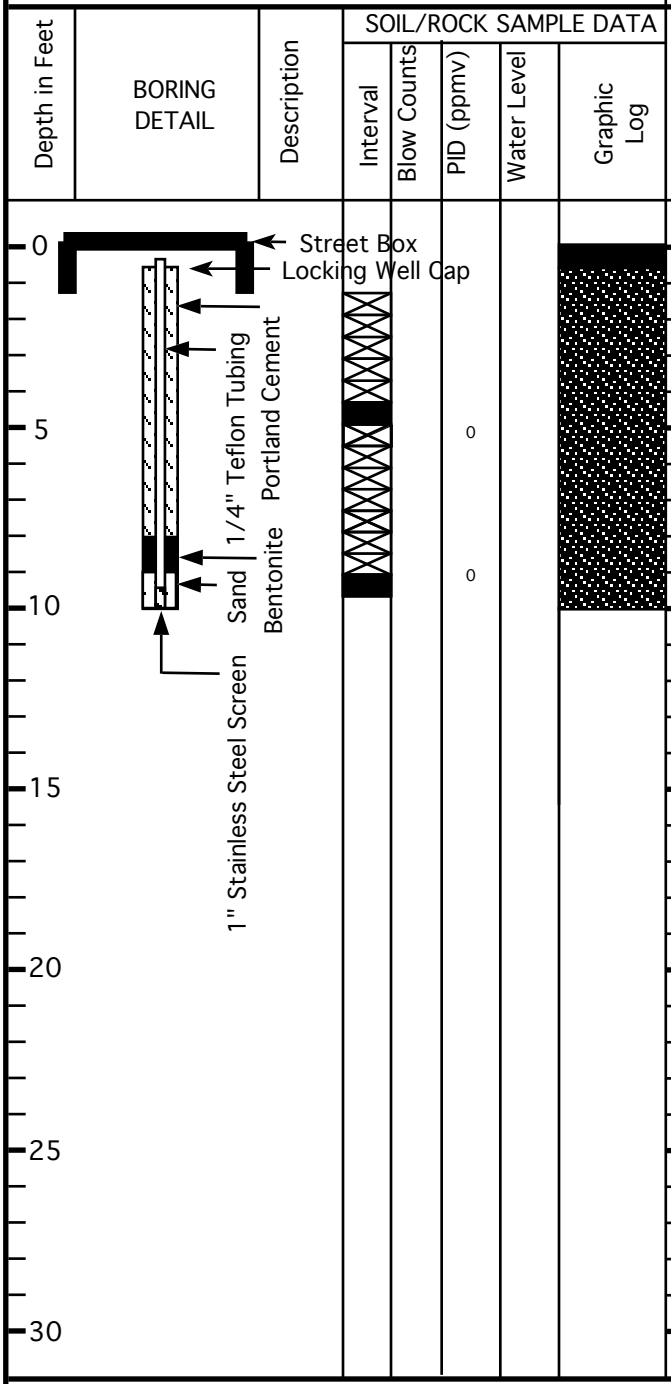
no odor at 4'

End of Boring at 5'

AQUA SCIENCE ENGINEERS, INC.

SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS		BORING: SVW-5
Project Name: Albany Hill	Project Location: 800 San Pablo Ave, Albany, CA	Page 1 of 1
Driller: Vironex	Type of Rig: Geoprobe 6600	Size of Drill: 2.0" Diameter
Logged By: Robert E. Kitay, P.G.	Date Drilled: June 30, 2015	Checked By: Robert E. Kitay, P.G.

WATER AND WELL DATA	
Depth of Water First Encountered: NA	Total Depth of Well Completed: 10'
	Well Screen Type and Diameter: Stainless Steel Sampling Point
Static Depth of Water in Well: NA	Well Screen Slot Size: NA
Total Depth of Boring: 10'	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.

0 Asphalt

Silty CLAY (CH); yellow brown; dry; very stiff; 80% clay; 20% silt; high plasticity; very low estimated K; no odor

no odor at 9'

End of Boring at 10'

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APPENDIX C

Certified Analytical Report
and
Chain of Custody Documentation
For Soil Samples

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1507099

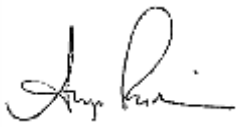
Report Created for: Aqua Science Engineers, Inc.

55 Oak Court Suite 220
Danville, CA 94526

Project Contact: Dave Allen
Project P.O.:
Project Name: Albany Hill

Project Received: 07/02/2015

Analytical Report reviewed & approved for release on 07/09/2015 by:



Angela Rydelius,
Laboratory Manager

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

Glossary of Terms & Qualifier Definitions

Client: Aqua Science Engineers, Inc.
Project: Albany Hill
WorkOrder: 1507099

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)
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.
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

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Analytical Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507099
Project:	Albany Hill	**Extraction Method:**	SW5030B
Date Received:	7/2/15 20:10	**Analytical Method:**	SW8260B
Date Prepared:	7/2/15	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-4 3.5'	**1507099-001A**	**Soil**	**06/30/2015 13:02**	**GC16**	**107108**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	0.25	1	07/08/2015 15:00
Surrogates	**REC (%)**	**Limits**		
Benzene-d6	87	60-140		07/08/2015 15:00
Dibromofluoromethane	91	70-130		07/08/2015 15:00

Analyst(s): KF

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-4 5.0'	**1507099-002A**	**Soil**	**06/30/2015 12:59**	**GC16**	**107108**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	0.25	1	07/08/2015 15:42
Surrogates	**REC (%)**	**Limits**		
Benzene-d6	94	60-140		07/08/2015 15:42
Dibromofluoromethane	93	70-130		07/08/2015 15:42

Analyst(s): KF

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-5 5.0'	**1507099-003A**	**Soil**	**06/30/2015 12:18**	**GC16**	**107108**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	**0.67**	0.25	1	07/08/2015 16:25
Surrogates	**REC (%)**	**Limits**		
Benzene-d6	95	60-140		07/08/2015 16:25
Dibromofluoromethane	93	70-130		07/08/2015 16:25

Analyst(s): KF

(Cont.)

