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Allterra Environmental, Inc. 849 Almar Avenue, Suite C No. 281 Santa Cruz, California 95060

Client: Project Location: Subject: Report Date: Mr. Manwel Shuwayhat 160 Holmes Street, Livermore, California Pilot Scale Remediation System Operation Report July 28, 2010

To Whom It May Concern:

I have reviewed the report referenced above and approve its distribution to the necessary regulatory agencies. Should any of the regulatory agencies require it, "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached proposal or report is true and correct to the best of my knowledge."

Sincerely,

Manwel Shuwayhat, Owner, Livermore Gas and Mini Mart



Pilot Scale Remediation System Operation Report 160 Holmes Street, Livermore, California

Date: July 28, 2010

Project No.: 160

Prepared For: Manwel and Samira Shuwayhat 54 Wolfe Canyon Road Kentfield, California 94904

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July 28, 2010 Project No.: 160

Manwel and Samira Shuwayhat 54 Wolfe Canyon Road Kentfield, California 94904

SUBJECT: Pilot Scale Remediation System Operation Report Fuel Leak Case No. RO0000324, 160 Holmes Street, Livermore, California

Dear Manwel and Samira Shuwayhat:

On your behalf, Allterra Environmental, Inc. (Allterra) has prepared this report documenting work conducted at the property located at 160 Holmes Street in Livermore, California (Site). This report presents field observations and data collected during pilot scale remediation system operation during June and July 2010 and presents conclusions and recommendations based on overall operation of the system during April, May, June, and July of 2010.

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Site Location and Description

The subject property is located at the northeast intersection of Holmes Street and Second Street, in Livermore, California (Figure 1). A fuel station currently occupies the Site and the surrounding area is primarily residential with some retail businesses along 1st and 2nd Streets. The approximate ground surface elevation at the Site is 465 feet above mean sea level (MSL) and slopes to the northwest. Pertinent site features, including the locations of the former underground storage tanks (USTs), existing monitoring and extraction wells, and previous soil borings are presented on Figure 2.

Pilot Scale Remediation System

The pilot scale remediation system consists of a vapor extraction system (VES) and a groundwater extracation system (GWES). The VES consists of a remediation compound area that includes a vapor extraction blower, electrical controls, and vapor abatement equipment, as well as subsurface conveyance piping and wellhead connections to extraction well EW-3. The GWES consists of an extraction pump in EW-3, conveyance piping, carbon filtration vessels, and storage tanks. The layout of the remediation system is presented on Figure 2.

Extraction Well

Well EW-3 was used as the soil vapor and groundwater extraction well. Well EW-3 was selected because it has a screen interval from 25 to 30 feet bgs, which spans the targeted contaminant smear zone. A previous pilot test completed using EW-3 indicated it was conducive for vapor extraction.

Remediation Compound

A temporary remediation compound was constructed along the northeastern edge of the property (Figure 2). The compound consisted of vapor extraction and off-gas abatement equipment with associated electrical controls and conveyance piping and groundwater extraction equipment with two 6,500-gallon tanks to contain groundwater extracted from EW-3.

Groundwater Extraction

During the fourth quarter of 2009 and first quarter of 2010, groundwater elevations increased to approximately 23-27 feet below ground surface (bgs), into the target area for soil vapor extraction. Therefore, to maximize performance of the VES, EW-3 was dewatered to expose the fuel-impacted soil between 25 and 30 feet bgs. Extracted groundwater was contained in two 6,500-gallon tanks, treated, and discharged under wastewater discharge permit.

Pilot Scale Remediation System Installation and Startup

Allterra personnel completed installation of pilot scale remdiation equipment at the Site in March 2010. Pilot scale remediation system operation began on April 5, 2010 and was operated daily (as feasible) through June 30, 2010.

Pilot Scale Remediation System Operation and Maintenance (O&M) – June and July 2010

During June 2010, Allterra operated and maintained vapor and groundwater extraction equipment located at the Site. O&M field activities included collection of vapor and groundwater samples for laboratory analyses, recording system operation data (total flows and flow rates, groundwater elevations, qualitative observations, etc.), and collecting data from observation wells. Field logs for O&M activities are included in Appendix A. System data, such as groundwater flow rates and groundwater sample results, are presented in Tables 1 through 4.

VES Operation and Data Collection - June 2010

In June 2010, remediation at the Site consisted of operating the VES to remove soil vapors from well EW-3. The VES operated for approximately 26 days at an average extraction rate of approximately 13.9 standard cubic feet per minute (scfm). On June 1, 14, and 21, 2010, vapor samples were collected from the influent vapor streams of the VES. Vapor samples were collected from a sample port and contained in 1-liter tedlar sample bags. VES operating parameters and other general observations were measured routinely during the month. Sample analytical results are presented in Table 1 and VES operation data is presented in Table 3. Operation and Maintenance Field Logs are included in Appendix A.

<u>GWES Operation and Data Collection – June and July 2010</u>

During June and one day in July 2010, the GWES removed approximately 7,814 gallons of groundwater from well EW-3 at an approximate flow rate of 1.5 gallons per minute (gpm). On June 1, 10, 21, and 28, 2010, groundwater stream samples were collected from groundwater entering the storage tanks (GW-IN). GW-IN samples were collected to determine dissolved contaminant masses removed during groundwater extraction. Other general observations and GWES operating parameters were measured routinely during the month. Sample analytical results are presented in Table 2 and GWES operation data is presented in Tables 3 and 4. Operation and Maintenance Field Logs are included in Appendix A.

Laboratory Analyses – VES and GWES samples – June 2010

Vapor samples from the VES and groundwater samples from the GWES were submitted under chainof-custody protocol to McCampbell Analytical, Inc. of Pacheco, California, a state of California certified laboratory (ELAP #1644). Vapor and groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) by EPA Method 8015C modified, and for benzene, toluene, ethyl-benzene, xylenes (BTEX), and methyl tert-butyl ether (MTBE) by EPA Method



8021B. Analytical results from vapor samples are presented in Table 1, and analytical results from groundwater samples are presented in Table 2. The certified analytical reports for the samples, including quality assurance and quality control (QA/QC) data, are included in Appendix B.

Pilot Scale Remediation System Operation and Maintenance Results for June and July 2010 VES Operation Results for June and July 2010

During June the VES removed approximately 132,606 cubic feet of soil vapor at an approximate flow rate of 13.9 scfm. Vapor extraction data is presented in Tables 1, 3, 4, and 5. Sample analytical results from the VES influent (VES-IN) samples collected in June indicated TPHg at concentrations ranging from 170 to 530 micrograms per liter (μ g/L), benzene at less than laboratory detection limits (<0.25) to 0.6 μ g/L, toluene at concentrations of 5.9 μ g/L to 24 μ g/L, ethyl-benzene at 0.9 to 3.6 μ g/L, xylenes at 8.7 to 56 μ g/L, and MTBE at 23 to 170 μ g/L. Analytical data from VES samples are presented in Table 1.

VES Mass Removal – June 2010

Based on soil vapor removal data and laboratory analytical results, the VES removed approximately 2.57 pounds of TPHg, 0.0017 pounds of benzene, and 0.92 pounds of MTBE during June 2010 (Table 5).

GWES Operation Results for June and July 2010

During June and one day in July 2010, the GWES removed approximately 7,814 gallons of groundwater from extraction well EW-3. Groundwater extraction data including flow rates and volumes is presented in Tables 3, 4, and 6. Analytical results from the system groundwater influent stream samples (GW-IN) collected on June 1, 10, 21, and 28, 2010 are summarized below:

| Sample ID | Date | TPHg | Benzene | Toluene | Ethylbenzene | Xylenes | MTBE |
|--------------|-----------|---------------|---------|---------|--------------|---------|---------|
| Extraction | Well EW-3 | (results in µ | g/L) | | | | |
| GW-IN | 6/1/10 | 20,000 | 380 | 1,800 | 980 | 5,100 | 180,000 |
| | 6/10/10 | 25,000 | 400 | 1,900 | 1,000 | 5,700 | 170,000 |
| | 6/21/10 | 24,000 | 330 | 1,700 | 1,000 | 4,600 | 120,000 |
| | 6/28/10 | 22,000 | 270 | 1,600 | 900 | 4,200 | 110,000 |

Additionally, analytical data from GWES samples are presented in Table 2 and certified analytical reports are attached as Appendix B.

GWES Mass Removal for June and July 2010

Based on the volume of groundwater extracted and laboratory analytical results, the GWES removed approximately 1.48 pounds of TPHg, 0.02 pounds of benzene, and 9.46 pounds of MTBE during June and July 2010 (Table 6).

Mass Removal – VES and GWES for June and July 2010

During June and July 2010, approximately 4.05 pounds of TPHg, 0.02 pounds of benzene, and 10.37 pounds of MTBE were removed from the Site. Combined cumulative mass removal from VES and GWES is summarized in Table 7.



3-Month Pilot Scale Remediation System Operation Results

VES Operation Results

Pilot scale VES operation during April, May, and June of 2010 removed approximately 241,266 cubic feet of soil vapor at an average flow rate of 9.8 scfm. Vapor extraction data is presented in Tables 1, 3, 4, and 5. Sample analytical results from the VES-IN samples collected during pilot scale operation indicated TPHg at concentrations ranging from 36 to 2,100 μ g/L, benzene at less than laboratory detection limits (<0.25) to 3.6 μ g/L, toluene at 1.1 to 72 μ g/L, ethyl-benzene at 0.5 to 22 μ g/L, xylenes at 5.2 to 190 μ g/L, and MTBE at 3.7 to 420 μ g/L. Analytical data from VES-IN samples are summarized below and presented as a time trend plot in Figure 3.

| Sample ID | Date | TPHg | Benzene | Toluene | Ethyl- benzene | Xylenes | MTBE |
|--------------|-----------|---------------|---------|---------|-------------------|---------|------|
| Extraction | Well EW-3 | (results in µ | g/L) | | | | |
| VES-IN | 4/5/10 | 770 | 2.3 | 26 | 5.5 | 47 | 310 |
| | 4/6/10 | 2,100 | 3.6 | 72 | 22 | 190 | 420 |
| | 4/7/10 | 1,500 | 3.3 | 57 | 19 | 110 | 400 |
| | 4/15/10 | 270 | 2.7 | 14 | 1.3 | 10 | 270 |
| | 4/30/10 | 170 | <1.0 | 9.6 | 1.1 | 7.2 | 130 |
| | 5/6/10 | 180 | 1.4 | 8.9 | 1.0 | 11 | 160 |
| | 5/20/10 | 310 | 0.39 | 12 | 2.7 | 24 | 86 |
| | 5/28/10 | 36 | < 0.25 | 1.1 | 0.5 | 5.2 | 3.7 |
| | 6/1/10 | 230 | < 0.25 | 12 | 1.9 | 22 | 140 |
| | 6/14/10 | 530 | 0.6 | 24 | 3.6 | 56 | 170 |
| | 6/21/10 | 170 | < 0.25 | 5.9 | 0.9 | 8.7 | 23 |

VES-IN and vapor extraction system effluent (VES-EFF) analytical data are presented in Table 1 and certified analytical reports for June are included as Appendix B.

VES Mass Removal

During pilot scale VES operation approximately 241,266 cubic feet of soil vapor (Table 4) was extracted (April through June). Based on soil vapor removal data and laboratory analytical results, the VES removed approximately 6.06 pounds of TPHg, 0.0111 pounds of benzene, and 2.15 pounds of MTBE (Table 5).

GWES Operation Results

During operation, the GWES removed approximately 30,072 gallons of groundwater from extraction wells EW-3 and EW-1 (on April 27, 2010 EW-1 was used for the GWES). Groundwater extraction data including flow rates and volumes are presented in Tables 3, 4, and 6. Analytical data from GW-IN samples are presented as a time trend plot in Figure 4 and summarized below:



Pilot Scale Remediation System Installation Report 160 Holmes Street, Livermore, California Page 5

| Sample ID | Date | TPHg | Benzene | Toluene | Ethyl- benzene | Xylenes | MTBE |
|--------------|-----------|---------------|---------|---------|-------------------|---------|---------|
| Extraction | Well EW-3 | (results in µ | g/L) | | | | |
| GW-IN | 4/5/10 | 78,000 | 550 | 1,800 | 2,100 | 16,000 | 310,000 |
| | 4/15/10 | 33,000 | 470 | 1,900 | 1,400 | 6,300 | 300,000 |
| | 4/20/10 | 30,000 | 260 | 1,300 | 840 | 7,400 | 170,000 |
| | 4/29/10 | 30,000 | 300 | 1,500 | 1,000 | 5,300 | 190,000 |
| | 5/6/10 | 27,000 | 350 | 1,800 | 1,100 | 5,000 | 200,000 |
| | 5/20/10 | 25,000 | 360 | 1,500 | 930 | 5,500 | 200,000 |
| | 5/28/10 | 37,000 | 400 | 1,900 | 1,200 | 6,200 | 190,000 |
| | 6/1/10 | 20,000 | 380 | 1,800 | 980 | 5,100 | 180,000 |
| | 6/10/10 | 25,000 | 400 | 1,900 | 1,000 | 5,700 | 170,000 |
| | 6/21/10 | 24,000 | 330 | 1,700 | 1,000 | 4,600 | 120,000 |
| | 6/28/10 | 22,000 | 270 | 1,600 | 900 | 4,200 | 110,000 |

Additionally, analytical data from GWES samples are presented in Table 2 and certified analytical reports from June 2010 are attached as Appendix B.

GWES Mass Removal

During pilot scale operation, the GWES removed approximately 30,072 gallons of groundwater (Table 4). Based on the volume of groundwater extracted and laboratory analytical results, the GWES removed approximately 6.89 pounds of TPHg, 0.08 pounds of benzene, and 42.63 pounds of MTBE (Table 6).

VES and GWES Combined Mass Removal

During pilot scale VES operation, approximately 12.95 pounds of TPHg, 0.088 pounds of benzene, and 44.77 pounds of MTBE were removed from the Site. Combined cumulative mass removal from VES and GWES is summarized in Table 7.

Conclusions

Based on data collected during April, May, June, and July 2010, Allterra concludes the following:

- Groundwater elevations in site wells remain at the highest they have been in several years. Therefore, groundwater extraction was used in conjunction with vapor extraction to maximize contaminant removal.
- At the end of pilot scale remediation system operation activities, cumulative mass removed in both phases is approximately 12.95 pounds of TPHg, 0.088 pounds of benzene, and 44.77 pound of MTBE.
- Vapor and groundwater extraction from EW-3 appears to be effective at extracting contaminant mass from the source area at the Site.
- Groundwater extraction from EW-3 resulted in 95% of MTBE mass removed during pilot scale remediation system operation activities.



Pilot Scale Remediation System Installation Report 160 Holmes Street, Livermore, California Page 6

Recommendations

Based on the conclusions presented above, Allterra recommends the following:

- Prepare a work plan for continued interim groundwater extraction from EW-3 while groundwater conditions remain favorable for dissolved mass removal via groundwater extraction.
- Further evaluate site-specific conditions and concerns to develop a clear pathway for expedited closure of the Site.

Limitations

Allterra prepared this report for the use of Manwel and Samira Shuwayhat, Alameda County Health Services, and RWQCB in evaluating groundwater conditions at selected on-site locations at the time of this study. Statements, conclusions, and recommendations in this report are based solely on the field observations and analytical results related to work performed by Allterra and there is no warranty, expressed or implied. Site conditions and data can change over time; therefore, data presented in this report is only applicable to the timeframe of this study. Allterra's services have been performed in accordance with environmental principles generally accepted at this time and location.

Should you have any questions, please contact Allterra at (831) 425-2608.

Sincerely, Allterra Environmental, Inc.

Nathaniel Allen Project Scientist

<u>List of Figures</u> Figure 1, Vicinity Map Figure 2, Site Map Figure 3, Time Trend Plot – Influent Vapor (VES-IN) Figure 4, Time Trend Plot – Influent Groundwater (GW-IN) Joe Mangine, P.G. 8423 Senior Geologist

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<u>List of Tables</u> Table 1, Vapor Extraction Sample Results Table 2, Groundwater Extraction Sample Results Table 3, Pilot Scale Remediation System Operational Data Table 4, Pilot Scale Remediation System Flow Volumes Table 5, Pilot Scale Remediation System – Vapor Phase Contaminant Mass Removal Data Table 6, Pilot Scale Remediation System – Dissolved Phase Contaminant Mass Removal Data Table 7, Pilot Scale Remediation System – Total Contaminant Mass Removal Data

<u>List of Appendices</u> Appendix A, O&M Field Logs for June 2010 Appendix B, Certified Analytical Reports and Chains of Custody for June 2010

FIGURES 1 - 4





Figure 3 Time Trend Plot - Influent Vapor (VES-IN)







Figure 4 Time Trend Plot - Influent Groundwater (GW-IN)



TABLES 1-7

| | | 160 Holmes S | street, Live | ermore, Ca | alifornia | | | | | | |
|------------|-----------|--|--------------|---|-------------------|------------------|------|--|--|--|--|
| Sample | Sample | Total Petroleum Hydrocarbons as (µg/L) | Ar | Aromatic Volatile Organic Compounds (µg/L) | | | | | | | |
| ID | Date | Gasoline | Benzene | Toluene | Ethyl- benzene | Total Xylenes | MTBE | | | | |
| Extraction | Well EW-3 | | | | | | | | | | |
| VES-IN | 4/5/10 | 770 | 2.3 | 26 | 5.5 | 47 | 310 | | | | |
| | 4/6/10 | 2,100 | 3.6 | 72 | 22 | 190 | 420 | | | | |
| | 4/7/10 | 1,500 | 3.3 | 57 | 19 | 110 | 400 | | | | |
| | 4/15/10 | 270 | 2.7 | 14 | 1.3 | 10 | 270 | | | | |
| | 4/30/10 | 170 | <1.0 | 9.6 | 1.1 | 7.2 | 130 | | | | |
| | 5/6/10 | 180 | 1.4 | 8.9 | 1.0 | 11 | 160 | | | | |
| | 5/20/10 | 310 | 0.39 | 12 | 2.7 | 24 | 86 | | | | |
| | 5/28/10 | 36 | < 0.25 | 1.1 | 0.5 | 5.2 | 3.7 | | | | |
| | 6/1/10 | 230 | < 0.25 | 12 | 1.9 | 22 | 140 | | | | |
| | 6/14/10 | 530 | 0.6 | 24 | 3.6 | 56 | 170 | | | | |
| | 6/21/10 | 170 | < 0.25 | 5.9 | 0.9 | 8.7 | 23 | | | | |
| VES-EFF | 4/5/10 | 39 | 2.6 | 1.6 | 0.46 | 4.1 | <2.5 | | | | |
| | 4/6/10 | 25 | 2.9 | 1.6 | 0.36 | 2.7 | <2.5 | | | | |
| | 4/7/10 | 33 | 1.7 | 1.2 | < 0.25 | 1.6 | <2.5 | | | | |
| | 4/15/10 | <25 | 0.98 | 0.48 | < 0.25 | 0.76 | <2.5 | | | | |
| | 4/29/10 | <25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | <2.5 | | | | |
| | 6/1/10 | <25 | 1.5 | 0.73 | < 0.25 | 0.63 | <2.5 | | | | |
| | 6/14/10 | <25 | 1.5 | 0.73 | < 0.25 | 0.79 | <2.5 | | | | |
| Extraction | Well EW-1 | | | | | | | | | | |
| VES-IN | 4/27/10* | <25 | < 0.25 | 0.31 | < 0.25 | 0.94 | 4.2 | | | | |

 Table 1

 Vapor Extraction Sample Results

 160 Holmes Street, Livermore, California

Notes and Definitions:

* = Vapor sample collected from well EW-3 while groundwater was extracted from well EW-1

VES-IN = vapor extraction system influent sample

VES-EFF = vapor extraction system effluent sample

MTBE = Methyl tertiary butyl ether

 $\mu g/L =$ Micrograms per liter

TPHg samples analyzed using EPA Method 8015Cm, BTEX and MTBE samples analyzed using



Table 2Groundwater Extraction Sample Results160 Holmes Street, Livermore, California

| Sample ID | Sample Date | Total Petroleum Hydrocabons as Gasoline | Benzene | Toluene | Ethyl- benzene | Total Xylenes | MTBE |
|--------------|----------------|---|---------|---------|-------------------|------------------|---------|
| | | Gusenne | | | | | |
| Extraction W | Vell EW-3 | | | | | | |
| GW-IN | 4/5/10 | 78,000 | 550 | 1.800 | 2.100 | 16.000 | 310.000 |
| | 4/15/10 | 33,000 | 470 | 1,900 | 1,400 | 6,300 | 300,000 |
| | 4/20/10 | 30,000 | 260 | 1,300 | 840 | 7,400 | 170,000 |
| | 4/29/10 | 30,000 | 300 | 1,500 | 1,000 | 5,300 | 190,000 |
| | 5/6/10 | 27,000 | 350 | 1,800 | 1,100 | 5,000 | 200,000 |
| | 5/20/10 | 25,000 | 360 | 1,500 | 930 | 5,500 | 200,000 |
| | 5/28/10 | 37,000 | 400 | 1,900 | 1,200 | 6,200 | 190,000 |
| | 6/1/10 | 20,000 | 380 | 1,800 | 980 | 5,100 | 180,000 |
| | 6/10/10 | 25,000 | 400 | 1,900 | 1,000 | 5,700 | 170,000 |
| | 6/21/10 | 24,000 | 330 | 1,700 | 1,000 | 4,600 | 120,000 |
| | 6/28/10 | 22,000 | 270 | 1,600 | 900 | 4,200 | 110,000 |
| | | | | | | | |
| Extraction W | ell EW-1 | | | | | | |
| GW-IN | 4/27/10 | 1,900 | 19 | 69 | 41 | 350 | 3,500 |
| | | | | | | | |

Notes and Definitions:

-- = not analyzed

All results in micrograms per liter

MTBE = Methyl tertiary butyl ether

GW-IN = Sample collected from influent groundwater stream

GW-MID = Sample collected from mid-poiont groundwater stream

GW-EFF = Sample collected from effluent groundwater stream

Samples analyzed for TPHg by EPA Method 8015CM, BTEX/MTBE by EPA Method 8021B.