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Analytical Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507099
Project:	Albany Hill	**Extraction Method:**	SW5030B
Date Received:	7/2/15 20:10	**Analytical Method:**	SW8260B
Date Prepared:	7/2/15	**Unit:**	mg/kg

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-5 10.0'	**1507099-004A**	**Soil**	**06/30/2015 12:21**	**GC16**	**107108**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	0.25	1	07/08/2015 17:08
Surrogates	**REC (%)**	**Limits**		
Benzene-d6	91	60-140		07/08/2015 17:08
Dibromofluoromethane	93	70-130		07/08/2015 17:08

Analyst(s): KF

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Analytical Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507099
Project:	Albany Hill	**Extraction Method:**	SW5030B
Date Received:	7/2/15 20:10	**Analytical Method:**	SW8260B
Date Prepared:	7/2/15	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-4 3.5'	**1507099-001A**	**Soil**	**06/30/2015 13:02**	**GC16**	**107108**

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.0050	1	07/08/2015 15:00
Benzene	ND	0.0050	1	07/08/2015 15:00
t-Butyl alcohol (TBA)	ND	0.050	1	07/08/2015 15:00
Diisopropyl ether (DIPE)	ND	0.0050	1	07/08/2015 15:00
Ethylbenzene	ND	0.0050	1	07/08/2015 15:00
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	07/08/2015 15:00
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	07/08/2015 15:00
Naphthalene	ND	0.0050	1	07/08/2015 15:00
Toluene	ND	0.0050	1	07/08/2015 15:00
Xylenes, Total	ND	0.0050	1	07/08/2015 15:00
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	98	70-130		07/08/2015 15:00
Toluene-d8	109	70-130		07/08/2015 15:00
4-BFB	103	70-130		07/08/2015 15:00
Benzene-d6	85	60-140		07/08/2015 15:00
Ethylbenzene-d10	93	60-140		07/08/2015 15:00
1,2-DCB-d4	69	60-140		07/08/2015 15:00

Analyst(s): KF

(Cont.)

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Analytical Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507099
Project:	Albany Hill	**Extraction Method:**	SW5030B
Date Received:	7/2/15 20:10	**Analytical Method:**	SW8260B
Date Prepared:	7/2/15	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-4 5.0'	**1507099-002A**	**Soil**	**06/30/2015 12:59**	**GC16**	**107108**

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.0050	1	07/08/2015 15:42
Benzene	ND	0.0050	1	07/08/2015 15:42
t-Butyl alcohol (TBA)	ND	0.050	1	07/08/2015 15:42
Diisopropyl ether (DIPE)	ND	0.0050	1	07/08/2015 15:42
Ethylbenzene	ND	0.0050	1	07/08/2015 15:42
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	07/08/2015 15:42
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	07/08/2015 15:42
Naphthalene	ND	0.0050	1	07/08/2015 15:42
Toluene	ND	0.0050	1	07/08/2015 15:42
Xylenes, Total	ND	0.0050	1	07/08/2015 15:42
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	100	70-130		07/08/2015 15:42
Toluene-d8	108	70-130		07/08/2015 15:42
4-BFB	105	70-130		07/08/2015 15:42
Benzene-d6	91	60-140		07/08/2015 15:42
Ethylbenzene-d10	100	60-140		07/08/2015 15:42
1,2-DCB-d4	74	60-140		07/08/2015 15:42

Analyst(s): KF

(Cont.)

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Analytical Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507099
Project:	Albany Hill	**Extraction Method:**	SW5030B
Date Received:	7/2/15 20:10	**Analytical Method:**	SW8260B
Date Prepared:	7/2/15	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-5 5.0'	**1507099-003A**	**Soil**	**06/30/2015 12:18**	**GC16**	**107108**

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.0050	1	07/08/2015 16:25
Benzene	**0.012**	0.0050	1	07/08/2015 16:25
t-Butyl alcohol (TBA)	ND	0.050	1	07/08/2015 16:25
Diisopropyl ether (DIPE)	ND	0.0050	1	07/08/2015 16:25
Ethylbenzene	ND	0.0050	1	07/08/2015 16:25
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	07/08/2015 16:25
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	07/08/2015 16:25
Naphthalene	ND	0.0050	1	07/08/2015 16:25
Toluene	ND	0.0050	1	07/08/2015 16:25
Xylenes, Total	ND	0.0050	1	07/08/2015 16:25
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	100	70-130		07/08/2015 16:25
Toluene-d8	109	70-130		07/08/2015 16:25
4-BFB	105	70-130		07/08/2015 16:25
Benzene-d6	92	60-140		07/08/2015 16:25
Ethylbenzene-d10	104	60-140		07/08/2015 16:25
1,2-DCB-d4	76	60-140		07/08/2015 16:25

Analyst(s): KF

(Cont.)

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Analytical Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507099
Project:	Albany Hill	**Extraction Method:**	SW5030B
Date Received:	7/2/15 20:10	**Analytical Method:**	SW8260B
Date Prepared:	7/2/15	**Unit:**	mg/Kg

Volatile Organics by P&T and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-5 10.0'	**1507099-004A**	**Soil**	**06/30/2015 12:21**	**GC16**	**107108**

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.0050	1	07/08/2015 17:08
Benzene	ND	0.0050	1	07/08/2015 17:08
t-Butyl alcohol (TBA)	ND	0.050	1	07/08/2015 17:08
Diisopropyl ether (DIPE)	ND	0.0050	1	07/08/2015 17:08
Ethylbenzene	ND	0.0050	1	07/08/2015 17:08
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	07/08/2015 17:08
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	07/08/2015 17:08
Naphthalene	ND	0.0050	1	07/08/2015 17:08
Toluene	ND	0.0050	1	07/08/2015 17:08
Xylenes, Total	ND	0.0050	1	07/08/2015 17:08
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	100	70-130		07/08/2015 17:08
Toluene-d8	109	70-130		07/08/2015 17:08
4-BFB	104	70-130		07/08/2015 17:08
Benzene-d6	89	60-140		07/08/2015 17:08
Ethylbenzene-d10	100	60-140		07/08/2015 17:08
1,2-DCB-d4	75	60-140		07/08/2015 17:08

Analyst(s): KF

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Analytical Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507099
Project:	Albany Hill	**Extraction Method:**	SW3550B/3630C
Date Received:	7/2/15 20:10	**Analytical Method:**	SW8015B
Date Prepared:	7/2/15	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-4 3.5'	1507099-001A	Soil	06/30/2015 13:02	GC11A	107154

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**2.5**	2.0	2	07/07/2015 19:09
Surrogates	**REC (%)**	**Limits**		
C9	91	70-130		07/07/2015 19:09

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-4 5.0'	1507099-002A	Soil	06/30/2015 12:59	GC11A	107154

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	07/07/2015 13:13
Surrogates	**REC (%)**	**Limits**		
C9	94	70-130		07/07/2015 13:13

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-5 5.0'	1507099-003A	Soil	06/30/2015 12:18	GC11A	107154

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	07/07/2015 12:04
Surrogates	**REC (%)**	**Limits**		
C9	95	70-130		07/07/2015 12:04

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-5 10.0'	1507099-004A	Soil	06/30/2015 12:21	GC11B	107154

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	07/07/2015 06:21
Surrogates	**REC (%)**	**Limits**		
C9	103	70-130		07/07/2015 06:21

Analyst(s): TK

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Quality Control Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507099
Date Prepared:	7/2/15	**BatchID:**	107108
Date Analyzed:	7/2/15	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/kg
Project:	Albany Hill	**Sample ID:**	MB/LCS-107108

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
VOC (C6-C12)	ND	2.44	0.25	3.2	-	76	74-142
Surrogate Recovery							
Dibromofluoromethane	0.112	0.115		0.12	89	92	70-130

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Quality Control Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507099
Date Prepared:	7/2/15	**BatchID:**	107108
Date Analyzed:	7/2/15	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	Albany Hill	**Sample ID:**	MB/LCS-107108 1507041-003AMS/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	0.0392	0.0050	0.050	-	78	53-116
Benzene	ND	0.0483	0.0050	0.050	-	97	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	0.157	0.050	0.20	-	78	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	0.0470	0.0050	0.050	-	94	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	0.0442	0.0040	0.050	-	88	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	0.0468	0.0040	0.050	-	94	58-135
1,1-Dichloroethene	ND	0.0484	0.0050	0.050	-	97	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	-	-	-	-
1,1-Dichloropropene	ND	-	0.0050	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-

(Cont.)