Table 3Pilot Scale Remediation System Operational Data160 Holmes Street, Livermore, California

| | | VES | | | GWES | | | | |
|------------|----------------------------------|------------------|-----------------|----------------------|-------------------------------|-------------------------|--------------|-----------------------|--|
| Time | AverageVapor Flow Rate (scfm) | Days Operated | Wells In Use | Date Added to VES | Average Flow Rate (gpm) | Total Flow (gallons) | Wells In Use | Date Added to GWES | |
| April 2010 | 6 | 25 | EW-3* | 4/5/10 | 2 | 10,761 | EW-3* | 4/5/10 | |
| May 2010 | 9.5 | 31 | EW-3 | 4/5/10 | 1.5 | 11,497 | EW-3 | 4/5/10 | |
| June 2010 | 13.9 | 26 | EW-3 | 4/5/10 | 1.4 | 7,517 | EW-3 | 4/5/10 | |
| July 2010 | | | | | 1.5 | 297 | EW-3 | 4/5/10 | |

Notes:

scfm = Standard cubic feet per minute

gpm = gallons per minute

Total flow = gallons processed through system

* = On 4/27/10 groundwater was extracted from EW-1



Table 4Pilot Scale Remediation System Flow Volumes

160 Holmes Street, Livermore, California

| | | Vapor | r Data | Groundw | vater Data | Notes | |
|---------|-------------------|--|---|---|-------------------------------------|--|--|
| Date | Quarter/ Month | Quarter's/Month's Flow Volume (cubic feet) | Cumulative Flow Volume (cubic feet) | Quarter's/Month's Flow Volume (gallons) | Cumulative Flow Volume (gallons) | | |
| 4/5/10 | April | 15 026 | 15 026 | 7,023 | 10 761 | Groundwater extracted from EW-3 on April 5 to April 26 and April 28 to April 30. | |
| 4/3/10 | Артт | 43,930 | 43,930 | 3,738 | 10,701 | 3,738 gallons of groundwater extracted from EW-1 on April 27. | |
| 5/31/10 | May | 67,116 | 113,052 | 11,497 | 22,258 | Soil vapor and groundwater extracted from EW-3 | |
| 6/30/10 | June | 132,606 | 245,658 | 7,517 | 29,775 | Soil vapor and groundwater extracted from EW-3 | |
| 7/14/10 | July | | | 297 | 30,072 | Groundwater extraction only | |

Notes:

SV = Soil vapor GW = Groundwater



Table 5Pilot Scale Remediation System – Vapor Phase Contaminant Mass Removal Data160 Holmes Street, Livermore, California

| | Avanaga | Average Influent Concentrations | | | Cubia Faat Processed | | Mass Removed (pounds) | | | | | |
|------------|------------|---------------------------------|-------------|-----------------------|--------------------------------|--------------------------|-----------------------|------|------------------|---------|------|--|
| Date | Average II | muent Con | centrations | Cubic Feet Flotesseu | | Quarter (or Month) Total | | | Cumulative Total | | | |
| Duit | TPHg | Benzene | MTBE | Quarter (or Month) | Quarter (or Month) Total TP | | Benzene | MTBE | TPHg | Benzene | MTBE | |
| April 2010 | 962 | 2.4 | 306 | 41,544 | 41,544 | 2.76 | 0.0069 | 0.88 | 2.76 | 0.0069 | 0.88 | |
| May 2010 | 175 | 0.6 | 83 | 67,116 | 108,660 | 0.73 | 0.0025 | 0.35 | 3.49 | 0.0094 | 1.23 | |
| June 2010 | 310 | 0.2 | 111 | 132,606 | 241,266 | 2.57 | 0.0017 | 0.92 | 6.06 | 0.0111 | 2.15 | |

Definitions and Notes:

All concentrations listed in micrograms per liter

All masses listed in pounds (lb)

TPHg = total petroleum hydrocarbons as gasoline

MTBE = methyl tertiary butyl ether

If multiple samples were collected the averaged concentration was used to calculate mass removed

Table 6 Pilot Scale Remediation System – Dissolved Phase Contaminant Mass Removal Data 160 Holmes Street, Livermore, California

| | Influe | ent Concent | tration | | | Mass Removed (pounds) | | | | | | |
|----------------|--------|-------------|---------|-----------------------------|--------|-----------------------|----------------------|-------|------|------------------|-------|--|
| Date | (Avera | samples) | lonthly | Gallons Processed | | Qua | Quarter/ Month Total | | | Cumulative Total | | |
| | TPHg | Benzene | MTBE | Quarterly/ Monthly Total | | TPHg | Benzene | MTBE | TPHg | Benzene | MTBE | |
| April 2010 | 42,750 | 395 | 242,500 | 7,023 (EW-3) | 10 761 | 2.50 | 0.02 | 14.19 | 2.56 | 0.021 | 1/ 30 | |
| April 2010 | 1,900* | 19* | 3,500* | 3,738 (EW-1) | 10,701 | 0.06* | 0.0006* | 0.11* | 2.30 | 0.021 | 14.30 | |
| May 2010 | 29,667 | 370 | 196,667 | 11,497 | 22,258 | 2.85 | 0.04 | 18.87 | 5.41 | 0.06 | 33.17 | |
| June/July 2010 | 22,750 | 345 | 145,000 | 7,814 | 30,072 | 1.48 | 0.02 | 9.46 | 6.89 | 0.08 | 42.63 | |

Definitions and Notes:

All concnetrations listed in micrograms per liter (μ g/L)

All masses listed in pounds (lb) * = Concentrations and masses removed were calculated using extraction and lab data from EW-1 on April 27, 2010



Table 7 Pilot Scale Remediation System - Total Contaminant Mass Removal Data 160 Holmes Street, Livermore, California

| | Mass Removed (pounds) | | | | | | | | | |
|----------------|-----------------------|---------------|-------|------------------|---------|-------|--|--|--|--|
| Date | Quar | rter/ Month 7 | Fotal | Cumulative Total | | | | | | |
| | TPHg | Benzene | MTBE | TPHg | Benzene | MTBE | | | | |
| April 2010 | 5.32 | 0.028 | 15.18 | 5.32 | 0.028 | 15.18 | | | | |
| May 2010 | 3.58 | 0.040 | 19.22 | 8.90 | 0.068 | 34.40 | | | | |
| June/July 2010 | 4.05 | 0.020 | 10.37 | 12.95 | 0.088 | 44.77 | | | | |

<u>Definitions and Notes:</u> All concentrations listed in micrograms per liter (μ g/L) All masses listed in pounds (lb)

Data includes masses removed in soil vapor and groundwater extracted from the Site



APPENDIX A O&M Field Logs for June 2010

| VES Operation and Maintenace | Field Log |
|---|------------------------------|
| 160 Holmes Street, Livermore, Cali | ifornia |
| PERSONNEL: (A) DA | |
| TE OBSERVATIONS and MEASUREMENTS UDON ADDIVAL | Sample Collection |
| Have Operated upon Arrival | VES-IN NOR |
| Hours Operated upon Arrival <u>3667</u> | VES-EFE |
| IC Engine at 40 Inches Water Ver | VES-EIT |
| IC Engine Water Knockout (% full): | Observation Wells |
| ic-Engine water Knockout (76 tuil). | Induced Vacuums (1st/2nd/3rd |
| VES Data | MW-1B P |
| ves Data | MW-1A |
| VES-EEE | FW-1 |
| EW-3 CHO in HD | EW-2 P |
| Vapor Flow Rate VES-IN 4000 Plan | Depth to Water |
| vapor now rate view not | Onsite Wells |
| Groundwater Extraction Observations and Measurements | MW-1A EW-1 |
| Groundwater Flow Rate $\sim 1.5 o/m$ | MW-1B EW-2 |
| Tank Level (% Full) 75% | MW-2A EW-3 |
| Totalizer Reading 3592817 | MW-3A |
| Influent Groundwater Stream | Offsite Wells |
| Product Odor (faint/strong) Apres | MW-7A MW-4A |
| Turbidity Low | MW-7B MW-9A |
| pH | MW-7C MW-9B |
| Color light brow | MW-7A MW-5A |
| Sheen | MW-7B MW-5B |
| Notes | |
| Groundwater Sampling | Departure Checklist |
| EW-3 (influent) | IC Engine off |
| Tank Sample 4 Voas Tank I | IC Engine locked |
| 3 Vous In | Wells secure |
| General OBSERVATIONS and MEASUREMENTS | Equipment secure |
| eather Conditions? (loss | GW piping secure |
| Tank Condition Good | ank ladder removed |
| Piping condition boosd | Site cleared |
| Engine Condition | |
| Misc. Notes Vapor + Y Vocus for Fier | |

| 160 Holmes Street, Livermore, Calif | fornia $(n-2) = 1$ | 0 |
|--|--------------------|---------------------|
| PERSONNEL: DO DAT | re: 0 2 1 | |
| | Samn | le Collection |
| ES OBSERVATIONS and MEASUREMENTS UPON ARRIVAL | VES_IN | |
| Hours Operated upon Arrival 8077, -(| VES FFF | |
| Battery Status | VES-EIT | |
| IC-Engine at 40-Inches Water Yes No | Obser | rvation Wells |
| IC-Engine Water Knockout (% full): | Induced Va | cuums (1st/2nd/3rd) |
| | MW 1P | |
| VES Data | MW-IB C | |
| anometer Readings VES-IN - 90 in Hall | TW 1 | |
| VES-EFF | EW-1 | , |
| EW-3 - 40 in Hol | Ew-2 | th to Water |
| Vapor Flow Rate VES-IN 100 4 m | Dep | nsite Wells |
| | | EW-1 |
| Groundwater Extraction Observations and Measurements | MW-IR | EW-2 |
| Tork Lavel (% Full) ~ CAP4 | MW-2A | EW-2 |
| Totalizer Peeding 3592423 | MW-3A | L w-5 |
| Influent Groundwater Stream | · Ot | ffsite Wells |
| Product Odor (faint/strong) Mach/ Shame | MW-7A | MW-4A |
| Turbidity | MW-7B | MW-9A |
| pH | MW-7C | MW-9B |
| Color 1.3.ht brown | MW-7A | MW-5A |
| Sheen | MW-7B | MW-5B |
| Notes | 7 | |
| Groundwater Sampling | Depar | ture Checklist |
| EW-3 (influent) | IC Engine | e off |
| Tank Sample | IC Engine loo | ked |
| | Wells se | cure 🗸 |
| General OBSERVATIONS and MEASUREMENTS | Equipment se | cure 🧹 |
| Veather Conditions? Surry | GW piping se | cure 🗸 |
| Tank Condition 6000 | ank ladder remo | oved V |
| Piping condition Growt | Site cle | ared |
| C Engine Condition (7002 | | |

| ALL | TEREA | |
|--|-------------------|---------------------|
| VES Operation and Maintenace Field Log 160 Holmes Street, Livermore, California | | |
| PERSONNEL: | DATE: 6-3-1 | 0 |
| | | |
| /ES OBSERVATIONS and MEASUREMENTS UPO | N ARRIVAL Sam | ole Collection |
| Hours Operated upon Arrival 8679.6 | VES-IN | |
| Battery Status Grad | VES-EFF | |
| IC-Engine at 40-Inches Water Yes No | | |
| IC-Engine Water Knockout (% full): | Obse | rvation Wells |
| | Induced Va | cuums (1st/2nd/3rd) |
| VES Data | MW-1B | |
| lanometer Readings VES-IN | MW-1A | |
| VES-EFF | EW-1 | |
| EW-3 | EW-2 | |
| Vapor Flow Rate VES-IN | Dep | oth to Water |
| | 0 | nsite Wells |
| Groundwater Extraction Observations and Measure | urements MW-1A | EW-1 |
| Groundwater Flow Rate ~ 1,5 | MW-1B | EW-2 |
| Tank Level (% Full) | MW-2A | EW-3 |
| Totalizer Reading 3592,809 | MW-3A | |
| Influent Groundwater Stream | 0 | ffsite Wells |
| Product Odor (faint/strong) | MW-7A | MW-4A |
| Turbidity | MW-7B | MW-9A |
| pH | MW-7C | MW-9B |
| Color | MW-7A | MW-5A |
| Sheen | MW-7B | MW-5B |
| Notes | | |
| Groundwater Sampling | Depar | ture Checklist |
| EW-3 (influent) | IC Engin | e off |
| Tank Sample | IC Engine lo | cked |
| | Wells se | cure |
| General OBSERVATIONS and MEASUREM | ENTS Equipment se | cure |
| Veather Conditions? | GW piping se | cure |
| Tank Condition | ank ladder remo | oved |
| Piping condition | Site cle | ared |
| C Engine Condition | | |
| Misc. Notes Set up her vescel | 901 | |

States

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|--|-----------------|----------------|
| VES Operation and Maintenace H | Field Log | • |
| 160 Holmes Street, Livermore, Can | TE: 6/5/10 | |
| PERSONNEL: L B DA | TE. 0/3/10 | |
| | Sampl | e Collection |
| ES OBSERVATIONS and MEASUREMENTS UPON ARRIVAL | VES-IN | |
| Hours Operated upon Arrival 8081.5 | VES-IN | |
| Battery Status | VES-EFF | |
| IC-Engine at 40-Inches Water Yes No | Obser | votion Wells |
| IC-Engine Water Knockout (% full): | Ubser | vation wens |
| | Induced Vac | |
| VES Data | MW-IB | |
| lanometer Readings VES-IN 41.4 | MW-1A O | |
| VES-EFF | EW-1 | |
| EW-3 | EW-2 | |
| Vapor Flow Rate VES-IN 470 + /m | Dep | th to Water |
| | Or | nsite Wells |
| Groundwater Extraction Observations and Measurements | MW-1A | EW-1 |
| Groundwater Flow Rate v 1.5 GPM | MW-1B | EW-2 |
| Tank Level (% Full) 70% | MW-2A | EW-3 |
| Totalizer Reading 3593410 | MW-3A | |
| Influent Groundwater Stream | Of | fsite Wells |
| Product Odor (faint/strong) Med. | MW-7A | MW-4A |
| Turbidity | MW-7B | MW-9A |
| pH | MW-7C | MW-9B |
| Color 1.t. Brown | MW-7A | MW-5A |
| Sheen None | MW-7B | MW-5B |
| Notes | | |
| Groundwater Sampling | Depar | ture Checklist |
| EW-3 (influent) | IC Engine | e off X |
| Tank Sample | IC Engine loc | ked X |
| | Wells see | cure X |
| General OBSERVATIONS and MEASUREMENTS | Equipment see | cure X |
| Veather Conditions? SUNNY, Hot | GW piping see | cure X |
| Tank Condition | ank ladder remo | ved X |
| Piping condition 6000 | Site clea | ared X |
| C Engine Condition GOD | | |
| Misc. Notes Filled Proves Trestrate suchla | | |

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|--|-------------------------------|
| VES Operation and M 160 Holmes Street, Liv | aintenace Field Log |
| PERSONNEL: LB | DATE: $6 - 6 - 10$ |
| | |
| VES OBSERVATIONS and MEASUREMENTS UPON A | RRIVAL Sample Collection |
| Hours Operated upon Arrival 86970 | VES-IN |
| Battery Status 600 D | VES-EFF |
| IC-Engine at 40-Inches Water Yes No | |
| IC-Engine Water Knockout (% full): | Observation Wells |
| | Induced Vacuums (1st/2nd/3rd) |
| VES Data | MW-1B O |
| anometer Readings VES-IN - 41.5 | MW-1A O |
| VES-EFF | EW-1 6 |
| EW-3 - 41.3 | EW-2 Ô |
| Vapor Flow Rate VES-IN 490 FPM | Depth to Water |
| | Onsite Wells |
| Groundwater Extraction Observations and Measurem | MW-1A EW-1 |
| Groundwater Flow Rate v 1.167M | MW-1B EW-2 |
| Tank Level (% Full) 80% - 75% | MW-2A EW-3 |
| Totalizer Reading 3593654 | MW-3A |
| Influent Groundwater Stream | Offsite Wells |
| Product Odor (faint/strong) faint | MW-7A MW-4A |
| Turbidity | MW-7B MW-9A |
| pH | MW-7C MW-9B |
| Color 17. Brown | MW-7A MW-5A |
| Sheen | MW-7B MW-5B |
| Notes | |
| Groundwater Sampling | Departure Checklist |
| EW-3 (influent) | IC Engine off |
| Tank Sample | IC Engine locked |
| | Wells secure 🔀 |
| General OBSERVATIONS and MEASUREMENT | S Equipment secure × |
| Veather Conditions? SUMMY, Hot | GW piping secure |
| Tank Condition | ank ladder removed |
| Piping condition Storb Treatment outlet avon | leaking Site cleared |
| C Engine Condition GOD | 0 |
| Misc. Notes Breaker in station went | out. |

Fuel tanker Doop off: had to turn off IC ~ 2 hour

| | ALL | HIRA | | | | |
|------------------------------------|----------------|---------------|------------|------------|---------------|---------------|
| VES Op | eration and | Maintenace | Field Log | | | |
| 160 | Holmes Street, | Livermore, Ca | ATE. 622. | 10 | | |
| PERSONNEL: V | | D | AIL. C 4 | V | | |
| | A CONTRACTOR | N ADDIVAL | S | ample Co | llection | |
| ES OBSERVATIONS and MEASURI | ZTAT A | ARRIVAL | VES-IN | | • | |
| Hours Operated upon Arrival | 5705.0 | | VES-FFF | | ÷ | |
| Battery Status (| 10000 | | VLS-LIT | | | |
| IC-Engine at 40-Inches Water | Yes No | | | Observatio | on Wells | |
| IC-Engine Water Knockout (% full): | | | Induce | d Vocuum | e (1st/2nd/ | (3rd) |
| | | | MW 1D | u vacuum | 15 (154 2110) | 514) |
| VES Data | | | MW-IB | | / | |
| anometer Readings VES-IN | | | MW-IA | | | |
| VES-EFF | | | EW-1 | | | |
| EW-3 | | | EW-2 | | Sector State | in the second |
| Vapor Flow Rate VES-IN | | | | Depth to | Water | |
| | | | | Onsite | Wells | |
| Groundwater Extraction Observa | tions and Mea | surements | MW-1A | | EW-1 | |
| Groundwater Flow Rate | SOPM | | MW-1B | | EW-2 | |
| Tank Level (% Full) 90 | 10 | | MW-2A | | EW-3 | |
| Totalizer Reading 35 4 | 13801 | | MW-3A | | | |
| Influent Groundwat | er Stream | | | Offsite | Wells | |
| Product Odor (faint/strong) | ns | | MW-7A | | MW-4A | |
| Turbidity low | | | MW-7B | | MW-9A | |
| pH | | | MW-7C | | MW-9B | |
| Color brh | | | MW-7A | | MW-5A | |
| Sheen Non | r | | MW-7B | | MW-5B | |
| Notes T-1 r | ridy for | -discharge | | | | |
| Groundwater Sa | mpling | | I | Departure | Checklist | 1 |
| EW-3 (influent) | | | IC E | Engine off | / | |
| Tank Sample | | | IC Engi | ne locked | V | |
| | | | We | lls secure | V | |
| General OBSERVATIONS and | I MEASUREN | IENTS | Equipme | ent secure | | |
| Veather Conditions? Subas | | | GW pipi | ng secure | V | |
| Tank Condition 9000 | | | ank ladder | removed | 1/ | · |
| Piping condition Good | | | Si | te cleared | 1 | |
| C Engine Condition good - alt | · felt. | • | | | | |
| Misc. Notes Altern str | belt luo | (C | | | | |
| 12 Volte cl | Leh no | f cm | | | 1. J. 1. 1. | |

| VES Operation and Ma | IFA intenace Field Lo | σ | | |
|--|--------------------------|----------------|---------------|--------|
| 160 Holmes Street, Live | ermore, California | 5 | | |
| PERSONNEL: | DATE: | -6 | -1D | |
| | | | | |
| VES OBSERVATIONS and MEASUREMENTS UPON AI | RRIVAL | Sampl | e Collection | |
| Hours Operated upon Arrival 5709.6 | VES | IN | | |
| Battery Status 6000 | VES- | EFF | | |
| IC-Engine at 40-Inches Water Yes No | | | | - |
| IC-Engine Water Knockout (% full): | | Obser | vation Wells | |
| | I | duced Vac | uums (1st/2nd | d/3rd) |
| VES Data | MW | 1B 🕥 | 0 | 0 |
| Manometer Readings VES-IN -40 in Hol | MW | IA D | S | 0 |
| VES-EFF | EW | 1 0 | D | 0 |
| EW-3 -40 Fn H_D | EW | 2 0 | 0 | 0 |
| Vapor Flow Rate VES-IN 400 Mm | | Depth to Water | | |
| | | Ons | site Wells | |
| Groundwater Extraction Observations and Measurem | ents MW- | 1A | EW-1 | |
| Groundwater Flow Rate ~ L.S g/m | MW | 1B | EW-2 | |
| Tank Level (% Full) $\sim 90\%$ | MW | 2A | EW-3 | |
| Totalizer Reading 3993882 | MW | 3A | | |
| Influent Groundwater Stream | | Off | site Wells | |
| Product Odor (faint/strong) Med/Sfrong | MW | 7A | MW-4A | 1 |
| Turbidity low | MW | 7B | MW-9A | |
| pH | MW | 7C | MW-9B | |
| Color light brown | MW | 7A | MW-5A | |
| Sheen | MW | 7B | MW-5B | |
| Notes | | | | |
| Groundwater Sampling | | Depart | ure Checklis | t |
| EW-3 (influent) | | IC Engine | off | / |
| Tank Sample 4 Hoss For | IC | Engine lock | ked | |
| 2 Hel 2 Van | | Wells secu | ure | 4 |
| General OBSERVATIONS and MEASUREMENTS | Equ | ipment secu | ure | ~ |
| Weather Conditions? SUNKY | GW | piping secu | ure | / |
| Tank Condition | ank la | dder remov | ved N | / |
| Piping condition Geo A | | Site clear | red | |
| IC Engine Condition | | | | |
| Misc. Notes | | | | |

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|--|----------------|---------------|--------------|-------|
| VES Operation and Maintenace I 160 Holmes Street Livermore Cali | fornia | | | |
| DEDSONNEL: DA | TE. 6-0 | 7-17 |) | - |
| TERSONNEL. DO DA | | | | 1.10 |
| VES OBSERVATIONS and MEASUREMENTS UPON ARRIVAL | | Sample C | Collection | |
| Hours Operated upon Arrival 6717.7 | VES-IN | • | | |
| Battery Status Gand | VES-EFF | | | |
| IC-Engine at 40-Inches Water Yes No | | | | |
| IC-Engine Water Knockout (% full): | | Observat | ion Wells | |
| | Induce | ed Vacuur | ns (1st/2nd | /3rd) |
| VES Data | MW-1B | Ð | Ø | 0 |
| anometer Readings VES-IN - 40 in Ha | MW-1A | Ø | Ø | 0 |
| VES-EFF | EW-1 | 0 | Ø | 0 |
| EW-3 -YD in Hyd | EW-2 | 0 | O | D |
| Vapor Flow Rate VES-IN ~ 400 flm | Depth to Water | | | |
| | Onsite Wells | | Wells | |
| Groundwater Extraction Observations and Measurements | MW-1A | . / | EW-1 | 1 |
| Groundwater Flow Rate -1.5 g/m | MW-1B | | EW-2 | |
| Tank Level (% Full) 95% | MW-2A | | EW-3 | |
| Totalizer Reading 3594239 | MW-3A | | | - |
| Influent Groundwater Stream | | Offsite Wells | | |
| Product Odor (faint/strong) Med/s frong | MW-7A | | MW-4A | |
| Turbidity low | MW-7B | | MW-9A | |
| pH | MW-7C | | MW-9B | |
| Color Light wown | MW-7A | | MW-5A | 1 |
| Sheen | MW-7B | | MW-5B | |
| Notes | | | | |
| Groundwater Sampling | Ι | Departure | Checklist | |
| EW-3 (influent) | IC E | Engine off | | |
| Tank Sample Tank 1 4 Von samples. | IC Engi | ne locked | \checkmark | - |
| TILL A WON FLCI | We | lls secure | V | |
| General OBSERVATIONS and MEASUREMENTS | Equipme | ent secure | V | |
| Veather Conditions? (lowdy/Sunny | GW pipi | ng secure | V | |
| Tank Condition bood | ank ladder | removed | | / |
| Piping condition Good | Si | te cleared | V | |
| C Engine Condition (5000) | | 1.22 | | |
| Misc. Notes | | | | |

| VES Operation and Main | enace Field Log | |
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| 160 Holmes Street, Liverm | ore, California | |
| PERSONNEL: | DATE: 6-10-10 | |
| | | |
| VES OBSERVATIONS and MEASUREMENTS UPON ARR | VAL Sample Collection | |
| Hours Operated upon Arrival 8726. | VES-IN | |
| Battery Status Geod | VES-EFF | |
| IC-Engine at 40-Inches Water (Yes) No | | |
| IC-Engine Water Knockout (% full): | Observation Wells | |
| | Induced Vacuums (1st/2nd | /3r |
| VES Data | MW-1B | |
| Manometer Readings VES-IN | MW-1A | |
| VES-EFF | EW-1 | |
| EW-3 | EW-2 | |
| Vapor Flow Rate VES-IN | Depth to Water | 1 |
| | Onsite Wells | |
| Groundwater Extraction Observations and Measuremen | s MW-1A EW-1 | |
| Groundwater Flow Rate - 1.5 | MW-1B EW-2 | |
| Tank Level (% Full) 98% | MW-2A EW-3 | |
| Totalizer Reading 3594715 | MW-3A | |
| Influent Groundwater Stream | Offsite Wells | |
| Product Odor (faint/strong) | MW-7A MW-4A | |
| Turbidity | MW-7B MW-9A | |
| pH | MW-7C MW-9B | |
| Color | MW-7A MW-5A | |
| Sheen | MW-7B MW-5B | |
| Notes | | |
| Groundwater Sampling | Departure Checklist | |
| EW-3 (influent) | IC Engine off | |
| Tank Sample | IC Engine locked | |
| | Wells secure | |
| General OBSERVATIONS and MEASUREMENTS | Equipment secure | |
| Weather Conditions? Sunny | GW piping secure | |
| Tank Condition full | ank ladder removed | |
| Piping condition 9600 | Site cleared | |
| IC Engine Condition | | |
| Mise Notes BRELD dicharge F | | |

| VES Operation an 160 Holmes Stree | LTEREA nd Maintenace Field Log et, Livermore, California | |
|---|---|-----------------------|
| PERSONNEL: | DATE: 6~11. | 10 |
| | | |
| ES OBSERVATIONS and MEASUREMENTS UP | ON ARRIVAL Sa | ample Collection |
| Hours Operated upon Arrival $\chi + [+,]$ | VES-IN | |
| Battery Status (March | VES-EFF | |
| IC-Engine at 40-Inches Water Yes No | | |
| IC-Engine Water Knockout (% full): | 0 | bservation Wells |
| | Induced | Vacuums (1st/2nd/3rd) |
| VES Data | MW-1B | |
| anometer Readings VES-IN | MW-1A | |
| VES-EFF | EW-1 | |
| EW-3 | EW-2 | |
| Vapor Flow Rate VES-IN | | Depth to Water |
| | | Onsite Wells |
| Groundwater Extraction Observations and Mea | surements MW-1A | EW-1 |
| Groundwater Flow Rate \sim (, 5) | - + 12/14/ | EW-2 |
| Tank Level (% Full) $\int d = \frac{1}{2} \left(\frac{1}{2} - \frac{1}{2} \right)$ | | EW-3 |
| Totalizer Reading 574,800 | MW-3A | |
| Influent Groundwater Stream | | Offsite Wells |
| Product Odor (faint/strong) | MW-7A | MW-4A |
| Turbidity | MW-7B | MW-9A |
| pH | MW-7C | MW-9B |
| Color | MW-7A | MW-5A |
| Sheen | MW-7B | MW-5B |
| Notes | | |
| Groundwater Sampling | De | parture Checklist |
| Ew-3 (influent) | IC En | |
| Tank Sample | IC Engine | Тоскеа |
| Concerci OBSEDVATIONS and MEASUDEN | | s secure |
| Venther Conditions? | Equipmen Civier | |
| Tank Condition | | secure |
| Piping condition | | cleared |
| C Engine Condition | | cicareu |
| Mice Notes T-1 chill durchas | rilan | |