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Quality Control Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507099
Date Prepared:	7/2/15	**BatchID:**	107108
Date Analyzed:	7/2/15	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	Albany Hill	**Sample ID:**	MB/LCS-107108 1507041-003AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	0.0434	0.0050	0.050	-	87	52-129
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0420	0.0050	0.050	-	84	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	0.0405	0.0050	0.050	-	81	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	0.0524	0.0050	0.050	-	105	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	0.0480	0.0050	0.050	-	96	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	-	-	-	-
Xylenes, Total	ND	-	0.0050	-	-	-	-
Surrogate Recovery							
Dibromofluoromethane	0.120	0.124		0.12	96	99	70-130
Toluene-d8	0.132	0.131		0.12	106	105	70-130
4-BFB	0.0129	0.0134		0.012	103	107	70-130
Benzene-d6	0.0921	0.0966		0.10	92	97	60-140
Ethylbenzene-d10	0.0980	0.107		0.10	98	107	60-140
1,2-DCB-d4	0.0758	0.0811		0.10	76	81	60-140

(Cont.)

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Quality Control Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507099
Date Prepared:	7/2/15	**BatchID:**	107108
Date Analyzed:	7/2/15	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	Albany Hill	**Sample ID:**	MB/LCS-107108 1507041-003AMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	0.0489	0.0458	0.050	ND	98	92	70-130	6.44	20
Benzene	0.0475	0.0444	0.050	ND	95	89	70-130	6.72	20
t-Butyl alcohol (TBA)	0.190	0.169	0.20	ND	95	84	70-130	12.0	20
Chlorobenzene	0.0476	0.0444	0.050	ND	95	89	70-130	6.96	20
1,2-Dibromoethane (EDB)	0.0442	0.0421	0.050	ND	88	84	70-130	4.75	20
1,2-Dichloroethane (1,2-DCA)	0.0497	0.0476	0.050	ND	99	95	70-130	4.15	20
1,1-Dichloroethene	0.0428	0.0407	0.050	ND	86	81	70-130	4.86	20
Diisopropyl ether (DIPE)	0.0534	0.0501	0.050	ND	107	100	70-130	6.39	20
Ethyl tert-butyl ether (ETBE)	0.0513	0.0479	0.050	ND	103	96	70-130	6.93	20
Methyl-t-butyl ether (MTBE)	0.0486	0.0456	0.050	ND	97	91	70-130	6.43	20
Toluene	0.0456	0.0426	0.050	ND	91	85	70-130	6.78	20
Trichloroethene	0.0428	0.0398	0.050	ND	86	80	70-130	7.21	20
Surrogate Recovery									
Dibromofluoromethane	0.138	0.140	0.12		110	112	70-130	1.17	20
Toluene-d8	0.142	0.140	0.12		113	112	70-130	1.07	20
4-BFB	0.0145	0.0144	0.012		116	115	70-130	0.972	20
Benzene-d6	0.112	0.105	0.10		112	105	60-140	6.20	20
Ethylbenzene-d10	0.126	0.113	0.10		126	113	60-140	11.0	20
1,2-DCB-d4	0.0929	0.0896	0.10		93	90	60-140	3.63	20

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Quality Control Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507099
Date Prepared:	7/2/15	**BatchID:**	107154
Date Analyzed:	7/3/15	**Extraction Method:**	SW3550B/3630C
Instrument:	GC6A	**Analytical Method:**	SW8015B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	Albany Hill	**Sample ID:**	MB/LCS-107154 1507099-004AMS/MSD

QC Report for SW8015B w/SG Clean-Up

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	43.8	1.0	40	-	110	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-
Surrogate Recovery							
C9	25.1	25.5		25	100	102	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	40.2	41.2	40	ND	101	103	70-130	2.37	30
Surrogate Recovery									
C9	25.3	25.9	25		101	104	70-130	2.55	30

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CHAIN-OF-CUSTODY RECORD

WorkOrder: 1507099 **ClientCode: ASED**

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Dave Allen
Aqua Science Engineers, Inc.
55 Oak Court Suite 220
Danville, CA 94526
(925) 820-9391 FAX: (925) 837-4853

Email: dallen@aquascienceengineers.com
cc/3rd Party: rkitay@aquascienceengineers.com;
PO:
ProjectNo: Albany Hill

Bill to:
Diane Schiell
Aqua Science Engineers, Inc.
217 Wild Flower Drive
Roseville, CA 95678
deezthng22@yahoo.com

Requested TAT: 5 days

Date Received: **07/02/2015**
Date Printed: **07/09/2015**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1507099-001	SVW-4 3.5'	Soil	6/30/2015 13:02	☐	A	A	A	A								
1507099-002	SVW-4 5.0'	Soil	6/30/2015 12:59	☐	A	A		A								
1507099-003	SVW-5 5.0'	Soil	6/30/2015 12:18	☐	A	A		A								
1507099-004	SVW-5 10.0'	Soil	6/30/2015 12:21	☐	A	A		A								

Test Legend:

1	8260GAS_S	2	8260VOC_S	3	PREDF REPORT	4	TPH(D)WSG_S	5	
6		7		8		9		10	
11		12							

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

Prepared by: Jena Alfaro

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.

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WORK ORDER SUMMARY

Client Name: AQUA SCIENCE ENGINEERS, INC. **QC Level:** LEVEL 2 **Work Order:** 1507099

Project: Albany Hill **Client Contact:** Dave Allen **Date Received:** 7/2/2015

Comments: **Contact's Email:** dallen@aquascienceengineers.com

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1507099-001A	SVW-4 3.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	☐	6/30/2015 13:02	5 days		☐	
			TPH(g) & 8260 (Misc. Compounds) by P&T GCMS			☐		5 days		☐	
1507099-002A	SVW-4 5.0'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	☐	6/30/2015 12:59	5 days		☐	
			TPH(g) & 8260 (Misc. Compounds) by P&T GCMS			☐		5 days		☐	
1507099-003A	SVW-5 5.0'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	☐	6/30/2015 12:18	5 days		☐	
			TPH(g) & 8260 (Misc. Compounds) by P&T GCMS			☐		5 days		☐	
1507099-004A	SVW-5 10.0'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	☐	6/30/2015 12:21	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.

1507099

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

Chain of Custody

PAGE 1 of 1

SAMPLER (SIGNATURE) Robert E. Kirby

PROJECT NAME Albany Hill JOB NO.