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| VES Operation and | Maintenace Field Log |
| 160 Holmes Street, | Livermore, California |
| PERSONNEL: LO | DATE: $(\rho - 1^{-1})$ |
| VES ORSERVATIONS and MEASUREMENTS UPON | NARRIVAL Sample Collection |
| Hours Operated upon Arrival \$732.3 | VES-IN VES |
| Battery Status (200) | VES-FFE V Ves |
| IC-Engine at 40-Inches Water (Ves) No | VES-EIT VES |
| IC-Engine Water Knockout (% full) | Observation Wells |
| 10-Eligne water Kilokout (70 full). | Induced Vacuums (1st/2nd/3rd) |
| VES Data | MW-1B |
| anometer Readings VES-IN - 417 7 | MW-14 O |
| VES-FFE | FW-1 0 |
| $FW_3 - 431$ | EW-2 |
| Vapor Flow Rate VES-IN 510 FPM | Depth to Water |
| | Onsite Wells |
| Groundwater Extraction Observations and Measu | rements MW-1A FW-1 |
| Groundwater Flow Rate 1. 5 PM | MW-1B FW-2 |
| Tank Level (% Full) \$ 70% T1 c Co | MW-1D EW-2 MW-2A FW-3 |
| Totalizer Reading 3595398 | MW-3A |
| Influent Groundwater Stream | Offsite Wells |
| Product Odor (faint/strong) | MW-7A MW-4A |
| Turbidity | MW-7B MW-9A |
| pH | MW-7C MW-9B |
| Color light Brow | MW-7A MW-5A |
| Sheen | MW-7B MW-5B |
| Notes | |
| Groundwater Sampling | Departure Checklist |
| EW-3 (influent) | IC Engine off |
| Tank Sample | IC Engine locked |
| | Wells secure |
| General OBSERVATIONS and MEASUREME | NTS Equipment secure |
| reather Conditions? Clear a Sunny; Hot | GW piping secure |
| Tank Condition | ank ladder removed |
| Piping condition | Site cleared |
| CEngine Condition Clubble not engrugery | |
| Misc. Notes Bought Duct thee. | |
| Sampled VESTIN à VES-1 | 100 |

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|--|---------------|----------|--------------|-----|
| VES Operation and Mainten | ace Field Log | | | |
| 160 Holmes Street, Livermore, | California | | | |
| PERSONNEL: DE | DATE: G-1 | 5- li | Ð | |
| | | | | |
| VES OBSERVATIONS and MEASUREMENTS UPON ARRIVA | L Sa | mple C | ollection | |
| Hours Operated upon Arrival 8737.0 | VES-IN | | - | |
| Battery Status Cook | VES-EFF | | - | |
| IC-Engine at 40-Inches Water Yes No | | | | |
| IC-Engine Water Knockout (% full): | OI | oservati | ion Wells | |
| | Induced | Vacuun | ns (1st/2nd | /3r |
| VES Data | MW-1B | ø | | |
| Ianometer Readings VES-IN - 40 in Hul | MW-1A | 0 | | |
| VES-EFF | EW-1 | 0 | | |
| EW-3 -40 in HD | EW-2 | 0 | | |
| Vapor Flow Rate VES-IN 400 flm | Ι | Depth to | Water | |
| | _ | Onsite | Wells | |
| Groundwater Extraction Observations and Measurements | MW-1A | | EW-1 | 1 |
| Groundwater Flow Rate - 1.5 gpm | MW-1B | | EW-2 | |
| Tank Level (% Full) | MW-2A | | EW-3 | |
| Totalizer Reading 3 Set 5373 | MW-3A | | | |
| Influent Groundwater Stream | | Offsite | Wells | |
| Product Odor (faint/strong) | MW-7A | 1 | MW-4A | + |
| Turbidity 10W | MW-7B | | MW-9A | 1 |
| pH | MW-7C | | MW-9B | 1 |
| Color light from | MW-7A | | MW-5A | |
| Sheen | MW-7B | C | MW-5B | |
| Notes | | | | |
| Groundwater Sampling | Dej | oarture | Checklist | _ |
| EW-3 (influent) | IC Eng | gine off | - | |
| Tank Sample | IC Engine | locked | / | |
| | Wells | secure | ~ | / |
| General OBSERVATIONS and MEASUREMENTS | Equipment | secure | / | / |
| Weather Conditions? Sunny | GW piping | secure | \checkmark | |
| Tank Condition 6001 | ank ladder re | moved | ~ | / |
| Piping condition 6002 | Site | cleared | / | |
| IC Engine Condition (500 d | | | | |

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| VES Operation and Mai | intenace Field Log |
| PERSONNEL: DO | DATE: 6-16-10 |
| | |
| VES OBSERVATIONS and MEASUREMENTS UPON AR | RIVAL Sample Collection |
| Hours Operated upon Arrival 8745,1 | VES-IN |
| Battery Status 6000 | VES-EFF |
| IC-Engine at 40-Inches Water Yes No | |
| IC-Engine Water Knockout (% full): | Observation Wells |
| | Induced Vacuums (1st/2nd |
| VES Data | MW-1B 🖉 🥏 |
| Manometer Readings VES-IN - 40 He | MW-1A O D |
| VES-EFF | EW-1 0 0 |
| EW-3 -40 m H20 | EW-2 0 0 |
| Vapor Flow Rate VES-IN 350 flm | Depth to Water |
| | Onsite Wells |
| Groundwater Extraction Observations and Measureme | nts MW-1A EW-1 |
| Groundwater Flow Rate ~ 1.5 glm | MW-1B EW-2 |
| Tank Level (% Full) 6 5% | MW-2A EW-3 |
| Totalizer Reading 3595772 | MW-3A |
| Influent Groundwater Stream | Offsite Wells |
| Product Odor (faint/strong) | MW-7A MW-4A |
| Turbidity Cow | MW-7B MW-9A |
| pH | MW-7C MW-9B |
| Color loght brown | MW-7A MW-5A |
| Sheen | MW-7B MW-5B |
| Notes | |
| Groundwater Sampling | Departure Checklist |
| EW-3 (influent) | IC Engine off |
| Tank Sample | IC Engine locked |
| | Wells secure |
| General OBSERVATIONS and MEASUREMENTS | Equipment secure |
| Weather Conditions? Sunny | GW piping secure |
| Tank Condition Georg | ank ladder removed |
| Piping condition | Site cleared |
| IC Engine Condition | |

| VES Operation an | LTERRA ad Maintenace Field Log | | |
|---|-----------------------------------|----------------------|--|
| PERSONNEL: GA | DATE: 6-18. | -16 | |
| | | 10 | |
| VES OBSERVATIONS and MEASUREMENTS UP | ON ARRIVAL Sa | mple Collection | |
| Hours Operated upon Arrival 8754, 3 | VES-IN | | |
| Battery Status | VES-EFF | | |
| IC-Engine at 40-Inches Water Yes No | | | |
| IC-Engine Water Knockout (% full): | OI | oservation Wells | |
| | Induced | Vacuums (1st/2nd/3rd | |
| VES Data | MW-1B | | |
| Manometer Readings VES-IN | MW-1A | | |
| VES-EFF | EW-1 | | |
| EW-3 | EW-2 | | |
| Vapor Flow Rate VES-IN | I | Depth to Water | |
| | | Onsite Wells | |
| Groundwater Extraction Observations and Mea | asurements MW-1A | EW-1 | |
| Groundwater Flow Rate | MW-1B | EW-2 | |
| Tank Level (% Full) | MW-2A | EW-3 | |
| Totalizer Reading 3596,201 | MW-3A | | |
| Influent Groundwater Stream | | Offsite Wells | |
| Product Odor (faint/strong) | MW-7A | MW-4A | |
| Turbidity | MW-7B | MW-9A | |
| pH | MW-7C | MW-9B | |
| Color | MW-7A | MW-5A | |
| Sheen | MW-7B | MW-5B | |
| Notes | | | |
| Groundwater Sampling | De | Departure Checklist | |
| EW-3 (influent) | IC Eng | gine off | |
| Tank Sample | IC Engine | locked | |
| | Wells | secure | |
| General OBSERVATIONS and MEASUREM | MENTS Equipment | secure | |
| Weather Conditions? SUMMY | GW piping | secure | |
| Tank Condition 5000 | ank ladder re | emoved | |
| Piping condition Guyd | Site | cleared | |
| IC Engine Condition 9001 | | | |
| VE | ALLTERRA S Operation and Mainten | ace Fie | ld Log | | | |
|--------------------------------|--|-----------|---------------|------------|---------------------|-------|
| | 160 Holmes Street, Livermore | , Califor | nia | | | |
| PERSONNEL: | LB | DATE | : 6-2 | 0.10 | | |
| | | _ | | | | |
| VES OBSERVATIONS and MEAS | SUREMENTS UPON ARRIVA | L | | Sample C | ollection | |
| Hours Operated upon Arriv | val 8757.1 | | VES-IN | . (| | |
| Battery Sta | tus Xood | | VES-EFF | | | 2 |
| IC-Engine at 40-Inches Wa | ter Yes No | | | | | |
| IC-Engine Water Knockout (% fu | 11): | | | Observati | ion Wells | |
| | | | Induce | ed Vacuun | ns (1st/2nd/ | (3rd) |
| VES Data | | | MW-1B | 0 | | |
| Manometer Readings VES-IN | 12.5 | | MW-1A | Ø | an internet and the | |
| VES-EFF | | | EW-1 | a | | |
| EW-3 | 12.5 | | EW-2 | 0 | | |
| Vapor Flow Rate VES-IN | 500 FRM | | | Depth to | Water | |
| | | | | Onsite | Wells | |
| Groundwater Extraction Obse | ervations and Measurements | | MW-1A | 1 | EW-1 | ſ |
| Groundwater Flow Rate | 1.8 GPM | | MW-1B | | EW-2 | |
| Tank Level (% Full) | 50% | | MW-2A | | EW-3 | |
| Totalizer Reading 3 | 596554 | | MW-3A | | | |
| Influent Ground | lwater Stream | | Offsite Wells | | | |
| Product Odor (faint/strong) 5 | from. | | MW-7A | (| MW-4A | ſ |
| Turbidity | 0 | | MW-7B | | MW-9A | |
| pH | | | MW-7C | | MW-9B | - |
| Color | t. Brown | | MW-7A | | MW-5A | |
| Sheen | | | MW-7B | | MW-5B | |
| Notes | | | | | | |
| Groundwate | r Sampling | | Ι | Departure | Checklist | |
| EW-3 (influent) | Г | | IC E | Ingine off | | 2 |
| Tank Sample | | | IC Engi | ne locked | | |
| | | _ | We | lls secure | | |
| General OBSERVATIONS | and MEASUREMENTS | | Equipme | ent secure | | |
| Weather Conditions? Sunny, Cl | une, Hot | | GW pipi | ng secure | | |
| Tank Condition | · · · · · · | | ank ladder | removed | | |
| Piping condition | | | Si | te cleared | | |
| IC Engine Condition | | | | | | - |
| Misc. Notes | ed propose, replaced | | | • | | |

Vapor flow Vate writer Batteries

| ALLT | | |
|--|-------------------------|---------------------|
| VES Operation and M | laintenace Field Log | |
| 160 Holmes Street, Li | vermore, California | |
| PERSONNEL: 6 21-10 | DATE: | |
| | | |
| VES OBSERVATIONS and MEASUREMENTS UPON A | ARRIVAL Samp | le Collection |
| Hours Operated upon Arrival 076911 | VES-IN | |
| Battery Status (1700d | VES-EFF | |
| IC-Engine at 40-Inches Water Yes No | | |
| IC-Engine Water Knockout (% full): | Obser | rvation Wells |
| | Induced Va | cuums (1st/2nd/3rd) |
| VES Data | MW-1B | |
| Vanometer Readings VES-IN | MW-1A | |
| VES-EFF | EW-1 | |
| EW-3 | EW-2 | |
| Vapor Flow Rate VES-IN | Dep | th to Water |
| | Oi | isite Wells |
| Groundwater Extraction Observations and Measurer | ments MW-1A | EW-1 |
| Groundwater Flow Rate ~ 1. 6 CPM | MW-1B | EW-2 |
| Tank Level (% Full) 7-12 90% 7-20 | Folla MW-2A | EW-3 |
| Totalizer Reading 3,596684 | MW-3A | |
| Influent Groundwater Stream | Of | fsite Wells |
| Product Odor (faint/strong) | MW-7A | MW-4A |
| Turbidity | MW-7B | MW-9A |
| pH | MW-7C | MW-9B |
| Color | MW-7A | MW-5A |
| Sheen | MW-7B | MW-5B |
| Notes | | |
| Groundwater Sampling | Depar | ture Checklist |
| EW-3 (influent) | IC Engine | off |
| Tank Sample T-1 | IC Engine loc | ked |
| | Wells see | cure |
| General OBSERVATIONS and MEASUREMEN' | TS Equipment see | cure |
| Weather Conditions? Hat | GW piping see | cure |
| Tank Condition Ford | ank ladder remo | ved |
| Piping condition Grod | Site clea | ared |
| IC Engine Condition Good | | |
| Misc. Notes | | |

| ALL? VES Operation and | TEARE Maintenace Field Log |
|---|--------------------------------------|
| 160 Holmes Street, | Livermore, California |
| PERSONNEL: | DATE: 6 22-10 |
| VES OBSERVATIONS and MEASUREMENTS UPON | NARRIVAL Sample Collection |
| Hours Operated upon Arrival 9769.2 | VES-IN |
| Battery Status | VES-EFF |
| IC-Engine at 40-Inches Water Yes No | |
| IC-Engine Water Knockout (% full): | Observation Wells |
| | Induced Vacuums (1st/2nd/3rd) |
| VES Data | MW-1B 🔿 🖗 O |
| Ianometer Readings VES-IN - 40 rn 140 | MW-1A @ @ 0 |
| VES-EFF | EW-1 0 0 0 |
| EW-3 -40 in HSD | EW-2 0 0 |
| Vapor Flow Rate VES-IN 500 fm | Depth to Water |
| | Onsite Wells |
| Groundwater Extraction Observations and Measu | rements MW-1A EW-1 (|
| Groundwater Flow Rate -1-5 5/man | MW-1B EW-2 |
| Tank Level (% Full) ~ 50% | MW-2A EW-3 |
| Totalizer Reading 3596919 | MW-3A |
| Influent Groundwater Stream | Offsite Wells |
| Product Odor (faint/strong) | MW-7A MW-4A |
| Turbidity | MW-7B MW-9A |
| pH | MW-7C MW-9B |
| Color light brown | MW-7A MW-5A |
| Sheen | MW-7B MW-5B |
| Notes | |
| Groundwater Sampling | Departure Checklist |
| EW-3 (influent) | IC Engine off |
| Tank Sample | IC Engine locked |
| | Wells secure |
| General OBSERVATIONS and MEASUREME | Equipment secure |
| Veather Conditions? Sonny - Hot | GW piping secure |
| Tank Condition | `ank ladder removed |
| Piping condition | Site cleared |
| C Engine Condition | |
| Misc. Notes | |

| ALLTEREA VES Operation and Maintenace 160 Holmes Street Livermore Co | e Field Log | | | |
|--|-------------|-----------|-------------|--------|
| PERSONNEL: DO D | ATE: 6-2 | 3-11 | 2 | |
| | | 1.11 | | |
| VES OBSERVATIONS and MEASUREMENTS UPON ARRIVAL | | Sample | Collection | |
| Hours Operated upon Arrival 8777.8 | VES-IN | | | |
| Battery Status 60002 | VES-EFF | | | |
| IC-Engine at 40-Inches Water Yes No | | | _ | |
| IC-Engine Water Knockout (% full): | | Observa | tion Wells | |
| | Induce | ed Vacuu | ms (1st/2nc | 1/3rd) |
| VES Data | MW-1B | 0 | 0 | 0 |
| anometer Readings VES-IN - 40 m H20 | MW-1A | Ø | 0 | 0 |
| VES-EFF | EW-1 | 0 | 0 | 0 |
| EW-3 - 40 in H20 | EW-2 | 0 | 0 | 0 |
| Vapor Flow Rate VES-IN 450 gm | | Depth t | o Water | |
| | | Onsite | Wells | 1 |
| Groundwater Extraction Observations and Measurements | MW-1A | 1 | EW-1 | 1 |
| Groundwater Flow Rate ~1-5 g/m | MW-1B | | EW-2 | |
| Tank Level (% Full) | MW-2A | | EW-3 | |
| Totalizer Reading | MW-3A | 1 | | 4 |
| Influent Groundwater Stream | | Offsite | Wells | _ |
| Product Odor (faint/strong) | MW-7A | 1 | MW-4A | 1 |
| Turbidity Low | MW-7B | | MW-9A | |
| pH | MW-7C | | MW-9B | |
| Color light proun | MW-7A | | MW-5A | |
| Sheen | MW-7B | | MW-5B | |
| Notes | | | | - |
| Groundwater Sampling | D | eparture | Checklist | |
| EW-3 (influent) | IC Ei | ngine off | | |
| Tank Sample | IC Engin | e locked | | |
| | Wel | ls secure | | |
| General OBSERVATIONS and MEASUREMENTS | Equipmer | nt secure | | - |
| eather Conditions? Sunn f | GW pipin | g secure | <u> </u> | _ |
| Tank Condition | ank ladder | removed | | |
| Piping condition (-917) | Site | e cleared | | |
| Engine Condition Goud | | | | |

| ALLTERRA | | 5 - E - F |
|--|----------------|----------------------|
| VES Operation and Maintenaco | e Field Log | |
| DEDSONNEL: | ATE: 6-24- | 12 |
| FERSONNEL: 0 D | ATE: C FI | 10 |
| VES OBSERVATIONS and MEASUREMENTS UPON ARRIVAL | Sam | ple Collection |
| Hours Operated upon Arrival 8780.7 | VES-IN | |
| Battery Status Goud | VES-EFF | |
| IC-Engine at 40-Inches Water Yes No | | |
| IC-Engine Water Knockout (% full): | Obs | ervation Wells |
| | Induced V | acuums (1st/2nd/3rd) |
| VES Data | MW-1B | |
| anometer Readings VES-IN -38.9 | MW-1A | |
| VES-EFF | EW-1 | |
| EW-3 -40.1 | EW-2 | and the second |
| Vapor Flow Rate VES-IN 500 4/m | De | pth to Water |
| | 0 | Onsite Wells |
| Groundwater Extraction Observations and Measurements | MW-1A | EW-1 |
| Groundwater Flow Rate 1.5 | MW-1B | EW-2 |
| Tank Level (% Full) 72 @70% , T-1@ 5% | MW-2A | EW-3 |
| Totalizer Reading 3597508 | MW-3A | |
| Influent Groundwater Stream | C | ffsite Wells |
| Product Odor (faint/strong) | MW-7A | MW-4A |
| Turbidity | MW-7B | MW-9A |
| pH | MW-7C | MW-9B |
| Color | MW-7A | MW-5A |
| Sheen | MW-7B | MW-5B |
| Notes | | |
| Groundwater Sampling | Depa | rture Checklist |
| EW-3 (influent) | IC Engin | e off |
| Tank Sample | IC Engine lo | cked |
| | Wells se | ecure |
| General OBSERVATIONS and MEASUREMENTS | Equipment se | ecure |
| reather Conditions? Nice | GW piping se | ecure |
| Tank Condition 9.002 | ank ladder rem | oved V |
| Piping condition good | Site cle | ared |
| C Engine Condition 9000 | | |
| Misc. Notes Grassh John Debuhage of T-1 | | |

| VES Operation and Maintena | ce Field Log | |
|--|-----------------|----------------------|
| 160 Holmes Street, Livermore, | California | |
| PERSONNEL: 7A | DATE: 6 - 75 - | -10 |
| VES OBSERVATIONS and MEASUREMENTS UPON ARRIVAL | Sam | ple Collection |
| Hours Operated upon Arrival 8786, 1 | VES-IN | |
| Battery Status Good | VES-EFF | STREET. |
| IC-Engine at 40-Inches Water Yes No | | |
| IC-Engine Water Knockout (% full): | Obse | ervation Wells |
| | Induced V | acuums (1st/2nd/3rd) |
| VES Data | MW-1B | |
| anometer Readings VES-IN -39.8 | MW-1A | |
| VES-EFF | EW-1 | |
| EW-3 - 40 | EW-2 | |
| Vapor Flow Rate VES-IN ~480 P/m | De | pth to Water |
| | C | Insite Wells |
| Groundwater Extraction Observations and Measurements | MW-1A | EW-1 |
| Groundwater Flow Rate 1.8 GPM | MW-1B | EW-2 |
| Tank Level (% Full) T1006 72006 | MW-2A | EW-3 |
| Totalizer Reading 3597,717 | MW-3A | |
| Influent Groundwater Stream | 0 | ffsite Wells |
| Product Odor (faint/strong) | MW-7A | MW-4A |
| Turbidity | MW-7B | MW-9A |
| pH | MW-7C | MW-9B |
| Color | MW-7A | MW-5A |
| Sheen | MW-7B | MW-5B |
| Notes | | |
| Groundwater Sampling | Depai | rture Checklist |
| EW-3 (influent) | IC Engin | e off |
| Tank Sample | IC Engine lo | cked |
| | Wells se | cure |
| General OBSERVATIONS and MEASUREMENTS | Equipment se | cure |
| eather Conditions? | GW piping se | cure |
| Tank Condition | ank ladder remo | oved |
| Piping condition | Site cle | ared |
| C Engine Condition | | |
| No Nu lock an or lock | | |

| ALLTERE | 3 | |
|--|----------------|----------------------|
| VES Operation and Mainte | nace Field Log | |
| 160 Holmes Street, Livermor | re, California | |
| PERSONNEL: ED | DATE: 6-25 | -10 |
| VES OBSERVATIONS and MEASUREMENTS UPON ARRIV | AL Sam | ple Collection |
| Hours Operated upon Arrival 8790.5 | VES-IN | 1 |
| Battery Status | VES-EFF | |
| IC-Engine at 40-Inches Water Yes No | | |
| IC-Engine Water Knockout (% full): | Obs | ervation Wells |
| | Induced V | acuums (1st/2nd/3rd) |
| VES Data | MW-1B O | |
| Ianometer Readings VES-IN ~-44,0 | MW-1A O | |
| VES-EFF | EW-1 C | |
| EW-3 -43.6 | EW-2 C | 5 |
| Vapor Flow Rate VES-IN 5 10 FPM | De | pth to Water |
| | | Insite Wells |
| Groundwater Extraction Observations and Measurements | MW-1A | EW-1 |
| Groundwater Flow Rate - 1.1 G PM | MW-1B | EW-2 |
| Tank Level (% Full) V 50 % | MW-2A | EW-3 |
| Totalizer Reading 3518127 | MW-3A | |
| Influent Groundwater Stream | 0 | ffsite Wells |
| Product Odor (faint/strong) Moderate | MW-7A | MW-4A |
| Turbidity | MW-7B | MW-9A |
| pH | MW-7C | MW-9B |
| Color Lt. Brown | MW-7A | MW-5A |
| Sheen | MW-7B | MW-5B |
| Notes | | |
| Groundwater Sampling | Depa | rture Checklist |
| EW-3 (influent) | IC Engin | e off |
| Tank Sample | IC Engine Io | cked |
| | Wells se | cure |
| General OBSERVATIONS and MEASUREMENTS | Equipment se | cure |
| /eather Conditions? SUNAL | GW piping se | cure |
| Tank Condition Gree D | ank ladder rem | oved |
| Piping condition Good P | Site cle | ared |
| C Engine Condition (abot) | | |
| Misc. Notes | | |

| ALLTEREA | | | |
|--|--------------------|-----------------|--------|
| VES Operation and Maintenac | e Field Log | | |
| 160 Holmes Street, Livermore, C | alifornia | 16 | - |
| PERSONNEL: LIV | ATE: 6-61 | - (0 | |
| VES OBSERVATIONS and MEASUREMENTS UPON ARRIVAL | Sam | ple Collection | |
| Hours Operated upon Arrival 8798. | VES-IN | | |
| Battery Status _ 0,000 | VES-EFF | | |
| IC-Engine at 40-Inches Water Yes No | | | |
| IC-Engine Water Knockout (% full): | Obs | ervation Wells | - |
| | Induced V | acuums (1st/2nd | 1/3rd) |
| VES Data | MW-1B 6 | | 1 |
| anometer Readings VES-IN - 44 . O | MW-1A C | * | |
| VES-EFF | EW-1 | 5 | |
| EW-3 - 44.2 | EW-2 | | 6 |
| Vapor Flow Rate VES-IN -44-2 5 20-FPM | De | pth to Water | |
| | 0 | nsite Wells | |
| Groundwater Extraction Observations and Measurements | MW-1A | EW-1 | |
| Groundwater Flow Rate 20 6 PM | MW-1B | EW-2 | |
| Tank Level (% Full) * 50% | MW-2A | EW-3 | |
| Totalizer Reading 3598425 | MW-3A | | |
| Influent Groundwater Stream | C |)ffsite Wells | |
| Product Odor (faint/strong) MODIRAL | MW-7A | MW-4A | |
| Turbidity | MW-7B | MW-9A | |
| pH | MW-7C | MW-9B | |
| Color H- Brawn | MW-7A | MW-5A | - |
| Sheen | MW-7B | MW-5B | |
| Notes Marguito larvore in tank | | | |
| Groundwater Sampling | Depa | rture Checklist | |
| EW-3 (influent) | IC Engin | e off | |
| Tank Sample | IC Engine lo | cked | |
| | Wells se | ecure | |
| General OBSERVATIONS and MEASUREMENTS | Equipment se | ecure | |
| Veather Conditions? SUNNY, HOT | GW piping se | ecure | |
| Tank Condition (2007) | ank ladder removed | | |
| Piping condition 6000 | Site cle | eared | |
| C Engine Condition | | | |
| Misc. Notes begand form there. | | | |

| | ALLTERN VES Operation and Maint 160 Holmes Street, Liverm | enace Field Log ore, California | |
|--|--|------------------------------------|---------------------|
| F | PERSONNEL: DA | DATE: 6-28-1 | 6 |
| | | | |
| VES OBSERVAT | IONS and MEASUREMENTS UPON ARRI | VAL Sam | ple Collection |
| Hours O | perated upon Arrival 000 5 5 | VES-IN | |
| | Battery Status | VES-EFF | |
| IC-Engine | e at 40-Inches Water <u>(Yes No</u> | | |
| IC-Engine Water | Knockout (% full): | Obse | rvation Wells |
| | | Induced Va | cuums (1st/2nd/3rd) |
| | VES Data | MW-1B | |
| anometer Reading | S VES-IN | MW-1A | _ |
| | VES-EFF | EW-1 | |
| the second s | EW-3 | EW-2 | |
| Vapor Flow Rate | VES-IN | Dep | oth to Water |
| | | 0 | nsite Wells |
| Groundwater | Extraction Observations and Measurements | MW-1A | EW-1 |
| Groundwate | r Flow Rate | MW-1B | EW-2 |
| Tank Lev | vel (% Full) | MW-2A | EW-3 |
| Totaliz | zer Reading | MW-3A | |
| 1225-12126 | Influent Groundwater Stream | Ot | fsite Wells |
| Product Odor (f | aint/strong) | MW-7A | MW-4A |
| | Turbidity | MW-7B | MW-9A |
| | pH | MW-7C | MW-9B |
| | Color | MW-7A | MW-5A |
| | Sheen | MW-7B | MW-5B |
| | Notes | | |
| | Groundwater Sampling | Depar | ture Checklist |
| EW- | 3 (influent) | IC Engine | off |
| Ta | ank Sample | IC Engine loc | ked |
| | | Wells sec | cure |
| General OF | SERVATIONS and MEASUREMENTS | Equipment sec | ure |
| eather Conditions? | Sunny | GW piping sec | aure |
| Tank Condition | 9000 | ank ladder remo | ved |
| Piping condition | 1000 | Site clea | red |
| Engine Condition | 7000 | | 1.1.1 |
| Misc. Notes | filled anDam | | |

| ALLTERRA | | | 5 8. | |
|--|-------------|-----------|------------------|--------|
| VES Operation and Maintenace | e Field Log | | | |
| PERSONNEL: PO D | ATE: 6 - |)q_ | (\overline{D}) | |
| | | | | |
| VES OBSERVATIONS and MEASUREMENTS UPON ARRIVAL | | Sample (| Collection | |
| Hours Operated upon Arrival 8.810.3 | VES-IN | - | | |
| Battery Status bood | VES-EFF | - | | |
| IC-Engine at 40-Inches Water Yes No | - | | <u></u> | _ |
| IC-Engine Water Knockout (% full): | | Observat | ion Wells | |
| | Induce | ed Vacuu | ms (1st/2nd | l/3rd) |
| VES Data | MW-1B | Ø | 0 | 0 |
| Ianometer Readings VES-IN - 40 in H_D | MW-1A | 0 | 6 | 0 |
| VES-EFF - 450 P/m | EW-1 | 0 | O | 0 |
| EW-3 - 40 in the | EW-2 | 0 | 2 | 6 |
| Vapor Flow Rate VES-IN | | Depth t | o Water | |
| | | Onsite | Wells | |
| Groundwater Extraction Observations and Measurements | MW-1A | 1 | EW-1 | F |
| Groundwater Flow Rate | MW-1B | | EW-2 | |
| Tank Level (% Full) | MW-2A | | EW-3 | |
| Totalizer Reading 3598723 | MW-3A | | | K |
| Influent Groundwater Stream | | Offsite | Wells | ĺ. |
| Product Odor (faint/strong) Modarcete | MW-7A | 1 | MW-4A | |
| Turbidity low | MW-7B | | MW-9A | |
| pH | MW-7C | | MW-9B | |
| Color light brown | MW-7A | | MW-5A | |
| Sheen | MW-7B | | MW-5B | - |
| Notes | | 140 | | |
| Groundwater Sampling | D | eparture | Checklist | |
| EW-3 (influent) | IC E | ngine off | | |
| Tank Sample 2 Hel VOAS Tant 9 | IC Engin | e locked | | |
| 2 Non Hel Votes Tant 2 | Wel | ls secure | | |
| General OBSERVATIONS and MEASUREMENTS | Equipme | nt secure | | |
| reather Conditions? Sunny | GW pipir | ng secure | الشهرار | |
| Tank Condition 6000 | ank ladder | removed | | |
| Piping condition 6000 | Site | e cleared | | |
| C Engine Condition 6000 | | | | |
| Misc. Notes TTO sample tation | | | | |

| VES Operation and Mainten | Field L og | |
|--|----------------|----------------------|
| 160 Holmes Street, Livermore, Ca | lifornia | |
| PERSONNEL: TA DA | TE: 6-79-1 | Ő |
| | <u> </u> | |
| VES OBSERVATIONS and MEASUREMENTS UPON ARRIVAL | Sam | ple Collection |
| Hours Operated upon Arrival 8818.5 | VES-IN | |
| Battery Status Gend | VES-EFF | |
| IC-Engine at 40-Inches Water Yes No | | |
| IC-Engine Water Knockout (% full): | Obs | ervation Wells |
| | Induced V | acuums (1st/2nd/3rd) |
| VES Data | MW-1B | |
| Ianometer Readings VES-IN | MW-1A | |
| VES-EFF | EW-1 | |
| EW-3 | EW-2 | and the second |
| Vapor Flow Rate VES-IN | De | pth to Water |
| والمستجاب المحمد ويستجد والمستجد والمستجد والمستجد والمتعاد والمتعاد والمحمد | 0 | Insite Wells |
| Groundwater Extraction Observations and Measurements | MW-1A | EW-1 |
| Groundwater Flow Rate | MW-1B | EW-2 |
| Tank Level (% Full) T1 - 20% T2 - 95% | MW-2A | EW-3 |
| Totalizer Reading | MW-3A | |
| Influent Groundwater Stream | C | offsite Wells |
| Product Odor (faint/strong) | MW-7A | MW-4A |
| Turbidity | MW-7B | MW-9A |
| pH | MW-7C | MW-9B |
| Color | MW-7A | MW-5A |
| Sheen | MW-7B | MW-5B |
| Notes | | |
| Groundwater Sampling | Depa | rture Checklist |
| EW-3 (influent) | IC Engin | e off |
| Tank Sample | IC Engine lo | cked |
| | Wells se | ecure |
| General OBSERVATIONS and MEASUREMENTS | Equipment se | ecure |
| /eather Conditions? | GW piping se | cure |
| Tank Condition | ank ladder rem | oved |
| Piping condition | Site cle | ared |
| C Engine Condition | | |
| Misc. Notes Overhight GW expansion | | |

| ALLTEREA | | | | |
|--|----------------|-----------------|--------|--|
| VES Operation and Maintenac | e Field Log | | | |
| 160 Holmes Street, Livermore, C | alifornia | 1.0 | - | |
| PERSONNEL: D | DATE: 6-30 | -10 | | |
| VES OBSERVATIONS and MEASUREMENTS UPON ADDIVAL | San | unla Collection | T.D.S. | |
| Hours Operated upon Arrival 4619 | VES-IN | ipie Concetion | | |
| Battery Status | VES-FFF | | - | |
| IC-Engine at 40-Inches Water Ves No | VESTERI | | _ | |
| IC-Engine Water Knockout (% full): | Obs | ervation Wells | THE | |
| te Engine Water Knockout (76 turi). | Induced V | acuums (1st/2nd | (/3rd) | |
| VES Data | MW-1B | | D | |
| anometer Readings VES-IN - 40 - 40 | MW-1A | 2 2 | 0 | |
| VES-EFE | EW-1 | 5 2 | 0 | |
| FW-3 - 412 - Ha) | EW-2 C | 2 0 | 0 | |
| Vapor Flow Rate VES-IN = 450 Jun | De | onth to Water | ~ | |
| raportion rate vesting into the | | Insite Wells | | |
| Groundwater Extraction Observations and Measurements | MW-1A | FW-1 | r | |
| Groundwater Flow Rate $\sim \left(a \int a d f d a \right)$ | MW-1R | EW-1 | | |
| Tank Level (% Full) Tant 1~95% Tant 2~45% | MW-2A | EW-3 | | |
| Totalizer Reading 3 59 9224 | MW-3A | L | | |
| Influent Groundwater Stream | | Offsite Wells | | |
| Product Odor (faint/strong) Manafe | MW-7A | 1 MW-4A | 1 | |
| Turbidity | MW-7B | MW-9A | | |
| pH - | MW-7C | MW-9B | | |
| Color I' and branch | MW-7A | MW-5A | | |
| Sheen | MW-7B | MW-5B | | |
| Notes | | | | |
| Groundwater Sampling | Depa | rture Checklist | A DAY | |
| EW-3 (influent) | IC Engin | ie off | 1.1 | |
| Tank Sample | IC Engine lo | cked | | |
| Second State Contract Contract State Contract State Contract | Wells se | ecure | | |
| General OBSERVATIONS and MEASUREMENTS | Equipment se | ecure | | |
| eather Conditions? SUNNY | GW piping se | ecure | | |
| Tank Condition | ank ladder rem | oved | | |
| Piping condition (2007) | Site cle | ared | | |
| Engine Condition 60052 | | | | |
| Misc. Notes GW COD All atout | | | | |

APPENDIX B Certified Analytical Reports and Chains of Custody for June 2010

| McCampbell An "When Ouality | nalytical, Inc. | 1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.mccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269 | | | | | | | | |
|--------------------------------|-----------------------------|---|-----------------|----------|--|--|--|--|--|--|
| Allterra Environmental, Inc | Client Project ID: 160 Holm | nes Street, Livermore | Date Sampled: | 06/01/10 | | | | | | |
| 849 Almar Ave Ste C #281 | | | Date Received: | 06/01/10 | | | | | | |
| | Client Contact: James Alle | Date Reported: | 06/04/10 | | | | | | | |
| Santa Cruz, CA 95060 | Client P.O.: | | Date Completed: | 06/03/10 | | | | | | |

WorkOrder: 1006029

June 04, 2010

Dear James:

Enclosed within are:

- 1) The results of the 2 analyzed samples from your project: 160 Holmes Street, Livermore,
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius Laboratory Manager McCampbell Analytical, Inc.

| | | | g_LL | 1-171 | 2,2 | | | | | | | | | | | C | ha | in | of | C | Cu | Ist | 00 | ly | Re | eco | ord | | |
|---|----------------|------------|--|---|---------------------------|-----------------|-------------------|--------|-------|---------------|-------|-------|-------|-------------|-----------------------------|---------------------------------|----------------|-----------------------|---------------------------|-------------|---------------|---------------|------------|----------------------|---------------------|----------------|--------------|------------|--------------|
| | | | 849 Almar A | venue, Suite | C, #2 | 81 | | 1. | 11 | 17 | 6 | | | | Turn | Arou | ind (| circ | le on | e) R | RU | ISH | 24 | HR | 48H | R 72 | 2HR | 5 Da |) |
| | | Phone: (| Santa Cruz Website: w 831) 425-26 | z, California ww.allterrae 08 Facsimile | 95060 1v.cor : (831 |) n) 425 | -2609 |) , | 06 | 02 | -7 | | | 8015/8020 | | | | | | | | | | | (0) | | | 0 | |
| Report and Bill t | o: Allterra Er | vironmen | tal, Inc. | | | | | | | | | | | A | | | | (09) | | | | ŝ | 20) | 0 | 831 | | | | |
| Project Number: | 160 | | | | | | | | | | | | | E | | | | N 82 | | | | bild | 09/0 | 602 | 25/ | | (8. | | |
| Project Location | 160 Holmes | Street, Li | vermore | | | | | | | | | | | BE | | | | EP/ | | 6 | 5 | d sc | 010 | 010 | 0,6 | | 200 | | |
| Project Name | | / | ~ | | | | | | | | | | | LW | | | (0) | ol (| 09 | 826 | 2 | lve | A 6 | 16(| 827 | ay | .6.0 | | |
| Sampler Signatu | re: X P | un | lun | - | | | | | | | | | | S | 6 | 0 | 82 | nan | (8) | PA | | isso | EF | EP | PA | ass | 200 | | |
| | Sample Co | ollection | Sample (| Containers | | ľ | Matri | х | | 1 | Prese | vatio | n | EX | 202 | 015 | EPA | Actl | sers | E | | ald | als | uls (| E | Bic | 10/ | | |
| Sample ID | Date | Time | Number of Containers | Container Type | Air | Water 🧳 | Soil | Sludge | Other | Ice | HCI | HNO3 | Other | TPHg and BT | BTEX (EPA 8 | TPHd (EPA 8 | 5-fuel oxys (E | Ethanol and N | Lead Scaveng | Total HVOCs | TOTAL LL VUCS | Hardness/Tota | CAM-17 Met | LUFT 5 Meta | PAH's/ PNA's | Fish Toxicity/ | Lead (EPA 60 | MTBE (8260 | EDF required |
| VES-EEE | 6-1-10 | | 1 | tedlar | ~ | - | | | | ~ | | | | V | | | | | | | | | | | | | | | V |
| VES-IN | 6-1-10 | | l | Tedbar | r . | | | | | V | | | | | | | | | | | | | | | | \$ | | | |
| | | | | | | | | | | | | | | • | | | | | | | | | | | | | | | |
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| | | - | | 1. 1 | 0 | | | 1 | (| | | | | | | ± | | | | | | | | | | | | | |
| Sampled By: Received By: Received/By: | then Or | news | Date: 6 - 1 - 10 Date: $\hat{c}_{11} / 10$ Date: | Time: 650 Time: 1830 Time: | Rece Rece | ived | By: By: By: | Le | 7 | $\leq \omega$ | R |) | | Co | ICI GC HE DE PR | E / t° ODD Q AD S CHLQ | | DITIO E AB ATEI | DN SEN DIN L VOA | AB | 3 | | ROP | RIAT AINE SERV | E. RS _ ED II | N LAI | B | _ | |

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

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

| WaterTrax WriteOn EDF Excel Fax Email HardCopy ThirdParty Report to: James Allen Email: allterraenvironmental@yahoo.com, micah Accounts Payable Accounts Payable Allterra Environmental, Inc C: Allterra Environmental PO: Allterra Environmental PO: Bate Received: 06/ Santa Cruz, CA 95060 ProjectNo: 160 Holmes Street, Livermore Santa Cruz, CA 95060 Date Printed: 06/ 831-425-2608 FAX 831-425-2609 ProjectNo: 160 Holmes Street, Livermore Santa Cruz, CA 95060 Date Printed: 06/ | (925) 252-9262 | | | | WorkO | order: 100602 | 9 Clier | ntCode: ATRS | | | |
|---|--|------------------------------------|--------------------------------|--------------------------------------|-----------|--|--|----------------|-----------------------------|----------------------|------------|
| Report to: Bill to: Requested TAT: James Allen Email: allterraenvironmental@yahoo.com, micah Accounts Payable Allterra Environmental, Inc cc: Allterra Environmental 849 Almar Ave, Ste. C #281 PO: 849 Almar Ave, Ste. C #281 Date Received: 06/ Santa Cruz, CA 95060 ProjectNo: 160 Holmes Street, Livermore Santa Cruz, CA 95060 Date Printed: 06/ 831-425-2608 FAX 831-425-2609 ProjectNo: 160 Holmes Street, Livermore Santa Cruz, CA 95060 Date Printed: 06/ | | WaterTrax | WriteOn | n 🗹 EDF | Excel | Fax | 🖌 Email | HardCopy | ThirdParty | ☐ J-fla | ıg |
| James Allen Email: allterraenvironmental@yahoo.com, micah Accounts Payable Allterra Environmental, Inc cc: Allterra Environmental 849 Almar Ave, Ste. C #281 PO: 849 Almar Ave, Ste. C #281 Date Received: 06/ Santa Cruz, CA 95060 ProjectNo: 160 Holmes Street, Livermore Santa Cruz, CA 95060 Date Printed: 06/ 831-425-2608 FAX 831-425-2609 ProjectNo: 160 Holmes Street, Livermore Santa Cruz, CA 95060 Date Printed: 06/ | Report to: | | | | В | ill to: | | Re | quested TAT: | 5 da | iys |
| 831-425-2608 FAX 831-425-2609 micah@allterraenv.com | James Allen Allterra Environmental, Inc 849 Almar Ave, Ste. C #281 Santa Cruz, CA 95060 | Email: cc: PO: ProjectNo: | allterraenviro 160 Holmes S | nmental@yahoo.c Street, Livermore | om, micah | Accounts Pa Allterra Envi 849 Almar A Santa Cruz, | ayable ironmental .ve, Ste. C #281 CA 95060 | Da Da | te Received: te Printed: | 06/01/20 06/02/20 |)10)10 |
| Requested Tests (See regend below) | 831-425-2608 FAX 831-425-2609 | | | | | micah@allte | Requested Tes | ts (See legend | below) | | |

| Lab ID | Client ID | Matrix | Collection Date | Ηοία | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 8 | 9 | 10 | 11 | 12 |
|------------|-----------|--------|-----------------|------|---|---|---|---|---|---|---|---|---|----|----|----|
| | | | | | | | | | | | | | | | | |
| 1006029-00 | I VES-EFF | Air | 6/1/2010 | | А | А | | | | | | | | | | |
| 1006029-00 | 2 VES-IN | Air | 6/1/2010 | | A | | | | | | | | | | | |

Test Legend:

| 1 | G-MBTEX_AIR | 2 |
|----|-------------|----|
| 6 | | 7 |
| 11 | | 12 |

| 2 | PREDF REPORT |
|----|--------------|
| 7 | |
| 12 | |

| 3 | |
|---|--|
| 8 | |

| 4 | |
|---|--|
| 9 | |

| 5 | |
|----|--|
| 10 | |

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

Prepared by: Melissa Valles

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.