ADDRESS 800 San Pablo Ave, Albany, CA

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

SAMPLE ID.	DATE	TIME	MATRIX	QUANTITY	TPH-GAS / MTBE & BTEX (EPA 5030/8015-8020)	TPH-DIESEL (EPA 3510/8015) w/silica gel CU	TPH-DIESEL & MOTOR OIL (EPA 3510/8015)	VOLATILE ORGANICS (EPA 624/8240/8260)	SEMI-VOLATILE ORGANICS (EPA 625/8270)	OIL & GREASE (EPA 5520)	LUFT METALS (5) (EPA 6010+7000)	CAM 17 METALS (EPA 6010+7000)	PCBs (EPA 8082)	ORGANOCHLORINATED PESTICIDES (EPA 8081A)	FUEL OXYGENATES (EPA 8260)	Pb (TOTAL or DISSOLVED) (EPA 6010)	TPH-G, BTEX & 5 OXY's (EPA 8260) naphthalene		COMPOSITE	EDF	HOLD
SVW-4 3.5'	6-30-15	1302	S	1		X											X			X	
SVW-4 5.0	↓	1259	↓	↓		X											X			X	
SVW-5 5.0		1218				X											X			X	
SVW-5 10.0		1221				X											X			X	

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
Robert E. Kirby 1755	1755	1920	1920	
(signature) (time)	(signature) (time)	(signature) (time)	(signature) (time)	
7-2-15	7/2/15	7/2/15	7/2/15	
Robert E. Kirby				
(printed name) (date)	(printed name) (date)	(printed name) (date)	(printed name) (date)	TURN AROUND TIME
Company-ASE, INC.	Company- MA	Company-	Company-	STANDARD 24Hr 48Hr 72Hr
				OTHER:

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Sample Receipt Checklist

Client Name: **Aqua Science Engineers, Inc.**
Date and Time Received: **7/2/2015 8:10:12 PM**

Project Name: **Albany Hill**
LogIn Reviewed by: Jena Alfaro

WorkOrder №: **1507099** Matrix: Soil
Carrier: Benjamin Yslas (MAI Courier)

Chain of Custody (COC) Information

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 ☐

Sample Receipt Information

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 Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Sample/Temp Blank temperature	Temp: 2.3°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 ☐	
	(Ice Type: WET ICE)		

UCMR3 Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522?	Yes ☐	No ☐	NA ☑
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	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 - www.aquascienceengineers.com

APPENDIX D

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

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1507009 **Amended:** 07/15/2015

Report Created for: Aqua Science Engineers, Inc.

55 Oak Court Suite 220
Danville, CA 94526

Project Contact: Robert Kitay
Project P.O.:
Project Name: Albany Hill

Project Received: 07/01/2015

Analytical Report reviewed & approved for release on 07/14/2015 by:

Angela Rydelius,
Laboratory Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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Glossary of Terms & Qualifier Definitions

Client: Aqua Science Engineers, Inc.
Project: Albany Hill
WorkOrder: 1507009

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)
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.
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

S	spike recovery outside accepted recovery limits
c2	surrogate recovery outside of the control limits due to matrix interference.

Quality Control Qualifiers

F2	LCS recovery for this compound is outside of acceptance limits.

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Case Narrative

Client: Aqua Science Engineers, Inc. **Work Order:** 1507009
Project: Albany Hill July 14, 2015

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 Advisory of April 2012.

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Analytical Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507009
Project:	Albany Hill	**Extraction Method:**	ASTM D 1946-90
Date Received:	7/1/15 11:16	**Analytical Method:**	ASTM D 1946-90
Date Prepared:	7/6/15-7/9/15	**Unit:**	%

Helium

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-2	**1507009-001A**	**SoilGas**	**06/30/2015 14:30**	**GC26**	**107209**

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
6.42	**17.01**	**AK**

Analytes	Result	RL	DF	Date Analyzed
Helium	**0.060**	0.050	1	07/06/2015 17:41

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-3	**1507009-002A**	**SoilGas**	**06/30/2015 15:10**	**GC26**	**107209**

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
11.31	**22.53**	**AK**

Analytes	Result	RL	DF	Date Analyzed
Helium	**1.7**	0.62	12	07/09/2015 09:16

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-4	**1507009-003A**	**SoilGas**	**06/30/2015 17:25**	**GC26**	**107209**

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
11.08	**22.09**	**AK**

Analytes	Result	RL	DF	Date Analyzed
Helium	ND	0.050	1	07/06/2015 18:07

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Analytical Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507009
Project:	Albany Hill	**Extraction Method:**	ASTM D 1946-90
Date Received:	7/1/15 11:16	**Analytical Method:**	ASTM D 1946-90
Date Prepared:	7/6/15-7/9/15	**Unit:**	%

Helium

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-5	**1507009-004A**	**SoilGas**	**06/30/2015 16:50**	**GC26**	**107209**

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
7.31	**17.00**	**AK**

Analytes	Result	RL	DF	Date Analyzed
Helium	ND	0.050	1	07/06/2015 18:19

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Analytical Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507009
Project:	Albany Hill	**Extraction Method:**	ASTM D 1946-90
Date Received:	7/1/15 11:16	**Analytical Method:**	ASTM D 1946-90
Date Prepared:	7/7/15-7/8/15	**Unit:**	%

Light Gases

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-2	**1507009-001A**	**SoilGas**	**06/30/2015 14:30**	**GC26**	**107396**

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
6.42	**17.01**	**AK**

Analytes	Result	RL	DF	Date Analyzed
Carbon Dioxide	**0.11**	0.0040	1	07/07/2015 18:03
Methane	**0.00049**	0.00020	1	07/07/2015 18:03
Oxygen	**40**	1.0	2.5	07/08/2015 14:20

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-3	**1507009-002A**	**SoilGas**	**06/30/2015 15:10**	**GC26**	**107396**

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
11.31	**22.53**	**AK**

Analytes	Result	RL	DF	Date Analyzed
Carbon Dioxide	**0.080**	0.0040	1	07/07/2015 18:38
Methane	**0.00022**	0.00020	1	07/07/2015 18:38
Oxygen	**15**	0.40	1	07/08/2015 12:46

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Analytical Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507009
Project:	Albany Hill	**Extraction Method:**	ASTM D 1946-90
Date Received:	7/1/15 11:16	**Analytical Method:**	ASTM D 1946-90
Date Prepared:	7/7/15-7/8/15	**Unit:**	%

Light Gases

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-4	**1507009-003A**	**SoilGas**	**06/30/2015 17:25**	**GC26**	**107396**

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
11.08	**22.09**	**AK**

Analytes	Result	RL	DF	Date Analyzed
Carbon Dioxide	**0.52**	0.0040	1	07/07/2015 19:12
Methane	**0.011**	0.00020	1	07/07/2015 19:12
Oxygen	**30**	1.0	2.5	07/08/2015 14:41

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-5	**1507009-004A**	**SoilGas**	**06/30/2015 16:50**	**GC26**	**107396**