"When Ouality Counts"

Sample Receipt Checklist

| Client Name: | Allterra Environr | nental, Ind | C | | | Date a | and Time Received: | 6/1/2010 9 | :15:07 PM |
|-------------------|-------------------------|-------------------|--------------|-------|--------------|------------|-----------------------|----------------|----------------|
| Project Name: | 160 Holmes Stree | et, Liverm | ore | | | Check | klist completed and r | eviewed by: | Melissa Valles |
| WorkOrder N°: | 1006029 | Matrix <u>Air</u> | - | | | Carrie | er: Benjamin Yslas | s (MAI Courier |) |
| | | | <u>Chain</u> | of Cu | stody (CO | C) Informa | ation | | |
| Chain of custody | v present? | | | Yes | V | No 🗆 | | | |
| Chain of custody | v signed when relinqui | shed and re | ceived? | Yes | V | No 🗆 | | | |
| Chain of custody | agrees with sample I | abels? | | Yes | \checkmark | No 🗌 | | | |
| Sample IDs noted | d by Client on COC? | | | Yes | \checkmark | No 🗆 | | | |
| Date and Time of | collection noted by Cl | ient on COC | ? | Yes | \checkmark | No 🗆 | | | |
| Sampler's name | noted on COC? | | | Yes | \checkmark | No 🗆 | | | |
| | | | <u>Sa</u> | ample | Receipt In | formation | 1 | | |
| Custody seals in | tact on shipping conta | iner/cooler? | | Yes | | No 🗆 | | NA 🔽 | |
| Shipping contain | er/cooler in good cond | lition? | | Yes | \checkmark | No 🗆 | | | |
| Samples in prope | er containers/bottles? | | | Yes | \checkmark | No 🗆 | | | |
| Sample containe | ers intact? | | | Yes | \checkmark | No 🗆 | | | |
| Sufficient sample | e volume for indicated | test? | | Yes | | No 🗌 | | | |
| | | <u>Samp</u> | le Preser | vatio | n and Hold | Time (HT |) Information | | |
| All samples recei | ived within holding tim | e? | | Yes | ✓ | No 🗌 | | | |
| Container/Temp | Blank temperature | | | Coole | er Temp: | | | NA 🗹 | |
| Water - VOA via | ls have zero headspa | ce / no bubb | oles? | Yes | | No 🗆 | No VOA vials subm | itted 🗹 | |
| Sample labels ch | necked for correct pre | servation? | | Yes | ✓ | No 🗌 | | | |
| Metal - pH accep | table upon receipt (p⊦ | l<2)? | | Yes | | No 🗆 | | NA 🗹 | |
| Samples Receive | ed on Ice? | | | Yes | | No 🗹 | | | |
| | | | | | | | | | |

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

Client contacted:

Date contacted:

Contacted by:

Comments:

| | McCampbo | ell Ana en Ouality G | alyti ^{Counts"} | cal, Ir | <u>ıc.</u> | Web | 1534 Willow F : www.mccamp Telephone: 8 | ass Road, Pittsburg bell.com E-mail: 777-252-9262 Fa | g, CA 94565-17 : main@mccamp x: 925-252-926 | 701 bell.com 9 | | | |
|---|--------------------------|-------------------------|------------------------------------|--------------|--------------|------------------|---|--|---|----------------------|-----------|------------|--|
| Allter | ra Environmental, Inc | | | Client P | Project ID: | 160 Holmes S | Street, | Date Sample | ed: 06/01 | /10 | | | |
| 849 A | lmar Ave. Ste. C #281 | | | Livermo | ore | | | Date Receiv | ed: 06/01 | /10 | | | |
| 0.711 | | | | Client (| Contact: Ja | mes Allen | mes Allen Date Extracted: 06/02/10 | | | | | | |
| Santa | Cruz, CA 95060 | | | Client P | 2.0.: | | | Date Analyz | xed: 06/02 | /10 | | | |
| | G | asoline R | ange (| C6-C12) | Volatile Hy | ydrocarbons : | as Gasoline | e with BTEX a | and MTBE* | k | | | |
| Extracti | on method: SW5030B | | | | Analy | tical methods: S | SW8021B/8015 | 5Bm | | Wor | k Order: | 1006029 | |
| Lab ID | Client ID | Matrix | TP | H(g) | MTBE | Benzene | Toluene | Ethylbenzene | Xylenes | DF | % SS | Comments | |
| 001A | VES-EFF | А | Ν | ٧D | ND | 1.5 | 0.73 | ND | 0.63 | 1 | 96 | | |
| 002A | VES-IN | А | 2 | 30 | 140 | ND<0.50 | 12 | 1.9 | 22 | 2 | 106 | d1 | |
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| | | | | | | | | | | | | - | |
| Repo | rting Limit for DF =1; | | 25 | 2.5 | 0.25 | 0.25 | 0.25 | 0.25 | | і 11 σ/I | | | |
| ND means not detected at or above the reporting limit S 1.0 0.05 | | | | | | 0.005 | 0.005 | 0.005 | 0.005 | | mg/K | {g | |
| * water | and vapor samples are re | ported in µ | ıg/L, so | vil/sludge/s | olid samples | in mg/kg, wipe | e samples in | µg/wipe, produc | t/oil/non-aque | ous liqui | id sample | s in mg/L. | |
| # clutte | red chromatogram; samp | ole peak co | oelutes v | with surro | gate peak. | | | | | | | | |

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

Angela Rydelius, Lab Manager

d1) weakly modified or unmodified gasoline is significant

| | McCam | pbell | Analyti alitv Counts" | cal, Inc. | | 1534 Willow Web: www.mccam Telephone: | Pass Road, Pittsburg pbell.com E-mail: 877-252-9262 Fa: | g, CA 94565-170 main@mccampbe x: 925-252-9269 | 1 ll.com | | | | | | |
|--------------------|---|--------------------------|--------------------------|--------------------------------------|--|---|---|---|-------------|----------|----------|--|--|--|--|
| Allter | a Environmental | , Inc | | Client Project ID: | 160 Holm | nes Street, | Date Sample | d: 06/01/1 | 0 | | | | | | |
| 849 A | lmar Ave. Ste. Ca | #281 | | Livermore | | | Date Receive | ed: 06/01/1 | 0 | | | | | | |
| | | | | Client Contact: J | ames Allen Date Extracted: 06/02/10 | | | | | | | | | | |
| Santa | Cruz, CA 95060 | | | Client P.O.: | | | Date Analyz | ed: 06/02/1 | 0 | | | | | | |
| | G | asoline R | ange (C6-0 | C12) Volatile Hydro | ocarbons as Gasoline with MTBE and BTEX in ppmv* | | | | | | | | | | |
| Extracti | on method: SW5030 | B | | Ana | alytical methods: SW8021B/8015Bm Work Order: 100 | | | | | | | | | | |
| Lab ID | Client ID | Matrix | TPH(g) | MTBE | Benzene | Toluene | Ethylbenzene | Xylenes | DF | % SS | Comments | | | | |
| 001A | VES-EFF | Α | ND | ND | 0.47 | 0.19 | ND | 0.14 | 1 | 96 | | | | | |
| 002A | VES-IN | А | 65 | 38 | ND<0.15 | 3.2 | 0.43 | 5.0 | 2 | 106 | d1 | | | | |
| | | | | | | | | | | | | | | | |
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| | | | I | 1 | | 1 | | | I | I | l | | | | |
| | ppm (mg/ | /L) to ppm | v (ul/L) con | version for TPH(g) as | sumes the m | nolecular weigh | nt of gasoline to b | e equal to that | of hexa | ine. | | | | | |
| Report | ing Limit for DF =1; | А | 7.0 | 0.68 | 0.077 | 0.065 | 0.057 | 0.057 | 1 | uL/L | | | | | |
| above | e the reporting limit | S | NA | NA | NA | NA | NA | NA | 1 | 1 | mg/Kg | | | | |
| * vapor samples | samples are reported and all TCLP & SF | d in µL/L, PLP extrac | soil/sludge/s | olid samples in mg/kg ed in µg/L. | , wipe samp | les in µg/wipe, | product/oil/non-ad | queous liquid s | amples | in mg/L | , water | | | | |
| +The fo | llowing description | sample pe | PH chromat | ogram are cursory in 1 | nature and M | IcCampbell An | alytical is not res | ponsible for th | eir inte | rpretati | on: | | | | |

d1) weakly modified or unmodified gasoline is significant





"When Ouality Counts"

QC SUMMARY REPORT FOR SW8021B/8015Bm

| W.O. Sample Matrix: Air | | (| QC Matri | x: Water | | | Batch | ID: 50980 | | WorkOrder 1006029 | | | | |
|--|-------------------------------|-------------------|----------|----------|-------|--------|----------|--------------------------------|----------|-------------------|----------|-----|--|--|
| EPA Method SW8021B/8015Bm | Extrac | xtraction SW5030B | | | | | | Spiked Sample ID: 1006015-008A | | | | | | |
| Analyte | Sample Spiked MS MSD MS-MSD L | | | | LCS | LCSD | LCS-LCSD | Acce | eptance | e Criteria (%) | | | | |
| , mayte | µg/L | µg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | MS / MSD | RPD | LCS/LCSD | RPD | | |
| TPH(btex ^f | ND | 60 | 88 | 84.5 | 4.13 | 88.3 | 86.6 | 1.96 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| MTBE | ND | 10 | 109 | 114 | 5.07 | 104 | 111 | 6.95 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| Benzene | ND | 10 | 102 | 106 | 3.50 | 97.1 | 99 | 1.89 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| Toluene | ND | 10 | 92.7 | 95.7 | 3.18 | 87.1 | 89.4 | 2.59 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| Ethylbenzene | ND | 10 | 92.3 | 94.6 | 2.41 | 88.6 | 89.4 | 0.891 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| Xylenes | ND | 30 | 106 | 108 | 1.31 | 102 | 103 | 0.723 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| %SS: | 103 | 10 | 100 | 106 | 5.93 | 97 | 100 | 2.71 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE | | | | | | | | | | | | | | |

BATCH 50980 SUMMARY

| Lab ID | Date Sampled | Date Extracted | Date Analyzed | Lab ID | Date Sampled | Date Extracted | Date Analyzed |
|--------------|--------------|----------------|------------------|--------------|--------------|----------------|------------------|
| 1006029-001A | 06/01/10 | 06/02/10 | 06/02/10 2:00 PM | 1006029-002A | 06/01/10 | 06/02/10 | 06/02/10 3:02 PM |

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



| McCampbell An "When Quality | nalytical, Inc. | 1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.mccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269 | | | | | | |
|--------------------------------|-----------------------------|---|-----------------|----------|--|--|--|--|
| Allterra Environmental, Inc | Client Project ID: #160 Hol | mes Street, Livermore | Date Sampled: | 06/14/10 | | | | |
| 849 Almar Ave. Ste. C #281 | | | Date Received: | 06/14/10 | | | | |
| | Client Contact: Nathaniel | Date Reported: | 06/17/10 | | | | | |
| Santa Cruz, CA 95060 | Client P.O.: | | Date Completed: | 06/16/10 | | | | |

WorkOrder: 1006381

June 17, 2010

Dear Nathaniel:

Enclosed within are:

- 1) The results of the 2 analyzed samples from your project: **#160 Holmes Street, Livermore,**
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius Laboratory Manager McCampbell Analytical, Inc.

| 12 | | | GLL | 1 -111 | E. | 1 | | | | ~ | - 1 | | | | | C | ha | in | of | C | Cu | ist | 00 | ly | Re | eco | ord | _ | |
|------------------|----------------|-------------|--------------------------|-------------------------------|------------------|---------|-------|--------|-------|-----|--------|--------|-------|------------|------------|------------|--------------|---------------|------------|------------|----------|-------------|-----------|------------|------------|--------------|------------|-----------|------------|
| | | | 849 Almar A | venue, Suite | C, #2 | 281 | | 10 |)6 | 3 | 51 | | | | Turn | Aro | und (| circ | le on | e) R | RI | USH | 24 | HR | 48H | R 72 | 2HR | 5 Da | y |
| | | Phone: (| Santa Cru: Website: w | z, California ww.allterrae | 95060 env.cor |) n | -2600 | | | | | | | 015/8020 | | | | | | | | | | | () | | | | |
| 0 | | Phone: (| 051) 423-20 | Jo racsining | . (0.) 1 | 1423 | -2003 | / | | | | | | 4 8 | | | | 6 | | | | | 0 | 6 | 310 | | | | |
| Report and Bill | to: Aliterra E | nvironmen | ital, Inc. | | | 7 | | / | - | - | | | | EP | | | | 826 | | | | ids | 602 | 02(| 5/8. | | | | |
| Project Number | : 160 Halmar | Cturnet 1 : | | 0 | -1 | - | | | | | | | | SE (| | | | PA | | ~ | | sol | 10/ | 0/0 | ,62 | | 00.8 | | |
| Project Location | 1 160 Holmes | street, LI | vermore | | 10 | ~ | | | | | | | | E | | | 6 | E | 6 | 260 | 3 | ved | 09 1 | 601 | 270 | ~ | 9/2(| | |
| Project Name | | | - | / | | | | | | | | | | & V | - | | 326 | ano | 826 | A 8 | A & | sol | EPA | PA | A 8 | ISSa | 00 | | |
| sampler signati | Sample C | ollection | Sample (| ontainers | T | 1 | Matri | x | | | Preser | vatio | n | X | 020 | 15) | Y | ethi | LLS (| EP | E | dis | ls (| S (E | EP | Sioa | 0/2 | | |
| Sample ID | Date | Time | mber of ontainers | Type | Air | Water g | Soil | Sludge | Other | lce | HCI | HNO; | Other | Ig and BTH | EX (EPA 80 | Hd (EPA 80 | iel oxys (El | anol and M | d Scavenge | al HVOCs (| II HVUCS | dness/Total | M-17 Meta | FT 5 Metal | f's/ PNA's | 1 Toxicity/E | d (EPA 601 | BE (8260) | P waniirad |
| | | 101 | 2 S | Ŭ | | | | | 10000 | | | 1.0000 | | 14 | BTH | IPF | S-fu | Etha | Lea | Tota | 101 | Han | CAI | 3 | PAF | Fish | Lea | MT | G |
| VES-TH | G-14-M | 11:06 | 1 | 13AB | × | | | | | | | | | × | | | | | | - | | | | | | | | | 1 |
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| 2: 10 | K | 1 | 6-14-10 | 1700 | 5 | | 14 | | | | 2 | | | | | HEA | D SP/ | ACE | ABSE | NT | | MA | CO | NTAL | NER | s v | | | |
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1534 Willow Pass Rd CA 04565 1701

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

| (925) 252-9262 | | | | WorkO | order: 100638 | 1 Clien | tCode: ATRS | | |
|--|------------------------|-----------------|-------------------|----------|---|--|-----------------|--------------|------------|
| | WaterTrax | WriteOn | EDF | Excel | Fax | 🖌 Email | HardCopy | ThirdParty | J-flag |
| Report to: | | | | В | ill to: | | Rec | quested TAT: | 5 days |
| Nathaniel Allen Allterra Environmental, Inc 849 Almar Ave, Ste. C #281 | Email: a cc: PO: | allterraenviror | nmental@yahoo.co | m, micah | Accounts Pa Allterra Envi 849 Almar A | iyable ronmental ve, Ste. C #281 | Da | te Received: | 06/14/2010 |
| Santa Cruz, CA 95060 831-425-2608 FAX 831-425-2609 | ProjectNo: # | #160 Holmes | Street, Livermore | | Santa Cruz, micah@allte | CA 95060 erraenv.com | Da | te Printed: | 06/14/2010 |
| | | | | | | Requested Test | s (See legend l | below) | |
| | | | O Headan Date I | 1-1-1 | | 4 5 0 | 7 0 | 0 40 | |

| | Client ID | Watrix | Collection Date | ποια | | 2 | 3 | 4 | 5 | 0 | 1 | 0 | 9 | 10 | 11 | 12 |
|-------------|-----------|--------|-----------------|------|---|---|---|---|---|---|---|---|---|----|----|----|
| | | | | _ | | | | | | | | | | | | |
| 1006381-001 | VES-IN | Air | 6/14/2010 11:00 | | А | А | | | | | | | | | | |
| 1006381-002 | VES-EFF | Air | 6/14/2010 11:20 | | А | | | | | | | | | | | |

Test Legend:

| 1 | G-MBTEX_AIR | |
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| 2 | PREDF REPORT |
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The following SampIDs: 001A, 002A contain testgroup.

Prepared by: Samantha Arbuckle

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.



"When Ouality Counts"

Sample Receipt Checklist

| Client Name: | Allterra Environn | nental, Inc | | | Date a | and Time Received: | 6/14/2010 | 5:13:02 PM |
|-------------------|-------------------------|-------------------|-------------|--------|------------------|---------------------------|----------------|-------------------|
| Project Name: | #160 Holmes Stre | eet, Liverm | ore | | Check | list completed and re | eviewed by: | Samantha Arbuckle |
| WorkOrder N°: | 1006381 | Matrix <u>Air</u> | | | Carrie | r: <u>Benjamin Ysla</u> s | s (MAI Courier |) |
| | | | Chain of Cu | ustody | y (COC) Informa | ition | | |
| Chain of custody | present? | | Yes | ✓ | No 🗆 | | | |
| Chain of custody | signed when relinqui | shed and rece | eived? Yes | ✓ | No 🗆 | | | |
| Chain of custody | agrees with sample I | abels? | Yes | ✓ | No 🗌 | | | |
| Sample IDs noted | by Client on COC? | | Yes | ✓ | No 🗆 | | | |
| Date and Time of | collection noted by Cli | ent on COC? | Yes | ✓ | No 🗆 | | | |
| Sampler's name r | noted on COC? | | Yes | ✓ | No 🗆 | | | |
| | | | Sample | Rece | eipt Information | l | | |
| Custody seals int | tact on shipping conta | iner/cooler? | Yes | | No 🗆 | | NA 🔽 | |
| Shipping containe | er/cooler in good cond | lition? | Yes | ✓ | No 🗆 | | | |
| Samples in prope | er containers/bottles? | | Yes | ✓ | No 🗆 | | | |
| Sample containe | rs intact? | | Yes | ✓ | No 🗆 | | | |
| Sufficient sample | volume for indicated | test? | Yes | ✓ | No 🗌 | | | |
| | | Sample | Preservatio | n and | Hold Time (HT |) Information | | |
| All samples recei | ved within holding tim | e? | Yes | ✓ | No 🗌 | | | |
| Container/Temp B | Blank temperature | | Cool | er Tem | ıp: | | NA 🗹 | |
| Water - VOA vial | ls have zero headspa | ce / no bubble | es? Yes | | No 🗆 | No VOA vials subm | itted 🗹 | |
| Sample labels ch | necked for correct pres | servation? | Yes | ✓ | No 🗌 | | | |
| Metal - pH accep | table upon receipt (pH | l<2)? | Yes | | No 🗆 | | NA 🗹 | |
| Samples Receive | ed on Ice? | | Yes | | No 🗹 | | | |
| | | | | | | | | |

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

Client contacted:

Date contacted:

Contacted by:

Comments:

| | McCampbo | ell Ana en Ouality C | alyti | cal, Ir | <u>nc.</u> | Web | 1534 Willow F : www.mccamp Telephone: 8 | Pass Road, Pittsburg bell.com E-mail: 377-252-9262 Fa | ad, Pittsburg, CA 94565-1701 n E-mail: main@mccampbell.com -9262 Fax: 925-252-9269 | | | | | |
|--------------|--|--------------------------------|----------|-------------|--------------|------------------|---|---|--|-----------|------------|------------|--|--|
| Allter | ra Environmental, Inc | | | Client P | roject ID: | #160 Holmes | s Street, | Date Sample | ed: 06/14 | /10 | | | | |
| 849 A | lmar Ave. Ste. C #281 | | | Livermo | re | | | Date Receiv | ed: 06/14 | /10 | | | | |
| 0.0011 | | | | Client C | Contact: Na | athaniel Aller | n | Date Extract | ed: 06/15 | 5/10 | | | | |
| Santa | Cruz, CA 95060 | | | Client P | .0.: | | | Date Analyz | ed: 06/15 | 5/10 | | | | |
| | G | asoline R | ange (| C6-C12) | Volatile Hy | drocarbons | as Gasoline | e with BTEX a | and MTBE* | k | | | | |
| Extraction | on method: SW5030B | | | | Analy | tical methods: S | SW8021B/8015 | 5Bm | | Wor | k Order: | 1006381 | | |
| Lab ID | Client ID | Matrix | TPI | H(g) | MTBE | Benzene | Toluene | Ethylbenzene | Xylenes | DF | % SS | Comments | | |
| 001A | VES-IN | A | 5 | 30 | 170 | 0.64 | 24 | 3.6 | 56 | 1 | 101 | d1 | | |
| 002A | VES-EFF | А | Ν | ۱D | ND | 1.5 | 0.73 | ND | 0.79 | 1 | 104 | | | |
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| | | | | | | | | | | | | | | |
| Repo | rting Limit for DF =1; | A | 2 | 25 | 2.5 | 0.25 | 0.25 | 0.25 | 0.25 | | μg/I | | | |
| ND m abov | eans not detected at or ve the reporting limit | S | 1 | .0 | 0.05 | 0.005 | 0.005 | 0.005 | 0.005 | | mg/K | g | | |
| * water | and vapor samples are re | ported in µ | ıg/L, so | il/sludge/s | olid samples | in mg/kg, wip | e samples in | µg/wipe, produc | t/oil/non-aque | ous liqu | id sample | s in mg/L. | | |
| # clutte | red chromatogram; samj | ple peak co | elutes v | with surrog | gate peak. | | | | | | | | | |
| +The fo | ollowing descriptions of | the TPH c | hromate | ogram are | cursory in n | ature and McC | ampbell Ana | alytical is not re | sponsible for | their int | erpretatio | on: | | |

Angela Rydelius, Lab Manager

%SS = Percent Recovery of Surrogate Standard DF = Dilution Factor

d1) weakly modified or unmodified gasoline is significant

| | McCamp | bell | Analyti alitv Counts" | cal, Inc. | , | 1534 Willow Web: www.mccam Telephone: | Pass Road, Pittsburg pbell.com E-mail: 877-252-9262 Fa | g, CA 94565-170 main@mccampbe x: 925-252-9269 | l ll.com | | |
|--------------------|---|-----------------------|--------------------------|--------------------------------------|--------------|---|--|---|--------------|---------|----------|
| Allter | ra Environmental, | Inc | | Client Project ID: | #160 Holr | nes Street, | Date Sample | d: 06/14/1 | 0 | | |
| 849 A | lmar Ave, Ste. C# | 281 | | Livermore | | | Date Receiv | ed: 06/14/1 | 0 | | |
| | | | | Client Contact: | Nathaniel A | llen | Date Extract | ed: 06/15/1 | 0 | | |
| Santa | Cruz, CA 95060 | | | Client P.O.: | | | Date Analyz | ed: 06/15/1 | 0 | | |
| Entre et | Ga | soline F | Range (C6-0 | C12) Volatile Hydr | rocarbons as | s Gasoline wit | th MTBE and] | BTEX in ppn | 1 v * | h Orden | 1006281 |
| Lab ID | Client ID | Matrix | TPH(g) | MTBE | Benzene | Toluene | Ethylbenzene | Xylenes | DF | % SS | Comments |
| 001A | VES-IN | A | 150 | 45 | 0.20 | 6.2 | 0.82 | 13 | 1 | 101 | d1 |
| 002A | VES-EFF | А | ND | ND | 0.47 | 0.19 | ND | 0.18 | 1 | 104 | |
| | | | | | | | | | | | |
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| | | | | | | | | | | | |
| | ppm (mg/I | L) to ppm | w (ul/L) con | version for TPH(g) a | ssumes the m | olecular weigh | t of gasoline to b | e equal to that | of hexa | ne. | |
| Repor | ting Limit for DF =1; | Α | 7.0 | 0.68 | 0.077 | 0.065 | 0.057 | 0.057 | 1 | | uL/L |
| abov | e the reporting limit | S | NA | NA | NA | NA | NA | NA | 1 | 1 | mg/Kg |
| * vapor samples | samples are reported and all TCLP & SP | in µL/L, LP extrac | soil/sludge/s | olid samples in mg/kg ed in μg/L. | g, wipe samp | les in µg/wipe, j | product/oil/non-a | queous liquid sa | mples i | n mg/L, | water |

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

%SS = Percent Recovery of Surrogate StandardDF = Dilution Factor

d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644



Angela Rydelius, Lab Manager

1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.mccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269

"When Ouality Counts"

QC SUMMARY REPORT FOR SW8021B/8015Bm

| W.O. Sample Matrix: Air | | (| QC Matrix | k: Water | | | Batch | ID: 51180 | | WorkOrder 1006381 | | | | |
|--|--------------|------------|-----------|-----------|------------|----------|-----------|-------------|--------------|-------------------|---------------------|-----|--|--|
| EPA Method SW8021B/8015Bm | Extrac | ction SW | 5030B | | | | | : 1006288-0 | 1006288-001A | | | | | |
| Analyte | Sample | Spiked | MS | MSD | MS-MSD | LCS | LCSD | LCS-LCSD | Acce | eptance | otance Criteria (%) | | | |
| , in all to | µg/L | µg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | MS / MSD | RPD | LCS/LCSD | RPD | | |
| TPH(btex ^f | ND | 60 | 84.3 | 82 | 2.81 | 83.1 | 81.4 | 2.16 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| MTBE | ND | 10 | 103 | 105 | 2.40 | 111 | 111 | 0 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| Benzene | ND | 10 | 95.6 | 97.8 | 2.28 | 100 | 99.3 | 1.07 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| Toluene | ND | 10 | 86.4 | 89.3 | 3.25 | 90.7 | 89.5 | 1.29 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| Ethylbenzene | ND | 10 | 86.4 | 89.2 | 3.17 | 90.6 | 89.8 | 0.905 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| Xylenes | ND | 30 | 97.2 | 100 | 3.27 | 104 | 102 | 1.90 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| %SS: | 104 | 10 | 100 | 101 | 1.28 | 100 | 99 | 0.821 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| All target compounds in the Method B NONE | lank of this | extraction | batch we | re ND les | s than the | method R | L with th | e following | exceptions: | | | | | |

| | | | BATCH 51180 SL | JMMARY | | | |
|--------------|-------------------|----------------|------------------|--------|--------------|----------------|---------------|
| Lab ID | Date Sampled | Date Extracted | Date Analyzed | Lab ID | Date Sampled | Date Extracted | Date Analyzed |
| 1006381-002A | 06/14/10 11:20 AM | 06/15/10 | 06/15/10 8:39 AM | | | | |

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644



"When Ouality Counts"

QC SUMMARY REPORT FOR SW8021B/8015Bm

| W.O. Sample Matrix: Air | | | QC Matrix | k: Water | | | Batch | D: 51195 | | WorkOrder 1006381 | | | | |
|--|--------------|------------|-----------|-----------|------------|----------|-----------------------------|---------------|-------------|-------------------|--------------|-----|--|--|
| EPA Method SW8021B/8015Bm | Extrac | tion SW | 5030B | | | | Spiked Sample ID: 1006312-0 | | | | | | | |
| Analyte | Sample | Spiked | MS | MSD | MS-MSD | LCS | LCSD | LCS-LCSD | Acce | eptance | Criteria (%) | | | |
| | µg/L | µg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | MS / MSD | RPD | LCS/LCSD | RPD | | |
| TPH(btex ^f) | ND | 60 | 116 | 111 | 4.49 | 110 | 111 | 0.678 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| MTBE | ND | 10 | 103 | 96 | 7.49 | 99.7 | 105 | 4.83 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| Benzene | ND | 10 | 90.6 | 89.2 | 1.63 | 88.6 | 90 | 1.53 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| Toluene | ND | 10 | 90.5 | 87.8 | 2.97 | 87.4 | 88.8 | 1.56 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| Ethylbenzene | ND | 10 | 90.5 | 88.5 | 2.24 | 87.9 | 89.7 | 1.98 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| Xylenes | ND | 30 | 90.7 | 88.5 | 2.52 | 88.3 | 89.8 | 1.64 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| %SS: | 100 | 10 | 94 | 94 | 0 | 93 | 92 | 0.802 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| All target compounds in the Method B NONE | lank of this | extraction | batch we | re ND les | s than the | method R | L with th | e following o | exceptions: | | | | | |

| | | | <u>BATCH 51195 SL</u> | JMMARY | | | |
|--------------|-------------------|----------------|-----------------------|--------|--------------|----------------|---------------|
| Lab ID | Date Sampled | Date Extracted | Date Analyzed | Lab ID | Date Sampled | Date Extracted | Date Analyzed |
| 1006381-001A | 06/14/10 11:00 AM | 06/15/10 | 06/15/10 5:37 PM | | | | |

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644



| McCampbell An "When Ouality | nalytical, Inc. | 1534 Willow Pass F Web: www.mccampbell.c Telephone: 877-2 | Road, Pittsburg, CA 945 com E-mail: main@mc 52-9262 Fax: 925-25 | 565-1701 ccampbell.com 2-9269 |
|--------------------------------|------------------------------|---|---|-------------------------------------|
| Allterra Environmental, Inc | Client Project ID: #160; 160 |) Holmes Street | Date Sampled: | 06/21/10 |
| 849 Almar Ave Ste C #281 | | | Date Received: | 06/21/10 |
| 019 Innia 1100, 500. C #201 | Client Contact: Erik Allen | | Date Reported: | 06/24/10 |
| Santa Cruz, CA 95060 | Client P.O.: | | Date Completed: | 06/23/10 |

WorkOrder: 1006568

June 24, 2010

Dear Erik:

Enclosed within are:

- 1) The results of the 1 analyzed sample from your project: #160; 160 Holmes Street,
- 2) A QC report for the above sample,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius Laboratory Manager McCampbell Analytical, Inc.

| | | | | | - | | | | | | | | | | | C | ha | in | of | C | Cus | to | dv | Re | eco | rd | | |
|------------------|----------------|------------|---|--|---------------------------|-----------------|------------|----------|-------|-----|-------|------------------|-------|-------------|-------------|-------------|----------------|---------------|--------------|-------------|---------------|------------|-------------|--------------|----------------|--------------|-------------|-------------|
| | | | 849 Almar | venue Suite | C #2 | 81 | | | | | | | | | Turn | Aro | und (| (circ | le on | e) R | RUS | H 2 | 4HR | 48H | R 72 | 2HR | 5 Da | v |
| | | Phone: (| Santa Cru Website: w (831) 425-26 | z, California www.allterrae 08 Facsimile | 95060 nv.coi : (831 |) n) 425 | -2609 |) | | | | | | 8015/8020 | | | | Conc | | | | | | (0 | | | | |
| Report and Bill | to: Allterra E | nvironmer | ntal. Inc. | | | | | | | | | | | N. | | | | 00 | | | | 50 | 6 | 310 | | | | |
| Project Number | : 160 | | | | | | | | | | | | | E | | | | 82 | | | lids | /60 | 602 | 5/8 | | 8 | | |
| Project Location | n 160 Holmes | Street, Li | vermore | | | | | | | | | | | BE | | | | SPA | | 6 | d so | 010 | 10/ | 0,62 | | 00 | | |
| Project Name | ~ | | | | | | | | | | | | | 1 | | | (0) | 10 | 60) | 326 | lve | A 6 | 160 | 827 | ay | .9/2 | | |
| Sampler Signati | ire: PAD | an | | | | | | | | | | | | S | 6 | ~ | 82(| and | (82 | A S | sso | EP | EPA | A | assi | 200 | | |
| | Sample C | ollection | Sample | Containers | | 1 | Matri | х | | 1 | Prese | rvatio | n | EX | 020 | 015 | PA | fleth | ers | E | ip | als | Is () | Ξ | Bio | 10/ | | |
| Sample ID | Date | Time | Number of Containers | Container Type | Air | Water | Soil | Sludge | Other | Ice | HCI | HNO ₃ | Other | TPHg and BT | BTEX (EPA 8 | TPHd (EPA 8 | 5-fuel oxys (E | Ethanol and N | Lead Scaveng | Total HVOCs | Hardness/Tota | CAM-17 Met | LUFT 5 Meta | PAH's/ PNA's | Fish Toxicity/ | Lead (EPA 60 | MTBE (8260) | FDF romired |
| VESIN | 6-21-10 | 11:00 | 1 | tedlor | | | | | | V | | | - | ~ | | | 47 | | | | | | | | | - 1 | | v |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Sampled By: | gh A | llen | Date: 6-21-10 | Time: | Rece | erved | The second | 4 | _ | ~ | | | | Co | mm | ents | : | | | | | | | | | | | |
| Received By: | L | | Date: 6/21/10 | Time: 1885 | Rect | ryed | By | 1- | V | | | | | 3 | | | | | | | | | | | | | | |
| Received By: | | | Date: | Time: | Rece | lived | By: | | | | | | | | | | | | | | | | | | | | | |

VES-IN



Page 1 of 1

| Pittsburg, CA 94565-1701 (925) 252-9262 | | | | Work(| Order: 10065 | 568 Clier | ntCode: ATRS | | | |
|--|--|----------------------------------|------------------------------|-------------|---|--|-------------------|-----------------------------|--------------------|--------------|
| | WaterTrax | WriteOn | EDF | Excel | Fax | 🖌 Email | HardCopy | ThirdParty | ☐ J-f | flag |
| Report to: | | | | I | Bill to: | | Rec | uested TAT: | 5 d | lays |
| Erik Allen Allterra Environmental, Inc 849 Almar Ave, Ste. C #281 Santa Cruz, CA 95060 831-425-2608 FAX 831-425-2609 | Email: en cc: PO: ProjectNo: # [.] | rik@allterraenv 160; 160 Holm | v.com, micah@a nes Street | llterraenv. | Accounts F Allterra En 849 Almar Santa Cruz micah@all | Payable vironmental Ave, Ste. C #281 z, CA 95060 Iterraenv.com | Dat Dat | te Received: te Printed: | 06/21/2 06/21/2 | 2010 2010 |
| | | | | | | Requested Tes | sts (See legend b | oelow) | | |
| Lab ID Client ID | | Matrix C | Collection Date | Hold 1 | 2 3 | 4 5 6 | 6 7 8 | 9 10 | 11 | 12 |

А

А

6/21/2010 11:00

Test Legend:

1006568-001

| 1 | G-MBTEX_AIR | |
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| 6 | | |
| 11 | | |

| 2 | PREDF REPORT |
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| 7 | |
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Air

| 3 | |
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| 8 | |

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| 9 | |

| 5 | |
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| 10 | |

The following SampID: 001A contains testgroup.

Prepared by: Ana 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.



"When Ouality Counts"

Sample Receipt Checklist

| Client Name: | Allterra Environr | nental, Inc | Date and Time Received: 6/21/2010 7:32:28 PM | | | | | | |
|---|-------------------------|--------------------|--|--------------|------------|--|---------------|-----------|--|
| Project Name: | #160; 160 Holme | s Street | | | Check | Checklist completed and reviewed by: Ana | | | |
| WorkOrder N°: | 1006568 | Matrix <u>Air</u> | | | Carrie | er: <u>Benjamin Ysla</u> | s (MAI Courie | <u>r)</u> | |
| | | <u>Chair</u> | n of Cu | stody (COC | :) Informa | ation | | | |
| Chain of custody | v present? | | Yes | \checkmark | No 🗆 | | | | |
| Chain of custody | v signed when relinqui | shed and received? | Yes | \checkmark | No 🗆 | | | | |
| Chain of custody | agrees with sample I | abels? | Yes | \checkmark | No 🗌 | | | | |
| Sample IDs noted | by Client on COC? | | Yes | \checkmark | No 🗆 | | | | |
| Date and Time of | collection noted by Cl | ient on COC? | Yes | \checkmark | No 🗆 | | | | |
| Sampler's name | noted on COC? | | Yes | \checkmark | No 🗆 | | | | |
| | | <u>s</u> | ample | Receipt Inf | ormatior | 1 | | | |
| Custody seals intact on shipping container/cooler? | | | Yes | | No 🗆 | | NA 🔽 | | |
| Shipping contain | er/cooler in good cond | lition? | Yes | \checkmark | No 🗆 | | | | |
| Samples in prope | er containers/bottles? | | Yes | \checkmark | No 🗆 | | | | |
| Sample containe | ers intact? | | Yes | \checkmark | No 🗆 | | | | |
| Sufficient sample | e volume for indicated | test? | Yes | \checkmark | No 🗌 | | | | |
| | | Sample Prese | rvatio | n and Hold | Time (HT | <u>) Information</u> | | | |
| All samples recei | ived within holding tim | e? | Yes | \checkmark | No 🗌 | | | | |
| Container/Temp | Blank temperature | | Coole | er Temp: | | | NA 🗹 | | |
| Water - VOA vials have zero headspace / no bubbles? | | | Yes | | No 🗆 | No VOA vials subm | itted 🗹 | | |
| Sample labels checked for correct preservation? | | | Yes | \checkmark | No 🗌 | | | | |
| Metal - pH acceptable upon receipt (pH<2)? | | | Yes | | No 🗆 | | NA 🗹 | | |
| Samples Received on Ice? | | | | | No 🗹 | | | | |
| | | | | | | | | | |

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

Client contacted:

Date contacted:

Contacted by:

Comments:

| McCampbell Analytical, Inc. "When Quality Counts" | | | | 1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.mccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269 | | | | | | | | |
|--|--------------------------|--------------|----------|---|---------------|--|--------------|---------------------|----------------|-----------|------------|------------|
| Allter | ra Environmental, Inc | | | Client P | roject ID: | ject ID: #160; 160 Holmes Date Sampled: 06/21/10 | | | | | | |
| 849 A | lmar Ave. Ste. C #281 | | | Street | | | | Date Receive | ed: 06/21 | /10 | | |
| | | | | Client C | Contact: Er | ik Allen | | Date Extracto | ed: 06/22 | 2/10 | | |
| Santa | Cruz, CA 95060 | | | Client P | .0.: | | | Date Analyz | ed: 06/22 | 2/10 | | |
| | G | asoline R | ange (| C6-C12) | Volatile Hy | drocarbons | as Gasolino | e with BTEX a | and MTBE* | k | | |
| Extractio | on method: SW5030B | | | | Analy | tical methods: S | SW8021B/8015 | 5Bm | | Wor | k Order: | 1006568 |
| Lab ID | Client ID | Matrix | TP | 'H(g) | MTBE | Benzene | Toluene | Ethylbenzene | Xylenes | DF | % SS | Comments |
| 001A | VES-IN | A | 1 | 70 | 23 | ND | 5.9 | 0.90 | 8.7 | 1 | 111 | d1 |
| | | | | | | | | | | | | |
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| | | | | | | | | | | | | |
| Repor | rting Limit for DF =1; | A | | 25 | 2.5 | 0.25 | 0.25 | 0.25 | 0.25 | | μg/I | _ |
| ND means not detected at or above the reporting limit NO NO | | | | | | 0.005 | 0.005 | 0.005 | 0.005 | | mg/K | g |
| * water | and vapor samples are re | eported in µ | ug/L, so | oil/sludge/s | olid samples | in mg/kg, wip | e samples in | µg/wipe, product | t/oil/non-aque | ous liqu | id sample: | s in mg/L. |
| # clutte | red chromatogram; samj | ple peak co | belutes | with surro | gate peak. | | | | | | | |
| +The fo | ollowing descriptions of | the TPH c | hromat | ogram are | cursory in na | ature and McC | ampbell Ana | alytical is not res | sponsible for | their int | erpretatio | on: |
| %SS = | Percent Recovery of Sur | rogate Star | ndard | | | | | | | | | |

Angela Rydelius, Lab Manager

DF = Dilution Factor

d1) weakly modified or unmodified gasoline is significant

| McCampbell Analytical, Inc. "When Quality Counts" | | | | | 1534 Willow Web: www.mccam Telephone: | Pass Road, Pittsburg pbell.com E-mail: 877-252-9262 Fa | g, CA 94565-170 main@mccampbe x: 925-252-9269 |)1 ell.com | | | |
|---|-------------------|------------|----------------------|----------------------|---|--|---|-----------------|---------|----------|----------|
| Allterra Environmental, Inc Client Project ID: # | | | |): #160; 160 | 160; 160 Holmes Date Sampled: 06/21/10 | | | | | | |
| 849 A | lmar Ave Ste C | #281 | | Street | | | Date Receiv | ed: 06/21/1 | 0 | | |
| 0.711 | | -01 | | Client Contact: | Erik Allen | | Date Extract | ed: 06/22/1 | 0 | | |
| Santa | Cruz, CA 95060 | | | Client P.O.: | | | Date Analyz | ed: 06/22/1 | 0 | | |
| | G | asoline R | Range (C6-0 | C12) Volatile Hyd | rocarbons a | s Gasoline wi | th MTBE and 1 | BTEX in ppr | nv* | | |
| Extracti | on method: SW5030 | B | | A | nalytical method | ls: SW8021B/80 |)15Bm | | Wor | k Order: | 1006568 |
| Lab ID | Client ID | Matrix | TPH(g) | MTBE | Benzene | Toluene | Ethylbenzene | Xylenes | DF | % SS | Comments |
| 001A | VES-IN | А | 46 | 6.2 | ND | 1.5 | 0.20 | 2.0 | 1 | 111 | d1 |
| | | | | | | | | | | | |
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| | | | | | | | | | | | |
| | nnm (ma | (I) to ppm | $v_{\rm (ul/L)}$ con | version for $TDH(a)$ | accumes the n | olecular weigh | t of assoling to h | a aqual to that | of have | no | |

ppm (mg (g)

| Reporting Limit for DF =1; | А | 7.0 | 0.68 | 0.077 | 0.065 | 0.057 | 0.057 | 1 | uL/L |
|----------------------------|---|-----|------|-------|-------|-------|-------|---|-------|
| above the reporting limit | S | NA | NA | NA | NA | NA | NA | 1 | mg/Kg |

* vapor samples are reported in µL/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L, water samples and all TCLP & SPLP extracts are reported in $\mu g/L$.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

%SS = Percent Recovery of Surrogate Standard DF = Dilution Factor

d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644



Angela Rydelius, Lab Manager

"When Ouality Counts"

QC SUMMARY REPORT FOR SW8021B/8015Bm

| W.O. Sample Matrix: Air | W.O. Sample Matrix: Air QC Matrix: Water | | | | | BatchID: 51239 WorkOrder 1006568 | | | | | | |
|--|---|------------|----------|-----------|------------|----------------------------------|-----------|-------------|-------------|---------|----------------|-----|
| EPA Method SW8021B/8015Bm | Extraction SW5030B Spiked Sample ID: 1006456- | | | | | | | : 1006456-0 | 01A | | | |
| Analyte | Sample | Spiked | MS | MSD | MS-MSD | LCS | LCSD | LCS-LCSD | Acce | eptance | e Criteria (%) | |
| , indy to | µg/L | µg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | MS / MSD | RPD | LCS/LCSD | RPD |
| TPH(btex) | ND | 60 | 80.1 | 87.8 | 9.13 | 83.3 | 82.1 | 1.46 | 70 - 130 | 20 | 70 - 130 | 20 |
| MTBE | ND | 10 | 102 | 106 | 4.64 | 107 | 100 | 6.95 | 70 - 130 | 20 | 70 - 130 | 20 |
| Benzene | ND | 10 | 96 | 102 | 6.43 | 101 | 94.1 | 7.43 | 70 - 130 | 20 | 70 - 130 | 20 |
| Toluene | ND | 10 | 88.2 | 92.8 | 4.99 | 91.9 | 85.9 | 6.72 | 70 - 130 | 20 | 70 - 130 | 20 |
| Ethylbenzene | ND | 10 | 79.4 | 93.6 | 16.4 | 91.6 | 85.5 | 6.81 | 70 - 130 | 20 | 70 - 130 | 20 |
| Xylenes | ND | 30 | 103 | 107 | 3.01 | 104 | 97.3 | 6.86 | 70 - 130 | 20 | 70 - 130 | 20 |
| %SS: | 98 | 10 | 99 | 104 | 4.61 | 101 | 100 | 0.851 | 70 - 130 | 20 | 70 - 130 | 20 |
| All target compounds in the Method B NONE | lank of this | extraction | batch we | re ND les | s than the | method R | L with th | e following | exceptions: | | | |

| | | | BATCH 51239 SL | JMMARY | | | |
|--------------|-------------------|----------------|------------------|--------|--------------|----------------|---------------|
| Lab ID | Date Sampled | Date Extracted | Date Analyzed | Lab ID | Date Sampled | Date Extracted | Date Analyzed |
| 1006568-001A | 06/21/10 11:00 AM | 06/22/10 | 06/22/10 8:27 PM | | | | |

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644



| McCampbell An "When Ouality | nalytical, Inc. | 1534 Willow Pass F Web: www.mccampbell.c Telephone: 877-2 | Road, Pittsburg, CA 945 com E-mail: main@mc 52-9262 Fax: 925-25 | 565-1701 ccampbell.com 2-9269 |
|--------------------------------|-----------------------------|---|---|-------------------------------------|
| Allterra Environmental, Inc | Client Project ID: 160 Holm | nes Street, Livermore | Date Sampled: | 06/01/10 |
| 849 Almar Ave, Ste, C #281 | | | Date Received: | 06/01/10 |
| | Client Contact: James Alle | Date Reported: | 06/02/10 | |
| Santa Cruz, CA 95060 | Client P.O.: | | Date Completed: | 06/02/10 |

WorkOrder: 1006031

June 02, 2010

Dear James:

Enclosed within are:

- 1) The results of the 1 analyzed sample from your project: 160 Holmes Street, Livermore,
- 2) A QC report for the above sample,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius Laboratory Manager McCampbell Analytical, Inc.
| | | | | | 2 | | | | | | | | | | | C | ha | in | of | C | ust | tod | y | Re | co | ord | | |
|-------------------|-----------------|------------|--|---|---------------------------|-----------------|-------|--------|-------|-----|---------|---------|-------|-------------|----------------------|------------------------------|---------------------|---------------|--------------|-------------|--------------|------------|-------------|---------------------|---------------|--------------|------------|---|
| | | | 849 Almar A | venue. Suite | C, #2 | 281 | | | | 30 | | G | - | - | Furn | Aro | und (| circl | le on | e) R | USI |)241 | HR | 48HI | R 72 | 2HR | 5 Da | y |
| | i. | Phone: (| Santa Cru Website: v 831) 425-26 | z, California ww.allterrae 08 Facsimile | 95060 nv.coi : (831 |) n) 425 | -2609 | , | 100 | 10 | 9 03 | -1 | | 8015/8020 | | | | . (| | | | _ | | (0) | | | | |
| Report and Bill t | to: Allterra En | vironmen | tal, Inc. | | | | | | | | | | | PA | | | | 560 | | | s | 020) | 6 | 831 | | | | |
| Project Number: | 160 | | | | | | | | | | | | | E | | | | 1 82 | | | olid | 0//0 | /60 | 25/ | | 8. | | |
| Project Location | 160 Holmes | Street, Li | vermore | | | | | | | | | | | BE | | | | EP/ | | (0) | s pa | 5010 | 010 | 70,6 | | 200 | | |
| Project Name | | | 0 | | | | | | | | | | | LW | | | (09 | ol (| 260 | 826 | olve | A 6 | A 6(| 827 | say | /6.0 | | l |
| Sampler Signatu | ire: the | 2002 | lau | 2 | - | | | | | | | | | 8 | 6 | 6 | 82 | han | (8) | PA | isso | (EI | EP | PA | oass | /20(| | |
| | Sample Co | llection | Sample | Containers | | 1 | Matri | x | | I | reset | rvatior | 1 | EX | 802 | 10 | SPA | vlet | Sers | E | ald | tals | als (| E E | /Bio | 010 | - | |
| Sample ID | Date | Time | Number of Containers | Container Type | Air | Water 🧳 | Soil | Sludge | Other | Ice | HCI | HNO3 | Other | TPHg and B1 | BTEX (EPA 8 | TPHd (EPA 8 | 5-fuel oxys (F | Ethanol and N | Lead Scaveng | Total HVOCs | Hardness/Tot | CAM-17 Met | LUFT 5 Meta | PAH's/ PNA' | Fish Toxicity | Lead (EPA 60 | MTBE (8260 | |
| Voa In | 6-1-10 | | 3 | Voa | | / | | | | 1 | ~ | - | | ~ | | | | | | | | | | | | | | |
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| | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sampled By: | | | Date: | Time: 1.00 | Reo | eived | By: | (| 7 | | | + | | Co | mm | ente | | | | | | | | | | | | |
| Received By: | Ovens | | 6-1-10 Date: 6/1/10 Date: | 1830 Time: Time: | Reco | eived | By: | > | 6l | l | | | | 201 | IC G(HE DE | E / t* DOD AD : CHL | CON SPAC ORIN | | | AB | AP | PROP | RIAT | ERS ED II HER | N LAI | B | _ | |



Page 1 of 1

| (925) 252-9262 | | | | Work | Order: | 100603 | 31 | ClientC | Code: ATR | 5 | | | |
|---|--------------------------------------|----------------------------------|--------------------------------------|----------|----------------------------------|--|---|-----------|------------|----------------------|---------------|------------------|--------------|
| | WaterTrax | WriteOn | EDF | Excel | [| Fax | 🖌 Ema | il | HardCop | y 🗌 Thir | rdParty | J-` | flag |
| Report to: | | | | | Bill to: | | | | R | equested | TAT: | 1 | day |
| James Allen Allterra Environmental, Inc 849 Almar Ave, Ste. C #281 Santa Cruz, CA 95060 831-425-2608 FAX 831-425-2609 | Email: a cc: PO: ProjectNo: | allterraenviron 160 Holmes St | mental@yahoo.con treet, Livermore | n, micah | Acc Allt 849 Sar mic | counts Pa erra Env 9 Almar A nta Cruz, cah@allte | ayable rironmental Ave, Ste. C # , CA 95060 erraenv.con | #281 า | D D | ate Rece ate Prin | ived: ted: | 06/01/ 06/02/ | 2010 2010 |
| | | | | | | | Requested | d Tests | (See legen | d below) | | | |
| Lab ID Client ID | | Matrix | Collection Date He | old 1 | 2 | 3 | 4 5 | 6 | 7 8 | 3 9 | 10 | 11 | 12 |

| Lab ID | Client ID | Matrix | Collection Date | Hold | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|-------------|-----------|--------|-----------------|------|---|---|---|---|---|---|---|---|---|----|----|----|
| | | | | - | | | | | | | | | | | | |
| 1006031-001 | Voa In | Water | 6/1/2010 | | А | Α | | | | | | | | | | |

Test Legend:

| 1 | G-MBTEX_W |
|----|-----------|
| 6 | |
| 11 | |

| 2 | PREDF REPORT |
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| 10 | |

Comments:



"When Ouality Counts"

Sample Receipt Checklist

| Project Name: 160 Holmes Street, Livermore WorkOrder N°: 1006031 Matrix Water | Checklist completed and reviewed by: Melissa Valles Carrier: <u>Benjamin Yslas (MAI Courier)</u> |
|---|---|
| WorkOrder N°: 1006031 Matrix Water | Carrier: Benjamin Yslas (MAI Courier) |
| | |
| Chain of Custody (C | 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 V | No 🗆 |
| Date and Time of collection noted by Client on COC? Yes | No 🗆 |
| Sampler's name noted on COC? Yes Ves | No 🗆 |
| Sample Receipt | t 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 Ho | old Time (HT) Information |
| All samples received within holding time? Yes | No 🗌 |
| Container/Temp Blank temperature Cooler Temp: | 6°C NA 🗆 |
| Water - VOA vials have zero headspace / no bubbles? Yes 🔽 | No \Box No VOA vials submitted \Box |
| Sample labels checked for correct preservation? Yes 🔽 | No 🗌 |
| Metal - pH acceptable upon receipt (pH<2)? Yes | No 🗆 NA 🗹 |
| Samples Received on Ice? Yes V | No 🗆 |
| (Ice Type: WET ICE |) |
| * NOTE: If the "No" box is checked, see comments below. | |

Client contacted:

Date contacted:

Contacted by:

| | McCampbe | ell Ar | alyti _{Counts"} | ical, Ir | <u>nc.</u> | Web | 1534 Willow P : www.mccamp Telephone: 8 | ass Road, Pittsburg bell.com E-mail: 77-252-9262 Fa | g, CA 94565-17 main@mccamp x: 925-252-926 | 701 bell.com 9 | | |
|-------------|--|-----------|-----------------------------|----------|----------------------|------------|---|---|---|----------------------|----------|----------|
| Allter | ra Environmental, Inc | | | Client P | Project ID: | 160 Holmes | Street, | Date Sample | ed: 06/01 | /10 | | |
| 849 A | lmar Ave. Ste. C #281 | | | Livermo | ore | | | Date Receiv | ed: 06/01 | /10 | | |
| | | | | Client C | Contact: Jai | nes Allen | | Date Extract | ed: 06/02 | 2/10 | | |
| Santa | Cruz, CA 95060 | | | Client P | .0.: | | | Date Analyz | ed: 06/02 | 2/10 | | |
| Extracti | Gaton method: SW5030B | asoline l | Range (| (C6-C12) | Volatile Hy Analy | drocarbons | as Gasoline sw8021B/8015 | e with BTEX a ^{5Bm} | and MTBE [*] | k Wor | k Order: | 1006031 |
| Lab ID | Client ID | Matrix | TP | PH(g) | MTBE | Benzene | Toluene | Ethylbenzene | Xylenes | DF | % SS | Comments |
| 001A | Voa In | w | 20 | ,000 | 180,000 | 380 | 1800 | 980 | 5100 | 100 | 109 | d1 |
| | | | | | | | | | | | | |
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| | | | | | | | | | | | | |
| Repo | rting Limit for DF =1; | W | | 50 | 5.0 | 0.5 | 0.5 | 0.5 | 0.5 | | μg/I | _ |
| ND m abo | eans not detected at or ve the reporting limit | S | | 1.0 | 0.05 | 0.005 | 0.005 | 0.005 | 0.005 | | mg/ŀ | Kg |

* water and vapor samples are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in μ g/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts in mg/L.

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

Angela Rydelius, Lab Manager



"When Ouality Counts"

QC SUMMARY REPORT FOR SW8021B/8015Bm

| W.O. Sample Matrix: Water | | (| QC Matri | x: Water | | | Batch | ID: 50971 | | WorkOrder 1006031 | | | | |
|--|--------|--------|----------|----------|--------|--------|--------|-----------|------------|-------------------|----------------|-----|--|--|
| EPA Method SW8021B/8015Bm Extraction SW5030B | | | | | | | | s | Spiked San | nple ID | : 1005005-0 | 01A | | |
| Analyte | Sample | Spiked | MS | MSD | MS-MSD | LCS | LCSD | LCS-LCSD | Acce | eptance | e Criteria (%) | | | |
| , indigite | µg/L | µg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | MS / MSD | RPD | LCS/LCSD | RPD | | |
| TPH(btex) | ND | 60 | 93.8 | 89.4 | 4.80 | 90.1 | 90.5 | 0.456 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| MTBE | ND | 10 | 115 | 113 | 1.38 | 119 | 120 | 0.928 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| Benzene | ND | 10 | 105 | 105 | 0 | 103 | 107 | 3.45 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| Toluene | 0.64 | 10 | 86 | 87.6 | 1.65 | 91.4 | 94.7 | 3.46 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| Ethylbenzene | ND | 10 | 91 | 92.2 | 1.30 | 91.2 | 93.7 | 2.68 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| Xylenes | ND | 30 | 102 | 102 | 0 | 100 | 105 | 4.82 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| %SS: | 103 | 10 | 103 | 105 | 1.72 | 103 | 105 | 1.76 | 70 - 130 | 20 | 70 - 130 | 20 | | |
| All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE | | | | | | | | | | | | | | |

BATCH 50971 SUMMARY

| Lab ID | Date Sampled | Date Extracted | Date Analyzed | Lab ID | Date Sampled | Date Extracted | Date Analyzed |
|--------------|--------------|----------------|------------------|--------------|--------------|----------------|------------------|
| 1006031-001A | 06/01/10 | 06/02/10 | 06/02/10 7:43 AM | 1006031-001A | 06/01/10 | 06/02/10 | 06/02/10 1:29 PM |

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.



| McCampbell An "When Quality | nalytical, Inc. | 1534 Willow Pass F Web: www.mccampbell.c Telephone: 877-2 | Road, Pittsburg, CA 945 com E-mail: main@mc 52-9262 Fax: 925-25 | 565-1701 ccampbell.com 2-9269 |
|--------------------------------|-----------------------------|---|---|-------------------------------------|
| Allterra Environmental, Inc | Client Project ID: GW-IN | | Date Sampled: | 06/10/10 |
| 849 Almar Ave. Ste. C #281 | | | Date Received: | 06/10/10 |
| 017 Inna 110, 50. 0 #201 | Client Contact: Nathaniel A | Allen | Date Reported: | 06/15/10 |
| Santa Cruz, CA 95060 | Client P.O.: | | Date Completed: | 06/14/10 |

WorkOrder: 1006310

June 15, 2010

Dear Nathaniel:

Enclosed within are:

- 1) The results of the 1 analyzed sample from your project: **GW-IN**,
- 2) A QC report for the above sample,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius Laboratory Manager McCampbell Analytical, Inc.

| | | | all' | 1-1-1 | E | | | 101 | 56 | ,2 | NC |) | | | | С | ha | in | of | C | us | to | dy | Re | eco | ord | | |
|-----------------|-----------------|------------|--|---|----------------------------|-----------------|----------|--------|-------|-----|--------|-------|-------|--------------------|--------------------|--------------------|----------------|---------------|--------------|--------------------|---------------|------------|-------------|--------------|----------------|--------------|------------|--------------|
| | | | 849 Almar A | venue, Suite | C, #2 | 81 | | 10 | 0.0 | ~ | | | | | Furn | Arou | und (| circ | e on | e) R | RUSI | 1 24 | HR | 48H | R 72 | 2HR | 5 Da | y |
| | | Phone: (| Santa Cru Website: w 831) 425-26 | z, California ww.allterrae 08 Facsimile | 95060 nv.cor :: (831 |) n) 425 | -2609 |) | | | | | | 8015/8020 | | | | | | | | | | (0 | | | | |
| Report and Bill | to: Allterra Er | nvironmen | ital, Inc. | | | | | | | | | | | A | | | | (09) | | | ~ | 50 | 0 | 831 | | | | |
| Project Number | : 160 | | | | | | | | | | | | | E | | | | A 82 | | | olid |)/60 | (09) | 25/ | | 8. | | |
| Project Locatio | n 160 Holmes | Street, Li | vermore | | | | | | | | | | | BE | | | | EP/ | | 6 | d so | 010 | 10 | 0,6 | | 200 | | 1 |
| Project Name | ~ · · | | | | | | | | | | | | | LW | | | (09 | ol (| 260 | 826 | lve | A 6 | 1 6(| 827 | ay | 6.0 | | |
| Sampler Signat | ure: FRO | n | | | 10 | | | | | | | | | 8 | 0 | 0 | 82 | nan | (82 | PA | isso | E | EP | PA | ass | 200 | | |
| | Sample Co | ollection | Sample | Containers | | 1 | Matri | x | | I | Preser | vatio | n | EX | \$02(| 015 | SPA | Aetl | gers | E | al d | als | uls (| (E | Bic | 10/ | _ | |
| Sample ID | Date | Time | Number of Containers | Container Type | Air | Water | Soil | Sludge | Other | Ice | HCI | HNO3 | Other | FPHg and BT | 3TEX (EPA 8 | FPHd (EPA 8 | 5-fuel oxys (F | Ethanol and N | Lead Scaveng | Fotal HVOCs | Hardness/Tota | CAM-17 Met | UUFT 5 Meta | PAH's' PNA's | Fish Toxicity/ | Lead (EPA 60 | MTBE (8260 | EDF required |
| CLI-TAI | 6,10-10 | | U | Via | | 1 | | | | 1 | / | | | 17 | julia | | 41 | 144 | - | | - | | - | - | - | - | | |
| 60 40 | 0.10 10 | | 7 | VCCI | | ~ | | | | | v | | | | | | | | | | | | | | | | | V |
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| Sampled By: | Cito A | llen | Date: 6-10-10 | Time: 1345 | Rece | ived l | By! | < | / | S | 2 | | | Cor | nm | ents | : | P | 32 | 34 | toc | | | | | | | |
| Received By: | 2 | / | Date: | Time: | Rece | | By: | -) | 5 | _ | _ | | | 1 | | G | OOD | SPAC | DITIO | SENT | | 1 | APP | ROPI | RIATI | | - 11 | M |
| Received By: | | | Date: | Time: | Rece | ived 1 | By: | | | | | | | 1 | | 2 | South | Onli | ALC | VOA | LAB_ | O&G | L MP | SERV | /ED I | NLA | BV | 1 |
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Page 1 of 1

| (925) 2 | rg, CA 94565-1701 52-9262 | | | | WorkO | order: 1 | 1006310 | Clie | ntCode: AT | RS | | | |
|--|---|--|--------------------------|-----------------|-----------|---|--|---|---------------|--------------|---------------------------|--------------------|----------------|
| | | WaterTrax | WriteOn | EDF | Excel | | Fax [| 🗸 Email | HardC | ору | ThirdParty | ′ □J- | -flag |
| Report to: | | | | | E | Bill to: | | | | Requ | uested TAT: | 5 | days |
| Nathaniel A Allterra Envi 849 Almar A Santa Cruz, 831-425-2608 | llen ironmental, Inc Ave, Ste. C #281 CA 95060 8 FAX 831-425-2609 | Email: a cc: PO: ProjectNo: (| allterraenviron GW-IN | mental@yahoo.co | om, micah | Acco Allter 849 A Santa mical | unts Payabl ra Environm Almar Ave, S a Cruz, CA S h@allterrael | e iental ite. C #281 05060 nv.com | | Date Date | e Received. e Printed: | : 06/10/ 06/10/ | /2010 /2010 |
| | | | | | | | Req | uested Tes | sts (See lege | end be | elow) | | |
| Lab ID | Client ID | | Matrix | Collection Date | Hold 1 | 2 | 3 4 | 5 | 6 7 | 8 | 9 10 | 11 | 12 |
| 1006310-001 | GW-IN | | Water | 6/10/2010 | A | А | | | | | | | |

Test Legend:

| 1 | G-MBTEX_W |
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| 6 | |
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| 10 | |

Prepared by: Samantha Arbuckle

Comments:



"When Ouality Counts"

Sample Receipt Checklist

| Client Name: | Allterra Environn | nental, | Inc | | | Da | ate ar | nd Time Received: | 6/10/2010 | B:12:22 PM |
|-------------------|-------------------------|-----------|--------------|---------|--------------|------------|--------------|----------------------|----------------|-------------------|
| Project Name: | GW-IN | | | | | Ch | neckl | list completed and r | eviewed by: | Samantha Arbuckle |
| WorkOrder N°: | 1006310 | Matrix | Water | | | Ca | arrier | : Benjamin Ysla | s (MAI Courier | 1 |
| | | | <u>Chain</u> | of Cu | stody (C | OC) Info | rmat | tion | | |
| Chain of custody | present? | | | Yes | ✓ | No [| | | | |
| Chain of custody | signed when relinquis | shed and | d received? | Yes | ✓ | No [| | | | |
| Chain of custody | agrees with sample la | abels? | | Yes | ✓ | No | | | | |
| Sample IDs noted | by Client on COC? | | | Yes | \checkmark | No E | | | | |
| Date and Time of | collection noted by Cli | ent on C | OC? | Yes | ✓ | No E | | | | |
| Sampler's name r | noted on COC? | | | Yes | | No [| | | | |
| | | | <u>S</u> | ample | Receipt | Informat | tion | | | |
| Custody seals int | tact on shipping contai | iner/cool | ler? | Yes | | No [| | | NA 🔽 | |
| Shipping containe | er/cooler in good cond | ition? | | Yes | | No [| | | | |
| Samples in prope | er containers/bottles? | | | Yes | ✓ | No [| | | | |
| Sample containe | rs intact? | | | Yes | | No E | | | | |
| Sufficient sample | volume for indicated | test? | | Yes | | No [| | | | |
| | | <u>Sa</u> | mple Prese | rvation | and Ho | old Time (| (<u>HT)</u> | Information | | |
| All samples recei | ved within holding time | ə? | | Yes | | No | | | | |
| Container/Temp E | Blank temperature | | | Coole | r Temp: | 3.4°C | | | NA 🗆 | |
| Water - VOA vial | ls have zero headspac | ce / no b | ubbles? | Yes | | No [| | No VOA vials subm | itted 🗆 | |
| Sample labels ch | necked for correct pres | servatior | ו? | Yes | ✓ | No | | | | |
| Metal - pH accep | table upon receipt (pH | <2)? | | Yes | | No E | | | NA 🗹 | |
| Samples Receive | ed on Ice? | | | Yes | ✓ | No E | | | | |
| | | | (Ісе Тур | e: WE | TICE |) | | | | |
| * NOTE: If the "N | lo" box is checked, se | e comm | ients below. | | | | | | | |
| | | | | | | | | | | |

Client contacted:

Date contacted:

Contacted by:

| | McCampbe | ell Ar en Oualitv | alyti _{Counts"} | ical, Ir | <u>nc.</u> | Web | 1534 Willow P : www.mccamp Telephone: 8 | ass Road, Pittsburg bell.com E-mail: 77-252-9262 Fa | g, CA 94565-17 main@mccamp x: 925-252-926 | 701 bell.com 9 | | | | | | | |
|------------|--|----------------------|-----------------------------|----------|--|--|---|---|---|----------------------|------|----------|--|--|--|--|--|
| Allter | ra Environmental, Inc | | | Client P | roject ID: C | GW-IN | | Date Sample | ed: 06/10 |)/10 | | | | | | | |
| 849 A | lmar Ave. Ste. C #281 | | | | | | | ed: 06/10 | 0/10 | | | | | | | | |
| | | | | Client C | Contact: Na | thaniel Aller | n | Date Extracted: 06/11/10-06/14/10 | | | | | | | | | |
| Santa | Cruz, CA 95060 | | | Client P | P.O.: Date Analyzed: 06/11/10-06/14/10 | | | | | | | | | | | | |
| Extraction | Gaton method: SW5030B | asoline l | Range (| (C6-C12) | Volatile Hy Analyt | Hydrocarbons as Gasoline with BTEX and MTBE* alvical methods: SW8021B/8015Bm | | | | | | | | | | | |
| Lab ID | Client ID | Matrix | TP | PH(g) | MTBE | Benzene | Toluene | Ethylbenzene | Xylenes | DF | % SS | Comments | | | | | |
| 001A | GW-IN | w | 25 | 5,000 | 170,000 | 400 | 1900 | 1000 | 5700 | 100 | 105 | d1 | | | | | |
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| Repo | rting Limit for DF =1; | W | | 50 | 5.0 | 0.5 | 0.5 | 0.5 | 0.5 | μg/L | | | | | | | |
| abov | eans not detected at or ve the reporting limit | S | | 1.0 | 0.05 | 0.005 | 0.005 | 0.005 | 0.005 | | mg/k | Kg - | | | | | |

* water and vapor samples are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in μ g/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts in mg/L.

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

Angela Rydelius, Lab Manager



McCampbell Analytical, Inc. "When Ouality Counts"

QC SUMMARY REPORT FOR SW8021B/8015Bm

| W.O. Sample Matrix: Water | | | QC Matri | x: Water | | | BatchID: 51180 WorkOrder 100 | | | | | | | | |
|--|----------------------|----------|----------|----------|--------|--------|--------------------------------|----------|----------|---------|----------------|-----|--|--|--|
| EPA Method SW8021B/8015Bm | Extra | ction SW | 5030B | | | | Spiked Sample ID: 1006288-001A | | | | | | | | |
| Analyte | Sample Spiked MS MSE | | | | MS-MSD | LCS | LCSD | LCS-LCSD | Acce | eptance | e Criteria (%) |) | | | |
| , indigite | µg/L | µg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | MS / MSD | RPD | LCS/LCSD | RPD | | | |
| TPH(btex ^f) | ND | 60 | 84.3 | 82 | 2.81 | 83.1 | 81.4 | 2.16 | 70 - 130 | 20 | 70 - 130 | 20 | | | |
| MTBE | ND | 10 | 103 | 105 | 2.40 | 111 | 111 | 0 | 70 - 130 | 20 | 70 - 130 | 20 | | | |
| Benzene | ND | 10 | 95.6 | 97.8 | 2.28 | 100 | 99.3 | 1.07 | 70 - 130 | 20 | 70 - 130 | 20 | | | |
| Toluene | ND | 10 | 86.4 | 89.3 | 3.25 | 90.7 | 89.5 | 1.29 | 70 - 130 | 20 | 70 - 130 | 20 | | | |
| Ethylbenzene | ND | 10 | 86.4 | 89.2 | 3.17 | 90.6 | 89.8 | 0.905 | 70 - 130 | 20 | 70 - 130 | 20 | | | |
| Xylenes | ND | 30 | 97.2 | 100 | 3.27 | 104 | 102 | 1.90 | 70 - 130 | 20 | 70 - 130 | 20 | | | |
| %SS: | 104 | 10 | 100 | 101 | 1.28 | 100 | 99 | 0.821 | 70 - 130 | 20 | 70 - 130 | 20 | | | |
| All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE | | | | | | | | | | | | | | | |

BATCH 51180 SUMMARY

| Lab ID | Date Sampled | Date Extracted | Date Analyzed | Lab ID | Date Sampled | Date Extracted | Date Analyzed |
|--------------|--------------|----------------|------------------|--------------|--------------|----------------|------------------|
| 1006310-001A | 06/10/10 | 06/11/10 | 06/11/10 5:01 PM | 1006310-001A | 06/10/10 | 06/14/10 | 06/14/10 8:20 PM |

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.



| McCampbell An "When Ouality | nalytical, Inc. | 1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.mccampbell.com E-mail: main@mccampbell.cor Telephone: 877-252-9262 Fax: 925-252-9269 | | | | | | | |
|--------------------------------|------------------------------|---|-----------------|----------|--|--|--|--|--|
| Allterra Environmental, Inc | Client Project ID: #160; 160 |) Holmes Street | Date Sampled: | 06/21/10 | | | | | |
| 849 Almar Ave, Ste, C #281 | | | Date Received: | 06/21/10 | | | | | |
| | Client Contact: Erik Allen | Date Reported: | 06/28/10 | | | | | | |
| Santa Cruz, CA 95060 | Client P.O.: | | Date Completed: | 06/28/10 | | | | | |

WorkOrder: 1006570

June 28, 2010

Dear Erik:

Enclosed within are:

- 1) The results of the 1 analyzed sample from your project: #160; 160 Holmes Street,
- 2) A QC report for the above sample,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius Laboratory Manager McCampbell Analytical, Inc.

| | | | qLL7 | 14/1 | E. | | | | | | | | | | | C | ha | in | of | C | ust | tod | ly] | Re | co | rd | | |
|-------------------|----------------|------------|---|---|--------------------------|---------------|--------|--------|-------|-----|-------|-------|-------|--|--------------------|---------------------|----------------|---------------|--------------|-------------|---------------|------------|------------|--------------|----------------|--------------|-------------|---|
| | | | 849 Almar A Santa Cruz Website: w | venue, Suite z, California ww.allterrae | C, #2 95060 nv.coi | 281 0 m | | | | | | | | 15/8020 | Turn | Aro | und (| circ | le on | e) R | USH | 24 | HR 4 | 48HF | ₹ 72 | HR | 5 Da | |
| D | 111. 12 | Phone: (| 831) 425-26 | 08 Facsimile | : (831 |) 425 | -2609 | | | | | | | 1 80 | | | | 6 | | | | 6 | _ | (0) | | | | |
| Report and Bill t | o: Allterra Er | nvironmen | tal, Inc. | | | | | | | | i. | | | EP/ | | | | 826 | | | ids | 602 | 020 | 5/83 | | | | |
| Project Number: | 160 Holmes | Street Li | vermore | | | | | | | | | | | BE (| | | | PA | | ~ | sol | 10/ | 9/0 | ,62 | | 00.8 | | |
| Project Name | Too Holines | Street, Li | vennore | | | | | | | | | | | TIM | | | 6 | 1 (E | (09 | 260 | ved | A 60 | 60 | 270 | 2 | 9/2 | | |
| Sampler Signatu | re: SAJ | A | | | | | | | | | | | | Se 1 | - | _ | 826 | ano | (82 | A 8 | ssol | EP | Ads | A 8 | assa | 00. | | |
| | Sample Co | ollection | Sample (| Containers | | 1 | Matrix | ĸ | | P | reser | vatio | n | EX | 020 | 015 | PA | leth | ers | E | ll di | als (| Is (I | E | Bio | 10/2 | | |
| Sample ID | Date | Time | Number of Containers | Container Type | Air | Water | Soil | Sludge | Other | Ice | HCI | HNO3 | Other | FPHg and BT | 3TEX (EPA 8 | FPHd (EPA 8) | 5-fuel oxys (E | Ethanol and N | Lead Scaveng | Fotal HVOCs | Hardness/Tota | CAM-17 Met | UFT 5 Meta | PAH's/ PNA's | Fish Toxicity/ | Lead (EPA 60 | MTBE (8260) | |
| CU-IN | 6-11-10 | | 3 | Vea | | | | | | V | 1 | | | / | - | | | - | | | - | - | - | - | - | - 1 | | 1 |
| 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | 0 | 1 | |) | | | | | | | | | 11 | | | | | | | | | ĺ |
| Sampled By: | city 1 | Aller | Date: 6-2.1-10 | Time: | Rece | | By: | 5 | 2 | _ | | _ | | Cor | nme | GC | É/tº | CONI | DITIO | N | _ | APP | ROPI | RIATE | | | | |
| Received By: | \geq | | Date: | 1855 | Rece | | By: | 8 | | | | | | DECHLORINATED IN LAB CONTAINERS DECHLORINATED IN LAB PRESERVED IN LAB PRESERVATION | | | | | | | | | | | | | | |



Page 1 of 1

| (925) 252-9262 | | | | Work | Order: | 10065 | 570 | Clie | entCode: A | ATRS | | | | |
|--|--|--------------------------------|----------------------|----------|----------------------------------|--|--|-----------------------------------|-------------|------------|---------------------|-------------|--------------------|--------------|
| | WaterTrax | WriteOn | EDF | Excel | C | Fax | ✓ | Email | Har | dCopy | Thire | Party | □ J-1 | flag |
| Report to: | | | | | Bill to: | | | | | Req | uested [·] | TAT: | 5 c | days |
| Erik Allen Allterra Environmental, Inc 849 Almar Ave, Ste. C #281 Santa Cruz, CA 95060 831-425-2608 FAX 831-425-2609 | Email: e cc: PO: ProjectNo: # | erik@allterrae #160; 160 Ho | env.com, micah@allte | erraenv. | Acc Allt 849 Sar mic | counts I erra En Almar hta Cru: cah@al | Payable ivironmer Ave, Ste z, CA 950 Iterraenv | ntal e. C #281 060 r.com | | Dat Dat | e Recei e Print | ved: ed: | 06/21// 06/21// | 2010 2010 |
| | | | | | | | Reque | ested Te | sts (See le | gend b | elow) | | • | |
| Lab ID Client ID | | Matrix | Collection Date He | old 1 | 2 | 3 | 4 | 5 | 6 7 | 8 | 9 | 10 | 11 | 12 |

| Lab ID | Client ID | Matrix | Collection Date | Hold | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|-------------|-----------|--------|-----------------|------|---|---|---|---|---|---|---|---|---|----|----|----|
| | | | | | | | | | | | | | | | | |
| 1006570-001 | GW-IN | Water | 6/21/2010 | | А | А | | | | | | | | | | |

Test Legend:

| 1 | G-MBTEX_W |
|----|-----------|
| 6 | |
| 11 | |

| 2 | PREDF REPORT | |
|----|--------------|---|
| 7 | | 1 |
| 12 | | 1 |

| 3 | |
|---|--|
| 8 | |

| 4 | |
|---|--|
| 9 | |

| 5 | |
|----|--|
| 10 | |

Prepared by: Ana Venegas

Comments:



"When Ouality Counts"

Sample Receipt Checklist

| Client Name: | Allterra Environn | nental, | Inc | | | D | Date a | ind Time Received: | 6/21/2010 | 7:40:50 PM |
|-------------------|-------------------------|-----------|--------------|--------|----------|----------|--------|-------------------------|----------------|-------------|
| Project Name: | #160; 160 Holmes | s Stree | t | | | С | heck | list completed and r | eviewed by: | Ana Venegas |
| WorkOrder N°: | 1006570 | Matrix | Water | | | С | Carrie | r: <u>Benjamin Ysla</u> | s (MAI Courier | 1 |
| | | | <u>Chain</u> | of Cu | stody (C | OC) Info | orma | <u>ition</u> | | |
| Chain of custody | present? | | | Yes | ✓ | No | | | | |
| Chain of custody | signed when relinquis | shed and | d received? | Yes | ✓ | No | | | | |
| Chain of custody | agrees with sample la | abels? | | Yes | ✓ | No | | | | |
| Sample IDs noted | by Client on COC? | | | Yes | ✓ | No | | | | |
| Date and Time of | collection noted by Cli | ent on C | OC? | Yes | ✓ | No | | | | |
| Sampler's name r | noted on COC? | | | Yes | ✓ | No | | | | |
| | | | Sa | mple | Receipt | Informa | ation | l | | |
| Custody seals int | tact on shipping contai | iner/cool | ler? | Yes | | No | | | NA 🔽 | |
| Shipping containe | er/cooler in good cond | ition? | | Yes | ✓ | No | | | | |
| Samples in prope | er containers/bottles? | | | Yes | ✓ | No | | | | |
| Sample containe | rs intact? | | | Yes | ✓ | No | | | | |
| Sufficient sample | volume for indicated | test? | | Yes | | No | | | | |
| | | Sa | mple Preser | vatior | n and Ho | ld Time | (HT) | Information | | |
| All samples recei | ved within holding time | e? | - | Yes | | No | | | | |
| Container/Temp E | Blank temperature | | | Coole | r Temp: | 16.8°C | | | NA 🗆 | |
| Water - VOA vial | s have zero headspac | ce / no b | ubbles? | Yes | ✓ | No | | No VOA vials subm | itted 🗆 | |
| Sample labels ch | necked for correct pres | servatior | ı? | Yes | ✓ | No | | | | |
| Metal - pH accept | table upon receipt (pH | <2)? | | Yes | | No | | | NA 🗹 | |
| Samples Receive | ed on Ice? | | | Yes | ✓ | No | | | | |
| | | | (Ice Type | e: WE | TICE) | 1 | | | | |
| * NOTE: If the "N | lo" box is checked, se | e comm | ients below. | | | | | | | |

Client contacted:

Date contacted:

Contacted by:

| | McCampbe | ell An en Oualitv | alyti | ical, Ir | <u>nc.</u> | Web | 1534 Willow P : www.mccamp Telephone: 8 | ass Road, Pittsbur bell.com E-mail 77-252-9262 Fa | g, CA 94565-17 : main@mccamp ix: 925-252-926 | 701 bell.com 9 | | | | |
|------------|---|-----------------------------|-------|----------|--------------|---|---|---|--|----------------------|------|----------|--|--|
| Allter | ra Environmental, Inc | | | Client P | roject ID: # | #160; 160 Holmes Date Sampled: 06/21/10 | | | | | | | | |
| 849 A | lmar Ave, Ste. C #281 | | | Street | | Date Received: 06/21/10 | | | | | | | | |
| | | | | Client C | Contact: Eri | k Allen | | Date Extract | ed: 06/24 | 4/10 | | | | |
| Santa | Cruz, CA 95060 | | | Client P | .0.: | Date Analyzed: 06/24/10 | | | | | | | | |
| Extraction | Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE* | | | | | | | | | 1006570 | | | | |
| Lab ID | Client ID | Matrix | TP | PH(g) | MTBE | Benzene | Toluene | Ethylbenzene | Xylenes | DF | % SS | Comments | | |
| 001A | GW-IN | w | 24 | 4,000 | 120,000 | 330 | 1700 | 1000 | 4600 | 100 | 98 | d1 | | |
| | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | |
| Repor | rting Limit for DF =1; | W | | 50 | 5.0 | 0.5 | 0.5 | 0.5 | 0.5 | | μg/I | _ | | |
| abo | ve the reporting limit | S | | 1.0 | 0.05 | 0.005 | 0.005 | 0.005 | 0.005 | | mg/K | g | | |

* water and vapor samples are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts in mg/L.

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

Angela Rydelius, Lab Manager

%SS = Percent Recovery of Surrogate Standard DF = Dilution Factor



"When Ouality Counts"

QC SUMMARY REPORT FOR SW8021B/8015Bm

| W.O. Sample Matrix: Water | W.O. Sample Matrix: Water | | | | | | Batchl | D: 51239 | | WorkOrder 1006570 | | | |
|--|---------------------------|----------|--------|--------|--------|--------|-------------------------------|----------|----------|-------------------|--------------|-----|--|
| EPA Method SW8021B/8015Bm | Extrac | ction SW | 5030B | | | | Spiked Sample ID: 1006456-001 | | | | | | |
| Analyte | Sample | Spiked | MS | MSD | MS-MSD | LCS | LCSD | LCS-LCSD | Acce | eptance | Criteria (%) | | |
| | µg/L | µg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | MS / MSD | RPD | LCS/LCSD | RPD | |
| TPH(btex [£] | ND | 60 | 80.1 | 87.8 | 9.13 | 83.3 | 82.1 | 1.46 | 70 - 130 | 20 | 70 - 130 | 20 | |
| MTBE | ND | 10 | 102 | 106 | 4.64 | 107 | 100 | 6.95 | 70 - 130 | 20 | 70 - 130 | 20 | |
| Benzene | ND | 10 | 96 | 102 | 6.43 | 101 | 94.1 | 7.43 | 70 - 130 | 20 | 70 - 130 | 20 | |
| Toluene | ND | 10 | 88.2 | 92.8 | 4.99 | 91.9 | 85.9 | 6.72 | 70 - 130 | 20 | 70 - 130 | 20 | |
| Ethylbenzene | ND | 10 | 79.4 | 93.6 | 16.4 | 91.6 | 85.5 | 6.81 | 70 - 130 | 20 | 70 - 130 | 20 | |
| Xylenes | ND | 30 | 103 | 107 | 3.01 | 104 | 97.3 | 6.86 | 70 - 130 | 20 | 70 - 130 | 20 | |
| %SS: | 98 | 10 | 99 | 104 | 4.61 | 101 | 100 | 0.851 | 70 - 130 | 20 | 70 - 130 | 20 | |
| All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE | | | | | | | | | | | | | |

BATCH 51239 SUMMARY

| Lab ID | Date Sampled | Date Extracted | Date Analyzed | Lab ID | Date Sampled | Date Extracted | Date Analyzed |
|--------------|--------------|----------------|------------------|--------------|--------------|----------------|------------------|
| 1006570-001A | 06/21/10 | 06/24/10 | 06/24/10 5:43 AM | 1006570-001A | 06/21/10 | 06/24/10 | 06/24/10 8:34 PM |

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

A QA/QC Officer

| McCampbell An "When Quality | nalytical, Inc. | 1534 Willow Pass F Web: www.mccampbell.c Telephone: 877-2 | Road, Pittsburg, CA 945 com E-mail: main@ma 52-9262 Fax: 925-25 | 565-1701 ccampbell.com 2-9269 |
|--------------------------------|------------------------------|---|---|-------------------------------------|
| Allterra Environmental, Inc | Client Project ID: #160; 160 |) Holmes Street, Livermore | Date Sampled: | 06/28/10 |
| 849 Almar Ave, Ste, C #281 | | | Date Received: | 06/28/10 |
| | Client Contact: Erik Allen | Date Reported: | 07/06/10 | |
| Santa Cruz, CA 95060 | Client P.O.: | | Date Completed: | 07/06/10 |

WorkOrder: 1006764

July 06, 2010

Dear Erik:

Enclosed within are:

- 1) The results of the 1 analyzed sample from your project: #160; 160 Holmes Street, Livermore,
- 2) A QC report for the above sample,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius Laboratory Manager McCampbell Analytical, Inc.

| | | | | | | | | | | | 100 | 00 | 74 | A | | | | | | | | | | | | | | |
|---|-------------------------------------|------------|---|---|-----------------------------|----------------------------|-------|--------|-------|-----|--------|--------|-------|--------------|--------------|------------------------|--|----------------|--------------|--------------------|----------------|--------------|-----------------------------|----------------|----------------------|---------------|-------------|------------|
| | | | GLL | 1-1-1 | E. | | | | | | | | | | | C | ha | in | of | C | us | too | ly | Re | eco | rd | 8 | |
| | | N | 849 Almar A Santa Cruz Website: w | venue, Suite z, California ww.allterrae | e C, #2 95060 env.com | 281 0 m | 2/00 | | | | | | | 15/8020 | Turn | Aro | und | cire | le on | e) R | USF | 1 24 | HR | 48H | R 72 | 2HR | 5 Da | ly |
| Report and Bill to Project Number: Project Location Project Name | o: Allterra Er 160 160 Holmes | Street, Li | 831) 425-260 ital, Inc. vermore | J8 Facsimile | 2: (831 | 1425 | -2609 | , | | | | | | MTBE (EPA 80 | | | (09 | ol (EPA 8260) | 260) | 8260) | olved solids | A 6010/6020) | A 6010/6020) | 8270,625/8310) | ay | ().9/200.8 | | |
| Sampler Signatu | re: 90 | Mection | Sample (| ontainers | - | | Matri | ~ | | | Dreces | rvatio | | X& | 20) | 15) | A 82 | ethan | rs (8; | EPA | disso | s (EF | (EP) | EPA | ioass | 0/20(| | |
| Sample ID | Date | Time | Number of Containers | Container Type | Air | Water | Soil | Sludge | Other | Ice | HCI | (ONH | Other | TPHg and BTE | 3TEX (EPA 80 | FPHd (EPA 80 | i-fuel oxys (EF | Ethanol and Mo | ead Scavenge | fotal HVOCs (| Hardness/Total | CAM-17 Metal | UFT 5 Metals | AH's/ PNA's (| 'ish Toxicity/B | Lead (EPA 601 | ATBE (8260) | DR ramined |
| Gh-IN | 6.28.10 | | 4 | Voa | | V | | | | V | V | | | V | 7 | | | | | | | | | | | | | l |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| ampled By: Received By: Received By: | 14 Al | llen | Date: 28-10 Date: 6-28-10 Date: | Time: 17 ZD Time: (33 0 Time: | Reco | eived I kh/l tived I | By: | 1 | | | | | | Co | mm | ente Gi Hi Di | E / t ^o OOD EAD ECHL RESE | | | N SEN D IN I | T LAB_s | AP | PROP CON PRE METAL | | ERS /ED I /HER | N LAE | | |



Page 1 of 1

| (925) 252-9262 | | | | WorkO | rder: 1006764 | 4 Client | Code: ATRS | | |
|---|------------------------|------------------|-----------------|--------------|--|--------------------------------------|-----------------|--------------|------------|
| | WaterTrax | WriteOn | EDF | Excel | Fax | 🖌 Email | HardCopy | ThirdParty | J-flag |
| Report to: | | | | В | ill to: | | Req | uested TAT: | 5 days |
| Erik Allen Allterra Environmental, Inc 849 Almar Ave, Ste. C #281 | Email: e cc: PO: | rik@allterraenv. | com, micah@a | allterraenv. | Accounts Pay Allterra Envir 849 Almar Av | yable onmental /e, Ste. C #281 | Daı | te Received: | 06/28/2010 |
| Santa Cruz, CA 95060 831-425-2608 FAX 831-425-2609 | ProjectNo: # | 160; 160 Holme | s Street,Liverr | nore | Santa Cruz, (micah@allter | CA 95060 rraenv.com | Dat | te Printed: | 06/28/2010 |
| | | | | | | Requested Test | s (See legend k | elow) | |

| Lab ID | Client ID | Matrix | Collection Date | Hold | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|-------------|-----------|--------|------------------------|------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1006764-001 | GW-IN | Water | 6/28/2010 | | А | А | | | | | | | | | | |

Test Legend:

| 1 | G-MBTEX_W |
|----|-----------|
| 6 | |
| 11 | |

| 2 | PREDF REPORT | |
|----|--------------|--|
| 7 | | |
| 12 | | |

| 3 | |
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| 9 | |

| 5 | |
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| 10 | |

Prepared by: Ana Venegas

Comments:



"When Ouality Counts"

Sample Receipt Checklist

| Client Name: | Allterra Environi | mental, | Inc | | | Date a | and Time Received: | 6/28/2010 | 6:44:29 PM | |
|-------------------|---|------------|--------------|---------|--------------|--------------------|-----------------------|--------------|-------------|--|
| Project Name: | #160; 160 Holme | s Stree | t,Livermor | e | | Check | klist completed and r | eviewed by: | Ana Venegas | |
| WorkOrder N°: | 1006764 | Matrix | Water | | | Carrie | er: Derik Cartan (N | /AI Courier) | | |
| | | | <u>Chair</u> | n of Cu | stody (C | OC) Informa | ation | | | |
| Chain of custody | present? | | | Yes | ✓ | No 🗆 | | | | |
| Chain of custody | signed when relinqu | ished and | d received? | Yes | ✓ | No 🗆 | | | | |
| Chain of custody | agrees with sample | labels? | | Yes | \checkmark | No 🗌 | | | | |
| Sample IDs noted | by Client on COC? | | | Yes | ✓ | No 🗆 | | | | |
| Date and Time of | collection noted by Cl | ient on C | OC? | Yes | ✓ | No 🗆 | | | | |
| Sampler's name r | noted on COC? | | | Yes | | No 🗆 | | | | |
| | | | <u>s</u> | ample | Receipt | Information | 1 | | | |
| Custody seals int | tact on shipping conta | ainer/cool | er? | Yes | | No 🗆 | | NA 🔽 | | |
| Shipping containe | er/cooler in good cond | dition? | | Yes | ✓ | No 🗆 | | | | |
| Samples in prope | er containers/bottles? | | | Yes | ✓ | No 🗆 | | | | |
| Sample containe | rs intact? | | | Yes | ✓ | No 🗆 | | | | |
| Sufficient sample | e volume for indicated | test? | | Yes | | No 🗌 | | | | |
| | | <u>Sa</u> | mple Prese | rvatior | and Ho | <u>ld Time (HT</u> |) Information | | | |
| All samples recei | ived within holding tim | ie? | | Yes | \checkmark | No 🗌 | | | | |
| Container/Temp E | Blank temperature | | | Coole | r Temp: | 13.4°C | | NA 🗆 | | |
| Water - VOA vial | ls have zero headspa | ice / no b | ubbles? | Yes | ✓ | No 🗆 | No VOA vials subm | itted | | |
| Sample labels ch | necked for correct pre | servation | ו? | Yes | ✓ | No 🗌 | | | | |
| Metal - pH accep | table upon receipt (pł | l<2)? | | Yes | | No 🗆 | | NA 🗹 | | |
| Samples Receive | ed on Ice? | | | Yes | ✓ | No 🗆 | | | | |
| | | | (Ісе Тур | e: WE | TICE) |) | | | | |
| * NOTE: If the "N | * NOTE: If the "No" box is checked, see comments below. | | | | | | | | | |

Client contacted:

Date contacted:

Contacted by:

| McCampbell Analytical, Inc. "When Ouality Counts" | | | | | | 1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.mccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269 | | | | | | | | |
|---|----------------|---|----------|----------------------------------|---------|---|---------|------------------------|-------------------------|-----|---------|----------|--|--|
| Allterra Environmental, Inc Client Project ID: | | | | | | ‡160; 160 Ho | olmes | Date Sampled: 06/28/10 | | | | | | |
| 849 Almar Ave, Ste, C #281 | | | | | | vermore | | | Date Received: 06/28/10 | | | | | |
| Client Contact: En | | | | | | ik Allen Date Extracted: 07/01/10-07/02/10 | | | | | | | | |
| Santa | Cruz, CA 95060 | | Client P | Date Analyzed: 07/01/10-07/02/10 | | | | | | | | | | |
| Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE* Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1006764 | | | | | | | | | | | 1006764 | | | |
| Lab ID Client ID Matrix TP | | | | PH(g) | MTBE | Benzene | Toluene | Ethylbenzene | Xylenes | DF | % SS | Comments | | |
| 001A | GW-IN | w | 22 | ,000 | 110,000 | 270 | 1600 | 900 | 4200 | 100 | 97 | d1 | | |
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| Reporting Limit for DF =1; W 50 | | | 5.0 | 0.5 | 0.5 | 0.5 | 0.5 | μg/L | | | | | | |
| ND means not detected at or above the reporting limit S | | | | 1.0 | 0.05 | 0.005 | 0.005 | 0.005 | 0.005 | | mg/k | mg/Kg | | |

* water and vapor samples are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts in mg/L.

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

Angela Rydelius, Lab Manager

 $\% SS = Percent \ Recovery \ of \ Surrogate \ Standard$

DF = Dilution Factor



McCampbell Analytical, Inc. "When Ouality Counts"

QC SUMMARY REPORT FOR SW8021B/8015Bm

| W.O. Sample Matrix: Water | | QC Matrix: Water | | | | | Batch | ID: 51461 | WorkOrder 1006764 | | | | |
|--|---------------|--------------------|----------|-----------|------------|----------|-----------|--------------------------------|-------------------------|-----|----------|-----|--|
| EPA Method SW8021B/8015Bm | Extra | Extraction SW5030B | | | | | | Spiked Sample ID: 1006760-005A | | | | | |
| Analyte | Sample | Spiked | MS | MSD | MS-MSD | LCS | LCSD | LCS-LCSD | Acceptance Criteria (%) | | | | |
| , undry to | µg/L | µg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | MS / MSD | RPD | LCS/LCSD | RPD | |
| TPH(btex) | ND | 60 | 111 | 111 | 0 | 103 | 109 | 5.82 | 70 - 130 | 20 | 70 - 130 | 20 | |
| MTBE | ND | 10 | 105 | 101 | 4.70 | 114 | 111 | 2.28 | 70 - 130 | 20 | 70 - 130 | 20 | |
| Benzene | ND | 10 | 93.6 | 89.2 | 4.77 | 92.9 | 90.2 | 2.91 | 70 - 130 | 20 | 70 - 130 | 20 | |
| Toluene | ND | 10 | 92.9 | 89.2 | 4.08 | 91.6 | 90.6 | 1.03 | 70 - 130 | 20 | 70 - 130 | 20 | |
| Ethylbenzene | ND | 10 | 94.2 | 90.3 | 4.18 | 92.3 | 92.6 | 0.258 | 70 - 130 | 20 | 70 - 130 | 20 | |
| Xylenes | ND | 30 | 94.2 | 90.4 | 4.03 | 91.8 | 92.9 | 1.23 | 70 - 130 | 20 | 70 - 130 | 20 | |
| %SS: | 96 | 10 | 94 | 90 | 4.41 | 95 | 91 | 4.21 | 70 - 130 | 20 | 70 - 130 | 20 | |
| All target compounds in the Method E NONE | Blank of this | extraction | batch we | re ND les | s than the | method R | L with th | e following | exceptions: | | | | |

BATCH 51461 SUMMARY

| Lab ID | Date Sampled | Date Extracted | Date Analyzed | Lab ID | Date Sampled | Date Extracted | Date Analyzed |
|--------------|--------------|----------------|------------------|--------------|--------------|----------------|------------------|
| 1006764-001A | 06/28/10 | 07/01/10 | 07/01/10 2:29 AM | 1006764-001A | 06/28/10 | 07/02/10 | 07/02/10 1:57 AM |

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