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
7.31	**17.00**	**AK**

Analytes	Result	RL	DF	Date Analyzed
Carbon Dioxide	**0.15**	0.0040	1	07/07/2015 19:46
Methane	**0.0053**	0.00020	1	07/07/2015 19:46
Oxygen	**35**	1.0	2.5	07/08/2015 14:51

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Analytical Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507009
Project:	Albany Hill	**Extraction Method:**	TO15
Date Received:	7/1/15 11:16	**Analytical Method:**	TO15
Date Prepared:	7/10/15-7/13/15	**Unit:**	µg/m³

TPH gas in µg/m³

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-2	**1507009-001A**	**SoilGas**	**06/30/2015 14:30**	**GC24**	**107478**

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
6.42	**17.01**	**AK**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	**8500**	950	1	07/12/2015 00:33

Surrogates	REC (%)	Limits	
1,2-DCA-d4	97	70-130	07/12/2015 00:33

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-3	**1507009-002A**	**SoilGas**	**06/30/2015 15:10**	**GC24**	**107576**

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
11.31	**22.53**	**AK**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	**3100**	720	1	07/10/2015 11:27

Surrogates	REC (%)	Limits	
1,2-DCA-d4	103	70-130	07/10/2015 11:27

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-4	**1507009-003A**	**SoilGas**	**06/30/2015 17:25**	**GC24**	**107478**

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
11.08	**22.09**	**AK**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	**11,000**	1400	2	07/11/2015 23:44

Surrogates	REC (%)	Limits	
1,2-DCA-d4	111	70-130	07/11/2015 23:44

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Analytical Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507009
Project:	Albany Hill	**Extraction Method:**	TO15
Date Received:	7/1/15 11:16	**Analytical Method:**	TO15
Date Prepared:	7/10/15-7/13/15	**Unit:**	µg/m³

TPH gas in µg/m³

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-5	**1507009-004A**	**SoilGas**	**06/30/2015 16:50**	**GC24**	**107478**

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
7.31	**17.00**	**AK**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	**190,000**	17,000	20	07/13/2015 21:00

Surrogates	REC (%)	Qualifiers	Limits	
1,2-DCA-d4	135	S	70-130	07/13/2015 21:00

Analytical Comments: c2

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Analytical Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507009
Project:	Albany Hill	**Extraction Method:**	TO15
Date Received:	7/1/15 11:16	**Analytical Method:**	TO15
Date Prepared:	7/10/15-7/13/15	**Unit:**	µg/m³

Volatile Organic Compounds in µg/m³

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-2	1507009-001A	SoilGas	06/30/2015 14:30	GC24	107478

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
6.42	17.01	AK

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	2.8	1	07/12/2015 00:33
Benzene	**74**	2.1	1	07/12/2015 00:33
t-Butyl alcohol (TBA)	ND	41	1	07/12/2015 00:33
Diisopropyl ether (DIPE)	ND	2.8	1	07/12/2015 00:33
Ethyl tert-butyl ether (ETBE)	ND	2.8	1	07/12/2015 00:33
Ethylbenzene	**60**	2.9	1	07/12/2015 00:33
Methyl-t-butyl ether (MTBE)	ND	2.5	1	07/12/2015 00:33
Naphthalene	ND	7.0	1	07/12/2015 00:33
Toluene	**180**	2.5	1	07/12/2015 00:33
Xylenes, Total	**170**	8.7	1	07/12/2015 00:33
Surrogates	REC (%)	Limits		
1,2-DCA-d4	94	70-130		07/12/2015 00:33
Toluene-d8	99	70-130		07/12/2015 00:33
4-BFB	106	70-130		07/12/2015 00:33

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Analytical Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507009
Project:	Albany Hill	**Extraction Method:**	TO15
Date Received:	7/1/15 11:16	**Analytical Method:**	TO15
Date Prepared:	7/10/15-7/13/15	**Unit:**	µg/m³

Volatile Organic Compounds in µg/m³

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-3	1507009-002A	SoilGas	06/30/2015 15:10	GC24	107576

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
11.31	22.53	AK

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	2.1	1	07/10/2015 11:27
Benzene	**27**	1.6	1	07/10/2015 11:27
t-Butyl alcohol (TBA)	**43**	31	1	07/10/2015 11:27
Diisopropyl ether (DIPE)	ND	2.1	1	07/10/2015 11:27
Ethyl tert-butyl ether (ETBE)	ND	2.1	1	07/10/2015 11:27
Ethylbenzene	**35**	2.2	1	07/10/2015 11:27
Methyl-t-butyl ether (MTBE)	ND	1.8	1	07/10/2015 11:27
Naphthalene	ND	5.3	1	07/10/2015 11:27
Toluene	**120**	1.9	1	07/10/2015 11:27
Xylenes, Total	**190**	6.6	1	07/10/2015 11:27
Surrogates	REC (%)	Limits		
1,2-DCA-d4	100	70-130		07/10/2015 11:27
Toluene-d8	99	70-130		07/10/2015 11:27
4-BFB	104	70-130		07/10/2015 11:27

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Analytical Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507009
Project:	Albany Hill	**Extraction Method:**	TO15
Date Received:	7/1/15 11:16	**Analytical Method:**	TO15
Date Prepared:	7/10/15-7/13/15	**Unit:**	µg/m³

Volatile Organic Compounds in µg/m³

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-4	**1507009-003A**	**SoilGas**	**06/30/2015 17:25**	**GC24**	**107478**

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
11.08	**22.09**	**AK**

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	4.2	2	07/11/2015 23:44
Benzene	**17**	3.2	2	07/11/2015 23:44
t-Butyl alcohol (TBA)	ND	62	2	07/11/2015 23:44
Diisopropyl ether (DIPE)	ND	4.2	2	07/11/2015 23:44
Ethyl tert-butyl ether (ETBE)	ND	4.2	2	07/11/2015 23:44
Ethylbenzene	**49**	4.4	2	07/11/2015 23:44
Methyl-t-butyl ether (MTBE)	ND	3.7	2	07/11/2015 23:44
Naphthalene	ND	11	2	07/11/2015 23:44
Toluene	**41**	3.8	2	07/11/2015 23:44
Xylenes, Total	**390**	13	2	07/11/2015 23:44
Surrogates	**REC (%)**	**Limits**		
1,2-DCA-d4	107	70-130		07/11/2015 23:44
Toluene-d8	98	70-130		07/11/2015 23:44
4-BFB	103	70-130		07/11/2015 23:44

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Analytical Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507009
Project:	Albany Hill	**Extraction Method:**	TO15
Date Received:	7/1/15 11:16	**Analytical Method:**	TO15
Date Prepared:	7/10/15-7/13/15	**Unit:**	µg/m³

Volatile Organic Compounds in µg/m³

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SVW-5	1507009-004A	SoilGas	06/30/2015 16:50	GC24	107478

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
7.31	17.00	AK

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	49	20	07/13/2015 21:00
Benzene	**12,000**	74	40	07/13/2015 20:22
t-Butyl alcohol (TBA)	ND	720	20	07/13/2015 21:00
Diisopropyl ether (DIPE)	ND	49	20	07/13/2015 21:00
Ethyl tert-butyl ether (ETBE)	ND	49	20	07/13/2015 21:00
Ethylbenzene	**320**	51	20	07/13/2015 21:00
Methyl-t-butyl ether (MTBE)	ND	43	20	07/13/2015 21:00
Naphthalene	ND	120	20	07/13/2015 21:00
Toluene	**210**	44	20	07/13/2015 21:00
Xylenes, Total	ND	150	20	07/13/2015 21:00

Surrogates	REC (%)	Qualifiers	Limits	
1,2-DCA-d4	131	S	70-130	07/13/2015 21:00
Toluene-d8	104		70-130	07/13/2015 21:00
4-BFB	101		70-130	07/13/2015 21:00

Analytical Comments: c2

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Quality Control Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507009
Date Prepared:	7/6/15	**BatchID:**	107209
Date Analyzed:	7/6/15	**Extraction Method:**	ASTM D 1946-90
Instrument:	GC26	**Analytical Method:**	ASTM D 1946-90
Matrix:	Soilgas	**Unit:**	%
Project:	Albany Hill	**Sample ID:**	MB/LCS-107209

QC Summary Report for ASTM D1946-90

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Helium	ND	ND	0.025	0.010	-	98	60-140

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Quality Control Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507009
Date Prepared:	7/7/15 - 7/8/15	**BatchID:**	107396
Date Analyzed:	7/7/15 - 7/8/15	**Extraction Method:**	ASTM D 1946-90
Instrument:	GC26	**Analytical Method:**	ASTM D 1946-90
Matrix:	SoilGas	**Unit:**	uL/L
Project:	Albany Hill	**Sample ID:**	MB/LCS-107396

QC Summary Report for ASTM D1946-90

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Carbon Dioxide	ND	101	20	100	-	101	70-130
Methane	ND	104	1.0	100	-	104	70-130
Oxygen	ND	5750	2000	7000	-	82	70-130

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Quality Control Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507009
Date Prepared:	7/8/15 - 7/9/15	**BatchID:**	107478
Date Analyzed:	7/8/15 - 7/9/15	**Extraction Method:**	TO15
Instrument:	GC24	**Analytical Method:**	TO15
Matrix:	Soilgas	**Unit:**	nL/L
Project:	Albany Hill	**Sample ID:**	MB/LCS-107478

QC Summary Report for TO15

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	12	-	-	-	-
Acrolein	ND	23.3	0.25	25	-	93	60-140
Acrylonitrile	ND	22.1	0.25	25	-	89	60-140
tert-Amyl methyl ether (TAME)	ND	28.5	0.25	25	-	113	60-140
Benzene	ND	22.7	0.25	25	-	91	60-140
Benzyl chloride	ND	35.0	0.25	25	-	140	60-140
Bromodichloromethane	ND	25.3	0.25	25	-	101	60-140
Bromoform	ND	36.0	0.25	25	-	144, F2	60-140
Bromomethane	ND	18.8	0.25	25	-	75	60-140
1,3-Butadiene	ND	15.5	0.25	25	-	62	60-140
2-Butanone (MEK)	ND	-	12	-	-	-	-
t-Butyl alcohol (TBA)	ND	29.5	5.0	25	-	118	60-140
Carbon Disulfide	ND	24.6	0.25	25	-	98	60-140
Carbon Tetrachloride	ND	24.6	0.25	25	-	99	60-140
Chlorobenzene	ND	28.3	0.25	25	-	113	60-140
Chloroethane	ND	15.3	0.25	25	-	61	60-140
Chloroform	ND	22.8	0.25	25	-	91	60-140
Chloromethane	ND	24.9	0.25	25	-	100	60-140
Cyclohexane	ND	20.5	2.5	25	-	82	60-140
Dibromochloromethane	ND	32.2	0.25	25	-	129	60-140
1,2-Dibromo-3-chloropropane	ND	32.4	0.0062	25	-	130	60-140
1,2-Dibromoethane (EDB)	ND	27.6	0.25	25	-	111	60-140
1,2-Dichlorobenzene	ND	31.9	0.25	25	-	128	60-140
1,3-Dichlorobenzene	ND	32.4	0.25	25	-	129	60-140
1,4-Dichlorobenzene	ND	31.9	0.25	25	-	127	60-140
Dichlorodifluoromethane	ND	27.4	0.25	25	-	110	60-140
1,1-Dichloroethane	ND	26.5	0.25	25	-	106	60-140
1,2-Dichloroethane (1,2-DCA)	ND	24.9	0.25	25	-	99	60-140
1,1-Dichloroethene	ND	26.7	0.25	25	-	107	60-140
cis-1,2-Dichloroethene	ND	27.5	0.25	25	-	110	60-140
trans-1,2-Dichloroethene	ND	26.7	0.25	25	-	107	60-140
1,2-Dichloropropane	ND	22.1	0.25	25	-	88	60-140
cis-1,3-Dichloropropene	ND	29.0	0.25	25	-	116	60-140
trans-1,3-Dichloropropene	ND	27.9	0.25	25	-	112	60-140
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	25.6	0.25	25	-	102	60-140
Diisopropyl ether (DIPE)	ND	23.7	0.25	25	-	95	60-140
1,4-Dioxane	ND	25.8	0.25	25	-	103	60-140
Ethanol	ND	-	25	-	-	-	-
Ethyl acetate	ND	25.8	0.25	25	-	103	60-140
Ethyl tert-butyl ether (ETBE)	ND	25.8	0.25	25	-	103	60-140

(Cont.)

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Quality Control Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507009
Date Prepared:	7/8/15 - 7/9/15	**BatchID:**	107478
Date Analyzed:	7/8/15 - 7/9/15	**Extraction Method:**	TO15
Instrument:	GC24	**Analytical Method:**	TO15
Matrix:	Soilgas	**Unit:**	nL/L
Project:	Albany Hill	**Sample ID:**	MB/LCS-107478

QC Summary Report for TO15

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Ethylbenzene	ND	28.4	0.25	25	-	114	60-140
4-Ethyltoluene	ND	31.6	0.25	25	-	126	60-140
Freon 113	ND	26.1	0.25	25	-	104	60-140
Heptane	ND	24.3	2.5	25	-	97	60-140
Hexachlorobutadiene	ND	37.6	0.25	25	-	150, F2	60-140
Hexane	ND	24.5	2.5	25	-	98	60-140
2-Hexanone	ND	28.0	0.25	25	-	112	60-140
4-Methyl-2-pentanone (MIBK)	ND	31.9	0.25	25	-	128	60-140
Methyl-t-butyl ether (MTBE)	ND	28.2	0.25	25	-	113	60-140
Methylene chloride	ND	24.6	0.25	25	-	98	60-140
Methyl methacrylate	ND	25.7	0.25	25	-	103	60-140
Naphthalene	ND	68.1	0.50	50	-	136	60-140
Propene	ND	-	25	-	-	-	-
Styrene	ND	29.4	0.25	25	-	117	60-140
1,1,1,2-Tetrachloroethane	ND	27.4	0.25	25	-	110	60-140
1,1,2,2-Tetrachloroethane	ND	26.1	0.25	25	-	104	60-140
Tetrachloroethene	ND	27.4	0.25	25	-	110	60-140
Tetrahydrofuran	ND	22.5	0.25	25	-	90	60-140
Toluene	ND	27.5	0.25	25	-	110	60-140
1,2,4-Trichlorobenzene	ND	38.4	0.25	25	-	154, F2	60-140
1,1,1-Trichloroethane	ND	32.8	0.25	25	-	131	60-140
1,1,2-Trichloroethane	ND	26.4	0.25	25	-	106	60-140
Trichloroethene	ND	24.5	0.25	25	-	98	60-140
Trichlorofluoromethane	ND	26.6	0.25	25	-	106	60-140
1,2,4-Trimethylbenzene	ND	30.9	0.25	25	-	124	60-140
1,3,5-Trimethylbenzene	ND	28.1	0.25	25	-	112	60-140
Vinyl Acetate	ND	27.9	0.25	25	-	112	60-140
Vinyl Chloride	ND	18.9	0.25	25	-	75	60-140
Xylenes, Total	ND	86.8	0.75	75	-	116	60-140
Surrogate Recovery							
1,2-DCA-d4	456	497		500	91	99	60-140
Toluene-d8	491	496		500	98	99	60-140
4-BFB	480	509		500	96	102	60-140

(Cont.)

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Quality Control Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507009
Date Prepared:	7/9/15 - 7/10/15	**BatchID:**	107576
Date Analyzed:	7/9/15 - 7/10/15	**Extraction Method:**	TO15
Instrument:	GC24	**Analytical Method:**	TO15
Matrix:	Soilgas	**Unit:**	nL/L
Project:	Albany Hill	**Sample ID:**	MB/LCS-107576

QC Summary Report for TO15

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	12	-	-	-	-
Acrolein	ND	22.9	0.25	25	-	92	60-140
Acrylonitrile	ND	25.2	0.25	25	-	101	60-140
tert-Amyl methyl ether (TAME)	ND	27.6	0.25	25	-	110	60-140
Benzene	ND	21.4	0.25	25	-	85	60-140
Benzyl chloride	ND	27.7	0.25	25	-	111	60-140
Bromodichloromethane	ND	21.8	0.25	25	-	87	60-140
Bromoform	ND	27.7	0.25	25	-	111	60-140
Bromomethane	ND	13.7	0.25	25	-	55, F2	60-140
1,3-Butadiene	ND	18.2	0.25	25	-	72	60-140
2-Butanone (MEK)	ND	-	12	-	-	-	-
t-Butyl alcohol (TBA)	ND	27.1	5.0	25	-	108	60-140
Carbon Disulfide	ND	25.7	0.25	25	-	103	60-140
Carbon Tetrachloride	ND	20.3	0.25	25	-	81	60-140
Chlorobenzene	ND	24.2	0.25	25	-	97	60-140
Chloroethane	ND	10.7	0.25	25	-	43, F2	60-140
Chloroform	ND	20.0	0.25	25	-	80	60-140
Chloromethane	ND	22.0	0.25	25	-	88	60-140
Cyclohexane	ND	19.3	2.5	25	-	77	60-140
Dibromochloromethane	ND	25.2	0.25	25	-	101	60-140
1,2-Dibromo-3-chloropropane	ND	28.8	0.0062	25	-	115	60-140
1,2-Dibromoethane (EDB)	ND	23.1	0.25	25	-	92	60-140
1,2-Dichlorobenzene	ND	25.8	0.25	25	-	103	60-140
1,3-Dichlorobenzene	ND	25.9	0.25	25	-	104	60-140
1,4-Dichlorobenzene	ND	25.4	0.25	25	-	101	60-140
Dichlorodifluoromethane	ND	23.1	0.25	25	-	92	60-140
1,1-Dichloroethane	ND	24.2	0.25	25	-	97	60-140
1,2-Dichloroethane (1,2-DCA)	ND	19.7	0.25	25	-	79	60-140
1,1-Dichloroethene	ND	25.6	0.25	25	-	102	60-140
cis-1,2-Dichloroethene	ND	25.2	0.25	25	-	101	60-140
trans-1,2-Dichloroethene	ND	24.3	0.25	25	-	97	60-140
1,2-Dichloropropane	ND	20.7	0.25	25	-	83	60-140
cis-1,3-Dichloropropene	ND	24.6	0.25	25	-	98	60-140
trans-1,3-Dichloropropene	ND	22.6	0.25	25	-	90	60-140
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	22.4	0.25	25	-	89	60-140
Diisopropyl ether (DIPE)	ND	21.0	0.25	25	-	84	60-140
1,4-Dioxane	ND	24.5	0.25	25	-	98	60-140
Ethanol	ND	-	25	-	-	-	-
Ethyl acetate	ND	22.1	0.25	25	-	88	60-140
Ethyl tert-butyl ether (ETBE)	ND	23.8	0.25	25	-	95	60-140

(Cont.)

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Quality Control Report

Client:	Aqua Science Engineers, Inc.	**WorkOrder:**	1507009
Date Prepared:	7/9/15 - 7/10/15	**BatchID:**	107576
Date Analyzed:	7/9/15 - 7/10/15	**Extraction Method:**	TO15
Instrument:	GC24	**Analytical Method:**	TO15
Matrix:	Soilgas	**Unit:**	nL/L
Project:	Albany Hill	**Sample ID:**	MB/LCS-107576

QC Summary Report for TO15

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Ethylbenzene	ND	24.0	0.25	25	-	96	60-140
4-Ethyltoluene	ND	24.6	0.25	25	-	99	60-140
Freon 113	ND	22.9	0.25	25	-	92	60-140
Heptane	ND	21.7	2.5	25	-	87	60-140
Hexachlorobutadiene	ND	28.2	0.25	25	-	113	60-140
Hexane	ND	22.0	2.5	25	-	88	60-140
2-Hexanone	ND	22.2	0.25	25	-	89	60-140
4-Methyl-2-pentanone (MIBK)	ND	25.6	0.25	25	-	102	60-140
Methyl-t-butyl ether (MTBE)	ND	24.1	0.25	25	-	96	60-140
Methylene chloride	ND	23.8	0.25	25	-	94	60-140
Methyl methacrylate	ND	24.3	0.25	25	-	97	60-140
Naphthalene	ND	55.9	0.50	50	-	112	60-140
Propene	ND	-	25	-	-	-	-
Styrene	ND	24.3	0.25	25	-	97	60-140
1,1,1,2-Tetrachloroethane	ND	23.5	0.25	25	-	94	60-140
1,1,2,2-Tetrachloroethane	ND	22.0	0.25	25	-	88	60-140
Tetrachloroethene	ND	22.0	0.25	25	-	88	60-140
Tetrahydrofuran	ND	20.8	0.25	25	-	83	60-140
Toluene	ND	23.7	0.25	25	-	94	60-140
1,2,4-Trichlorobenzene	ND	30.4	0.25	25	-	122	60-140
1,1,1-Trichloroethane	ND	27.5	0.25	25	-	110	60-140
1,1,2-Trichloroethane	ND	22.4	0.25	25	-	90	60-140
Trichloroethene	ND	21.9	0.25	25	-	88	60-140
Trichlorofluoromethane	ND	22.1	0.25	25	-	88	60-140
1,2,4-Trimethylbenzene	ND	24.8	0.25	25	-	99	60-140
1,3,5-Trimethylbenzene	ND	23.8	0.25	25	-	95	60-140
Vinyl Acetate	ND	24.8	0.25	25	-	99	60-140
Vinyl Chloride	ND	17.8	0.25	25	-	71	60-140
Xylenes, Total	ND	70.5	0.75	75	-	94	60-140
Surrogate Recovery							
1,2-DCA-d4	427	416		500	85	83	60-140
Toluene-d8	501	457		500	100	91	60-140
4-BFB	501	460		500	100	92	60-140

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CHAIN-OF-CUSTODY RECORD

WorkOrder: 1507009 **ClientCode: ASED**

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ 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: rkitay@aquascienceengineers.com
cc/3rd Party:
PO:
ProjectNo: Albany Hill

Bill to:
Diane Schiell
Aqua Science Engineers, Inc.
217 Wild Flower Drive
Roseville, CA 95678
deezthng22@yahoo.com

Requested TAT: 5 days

Date Received: **07/01/2015**
Date Printed: **07/15/2015**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1507009-001	SVW-2	SoilGas	6/30/2015 14:30	☐	A	A	A	A	A	A						
1507009-002	SVW-3	SoilGas	6/30/2015 15:10	☐	A	A		A	A	A						
1507009-003	SVW-4	SoilGas	6/30/2015 17:25	☐	A	A		A	A	A						
1507009-004	SVW-5	SoilGas	6/30/2015 16:50	☐	A	A		A	A	A						

Test Legend:

1	HELIUM_LC_SOILGAS(%)	2	LG_SUMMA_SOILGAS(%)	3	PREDF REPORT	4	O15_Scan-SIM_SOIL(UG/M3	5	TO15-8260_SOIL(UG/M3)
6	5GAS_Scan-SIM_SOIL(UG/	7		8		9		10	
11		12							

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

Prepared by: Maria Venegas

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.

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WORK ORDER SUMMARY

Client Name: AQUA SCIENCE ENGINEERS, INC. **QC Level:** **Work Order:** 1507009
Project: Albany Hill **Client Contact:** Robert Kitay **Date Received:** 7/1/2015
Comments: **Contact's Email:** rkitay@aquascienceengineers.com

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1507009-001A	SVW-2	SoilGas	ASTM D1946-90 (Light Gases) <Carbon Dioxide_2, Methane_4, Oxygen>	1	1L Summa	☐	6/30/2015 14:30	5 days		☐	
			TO15 + Gas w/ Helium			☐		5 days		☐	
1507009-002A	SVW-3	SoilGas	ASTM D1946-90 (Light Gases) <Carbon Dioxide_2, Methane_4, Oxygen>	1	1L Summa	☐	6/30/2015 15:10	5 days		☐	
			TO15 + Gas w/ Helium			☐		5 days		☐	
1507009-003A	SVW-4	SoilGas	ASTM D1946-90 (Light Gases) <Carbon Dioxide_2, Methane_4, Oxygen>	1	1L Summa	☐	6/30/2015 17:25	5 days		☐	
			TO15 + Gas w/ Helium			☐		5 days		☐	
1507009-004A	SVW-5	SoilGas	ASTM D1946-90 (Light Gases) <Carbon Dioxide_2, Methane_4, Oxygen>	1	1L Summa	☐	6/30/2015 16:50	5 days		☐	
			TO15 + Gas w/ Helium			☐		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.

1507009

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CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH ☐ 1 Day ☐ 2 Day ☐ 3 Day ☐ 5 DAY ☒
GeoTracker EDF ☒ PDF ☐ EDD ☐ EQuIS ☐ 10 DAY ☐
UST Clean Up Fund Project ☐ Claim #

Report To: Robert Kitay	Bill To: Robert Kitay
Company: Aqua Science Engineers	
55 Oak Ct, Suite 220	
Danville, CA 94526	E-Mail: rkitay@aquascience engineers.com
Tele: (925) 413-8604	Fax: (925) 837-4853
Project #:	Project Name: Albany Hill
Project Location: Albany Hill, 800 San Pablo Ave, Albany, CA	
Sampler Signature: Robert C. Kitay	

Analysis Requested

Helium Shroud SN#

Other:

Notes: Please Specify units if different than defaults VOCs is ug/m3 and fixed gas is uL/L. Leak check default is IPA.

Field Sample ID (Location)	Collection Date	Collection Time	Canister SN#	Sampler Kit SN#	VOCs by TO-15 (ug/m3)	8010 by TO-15 (ug/m3)	TPH(g) (ug/m3)	LEED (inc. 4PCH, Formaldehyde, CO, Total VOCs)	Fixed Gas: CO2, Methane, Ethane, O2, Ethylene, Acetylene, CO (please circle or indicate in notes)	Fixed Gas: O2, N2 (please circle) uL/L	Fixed Gas: Propane uL/L	Helium Leak Check (%)	Leak Check (IPA, Norflorane, 1,1-difluroethane) ug/m3	APH: Aliphatic and/or Aromatic (please circle) ug/m3	Other:	Matrix: Soilgas	Matrix: Indoor Air	Cannister Pressure/ Vacuum: Initial	Cannister Pressure/ Vacuum: Final
SVW-2	6-30-15	1430	CAN 5801-732	MAN 316-1322	X				X			X				X		29	19
SVW-3	↓	1510	CAN 5800-731	MAN 316-1335	X				X			X				X		29	6
SVW-4	↓	1725	CAN 5808-739	MAN 316-1347	X				X			X				X		29	7
SVW-5	↓	1650	CAN 5806-737	MAN 316-1327	X				X			X				X		29	15

	Date:	Time:	Received By:
Relinquished By: Robert C. Kitay	7/1/15	1045	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

Temp (°C): _____ Work Order #: _____
Condition: _____
Custody Seals Intact?: Yes _____ No _____ None _____
Shipped Via: _____

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Sample Receipt Checklist

Client Name: **Aqua Science Engineers, Inc.**
Date and Time Received: **7/1/2015 11:16:37 AM**

Project Name: **Albany Hill**
LogIn Reviewed by: Maria Venegas

WorkOrder №: **1507009** Matrix: SoilGas
Carrier: Client Drop-In

Chain of Custody (COC) Information

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 ☑

Sample Receipt Information

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 Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Sample/Temp Blank temperature	Temp:		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 ☑	

UCMR3 Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522?	Yes ☐	No ☐	NA ☑
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	Yes ☐	No ☐	NA ☑

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

Comments: