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Alameda County Environmental Health



Pilot Scale Vapor Extraction System Status Report for April 2010 160 Holmes Street, Livermore, California

Date: May 17, 2010

Project No.: 160

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

Allterra Environmental, Inc.

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May 17, 2010 Project No.: 160

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

SUBJECT: Pilot Scale Vapor Extraction System Status Report for April 2010, Fuel Leak Case No. RO0000324, 160 Holmes Street, Livermore, California

Dear Manwel and Samira Shuwayhat:

Allterra Environmental, Inc. (Allterra) has prepared this interim remedial action status report to document work conducted at the property located at 160 Holmes Street in Livermore, California (Site). This report documents field observations and data collected while conducting pilot scale system operation and maintenance during April of 2010.

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 Vallero fuel station currently occupies the Site and the surrounding area is primarily residential with some retail businesses along 1st and 2nd Streets. The approximate surface elevation of 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 in Figure 2.

Pilot Scale Vapor Extraction System (VES) Description

The VES consisted 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 layout of the VES is presented in Figure 2.

Vapor Extraction Well

Well EW-3 was used as the soil vapor 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 two 6,500-gallon tanks to contain groundwater extracted from EW-3.

Groundwater Extraction

Over the last several months, groundwater elevations increased to approximately 23-27 feet below ground surface (bgs), which is the target area for soil vapor extraction. Therefore, to maximize performance of the SVE system, Allterra dewatered EW-3 to expose the fuel-impacted soil between 25 and 30 feet bgs. Extracted groundwater is contained in two 6,500-gallon tanks and discharged under wastewater discharge permit.

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

During April 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, monitoring well 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 – April 2010

For April 2010, remediation consisted of operating a VES that removed soil vapors from well EW-3. During April, the VES operated for approximately 25 days at an average extraction rate of approximately 6 standard cubic feet per minute (scfm). On April 5, 6, 7, 15, and 30 Allterra collected vapor samples from the influent and effluent vapor streams of the VES. Vapor samples were collected from sample ports in 1-liter tedlar sample bags. VES operating parameters and other general observations were measured routinely through 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.

Groundwater Extraction System Operation and Data Collection - April 2010

During April, the groundwater extraction system (GWES) removed approximately 7,023-gallons of groundwater from well EW-3 at an approximate flow rate of 2 gallons per minute (gpm). On April 27, 2010 the GWES extracted approximately 3,738-gallons of groundwater from EW-1 at an approximate flow rate of 10 gpm. Groundwater extraction from EW-1 and EW-3 combined resulted in approximately 10,761-gallons in April. On April 5, 15, 20, 27, and 29 Allterra collected groundwater stream samples 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 through 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

Vapor samples from the VES and groundwater samples from the GWES were submitted under chain-of-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, ethylbenzene, 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 April

During April the VES removed approximately 45,936 cubic feet of soil vapor at an approximate flow rate of 6 standard cubic feet per minute (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 April indicated TPHg at concentrations ranging from 170 to 2,100 micrograms per liter (μ g/L), benzene at less than 1.0 to 3.6 μ g/L, toluene at 9.6 to 72 μ g/L, ethyl-benzene at 1.1 to 22 μ g/L, xylenes at 7.2 to 190 μ g/L, and MTBE at 130 to 420 μ g/L. Sample analytical results from the VES effluent (VES-EFF) indicated a TPHg concentrations ranging from at less than 25 to 39 μ g/L, benzene at less than 0.25 to 2.9 μ g/L, toluene at less than 0.25 to 1.6, ethylbenzene at less than 25 to 0.46 μ g/L, and xylenes at less than 0.25 to 4.1 μ g/L. Concentrations of MTBE were at or below laboratory detection limits in effluent vapor samples. Analytical data from VES samples are presented in Table 1.

VES Mass Removal

During April, the VES removed approximately 45,936 cubic feet of soil vapor (Table 4). Based on soil vapor removal data and laboratory analytical results, the VES removed approximately 2.76 pounds of TPHg, 0.01 pounds of benzene, and 0.88 pounds of MTBE during April (Table 5).

GWES Operation Results for April

During April the GWES removed approximately 10,761-gallons of groundwater from extraction wells EW-1 and EW-3. Groundwater extraction data including flow rates and volumes is presented in Tables 3, 4, and 6. Groundwater was extracted from EW-3 from April 5th to 26th and 28th through the 30th. For one day, April 27, groundwater was extracted from EW-1. Analytical results from the system groundwater influent stream samples (GW-IN) collected on April 5, 15, 20, 27 (EW-1), and 29, 2010 are summarized below:

Sample ID	Date	ТРНд	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE			
Extraction Well EW-3 (results in µg/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			
Extraction Well EW-1 (results in µg/L)										
GW-IN	4/27/10	1,900	19	69	41	350	3,500			

Additionally, analytical data from GWES samples are presented in Table 3 and certified analytical reports are attached as Appendix B.



GWES Mass Removal

During April 2010, the GWES removed approximately 10,761-gallons of groundwater (Table 4). Based on the volume of groundwater extracted and laboratory analytical results, the GWES removed approximately 2.56 pounds of TPHg, 0.021 pounds of benzene, and 14.3 pounds of MTBE during April 2010 (Table 6).

Mass Removal – VES and GWES

During April 2010 approximately 5.32 pounds of TPHg, 0.027 pounds of benzene, and 15.18 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 2010, Allterra concludes the following:

- Water levels in site wells were the highest they have been in several years. Therefore, groundwater extraction was used in conjunction with vapor extraction to maximize contaminant removal.
- The VES removed approximately 45,936 cubic feet of soil vapor during this quarter, resulting in the removal of approximately 2.76 pounds of vapor phase TPHg, 0.0069 pounds of vapor phase benzene, and 0.88 pounds of vapor phase MTBE.
- The GWES removed approximately 10,671 gallons of groundwater during this quarter, resulting in the removal of approximately 2.56 pounds of TPHg, 0.021 pounds of benzene, and 14.30 pounds of MTBE.
- In April, cumulative mass removed in both phases is approximately 5.32 pounds of TPHg, 0.028 pounds of benzene, and 15.18 pound of MTBE.
- Vapor and groundwater extraction from EW-3 appears to be effective at extracting contaminant mass from the source area

Recommendations

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

• Continue operation of VES and GWES equipment for the duration of the quarter.

Limitations

Allterra prepared this report for the use of Manwel and Samira Shuwayhat, Alameda County Health Services, and RWQCB in evaluating groundwater quality 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.



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

Sincerely,

Allterra Environmental, Inc.

James Allen, R.E.A.II Project Manager

Michael Killoran, P.G. 6670 Senior Geologist

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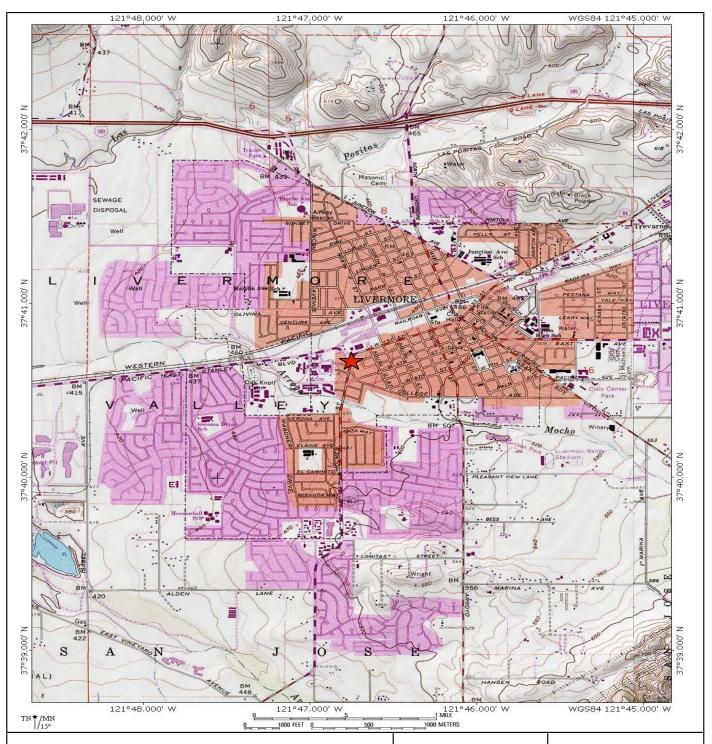
Appendix A, O&M Field Logs

Appendix B, Certified Analytical Reports and Chains of Custody

Mr. Jerry Wickham, Alameda County Department of Health Services



FIGURES 1-2



Site Vicinity Map

Livermore Gas and Minimart 160 Holmes Street Livermore, California Figure 1

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4/8/10

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TABLES 1-7

Table 1 Vapor Extraction Sample Results

160 Holmes Street, Livermore, California

Sample ID	Sample Date	Total Petroleum Hydrocarbons as (µg/L)	(μg/L)						
	Date	ТРНд	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE		
Extraction	Well EW-3								
VES-IN	4/5/10	770	2.3	26	5.5	47	310		
, 25 11,	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		
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	<25	0.76	< 2.5		
	4/29/10	<25	< 0.25	< 0.25	< 0.25	< 0.25	< 2.5		
Extraction VES-IN	Well EW-1 4/27/10*	<25	<0.25	0.31	<0.25	0.94	4.2		

Notes and Definitions:

VES-IN = vapor extraction system influent sample

VES-EFF = vapor extraction system effluent sample

TPHg = Total Petroleum Hydrocarbons as gasoline

MTBE = Methyl tertiary butyl ether

 μ g/L = Micrograms per liter

TPHg samples analyzed using EPA Method 8015Cm, BTEX and MTBE samples analyzed using EPA Method 8021b.



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

Table 2 Groundwater Extraction Sample Results

160 Holmes Street, Livermore, California

Sample ID	Sample Date	Total Petroleum Hydrocabons as Gasoline	Benzene	Toluene	Ethyl- benzene	Total Xylenes	МТВЕ
Extraction V GW-IN	Vell EW-3 4/5/10 4/15/10 4/20/10 4/29/10	78,000 33,000 30,000 30,000	550 470 260 300	1,800 1,900 1,300 1,500	2,100 1,400 840 1,000	16,000 6,300 7,400 5,300	310,000 300,000 170,000 190,000
Extraction V GW-IN	Vell EW-1 4/27/10	1,900	19	69	41	350	3,500

Notes and Definitions:

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.

^{-- =} not analyzed

Table 3
Pilot Scale Remediation System Operational Data

160 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 GWTS
4/5/10 to 4/30/10	6	25	EW-3*	4/5/10	2	10,761	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 4
Pilot Scale Remediation System Flow Volumes

160 Holmes Street, Livermore, California

	0 1 1	Vapor Data		Groundwa	ter Data		
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	45,936	45,936	7,023		Groundwater extracted from EW-3 on April 5 to April 26 and April 28 to April 30.	
4/3/10	Apm	45,730	45,930	3,738	ĺ	3,738 gallons of groundwater extracted from EW-1 on April 27.	

Notes:

SV = Soil vapor

GW = Groundwater

Table 5
Pilot Scale Remediation System – Vapor Phase Contaminant Mass Removal Data

441 Leigh Avenue, Los Gatos, California

	Average Influent		Cubic Feet Processed		Mass Removed (pounds)						
Date	Concentrations				Quarter (or Month) Total			Cumulative Total			
Bute	ТРНд	Benzene	MTBE	Quarter (or Month)	Total	ТРНд	Benzene	MTBE	ТРНд	Benzene	MTBE
April 2010	962	2.4	306	41,544	41,544	2.76	0.0069	0.88	2.76	0.0069	0.88

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

	Influent Concentration			Callona D	Callana Dua accad		Mass Removed (pounds)					
Data	(average from Monthly Samples)		(Samples)	Gallons Processed		Quarter/ Month Total			Cumulative Total			
Date	ТРНд	Benzene	MTBE	Quarterly/ Monthly	Total	ТРНд	Benzene	MTBE	ТРНд	Benzene	MTBE	
A mril 2010	42,750	395	242,500	7,023 (EW-3)	10.761	2.50	0.02	14.19	2.56	0.021	14.30	
April 2010	1,900*	19*	3,500*	3,738 (EW-1)	10,761	0.06*	0.0006*	0.11*	2.30	0.021	14.30	

Definitions and Notes:

All concnetrations listed in micrograms per liter (µg/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	Quarter/ Month Total			Cumulative Total					
	TPHg	Benzene	MTBE	TPHg	Benzene	MTBE			
April 2010	5.32	0.028	15.18	5.32	0.028	15.18			

 $\frac{Definitions \ and \ Notes:}{All \ concnetrations \ listed \ in \ micrograms \ per \ liter \ (\mu g/L)}{All \ masses \ listed \ in \ pounds \ (lb)}$

GWTS = Groundwater extraction and treatment system



APPENDIX A O&M Field Logs

P	ERSONNEI	: EA /TR	DATE:	4/	5/10				
		h	100		110				
VES OBSERVATION	NS and ME	ASUREMENTS UPON ARRIVAL		14.	Sample (Collection	1 - 1		
Hours O	perated upor	Arrival 8408.4	1	ES-IN	. 1 6	SAG			
	Batter	y Status Good	V	VES-EFF BAG					
IC-Engin	e at 40-Inch	es Water Yes No							
IC-Engine Water	Knockout	(% full): 0°%			Observa	tion Wells			
		9		Indi	uced Vacuur	ns (1st/2nd	/3rd)		
	VES Data		N	1W-1B					
Manometer Readings	VES-IN	-40 in 1/2"	N	IW-1A					
	VES-EFF			EW-1					
	EW-3	-40 in H20 v		EW-2	1				
Vapor Flow Rate	VES-IN	400 FPM			Depth t	o Water			
-					Onsite	Wells			
Groundwater	Extraction	Observations and Measurements	N	IW-1A	25,64	EW-1	26.10		
Groundwater	Flow Rate	ZO RPM	N	1W-1B	25.62	EW-2	26.28		
Tank Lev	el (% Full)	0%	N	IW-2A	25.52	EW-3	26.09		
Totaliz	er Reading	784444 356 9184	N	IW-3A	26.14				
	Influent Gr	oundwater Stream			Offsite	Wells			
Product Odor (fa	aint/strong)	STRONG	N	IW-7A	-81	MW-4A			
	Turbidity	LOW	N	1W-7B		MW-9A			
	рН		. N	IW-7C	Lur	MW-9B	- 63		
	Color	Clear	N	IW-7A		MW-5A			
	Sheen		N	IW-7B	450	MW-5B	0.5		
	Notes			17					
	Groundy	vater Sampling		TIN.	Departure	Checklist	AN.		
EW-	3 (influent)	V 10:00		IC	Engine off	1			
Ta	ink Sample			7.00	gine locked	,			
				V	Vells secure	/	N		
General OBSERVATIONS and MEASUREMENTS				Equipr	ment secure	/	43		
Weather Conditions?		GW pi	ping secure	1 9	1,4,5				
Tank Condition	Rose	er cast	Ta		er removed	1			
Piping condition			Site cleared	-/					
IC Engine Condition	(200								
Misc. Notes									

PERSONNEL: EA DO	DATE: 4-6-10					
VES OBSERVATIONS and MEASUREMENTS UPON ARRIVAL	Sample Collection					
Hours Operated upon Arrival 8412.2	VES-IN					
Battery Status Good	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 25166 6 8					
Manometer Readings VES-IN - 117 In 120	MW-1A 2570 6 8					
VES-EFF	EW-1 26 15 Ø Ø					
EW-3 = (1.3 in/H20	EW-2 24/16 8					
Vapor Flow Rate VES-IN 350 ft/min	Depth to Water					
	Onsite Wells					
Groundwater Extraction Observations and Measurements	MW-1A 25-70 EW-1 26.1					
Groundwater Flow Rate 2.13 g/min	MW-1B 25.66 EW-2 24.1					
Groundwater Flow Rate 2.13 g/nin Tank Level (% Full) ~ 5%	MW-2A 23,38 EW-3 25.90					
Totalizer Reading 356 9190 Gal	MW-3A 24.00					
Influent Groundwater Stream	Offsite Wells					
Product Odor (faint/strong) 5 fron 9	MW-7A MW-4A					
Turbidity (06)	MW-7B MW-9A					
рН	MW-7C MW-9B					
Color Cless	MW-7A MW-5A					
Sheen V	MW-7B MW-5B					
Notes						
Groundwater Sampling	Departure Checklist					
EW-3 (influent) NA	IC Engine off					
Tank Sample NA	IC Engine locked					
	Wells secure					
General OBSERVATIONS and MEASUREMENTS	Equipment secure					
Weather Conditions? Sunny	GW piping secure					
Tank Condition 600 A	Tank ladder removed					
Piping condition good	Site cleared					
IC Engine Condition 500d						
Misc. Notes Filled propane						

VES Operation and Maintenace Field Log

160 Holmes Street, Livermore, Califor	nia					
PERSONNEL: DO/ E4 DATI			no let	M.		
smore and framework of the nom we	Trans.	6.700	al you	d.		
VES OBSERVATIONS and MEASUREMENTS UPON ARRIVAL		Sample C	ollection			
Hours Operated upon Arrival 84 178	VES-IN	/				
Battery Status Good	VES-EFF					
IC-Engine at 40-Inches Water Yes No						
IC-Engine Water Knockout (% full):	Observation Wells					
	Indu	ced Vacuum	ns (1st/2nd/	(3rd)		
VES Data	MW-1B	0	D	0		
Manometer Readings VES-IN - 10,5	MW-1A	D	0	Ø		
VES-EFF —	EW-1	0	0	0		
EW-3 - 10-2	EW-2	0	0	Ø		
Vapor Flow Rate VES-IN 300 At/min		Depth to	Water			
		Onsite	Wells			
Groundwater Extraction Observations and Measurements	MW-1A	25.6	EW-1	16.05		
Groundwater Flow Rate . 75 g/mrn	MW-1B	25.6	EW-2	26-25		
Tank Level (% Full) ~ 5 %	MW-2A	25,4	EW-3	26.00		
Totalizer Reading 3569392	MW-3A	25.1				
Influent Groundwater Stream		Offsite	Wells			
Product Odor (faint/strong) Strong	MW-7A		MW-4A			
Turbidity low	MW-7B		MW-9A			
рН	MW-7C		MW-9B			
Color Clear	MW-7A		MW-5A			
Sheen	MW-7B		MW-5B			
Notes						
Groundwater Sampling		Departure	Checklist			
EW-3 (influent) V A	IC	Engine off	(key)			
Tank Sample		gine locked				
	V	ells secure				
General OBSERVATIONS and MEASUREMENTS	Equipn	nent secure		A		
Weather Conditions? SUNNY	GW pi	oing secure		1		
Tank Condition Good	Tank ladde	er removed				
Piping condition (Sep 1)	5	ite cleared		,		
IC Engine Condition Good	Propan	e tanks				
Misc. Notes End of Black hose bent/legt	-					

VES Operation and Maintenace Field Log

160 Holmes Street, Livermore, California -10 PERSONNEL: DATE: VES OBSERVATIONS and MEASUREMENTS UPON ARRIVAL Sample Collection Hours Operated upon Arrival 80% VES-IN VES-EFF Battery Status IC-Engine at 40-Inches Water Yes IC-Engine Water Knockout (% full): Observation Wells Induced Vacuums (1st/2nd/3rd) **VES Data** MW-1B Manometer Readings VES-IN -\ MW-1A VES-EFF EW-1 EW-2 EW-3 -11 Vapor Flow Rate VES-IN WOO Depth to Water Onsite Wells EW-1 MW-1A Groundwater Extraction Observations and Measurements EW-2 Groundwater Flow Rate MW-1B Tank Level (% Full) 506 MW-2A EW-3 Totalizer Reading \$69521 MW-3A Influent Groundwater Stream Offsite Wells Product Odor (faint/strong) MW-7A MW-4A MW-7B MW-9A Turbidity pH MW-7C MW-9B Color MW-7A MW-5A MW-7B MW-5B Sheen 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? GW piping secure Sanny 9000 Tank Condition Tank ladder removed Piping condition Site cleared 4000 Good IC Engine Condition Misc. Notes

ALLTERES

VES Operation and Maintenace Field Log 160 Holmes Street, Livermore, California 9-16 PERSONNEL: DATE: VES OBSERVATIONS and MEASUREMENTS UPON ARRIVAL Sample Collection Hours Operated upon Arrival 8426.7 VES-IN Battery Status good 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 VES-IN -((. 1 Manometer Readings MW-1A VES-EFF EW-1 EW-3 -11 3 EW-2 Vapor Flow Rate VES-IN Depth to Water Onsite Wells 25,91 75.47 MW-1A EW-1 Groundwater Extraction Observations and Measurements 26.09 MW-IB 25.42 Groundwater Flow Rate EW-2 Tank Level (% Full) MW-2A EW-3 pump on Totalizer Reading MW-3A Influent Groundwater Stream Offsite Wells Strons Product Odor (faint/strong) MW-7A MW-4A Turbidity MW-7B MW-9A pH MW-7C MW-9B clear 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? GW piping secure Sunni Tank Condition good Tank ladder removed Piping condition Site cleared IC Engine Condition

Misc. Notes

PERSONNEL: 4-12-10 EA 1	DATE:				
VES OBSERVATIONS and MEASUREMENTS UPON ARRIVAL	San	ple Collection			
Hours Operated upon Arrival 844/	VES-IN 6				
Battery Status _ low	VES-EFF				
IC-Engine at 40-Inches Water <u>Ves</u> No					
IC-Engine Water Knockout (% full):	Obs	ervation Wells			
	Induced V	acuums (1st/2nd/3rd)			
VES Data	MW-1B	1 0 0			
Manometer Readings VES-IN - 11.0 T. H20	MW-1A	00			
VES-EFF —	EW-1	6 6			
EW-3 - 11. 1 In 14.0	EW-2	00			
Vapor Flow Rate VES-IN 375 F/m	De	pth to Water			
		Onsite Wells			
Groundwater Extraction Observations and Measurements	MW-1A	EW-1 1			
Groundwater Flow Rate 2.9	MW-1B	EW-2			
Tank Level (% Full)	MW-2A	EW-3			
Totalizer Reading 3,5 70,615	MW-3A				
Influent Groundwater Stream	C	Offsite Wells			
Product Odor (faint/strong) 5 704 5	MW-7A	MW-4A			
Turbidity low	MW-7B	MW-9A			
рН	MW-7C	MW-9B			
Color Clt ~	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	cure			
General OBSERVATIONS and MEASUREMENTS	Equipment se	cure			
Weather Conditions? Tains	GW piping se				
Tank Condition 3000	Tank ladder removed				
Piping condition good	Site cle				
IC Engine Condition 900d	Propan B				
Misc. Notes No depth to water meter	tanhs				

PERSONNEL:	DATE: 4-13-10
VES OBSERVATIONS and MEASUREMENTS UPON ARRIVAL	Sample Collection
Hours Operated upon Arrival 08447.4	VES-IN None
Battery Status Bud - Replaced > Good	VES-EFF Wore
IC-Engine at 40-Inches Water No No	
IC-Engine Water Knockout (% full):	Observation Wells
	Induced Vacuums (1st/2nd/3rd)
VES Data	MW-1B 0 0 0
Manometer Readings VES-IN - 10-5 In Hyp	MW-1A O O O
VES-EFF	EW-1 0 0 0
EW-3 -11.0 In the	EW-2 0 0
Vapor Flow Rate VES-IN 300 f/min	Depth to Water
	Onsite Wells
Groundwater Extraction Observations and Measurements	MW-1A 23.60 EW-1 23.55
Groundwater Flow Rate 1.40 Gal/min	MW-1B 23.63 EW-2 23.73
Tank Level (% Full) ~20%	MW-2A 2300 EW-3 -
Totalizer Reading 3570983	MW-3A 23-57
Influent Groundwater Stream	Offsite Wells
Product Odor (faint/strong) Strong	MW-7A \ MW-4A
Turbidity low	MW-7B MW-9A
pH	MW-7C MW-9B
Color Clear	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? Clarky	GW piping secure
Tank Condition Good	Tank ladder removed
Piping condition (5000	Site cleared,
IC Engine Condition	Properse tents
Misc. Notes Replaced Retary, No Samples to	

PERSONNEL: DO	DATE: 4-11	1-10	-	
VES OBSERVATIONS and MEASUREMENTS UPON ARRIVAL		Sample C	Collection	
Hours Operated upon Arrival &451.2	VES-IN	1	re	
Battery Status Good	VES-EFF		ne	
IC-Engine at 40-Inches Water (Fes.) No		,,,,		
IC-Engine Water Knockout (% full):		Observat	ion Wells	
		ced Vacuun	ns (1st/2nd	/3rd)
VES Data at 10:00 an at 2:00	TAY AA TITO	0	0	0
Manometer Readings VES-IN - 49 m How -II. 5 in/H2	MW-1A	0	0	0
VES-EFF	EW-1	0	0	2
EW-3 -50.8 in Had-11.1 = 1/H.	e EW-2	Ð	0	0
Vapor Flow Rate VES-IN 350 Ft/min /400 H/min		Depth to	Water	
		Onsite	Wells	
Groundwater Extraction Observations and Measurements	MW-1A	23.1	EW-1	23.53
Groundwater Flow Rate 1.67 g/min	MW-1B	23.00	EW-2	23-7
Tank Level (% Full) ~20 %	MW-2A	22.95	EW-3	23.5
Totalizer Reading 357/211 Gal	MW-3A	23.55		
Influent Groundwater Stream		Offsite	Wells	
Product Odor (faint/strong) 5 trong	MW-7A	1	MW-4A	1
Turbidity Low	MW-7B		MW-9A	
рН	MW-7C		MW-9B	
Color clear	MW-7A		MW-5A	
Sheen	MW-7B		MW-5B	1
Notes				
Groundwater Sampling		Departure	Checklist	
EW-3 (influent)	IC	Engine off		
Tank Sample V	IC Eng	ine locked		, , , , , ,
	W	ells secure		
General OBSERVATIONS and MEASUREMENTS	Equipm	ent secure		
Weather Conditions? Sunny	GW pip	ing secure		
Tank Condition Good	Tank ladde			
Piping condition Good	S	ite cleared		
IC Engine Condition (900)	Propuse	toutes		
Misc. Notes VES Data taken twice,	Batte	eny		
One at start of day one at end.				
Higher at start				

VES Operation and Maintenace Field Log

p	ERSONNE	L: 512	DATE:	4-1	5-10		
	EKSONNE		DAIL.				
VES OBSERVATION	NS and ME	ASUREMENTS UPON ARRIVA	XL		Sample (Collection	
Hours C	perated upor	1 Arrival 845 6 . 1		VES-IN	1	bes	
		ry Status Good		VES-EFF	,	bag	
IC-Engir		es Water Yes No				3	
		(% full): 🔷 °/e			Observat	tion Wells	
				Indu	ced Vacuur	ns (1st/2nd/	(3rd)
	VES Dat	a		MW-1B		-	
Manometer Readings	VES-IN	-41.6 inthe		MW-1A			_
	VES-EFF			EW-1			
	EW-3	- 41.6 intle		EW-2	_		-
Vapor Flow Rate	VES-IN	300 CFM 2" P. PE.			Depth t	o Water	
					Onsite	Wells	
Groundwater	Extraction	Observations and Measurement	ts	MW-1A		EW-1	
Groundwate	r Flow Rate	WHE KRIM ZZ4	GPM	MW-1B	- 1	EW-2	,
Tank Le	vel (% Full)	1/2 FULL		MW-2A		EW-3	
Totali	zer Reading	3,571,593		MW-3A			4,-T,-
	Influent G	roundwater Stream			Offsite	Wells	
Product Odor (f	faint/strong)	STRONG		MW-7A	1	MW-4A	
	Turbidity	LOW		MW-7B		MW-9A	
	рН			MW-7C	11	MW-9B	1
	Color	Clev		MW-7A		MW-5A	
	Sheen	No.		MW-7B	1	MW-5B	
	Notes						
	Ground	water Sampling			Departure	Checklist	
EW-	-3 (influent)	3 VOA		IC	Engine off		
T	ank Sample			IC Eng	ine locked		4714
				W	ells secure		
General O	BSERVATI	ONS and MEASUREMENTS		Equipn	ent secure		
Weather Conditions?	500	my 60°F		GW pip	ing secure		
Tank Condition	Go	col	1	ank ladde	er removed		
Piping condition	Ro	2		S	ite cleared		
IC Engine Condition	F	g.l					
Miss Notes	- 1	0					

Misc. Notes VALLUUM REGIL IN- 67 Well head.

[·] No Depth To water meter.

PERSONNEL: 27	DATE: 4 - 16	-10		
VES OBSERVATIONS and MEASUREMENTS UPON ARRIVAL		Sample Collection		
Hours Operated upon Arrival 8462.2	VES-IN	ø		
Battery Status 900 d	VES-EFF	d		
IC-Engine at 40-Inches Water Yes No				
IC-Engine Water Knockout (% full):	1 1 5 1 1 1 - 1 5	Observation Wells		
	Induc	ed Vacuums (1st/2nd/3rd)		
VES Data	MW-1B			
Manometer Readings VES-IN - 37. 8	MW-1A			
VES-EFF	EW-1			
EW-3 - 38.2	EW-2			
Vapor Flow Rate VES-IN 300 C/m		Depth to Water		
		Onsite Wells		
Groundwater Extraction Observations and Measurements	MW-1A	EW-1		
Groundwater Flow Rate 60°6	MW-1B	EW-2		
Tank Level (% Full) V - Z gpm	MW-2A	EW-3		
Totalizer Reading 3,5 +1,748	MW-3A			
Influent Groundwater Stream		Offsite Wells		
Product Odor (faint/strong) 5 trus	MW-7A	MW-4A		
Turbidity Low	MW-7B	MW-9A		
рН	MW-7C	MW-9B		
Color cler	MW-7A	MW-5A		
Sheen	MW-7B	MW-5B		
Notes —				
Groundwater Sampling		Departure Checklist		
EW-3 (influent)	IC I	Engine off		
Tank Sample	IC Engi	ne locked		
	We	ells secure		
General OBSERVATIONS and MEASUREMENTS	Equipmo	ent secure		
Weather Conditions? Sunn	GW pipi	ng secure		
Tank Condition 900d	Tank ladder	removed		
Piping condition 900 d	Si	te cleared V		
IC Engine Condition 100d				
Misc. Notes P gugge Working grain	1			

VES Operation and Maintenace Field Log

	100 Hollines Street, Livermore, C:	amornia	7 10
P	ERSONNEL:	DATE: 4-1	1-10
	NS and MEASUREMENTS UPON ARRIVAL	San	nple Collection
Hours O	perated upon Arrival 8478.8	VES-IN	
	Battery Status Cool	VES-EFF	
IC-Engin	e at 40-Inches Water Yes No		
IC-Engine Water	r Knockout (% full):	Obs	servation Wells
		Induced V	/acuums (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	De	epth to Water
			Onsite Wells
Groundwater	Extraction Observations and Measurements	MW-1A	EW-1
Groundwater	r Flow Rate ~ 2 G PM	MW-1B	EW-2
Tank Lev	vel (% Full) ~75 %	MW-2A	EW-3
Totaliz	zer Reading 3,572,806	MW-3A	
	Influent Groundwater Stream		Offsite Wells
Product Odor (fa	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	Depa	rture Checklist
EW-	3 (influent)	IC Engir	
Ta	ank Sample	IC Engine lo	cked
		Wells so	ecure
General Ol	BSERVATIONS and MEASUREMENTS	Equipment se	ecure
Weather Conditions?	Sunny	GW piping se	ecure
Tank Condition	God	Tank ladder rem	
Piping condition	Good	Site cle	eared
IC Engine Condition	Good		
Misc. Notes	clutch on Ic not working.		

Shut down started working @1:30 PM

VES Operation and Maintenace Field Log 160 Holmes Street, Livermore, California PERSONNEL: DATE: VES OBSERVATIONS and MEASUREMENTS UPON ARRIVAL Sample Collection Hours Operated upon Arrival 8482.0 Water VES-IN VES-EFF Watter Battery Status 6000 IC-Engine at 40-Inches Water (Yes) IC-Engine Water Knockout (% full): Observation Wells Induced Vacuums (1st/2nd/3rd) MW-1B **VES Data** VES-IN 0 Manometer Readings MW-1A 0 VES-EFF 0 EW-1 EW-3 -40 in 120 10 0 0 EW-2 Vapor Flow Rate VES-IN Depth to Water Onsite Wells 25.06 25.5 Groundwater Extraction Observations and Measurements MW-1A EW-1 2.25 GPM 24,95 25.62 Groundwater Flow Rate MW-1B EW-2 75 % 25.5 24.85 Tank Level (% Full) MW-2A EW-3 25.45 Totalizer Reading 3,573.121 MW-3A Influent Groundwater Stream Offsite Wells Product Odor (faint/strong) STIZONG MW-7A MW-4A 60W Turbidity MW-7B MW-9A 6.53 MW-7C MW-9B pH Color Clea MW-7A MW-5A 51-1-Sheen MW-7B MW-5B Notes Groundwater Sampling Departure Checklist EW-3 (influent) YOA IC Engine off Tank Sample 3 YOA IC Engine locked Wells secure General OBSERVATIONS and MEASUREMENTS Equipment secure oury/ rain Weather Conditions? GW piping secure Tank Condition Tank ladder removed Piping condition Site cleared Gropane tako IC Engine Condition

Hose Adapter

Misc. Notes

PERSONNEL:	DATE: 4-2	1-10		
VES OBSERVATIONS and MEASUREMENTS UPON ARRIVAL		Sample (Collection	er.
Hours Operated upon Arrival 8487.6	VES-IN	10/	Oncetion	
Battery Status Good	VES-EFF	1/5	me	
IC-Engine at 40-Inches Water Yes No	VES-EFF	L WO	ne	
IC-Engine Water Knockout (% full):		Observat	ion Wells	
	Indu	iced Vacuur	ns (1st/2nd	/3rd)
VES Data	MW-1B	0	0	0
Manometer Readings VES-IN - 37-2 14150	MW-1A	0	0	9
VES-EFF —	EW-1	0	0	0
EW-3 - 36.9 En H50	EW-2	0	0	0
Vapor Flow Rate VES-IN 350 f/m		Depth to	o Water	
		Onsite	Wells	
Groundwater Extraction Observations and Measurements	MW-1A	24,95	EW-1	25.4
Groundwater Flow Rate 2 4 m	MW-1B	24.85	EW-2	25.5
Tank Level (% Full) 80%	MW-2A	25.75	EW-3	25.4
Totalizer Reading 3,573,545	MW-3A	24-37		1
Influent Groundwater Stream		Offsite	Wells	
Product Odor (faint/strong) Strong	MW-7A		MW-4A	
Turbidity Ow	MW-7B		MW-9A	
рН	MW-7C		MW-9B	
Color dear	MW-7A		MW-5A	
Sheen	MW-7B	1	MW-5B	1
Notes				
Groundwater Sampling		Departure	Checklist	
EW-3 (influent)	IC	Engine off		
Tank Sample		gine locked	V	
		ells secure	V	,
General OBSERVATIONS and MEASUREMENTS		nent secure	V	
Weather Conditions?		oing secure	1	
Tank Condition 6001	A CONTRACTOR	er removed	V	
Piping condition (908)		site cleared	1	
C Engine Condition (908)			V	
Misc. Notes		- 20		

PERSONNEL:	DATE: 4-22-10	
VES OBSERVATIONS and MEASUREMENTS UPON ARRIVAL	Sampl	e Collection
Hours Operated upon Arrival 8492.4	VES-IN Ø	
Battery Status Good	VES-EFF Ø	
IC-Engine at 40-Inches Water Yes No		
IC-Engine Water Knockout (% full):	Obser	vation Wells
	Induced Vac	uums (1st/2nd/3rd)
VES Data	MW-1B	0.0 0.0
Manometer Readings VES-IN -37.0	MW-1A	0.0 0.0
VES-EFF -O	EW-1	0.0 0.0
EW-3 -3812	EW-2	0-0 0-0
Vapor Flow Rate VES-IN 380 f/m	Dept	h to Water
	Ons	site Wells
Groundwater Extraction Observations and Measurements	MW-1A 24.8	
Groundwater Flow Rate 1, 8 GPM	MW-1B 24.75	
Tank Level (% Full) ~ 80%	MW-2A 2470	
Totalizer Reading 3,5 73 721	MW-3A 25 37	
Influent Groundwater Stream		site Wells
Product Odor (faint/strong) Strong	MW-7A	MW-4A
Turbidity (00	MW-7B	MW-9A
рН	MW-7C	MW-9B
Color Clear	MW-7A	MW-5A
Sheen	MW-7B	MW-5B
Notes ©		
Groundwater Sampling	Departi	ire Checklist
EW-3 (influent)	IC Engine	
Tank Sample	IC Engine lock	
	Wells secu	1
General OBSERVATIONS and MEASUREMENTS	Equipment secu	1/
Weather Conditions? Ship)	GW piping secu	
Tank Condition Joud	Tank ladder remov	
Piping condition 500d	Site clear	
IC Engine Condition 5000		
Misc. Notes		

PERSONNEL: U	DATE: 473-10			
VES OBSERVATIONS and MEASUREMENTS UPON ARRIVAL	Sample Collection			
Hours Operated upon Arrival 8478,6	VES-IN			
Battery Status 900d	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 0.0			
Manometer Readings VES-IN - 38.9 In Ho	MW-1A 6,0			
VES-EFF	EW-1 6.6			
EW-3	EW-2 0.0			
Vapor Flow Rate VES-IN	Depth to Water			
	Onsite Wells			
Groundwater Extraction Observations and Measurements	MW-1A 24.92 EW-1 25.38			
Groundwater Flow Rate	MW-1B 24-87 EW-2 25.5			
Tank Level (% Full)	MW-2A 24.77 EW-3			
Totalizer Reading 674, 270	MW-3A 75,59			
Influent Groundwater Stream	Offsite Wells			
Product Odor (faint/strong) 5+005	MW-7A MW-4A			
Turbidity low	MW-7B MW-9A			
рН	MW-7C MW-9B			
Color clear	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?	GW piping secure			
Tank Condition	Tank ladder removed			
Piping condition	Site cleared /			
IC Engine Condition				
Misc. Notes Tanh de(Neved @ 1:00 PM				

PERSONNEL: A	DATE: 4-24-10
VES OBSERVATIONS and MEASUREMENTS UPON ARRIVAL	L Sample Collection
Hours Operated upon Arrival 8507.7	VES-IN
Battery Status Good	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 0.0
Manometer Readings VES-IN - 38.2	MW-1A C.O
VES-EFF	EW-1 G. O
EW-3 - 39, (EW-2 O-C
Vapor Flow Rate VES-IN 380 F/m	Depth to Water
vapor row rate vas in sign of m	Onsite Wells
Groundwater Extraction Observations and Measurements	20121
Groundwater Flow Rate 1.8 GPM	MW-1B 24.91 EW-2 25.5
Tank Level (% Full) 95%	MW-2A 24 77 EW-3
Totalizer Reading 3,5 74,609	MW-3A 25,43
Influent Groundwater Stream	Offsite Wells
Product Odor (faint/strong) Strong	MW-7A MW-4A
Turbidity low	MW-7B MW-9A
pH Ø	MW-7C MW-9B
Color bru	MW-7A MW-5A
Sheen &	MW-7B MW-5B
Notes	MW 1B MW 3B
Groundwater Sampling	Departure Checklist
EW-3 (influent)	IC Engine off
Tank Sample	IC Engine locked V
Tank Sample	Wells secure
General OBSERVATIONS and MEASUREMENTS	Equipment secure
Weather Conditions? (~ h n ?	GW piping secure
	Tank ladder removed /
	Site cleared
	Site cleared [//
031 1 11	12-1 Am
Misc. Notes tilled all propane tanks	12 11/

PE	ERSONNEI	: A	DATE:	4-76-	10		
VEC OPCEDVATION	S and ME	ASUREMENTS UPON ARRIVAL			Sample C	Collection	
				VIEC IN	Sample	onection	
Hours Op		Arrival 85 12 6	-	VES-IN		-	
		y Status Good	L	VES-EFF			
IC-Engine	e at 40-Inche	es Water Yes No					
IC-Engine Water	Knockout	(% full):			Observat	ion Wells	
				Indu	ced Vacuun	ns (1st/2nd	/3rd)
	VES Data	1		MW-1B	00		
Manometer Readings	VES-IN			MW-1A	00		
	VES-EFF			EW-1	0.0		
	EW-3	6		EW-2	00		
Vapor Flow Rate	VES-IN				Depth to	o Water	
Tupor 1 Town Italia					Onsite	The second second	
Graundwater	Extraction	Observations and Measurements		MW-1A	24.78	EW-1	25.24
Groundwater		2 G PM		MW-1B	24.70	EW-2	25,38
	rel (% Full)	-10°6		MW-2A	24.60	EW-3	
	er Reading	3,575400		MW-3A	25.22	15,11-3	
Totaliz		roundwater Stream		Offsite Wells			
Desilent Odes (6		5 trobs		MW-7A	Offsite	MW-4A	
Product Odor (fa		1				MW-9A	
	Turbidity	0	-	MW-7B			
	pH			MW-7C		MW-9B	
	Color	bm		MW-7A		MW-5A	1
	Sheen	Ø		MW-7B		MW-5B	
	Notes	8					
	Ground	water Sampling			Departure	Checklist	
EW-	3 (influent)			IC	Engine off		
Ta	ank Sample			IC Eng	gine locked		
				V	Vells secure		
General O	BSERVATI	ONS and MEASUREMENTS		Equipr	nent secure		
Weather Conditions?	SLANG			GW pi	ping secure		
Tank Condition	good				er removed		
Piping condition	good				Site cleared		
IC Engine Condition	9600						
Misc. Notes							



VES Operation and Maintenace Field Log

PERSONNEL: PERSONNEL:	DATE: 4 - 27-10
	Lends W 1
VES OBSERVATIONS and MEASUREMENTS UPON ARRIVAL	Sample Collection
Hours Operated upon Arrival 85186	VES-IN
Battery Status Dead charget	VES-EFF
IC-Engine at 40-Inches Water No	19-9- 1-W
IC-Engine Water Knockout (% full):	Observation Wells
	Induced Vacuums (1st/2nd/3rd)
VES Data	MW-1B
Manometer Readings VES-IN -40 in H ₂ 6	MW-1A
VES-EFF	EW-1
EW-3 -40 In H20	EW-2
Vapor Flow Rate VES-IN 50 F/m	Depth to Water
	At Start Onsite Wells At Start
Groundwater Extraction Observations and Measurements	MW-1A 24.7 EW-1 25.1
Groundwater Flow Rate In Thral - 11 g/m	MW-1B' 24.6 EW-2 2527
Tank Level (% Full) 5%	MW-2A 24. 5 EW-3 25.15
Totalizer Reading 3575813	MW-3A 28.15
Influent Groundwater Stream	Offsite Wells
Product Odor (faint/strong)	MW-7A MW-4A
Turbidity OW	MW-7B MW-9A
рН	MW-7C MW-9B
Color clear	MW-7A MW-5A
Sheen	MW-7B MW-5B
Notes —	1
Groundwater Sampling	Departure Checklist
EW-1-EW-3 (influent) 3 Voq	IC Engine off
Tank Sample 3 Voa	IC Engine locked
	Wells secure
General OBSERVATIONS and MEASUREMENTS	Equipment secure
Weather Conditions? Charles Vain	GW piping secure
Tank Condition Green	Tank ladder removed
Piping condition Gord	Site cleared
IC Engine Condition 6000	
Misc. Notes Used EW-1 to extract victor	
Vapor concentration bels low/none	glan a
Who some studed at Days	

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VES Operation and Maintenace Field Log

	160 Holmes Street, Livermore, C	alifornia			
P	ERSONNEL:	DATE: 4	-28-10	7	
VES OBSERVATION	NS and MEASUREMENTS UPON ARRIVAL		Sample	Collection	
Hours O	perated upon Arrival 8523,8	VES-	N No	ne	
	Battery Status 6006 - Had to Jump	VES-E	FF No	ne	
IC-Engin	e at 40-Inches Water (Yes) No				
IC-Engine Water	Knockout (% full):		Observa	tion Wells	
		I	nduced Vacuu	ms (1st/2nd	1/3rd)
	VES Data	MW-1	B 0	0	0
Manometer Readings	VES-IN - 40 on 450	MW-1	A S	0	0
	VES-EFF	EW-	D	0	0
	EW-3 - 40 PM HSD	EW-2	9	15	0
Vapor Flow Rate	VES-IN 250		Depth t	o Water	
	<u> </u>		Onsite	Wells	
Groundwater	Extraction Observations and Measurements	MW-1	A 24.4	EW-1	25.15
Groundwater		MW-1	B 24.65	EW-2	25,3
Tank Lev	vel (% Full) ~ 50 %	MW-2	A 25.5	EW-3	25.05
Totaliz	zer Reading 3579048	MW-3	A 25.15	LEXAGER	1-1
	Influent Groundwater Stream		Offsite	e Wells	
Product Odor (fa	aint/strong)	MW-7	A (MW-4A	1
	Turbidity low	MW-7	В	MW-9A	
	pH	MW-7	C	MW-9B	
	Color clear	MW-7	A	MW-5A	
and the	Sheen	MW-7	В	MW-5B	
	Notes				
	Groundwater Sampling	1	Departure	Checklist	THE SAME
EW-	3 (influent) Wan e		IC Engine off		
Ta	ank Sample Vone	IC I	Engine locked	1	
			Wells secure	/	
General Ol	BSERVATIONS and MEASUREMENTS	Equ	pment secure	V	
Weather Conditions?	Cloudy / rain		piping secure	V	
Tank Condition	Good	Tank la	dder removed		
Piping condition	6002		Site cleared		
IC Engine Condition	6000				
Misc, Notes	Shortend rubber hose to fit EW-3.				

Had to charge buttony.

ALLTERRA

VES Operation and Maintenace Field Log 160 Holmes Street, Livermore, California

e, California	
DATE: 4-29-	10
Sa	mple Collection
1 Tree	t bas
VES-EFF	logg
	3
Ob	servation Wells
	Vacuums (1st/2nd/3
MW-1B	(150 2110/5
MW-1A	
	pth to Water
	Onsite Wells
Contract of the Contract of th	EW-1
	EW-2
	EW-3
	ffsite Wells
A CONTRACT OF THE PARTY OF THE	
	MW-4A
No. 2-23V (1997)	MW-9A
	MW-9B
	MW-5A
MW-/B	MW-5B
Depart	une Charle
The state of the s	
Site cleare	d
	VES-IN VES-EFF Ob Induced V MW-1B MW-1A EW-1 EW-2 De (MW-1A MW-1B MW-1A

ALLTERRA

VES Operation and Maintenace Field Log 160 Holmes Street, Livermore, California

PERSONNEL: A	DATE: 4-30-10	
VES OBSERVATIONS and MEASUREMENTS UPON ARRIVAL		
Hours Operated upon Arrival 8536.6		Collection
	VES-IN	1 bag
Battery Status (7000)	VES-EFF C	
IC-Engine at 40-Inches Water <u>Yes</u> No		
IC-Engine Water Knockout (% full):	Observa	tion Wells
		ms (1st/2nd/3rd)
VES Data	MW-1B 0.0	
Manometer Readings VES-IN - 38-6	MW-1A 0.0	
VES-EFF	EW-1 0.0	
EW-3 - 38.9	EW-2 O. O	
Vapor Flow Rate VES-IN 380 E/m	Depth t	o Water
		e Wells
Groundwater Extraction Observations and Measurements	MW-1A	EW-1
Groundwater Flow Rate 1.7 GPM	MW-1B	EW-2
Tank Level (% Full) № 70°6	MW-2A	EW-3
Totalizer Reading 3,579,901	MW-3A	
Influent Groundwater Stream		Wells
Product Odor (faint/strong) Stray	MW-7A	MW-4A
Turbidity Lew	MW-7B	MW-9A
рН	MW-7C	MW-9B
Color brn	MW-7A	MW-5A
Sheen	MW-7B	MW-5B
Notes	111111111111111111111111111111111111111	WW-3D
Groundwater Sampling	Departure	Checklist
EW-3 (influent)	IC Engine off	/
Tank Sample	IC Enginè locked	1
	Wells secure	/
General OBSERVATIONS and MEASUREMENTS	Equipment secure	~
Weather Conditions? Sanny	GW piping secure	/
Tank Condition Good	Tank ladder removed	V
Piping condition 500d	Site cleared	/
C Engine Condition 4000	Site cleared	
Misc. Notes Edded Orpane		

APPENDIX B Certified Analytical Reports and Chains of Custody

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	Date Sampled: 04/05/10
849 Almar Ave, Ste. C #281		Date Received: 04/05/10
01) Timila TTO, Sec. C #201	Client Contact: Nathaniel Allen	Date Reported: 04/08/10
Santa Cruz, CA 95060	Client P.O.:	Date Completed: 04/07/10

WorkOrder: 1004111

April 08, 2010

Dear Nathaniel:

Enclosed within are:

- 1) The results of the 3 analyzed samples from your project: #160,
- 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.

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		849	Almar Aven	ue, Suite C,	¥281											Turn.	Around	Time (circle o	ne)	RUSH	24HR	48F	IR 1	72HR (5 Day		
		S	anta Cruz, Ca	alifornia 950	60													-										
		W	ebsite: www.	allterraenv.c	om									8015/8021)														
	- I	hone: (831) 425-2608 F	acsimile: (83	31) 42	5-2609	9							08/				6					_	0				
Report and Bill to: A	Allterra Environi	nental, Inc.												015				260			Sp	020	20)	83				
Project Number:	160			-	_	-								× ×				A 8			solie	9/0	99	625		8.0		
Project Location:	160 Holmes S	treet, Liver	more, CA-											Ē			_	(EP	6	09	ed s	109	9	70,		/20		
Project Name:														3E			260	Tou	1266	82	No.	PA	× ×	82	Say	6.0		
Sampler Signature:			-											Ě	50)	8	× ×	tha	8 8	EPA	diss	S (E	E	EPA	ioas	07.70		
	Sample Co	ollection		Containers		N	Aatrix			P	reser	vatio	n	×	80.	80	EP.	Me	18er	l) s	Ta I	stals	ig s	S	N/B	010		-
Field Point Name Sample ID	Date	Time	Number of Containers	Container	Air	Water	Soil	Sludge	Other	lce	HCI	HNO3	Other	TPHg/ BTEX/ MTBE (EPA	BTEX (EPA 8020)	TPHd (EPA 8015)	5-fuel oxys (EPA 8260)	Ethanol and Methanol (EPA 8260)	Lead Scavengers (8260)	Total HVOCs (EPA 8260)	Hardness/Total dissolved solids	CAM-17 Metals (EPA 6010/6020)	LUFT 5 Metals (EPA 6010/6020)	PAH's/ PNA's (EPA 8270,625/8310)	Fish Toxicity/Bioassay	Lead (EPA 6010/200.9/200.8)		EDF required
VES-IN	4-5-10		1	BAG	Á									×	-		4,		_		-		_		100			×
VES - EFF	, ,		1	BAG	×									X														×
GW-IN	l		3	VOA	-	×					×			×														k
	~	1						0													-	_						
Received By:			Date: 4/-5/-/ O Date: Date: Date:	Time:	Rece	ived I	*	X N		_		,		Comi	ments			GO	E/t° OD CO AD SP CHLO	ACE A	BSENT ED IN L		PR	ESER	VED IN	LAB	Mar	-

McCampbell Analytical, Inc.

1534 Willow Pass Rd (925) 252-9262

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Prepared by: Samantha Arbuckle

Pittsburg, CA 94565-1701 WorkOrder: 1004111 ClientCode: ATRS WaterTrax WriteOn ✓ EDF Excel Fax ✓ Email HardCopy ThirdParty J-flag Report to: Bill to: Requested TAT: 5 days Nathaniel Allen Email: allterraenvironmental@yahoo.com, mic Accounts Payable Allterra Environmental, Inc. Allterra Environmental cc: Date Received: 04/05/2010 PO: 849 Almar Ave, Ste. C #281 849 Almar Ave, Ste. C #281 Santa Cruz, CA 95060 ProjectNo: #160 Santa Cruz, CA 95060 Date Printed: 04/05/2010 831-425-2608 FAX 831-425-2609 micah@allterraenv.com Requested Tests (See legend below) Lab ID **Client ID** Collection Date Hold 2 3 5 6 9 10 12 Matrix 1 11 1004111-001 VES-IN 4/5/2010 Α Air **VES-EFF** Air 4/5/2010 Α 1004111-002 1004111-003 **GW-IN** Water 4/5/2010 Α Test Legend: 5 2 3 G-MBTEX_AIR G-MBTEX_W PREDF REPORT 7 10 6 8

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

12

Comments:

Allterra Environmental, Inc

Client Name:

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

4/5/2010 9:57:56 PM

Date and Time Received:

Sample Receipt Checklist

Project Name:	#160					Check	klist completed and reviewed by	r: Samantha Arbuckle
WorkOrder N°:	1004111	Matrix	Air/Water			Carrie	r: <u>Benjamin Yslas (MAI Cou</u>	<u>rier)</u>
			Chain	of Cu	stody (C	OC) Informa	ation	
Chain of custody	present?			Yes	V	No 🗆		
Chain of custody	signed when relinqui	shed and	d received?	Yes	V	No 🗆		
Chain of custody	agrees with sample I	abels?		Yes	✓	No 🗌		
Sample IDs noted	by Client on COC?			Yes	V	No 🗆		
Date and Time of	collection noted by Cli	ient on C	OC?	Yes	~	No 🗆		
Sampler's name n	noted on COC?			Yes	✓	No 🗆		
			Sa	ample	Receipt	Information	•	
Custody seals into	act on shipping conta	iner/cool		Yes		No 🗆	· NA 🔽	
-	er/cooler in good cond			Yes	V	No 🗆		
	er containers/bottles?			Yes	✓	No 🗆		
Sample container	rs intact?			Yes	✓	No 🗆		
Sufficient sample	volume for indicated	test?		Yes	✓	No 🗌		
		Sa	ımple Preser	vatior	n and Ho	old Time (HT)) Information	
All samples receiv	ved within holding time			Yes	V	No 🗆	,	
Container/Temp E				Coole	r Temp:	4.8°C	NA 🗆	
	s have zero headspa	ce / no b	oubbles?	Yes	✓	No 🗆	No VOA vials submitted	
	ecked for correct pres			Yes	✓	No 🗌		
Metal - pH accept	table upon receipt (pH	l<2)?		Yes		No 🗆	NA 🗹	
Samples Receive	ed on Ice?			Yes	✓	No 🗆		
			(Ice Type	e: WE	TICE)		
* NOTE: If the "N	lo" box is checked, se	ee comm	nents below.					
=====		===					=======	======
Client contacted:			Date contact	ed:			Contacted by:	
Comments:								

Allterra Environmental, Inc	Client Project ID: #160	Date Sampled:	04/05/10
849 Almar Ave, Ste. C #281		Date Received:	04/05/10
	Client Contact: Nathaniel Allen	Date Extracted:	04/06/10
Santa Cruz, CA 95060	Client P.O.:	Date Analyzed:	04/06/10

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

Analytical methods: SW8021B/8015Bm Extraction method: SW5030B Work Order: 1004111 MTBE Lab ID Client ID Matrix TPH(g) Benzene Toluene Ethylbenzene Xylenes DF % SS Comments 001A VES-IN Α 770 310 2.3 26 5.5 47 102 d1 002A VES-EFF 39 ND 0.46 100 Α 2.6 1.6 4.1 1 d1 Reporting Limit for DF = 1; Α 2.5 0.25 0.25 0.25 0.25 25 μ g/L ND means not detected at or 0.05 0.005 0.005 0.005 0.005 mg/Kg

above the reporting limit	ာ	1.0	0.03	0.003	0.003	0.003	0.003	mg/ K g
* water and vapor samples are re	ported in	μg/L, soil/sludge/s	olid samples i	n mg/kg, wip	e samples in µ	ıg/wipe, produc	t/oil/non-aque	ous liquid samples in mg/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:

d1) weakly modified or unmodified gasoline is significant

Allterra Environmental, Inc	Client Project ID: #160	Date Sampled:	04/05/10
849 Almar Ave, Ste. C #281		Date Received:	04/05/10
	Client Contact: Nathaniel Allen	Date Extracted:	04/06/10
Santa Cruz, CA 95060	Client P.O.:	Date Analyzed:	04/06/10

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

Extraction method: SW5030B SW8021B/8015Bm Analytical methods: Work Order: 1004111 Client ID Matrix MTBE Toluene Ethylbenzene DF % SS Lab ID TPH(g) Benzene Xylenes Comments 001A VES-IN 210 4 102 Α 86 0.726.8 1.3 11 d1 002A VES-EFF Α 11 ND 0.79 0.41 0.11 0.94 1 100 d1

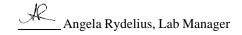
ppm (mg/L	ppm (mg/L) to ppmv (ul/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.													
Reporting Limit for DF =1;	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L					
ND means not detected at or above the reporting limit	S	NA	NA	NA	NA	NA	NA	1	mg/Kg					

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

d1) weakly modified or unmodified gasoline is significant



Allterra Environmental, Inc	Client Project ID: #160	Date Sampled:	04/05/10
849 Almar Ave, Ste. C #281		Date Received:	04/05/10
	Client Contact: Nathaniel Allen	Date Extracted:	04/07/10
Santa Cruz, CA 95060	Client P.O.:	Date Analyzed:	04/07/10

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1004111

Extraction	on method: SW5030B			Allalyt	icai metnods:	5 W 6021D/6013	DIII		WOII	k Order:	.004111
Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
003A	GW-IN	W	78,000	310,000	550	1800	2100	16,000	200	95	d1
	rting Limit for DF =1;	W	50	5.0	0.5	0.5	0.5	0.5		μg/L	
	eans not detected at or we the reporting limit	S	1.0	0.05	0.005	0.005	0.005	0.005		mg/K	

* 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:
- d1) weakly modified or unmodified gasoline is significant

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water/Air QC Matrix: Water BatchID: 49767 WorkOrder 1004111

EPA Method SW8021B/8015Bm		5	Spiked San	nple ID	: 1004101-0	01A								
Analyte	Sample	Spiked	MS	MSD	MSD MS-MSD LCS LCSD LCS-LCSD Accepta							e Criteria (%)		
7 mary to	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD		
TPH(btex ^f)	ND	60	88.8	94.3	6.03	97.1	96.4	0.695	70 - 130	20	70 - 130	20		
MTBE	ND	10	113	107	5.07	111	113	1.96	70 - 130	20	70 - 130	20		
Benzene	ND	10	101	103	1.18	98.7	97.4	1.30	70 - 130	20	70 - 130	20		
Toluene	ND	10	93.6	91.4	2.41	89.1	87	2.44	70 - 130	20	70 - 130	20		
Ethylbenzene	ND	10	90.3	90.5	0.202	88.9	86.9	2.25	70 - 130	20	70 - 130	20		
Xylenes	ND	30	104	103	0.979	103	100	2.68	70 - 130	20	70 - 130	20		
%SS:	105	10	106	100	5.60	97	99	2.26	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 49767 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1004111-001A	04/05/10	04/06/10	04/06/10 4:48 PM	1004111-002A	04/05/10	04/06/10	04/06/10 10:49 AM
1004111-003A	04/05/10	04/07/10	04/07/10 5:45 AM	1004111-003A	04/05/10	04/07/10	04/07/10 8:17 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).

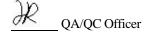
MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the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



McCampbell Analytical, 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 Holmes Street,	Date Sampled: 04/06/10
849 Almar Ave, Ste. C #281	Livermore, CA	Date Received: 04/06/10
019 11111111 1110, 500 0 11201	Client Contact: James Allen	Date Reported: 04/09/10
Santa Cruz, CA 95060	Client P.O.:	Date Completed: 04/09/10

WorkOrder: 1004144

April 09, 2010

-	-
llaar	James:
17541	Janues

Enclosed within are:

- 1) The results of the 2 analyzed samples from your project: 160 Holmes Street, Livermore, CA,
- 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.

1004144

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				ie, Suite C, #									Turn	Around					24HR			2HR	5 Day	
	Р	Sa We	nta Cruz, Ca bsite: www.	difornia 9506 allterraenv.co acsimile: (83	60 om	509					8015/8021)				, ((6	_	(01			
Report and Bill to: Al Project Number: Project Location: Project Name: Sampler Signature;	160 160 Holmes St						03				TPHg/ BTEX/ MTBE (EPA 8015	(02	5)	A 8260)	Ethanol and Methanol (EPA 8260)	s (8260)	otal HVOCs (EPA 8260)	lardness/Total dissolved solids	AM-17 Metals (EPA 6010/6020)	.UFT 5 Metals (EPA 6010/6020)	9AH's/ PNA's (EPA 8270,625/8310)	ioassay	cad (EPA 6010/200.9/200.8)	
	Sample Co		Sample (Containers		Matri	X	P	reser	rvation	×	80%	801	(EP	Me	nger	3	otal	ctal	stals	Y.s (ly/B	0109	p
Field Point Name / Sample ID	Date	Time	Number of Containers	Container Type	Air	Soil	Sludge	Ice	HCI	HNO; Other	TPHg/ BTE	BTEX (EPA 8020)	TPHd (EPA 8015)	5-fuel oxys (EPA 8260)	Ethanol and	Lead Scavengers (8260)	Total HVO	Hardness/T	CAM-17 M	LUFT 5 Mk	PAH's/ PN/	Fish Toxicity/Bioassay	Lead (EPA	EDF required
VES-IN VES-EFF		11:00	l l	Tedler Tedler	1			2			1											5		
																								•
													•											
			(1)		**																			
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														· · · ·										
Sampled By: Deven Received By:	Over	15	Date: 4-6-40 Date:	Time:	Receive	H	Val		4	1730	Com	1	HEAD :	CONDI	ABSE			ROPRI CONTA PRESE		N LAE	3			
Received By:			Date:	Time:	Receive	d By:						ş	PRESE	RVATIO		DAS O	& G j A	METALS	OTHER					

McCampbell Analytical, Inc.

1534 Willow Pass Rd

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Pittsburg, CA 94565-1701 WorkOrder: 1004144 ClientCode: ATRS (925) 252-9262 WaterTrax WriteOn ✓ EDF Excel Fax ✓ Email HardCopy ThirdParty J-flag Report to: Bill to: Requested TAT: 5 days James Allen Email: allterraenvironmental@yahoo.com, mic Accounts Payable Allterra Environmental, Inc. Allterra Environmental cc: Date Received: 04/06/2010 PO: 849 Almar Ave, Ste. C #281 849 Almar Ave, Ste. C #281 Santa Cruz, CA 95060 ProjectNo: 160 Holmes Street, Livermore, CA Santa Cruz, CA 95060 Date Printed: 04/06/2010 831-425-2608 FAX 831-425-2609 micah@allterraenv.com Requested Tests (See legend below) Lab ID **Client ID** Collection Date Hold 2 3 5 6 9 10 12 Matrix 1 11 1004144-001 VES-IN Air 4/6/2010 11:00 Α **VES-EFF** Air 1004144-002 4/6/2010 11:00 Test Legend: 5 2 G-MBTEX_AIR PREDF REPORT 3 7 6 10 8 11 12 The following SampIDs: 001A, 002A contain testgroup. Prepared by: Melissa Valles

Comments:

Sample Receipt Checklist

Client Name:	Allterra Environmental,	Inc		Date a	and Time Received:	4/6/2010 7	':10:52 PM
Project Name:	160 Holmes Street, Live	rmore, CA		Check	klist completed and	eviewed by:	Melissa Valles
WorkOrder N°:	1004144 Matrix	<u>Air</u>		Carrie	er: <u>Benjamin Ysla</u>	s (MAI Courie	<u>r)</u>
		Chain of Cu	ıstody	(COC) Informa	ation_		
Chain of custody	y present?	Yes	V	No 🗆			
Chain of custody	signed when relinquished and	d received? Yes	v	No 🗆			
Chain of custody	y agrees with sample labels?	Yes	✓	No 🗌			
Sample IDs noted	d by Client on COC?	Yes	V	No 🗆			
Date and Time o	f collection noted by Client on C	OC? Yes	V	No 🗆			
Sampler's name	noted on COC?	Yes	~	No 🗆			
		Sample	Rece	ipt Information	<u>1</u>		
Custody seals in	tact on shipping container/cool	er? Yes		No 🗆		NA 🔽	
Shipping contain	er/cooler in good condition?	Yes	V	No 🗆			
Samples in prop	er containers/bottles?	Yes	V	No 🗆			
Sample containe	ers intact?	Yes	✓	No 🗆			
Sufficient sample	e volume for indicated test?	Yes	✓	No 🗌			
	<u>Sa</u>	mple Preservatio	n and	Hold Time (HT) Information		
All samples rece	ived within holding time?	Yes	V	No 🗌			
Container/Temp	Blank temperature	Coole	er Tem	p:		NA 🗹	
Water - VOA via	ıls have zero headspace / no b	ubbles? Yes		No 🗆	No VOA vials subm	nitted 🗹	
Sample labels cl	hecked for correct preservation	? Yes	v	No 🗌			
Metal - pH accep	otable upon receipt (pH<2)?	Yes		No 🗆		NA 🔽	
Samples Receiv	ed on Ice?	Yes		No 🗹			
* NOTE: If the "I	No" box is checked, see comm	ents below.		====:	=====:	====	======
Client contacted:		Date contacted:			Contacted	l by:	
Comments:							

1534 Willow Pass Road, Pittsburg, CA 94565-1701 Telephone: 877-252-9262 Fax: 925-252-9269

Allterra Environmental, Inc Client Project ID: 160 Holmes Street, Date Sampled: 04/06/10 Livermore, CA Date Received: 04/06/10 849 Almar Ave, Ste. C #281 Client Contact: James Allen Date Extracted: 04/07/10 Santa Cruz, CA 95060 Client P.O.: 04/07/10 Date Analyzed:

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

Analytical methods: SW8021B/8015Bm Extraction method: SW5030B Work Order: 1004144 Lab ID Client ID Matrix TPH(g) MTBE Benzene Toluene Ethylbenzene Xylenes Comments 001A VES-IN A 2100 420 3.6 72 22 190 2 84 002A 99 VES-EFF 25 ND 2.9 0.36 d1 A 1.6 2.7 1 Reporting Limit for DF = 1; Α 25 2.5 0.25 0.25 0.25 0.25 $\mu g\!/\!L$ ND means not detected at or 0.05 1.0 0.005 0.005 0.005 0.005 mg/Kg above the reporting limit

* water and	vapor sampl	es are reported	10 Hg/L, SO1		samples in mg/kg.	wipe samples	in ug/wine.	product/oil/non-aqueoi	us liaind sambl	ec in mo/l
* water and	vapor sampi			I/SIIIage/Solia :	samples in mg/kg.					

[#] 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:

d1) weakly modified or unmodified gasoline is significant

Allterra Environmental, Inc	Client Project ID: 160 Holmes Street, Livermore, CA	Date Sampled: 04/06/10
849 Almar Ave, Ste. C #281	Liverniole, CA	Date Received: 04/06/10
,	Client Contact: James Allen	Date Extracted: 04/07/10
Santa Cruz, CA 95060	Client P.O.:	Date Analyzed: 04/07/10

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

Extraction	on method: SW5030	В		I	Analytical methods	: SW8021B/80		Wor	k Order:	1004144	
Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	VES-IN	A	580	120	1.1	19	5.1	43	2	84	d1
002A	VES-EFF	A	7.1	ND	0.88	0.42	0.082	0.61	1	99	d1

ppm (mg/I	ppm (mg/L) to ppmv (ul/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.														
Reporting Limit for DF =1;	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L						
ND means not detected at or above the reporting limit	S	NA	NA	NA	NA	NA	NA	1	mg/Kg						

^{*} vapor samples are reported in $\mu L/L$, soil/sludge/solid samples in mg/kg, wipe samples in $\mu g/wipe$, 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:

d1) weakly modified or unmodified gasoline is significant

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Air QC Matrix: Water BatchID: 49798 WorkOrder 1004144

EPA Method SW8021B/8015Bm Extraction SW5030B Spiked Sample ID: 1004148-0													
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	CS-LCSD Acceptance Criteria (%)				
7 tildiyto	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD	
TPH(btex)	ND	60	113	99.3	13.1	86.2	96.4	11.2	70 - 130	20	70 - 130	20	
MTBE	ND	10	106	91.7	14.4	98.8	89.3	10.2	70 - 130	20	70 - 130	20	
Benzene	ND	10	103	103	0	97.1	96.6	0.476	70 - 130	20	70 - 130	20	
Toluene	ND	10	94.7	92.1	2.77	87.4	85.7	1.90	70 - 130	20	70 - 130	20	
Ethylbenzene	ND	10	90.6	90.4	0.205	85.6	85.6	0	70 - 130	20	70 - 130	20	
Xylenes	ND	30	105	104	1.47	100	99.5	0.772	70 - 130	20	70 - 130	20	
%SS:	100	10	105	105	0	101	102	0.980	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 49798 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1004144-001A	04/06/10 11:00 AM	04/07/10	04/07/10 12:06 PM	1004144-002A	04/06/10 11:00 AM	04/07/10	04/07/10 11:36 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).

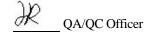
MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the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



McCampbell Analytical, 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; 160 Holmes Street, Livermore CA	Date Sampled: 04/07/10
849 Almar Ave, Ste. C #281	Liverniore CA	Date Received: 04/07/10
019 11111111 1110, 500 0 11201	Client Contact: James Allen	Date Reported: 04/14/10
Santa Cruz, CA 95060	Client P.O.:	Date Completed: 04/14/10

WorkOrder: 1004155

April 14, 2010

-	-
llaar	James:
17541	Janues

Enclosed within are:

- 1) The results of the 2 analyzed samples from your project: #160; 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.

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Report and Bill to: A		mental, Inc.											- 5					260			ds	020	020	1/83				
roject Number:	160												× ×					8 V			ilos	10/6	0/0	625		8.0		
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Field Point Name / Sample ID	Date	Time	Number of Containers	Container Type	Air	Water	Soil	Sludge	Other	lce	HC	HNO	Uther Linear TPHs/BTEX/MTBE/EPA		BTEX (EPA·8020)	TPHd (EPA 8015)	5-fuel oxys (EPA 8260)	Ethanol and Methanol (EPA 8260)	Lead Scavengers (8260)	Total HVOCs (EPA 8260)	Hardness/Total dissolved solids	CAM-17 Metals (EPA 6010/6020)	LUFT 5 Metals (EPA 6010/6020)	PAH's/ PNA's (EPA 8270,625/8310)	Fish Toxicity/Bioassay	Lead (EPA 6010/200.9/200.8)		
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eceived By:			Date:	Time:	Rece	ived E	By;	1				17.																

McCampbell Analytical, Inc.

1534 Willow Pass Rd

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

	rg, CA 94565-1701 252-9262					Worl	kOrder	: 1004	155	ClientCo		Code: A	TRS				
		WaterTrax	WriteOn	✓ EDF		Exce	I	Fax	[✓ Email		Hard	Сору	Thir	rdParty	□ J-	flag
Report to: James Aller		Email: a	ıllterraenviron	nmental@yahoo.d	com, n	nic		counts	Payabl				Requ	uested	TAT:	5	days
		cc: PO: ProjectNo: #	160; 160 Hol	mes Street, Liver	more	CA	84 Sa	9 Alma ınta Cru	nvironm r Ave, S uz, CA 9 Ilterrae	Ste. C #2 95060	281			e Rece e Prini	rived: ted:	04/07/ 04/07/	
									Req		Tests	(See le					1
Lab ID	Client ID		Matrix	Collection Date	Hold	1	2	3	4	5	6	7	8	9	10	11	12
1004155-001 1004155-002	VES IN VES EFF		Air Air	4/7/2010 11:00 4/7/2010 11:00		Α	Α										
Test Legend:																	
1 G-MB	TEX_AIR 2	PREDF REF	PORT	3				4	ı					5			
6	7			8				9)				[10			
The following Sar	mpIDs: 001A, 002A contain te	estgroup.											Prepai	red by:	Maria	Veneg	as

Comments:

Sample Receipt Checklist

Client Name:	Allterra Environmen	tal, Inc			Date a	and Time Received:	4/7/2010 2:	42:55 PM
Project Name:	#160; 160 Holmes St	reet, Livermore	CA		Check	dist completed and r	eviewed by:	Maria Venegas
WorkOrder N°:	1004155 Ma	atrix <u>Air</u>			Carrie	r: <u>Benjamin Ysla</u>	s (MAI Courier)	
		Chain of	f Cu	stody (COC) Informa	ation		
Chain of custody	present?	١	⁄es	V	No \square			
Chain of custody	signed when relinquished	d and received?	⁄es	V	No \square			
Chain of custody	agrees with sample labe	ls?	⁄es	✓	No 🗌			
Sample IDs noted	by Client on COC?	١	⁄es	V	No \square			
Date and Time of	collection noted by Client	on COC?	⁄es	V	No \square			
Sampler's name r	noted on COC?	١	⁄es	✓	No \square			
		Sam	nple	Receipt Inf	ormation	ļ		
Custody seals in	tact on shipping container.	/cooler?	⁄es		No \square		NA 🔽	
Shipping containe	er/cooler in good condition	? \	⁄es	V	No \square			
Samples in prope	er containers/bottles?	١	⁄es	V	No \square			
Sample containe	ers intact?	١	⁄es	\checkmark	No \square			
Sufficient sample	e volume for indicated test	? \	⁄es	✓	No 🗌			
		Sample Preserva	atior	n and Hold	Time (HT)) Information		
All samples recei	ived within holding time?	Υ	⁄es	✓	No 🗌			
Container/Temp B	Blank temperature	C	Coole	r Temp:			NA 🗹	
Water - VOA vial	ls have zero headspace /	no bubbles?	⁄es		No \square	No VOA vials subm	itted 🗹	
Sample labels ch	necked for correct preserv	ation?	⁄es	~	No 🗌			
Metal - pH accep	table upon receipt (pH<2)	? \	⁄es		No \square		NA 🗹	
Samples Receive	ed on Ice?	١	⁄es		No 🗹			
* NOTE: If the "N	No" box is checked, see c	omments below. — — — — — —						
Client contacted:		Date contacted	l:			Contacted	by:	
Comments:								

Allterra Environmental, Inc	Client Project ID: #160; 160 Holmes Street, Livermore CA	Date Sampled:	04/07/10
849 Almar Ave, Ste. C #281	Sueet, Livermore CA	Date Received:	04/07/10
	Client Contact: James Allen	Date Extracted:	04/07/10
Santa Cruz, CA 95060	Client P.O.:	Date Analyzed:	04/07/10

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

Analytical methods: SW8021B/8015Bm Extraction method: SW5030B Work Order: 1004155 Lab ID Client ID Matrix TPH(g) MTBE Benzene Toluene Ethylbenzene Xylenes DF % SS Comments001A VES IN Α 1500 400 3.3 57 19 110 6.7 116 002A 100 VES EFF ND 1.7 1.2 ND Α 33 1.6 1 d1 Reporting Limit for DF = 1; Α 2.5 0.25 0.25 0.25 0.25 25 μg/L ND means not detected at or 1.0 0.05 0.005 0.005 0.005 0.005 mg/Kg

* water and	l vapor sample	es are reported	l in iig/l.	soil/sliidge/solid	l samples in mg/kg	. wipe samp	oles in iig/wine	nroduct/oil/no			
					i sambies in mg/kg		oles in ug/wine		m-aqueous Hauia	sambles in mg/1	

above the reporting limit

[#] 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:

d1) weakly modified or unmodified gasoline is significant

Allterra Environmental, Inc	Client Project ID: #160; 160 Holmes	Date Sampled: 04/07/10
849 Almar Ave, Ste. C #281	Street, Livermore CA	Date Received: 04/07/10
	Client Contact: James Allen	Date Extracted: 04/07/10
Santa Cruz, CA 95060	Client P.O.:	Date Analyzed: 04/07/10

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

Extractio	on method: SW5030I	3		1		Wor	k Order:	1004155			
Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	VES IN	A	430	110	1.0	15	4.3	24	6.7	116	d1
002A	VES EFF	A	9.3	ND	0.52	0.30	ND	0.36	1	100	d1

ppm (mg/L	.) to ppm	v (ul/L) conver	sion for TPH(g)) assumes the m	olecular weight	of gasoline to b	e equal to that	of hexa	ne.
Reporting Limit for DF =1;	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L
ND means not detected at or above the reporting limit	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

^{*} vapor samples are reported in $\mu L/L$, soil/sludge/solid samples in mg/kg, wipe samples in $\mu g/wipe$, 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:

d1) weakly modified or unmodified gasoline is significant



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Air QC Matrix: Water BatchID: 49798 WorkOrder 1004155

EPA Method SW8021B/8015Bm Extraction SW5030B Spiked Sample ID: 1004148-001A												
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acc	eptance	Criteria (%)	1
ruidiyto	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex)	ND	60	113	99.3	13.1	86.2	96.4	11.2	70 - 130	20	70 - 130	20
MTBE	ND	10	106	91.7	14.4	98.8	89.3	10.2	70 - 130	20	70 - 130	20
Benzene	ND	10	103	103	0	97.1	96.6	0.476	70 - 130	20	70 - 130	20
Toluene	ND	10	94.7	92.1	2.77	87.4	85.7	1.90	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	90.6	90.4	0.205	85.6	85.6	0	70 - 130	20	70 - 130	20
Xylenes	ND	30	105	104	1.47	100	99.5	0.772	70 - 130	20	70 - 130	20
%SS:	100	10	105	105	0	101	102	0.980	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 49798 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1004155-001A	04/07/10 11:00 AM	04/07/10	04/07/10 10:05 PM	1004155-002A	04/07/10 11:00 AM	04/07/10	04/07/10 9:32 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.

QA/QC Officer

McCampbell Analytical, 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 Holmes Street	Date Sampled: 04/15/10
849 Almar Ave, Ste. C #281		Date Received: 04/15/10
019 Filmina Five, Ste. C #201	Client Contact: James Allen	Date Reported: 04/21/10
Santa Cruz, CA 95060	Client P.O.:	Date Completed: 04/19/10

WorkOrder: 1004421

April 21, 2010

Dear James:

Enclosed within are:

- 1) The results of the 3 analyzed samples from your project: **160 Holmes Street**,
- 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.

			LLTA	1/15	4													Ch	ain	of C	usto	ody	Rec	ord		_		
		849	Almar Avenu	e, Suite C,	#281											Turn	Around				RUSH					5 Day)	
		W	ianta Cruz, Cai /ebsite: www.a) 425-2608 Fa	allterraenv.c	om	5-260	9							8015/8021)										(0				1
Report and Bill to: A				icsimile. (6.	21172	2-200								15/				(09			- 10	62	6	831				
roject Number:	160	intental, the												80				182			hile	09/	602	25/8		8		
roject Location:	160 Holmes S	Street, Liver	more, CA											EP/				EP/	_	9	D S	010	010	9,0		200		
roject Name:														E (9	0 (260	826	lve	A 6	46	827	35	76.0		
Sampler Signature:			-	-										E	6	6	82	han	8	PA	ISS(Ē	EP.	PA	Sass	200		
	Sample C	Collection	Sample C	containers		1	Matrix	Y.		F	rese	rvatio	n	2	802	0.0	A D	Met	Sers	E	ald	als	ls (E (E	Bic	010		
Field Point Name Sample ID	Date	Time	Number of Containers	Container Type	Air	Water	Soil	Sludge	Other	Ice	HCI	HNO;	Other	TPHg/ BTEX/ MTBE (EPA	BTEX (EPA 8020)	TPH4 (EPA 8015)	5-fuel oxys (EPA 8260)	Ethanol and Methanol (EPA 8260)	Lead Scavengers (8260)	Total HVOCs (EPA 8260)	Hardness/Total dissolved solids	CAM-17 Metals (EPA 6010/6020)	LUFT 5 Metals (EPA 6010/6020)	PAH's/ PNA's (EPA 8270,625/8310)	Fish Toxicity/Bioassay	cad (EPA 6010/200.9/200.8)		
GW-IN	4-15-16	8:00	3 VOA-	-		X					X			X	-													
	4-15-10		1 bAG -		X								1	X														
VES EFF			1646 -		X									X														T
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McCampbell Analytical, Inc.

1534 Willow Pass Rd

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Pittsbu	rg, CA 94565-1701 252-9262				Work	Order	: 1004	421	(Client(Code: A	ATRS				
		WaterTrax	WriteOn	✓ EDF	Excel		Fax	[✓ Email		Hard	dCopy	Thi	rdParty	□ J-	flag
	ironmental, Inc Ave, Ste. C #281 , CA 95060	Email: allterraenvironi cc: PO: ProjectNo: 160 Holmes St		mental@yahoo.d	com, mic	All 84 Sa	Bill to: Accounts Payat Alterra Environ 849 Almar Ave, Santa Cruz, CA micah@allterra		nmental , Ste. C #281 A 95060			Date			5 days 04/15/2010 04/15/2010	
Lab ID	Client ID		Matrix	Collection Date	Hold 1	2	3	Req 4	uested 5	Tests 6	(See le	gend be	elow)	10	11	12
1004421-001 1004421-002 1004421-003	GW-IN VES-IN VES-EFF		Water Air Air	4/15/2010 8:00 4/15/2010 7:05 4/15/2010 6:58		A	A									
11	TEX_AIR 2 7 12 mpIDs: 002A, 003A contain te	G-MBTEX	(_W	3 PR	EDF REPORT		9						5 10 red by:	: Melis	sa Valle	es

Comments:

Sample Receipt Checklist

Client Name:	Allterra Enviro	nmental, Inc			Date a	and Time Received:	4/15/2010	12:37:03 PM
Project Name:	160 Holmes St	eet			Check	list completed and r	eviewed by:	Melissa Valles
WorkOrder N°:	1004421	Matrix Air/Water			Carrie	r: <u>Benjamin Ysla</u>	s (MAI Courie	<u>r)</u>
		<u>Chai</u>	n of Cu	istody (C	COC) Informa	ition		
Chain of custody	y present?		Yes	V	No 🗆			
Chain of custody	signed when reline	uished and received?	Yes	V	No 🗆			
Chain of custody	agrees with samp	e labels?	Yes	✓	No 🗆			
Sample IDs noted	d by Client on COC?		Yes	V	No 🗆			
Date and Time of	f collection noted by	Client on COC?	Yes	✓	No 🗆			
Sampler's name	noted on COC?		Yes	✓	No 🗆			
		<u>:</u>	Sample	Receipt	t Information			
Custody seals in	tact on shipping co	ntainer/cooler?	Yes		No 🗆		NA 🔽	
Shipping contain	er/cooler in good co	ndition?	Yes	V	No 🗆			
Samples in prop	er containers/bottle	s?	Yes	~	No 🗆			
Sample containe	ers intact?		Yes	✓	No 🗆			
Sufficient sample	e volume for indicat	ed test?	Yes	✓	No 🗌			
		Sample Pres	ervatio	n and Ho	old Time (HT)) Information		
All samples rece	ived within holding	ime?	Yes	✓	No 🗌			
Container/Temp	Blank temperature		Coole	er Temp:	18.2°C		NA 🗆	
Water - VOA via	ls have zero heads	pace / no bubbles?	Yes	~	No 🗆	No VOA vials subm	itted \square	
Sample labels ch	hecked for correct p	reservation?	Yes	~	No 🗌			
Metal - pH accep	otable upon receipt (pH<2)?	Yes		No 🗆		NA 🔽	
Samples Receive	ed on Ice?		Yes		No 🗹			
* NOTE: If the "I	No" box is checked	see comments below	=	===	====	=====	====	======
Client contacted:		Date conta	cted:			Contacted	by:	
Comments:								

A STATE OF THE STA	l.			
Allterra Environmental, Inc	Client Project ID: 160 Holmes Str	eet Date	e Sampled:	04/15/10
849 Almar Ave, Ste. C #281		Date	e Received:	04/15/10
	Client Contact: James Allen	Date	e Extracted:	04/15/10
Santa Cruz, CA 95060	Client P.O.:	Date	e Analyzed:	04/15/10

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

Analytical methods: SW8021B/8015Bm Extraction method: SW5030B Work Order: 1004421 Lab ID Client ID Matrix TPH(g) MTBE Benzene Toluene Ethylbenzene Xylenes DF % SS Comments 002A 14 VES-IN Α 270 270 2.7 1.3 10 115 d1 003A 0.98 ND 97 VES-EFF ND ND 0.48 0.76 Α 1 Reporting Limit for DF = 1; Α 2.5 0.25 0.25 0.25 0.25 25 μg/L ND means not detected at or

* water and	vapor samp	les are reporte	. SO11/S11		i samples 11	n mø/kø.	wipe samp	des in ilg/wine	nroduct/oil	/non-aqueous		n mg/L.
	vapor samp			iage/solia	i sambies ii							

0.005

0.005

0.005

0.005

mg/Kg

1.0

0.05

above the reporting limit

[#] 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:

d1) weakly modified or unmodified gasoline is significant

Allterra Environmental, Inc	Client Project ID: 160 Holmes Street	Date Sampled:	04/15/10
849 Almar Ave, Ste. C #281		Date Received	l: 04/15/10
,	Client Contact: James Allen	Date Extracted	1: 04/15/10
Santa Cruz, CA 95060	Client P.O.:	Date Analyzed	1: 04/15/10

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

Extraction method: SW5030B SW8021B/8015Bm Analytical methods: Work Order: 1004421 Client ID Matrix MTBE Toluene Ethylbenzene DF % SS Lab ID TPH(g) Benzene Xylenes Comments 002A VES-IN 75 4 115 Α 76 0.823.7 0.29 2.4 d1 003A VES-EFF Α ND ND 0.30 0.13 ND 0.17 1 97

ppm (mg/L	.) to ppn	nv (ul/L) conver	sion for TPH(g)	assumes the m	olecular weight	of gasoline to b	e equal to that	of hexa	ne.
Reporting Limit for DF =1;	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L
ND means not detected at or above the reporting limit	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

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

d1) weakly modified or unmodified gasoline is significant



Allterra Environmental, Inc	Client Project ID: 160 Holmes Street	Date Sampled:	04/15/10
849 Almar Ave, Ste. C #281		Date Received:	04/15/10
	Client Contact: James Allen	Date Extracted:	04/16/10-04/20/10
Santa Cruz, CA 95060	Client P.O.:	Date Analyzed:	04/16/10-04/20/10

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1004421

Extraction	on method: SW5030B			Analyt	tical methods:	SW8021B/8015	Bm		Wor	k Order:	1004421
Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	GW-IN	W	33,000	300,000	470	1900	1400	6300	20	100	d1
	rting Limit for DF =1;	W	50	5.0	0.5	0.5	0.5	0.5		μg/L	
	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 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:
- d1) weakly modified or unmodified gasoline is significant

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water/Air QC Matrix: Water BatchID: 49954 WorkOrder 1004421

EPA Method SW8021B/8015Bm Extraction SW5030B Spiked Sample ID: 1004374-037A														
Analyte	Sample	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)						
	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD		
TPH(btex)	ND	60	105	103	1.19	101	101	0	70 - 130	20	70 - 130	20		
MTBE	ND	10	99	97.3	1.74	96	101	5.31	70 - 130	20	70 - 130	20		
Benzene	ND	10	86.5	88.3	2.04	86	88.4	2.72	70 - 130	20	70 - 130	20		
Toluene	ND	10	85	87	2.27	84.4	86.8	2.83	70 - 130	20	70 - 130	20		
Ethylbenzene	ND	10	85.9	88.1	2.58	85.2	87.3	2.39	70 - 130	20	70 - 130	20		
Xylenes	ND	30	87.6	90.3	2.99	87	89.2	2.51	70 - 130	20	70 - 130	20		
%SS:	94	10	96	97	0.956	97	96	0.384	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 49954 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1004421-001A	04/15/10 8:00 AM	04/16/10	04/16/10 7:38 PM	1004421-001A	04/15/10 8:00 AM	04/20/10	04/20/10 9:09 AM
1004421-002A	04/15/10 7:05 AM	04/15/10	04/15/10 3:08 PM	1004421-003A	04/15/10 6:58 AM	04/15/10	04/15/10 3:38 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.

QA/QC Officer

McCampbell Analytical,	Inc.
"When Quality Counts"	

Allterra Environmental, Inc	Client Project ID: #160; 160 Holmes Street, Livermore CA	Date Sampled: 04/20/10
849 Almar Ave. Ste. C #281	Liverniole CA	Date Received: 04/20/10
-	Client Contact: James Allen	Date Reported: 04/21/10
Santa Cruz, CA 95060	Client P.O.:	Date Completed: 04/21/10

WorkOrder: 1004584

April 21, 2010

Dear James:

Enclosed within are:

- 2 analyzed samples from your project: #160; 160 Holmes Street, Livermore 1) The results of the
- 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.



			2707 447		1																	ody						
		849	Almar Avenu	ie, Suite C,	#281											Turn .	Around	Time (circle o	ne) I	RUSH	24HF	48F	IR 7	2HR	5 Day		
	?: -	Sa	anta Cruz, Ca ebsite: www.:) 425-2608 F:	lifornia 950 allterraenv.c	60 com	25-260	9							(8021)								0		10)			7,7	
Report and Bill to: A														015				260			95	020	20)	98				
Project Number: 160										80				A 00			olik	9/0	/60	25		8						
Project Location: 160 Holmes Street, Livermore, CA									EP				H	_	9	28	95	010	70,6		200							
Project Location: 160 Holmes Street, Livermore, CAP									Œ			99	10	260	82	100	PA	A 6	22	Say	6.0							
Sampler Signature:			<											E	6	8	82	han	- 00	P.	iss	Ξ.	E	PA	Sas	20		
outifier organica.	Sample C	ollection	Sample C	Containers	T	Λ	Aatrix			P	reser	vation	1	2	802	0	P.A	Met	gers	S.	al d	tals	als (S (E	Big	9		_
Field Point Name Sample ID	Date	Time	Number of Containers	Container Type	Air	Water	Soil	Sludge	Other	lce	HCI	HNOs	Other	TPHg/ BTEX/ MTBE (EPA 8015/8021)	BTEX (EPA 8020)	TPHd (EPA 8015)	5-fuel oxys (EPA 8260)	Ethanol and Methanol (EPA 8260)	Lead Scavengers (8260)	Total HVOCs (EPA 8260)	Hardness/Total dissolved solids	CAM-17 Metals (EPA 6010/6020)	LUFT 5 Metals (EPA 6010/6020)	PAH's/ PNA's (EPA 8270,625/8310)	Fish Toxicity/Bioassay	Lead (EPA 6010/200.9/200.8)		EDF required
T-1	4-20-10	10:30	3	VOA		1					1			X.										-45	1717			
GW-IN	4-20-10		3	VOA		X					X			X														
																					-							
	1																											
	1	-							1																			
Sampled By: Received By:		_	Date: 4-20-10 Date: 1/20/10 Date:	Time: 1315 Time: 1440 Time:	Rec	cived I	V		2		2		6	Comi	ments	:	HEA	D CON D SPA HLOR	NDITIO CE ABS INATES	SENT_ O IN LA	/	CON	ROPRI TAINI SERVI	ERS ED IN				

McCampbell Analytical, Inc.

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

erTrax	mnental@yahoo.	com, m	Excel	Bill to: Ac All 84 Sa	Fax ccounts Iterra El 9 Alma anta Cru icah@a	Payable nvironm r Ave, S ız, CA 9 Ilterraer	e ental te. C #2 5060 nv.com	281	ode: A	Copy Requ Date	Receive Print	TAT:		day 2010
ctNo: #160; 160 Ho Matrix Water	conmental@yahoo.	com, n	CA 1	Bill to: Ac All 84 Sa mi	ccounts Iterra Ei I9 Alma anta Cru icah@a	Payablo nvironm r Ave, S ız, CA 9 Ilterraer Req	e lental te. C #2 5060 nv.com	281 Tests ((See leç	Requ Date Date	Receipe Print	TAT: ived: fed:	1 04/20/ 04/20/	day 2010 2010
ctNo: #160; 160 Ho Matrix Water	Collection Date	rmore	1 A	Ac All 84 Sa mi	ccounts Iterra Ei I9 Alma anta Cru icah@a	nvironm r Ave, S ız, CA 9 Ilterraer	ental te. C #2 5060 nv.com	Tests (Date Date	Recei	ived: ted:	04/20/ 04/20/	2010 2010
Matrix Water	Collection Date 4/20/2010 10:30		1 A	84 Sa mi	l9 Alma anta Cru icah@a	r Ave, S ız, CA 9 Ilterraeı Req	te. C #2 5060 nv.com uested	Tests (Date	Print	ted:	04/20/	2010
Water	4/20/2010 10:30	Hold	Α	2	3							10	11	12
Water	4/20/2010 10:30	Hold	Α	2	3	4	5	6	7 	8	9	10	11	12
														4
Water	4/20/2010 10:35		Α						-					
					_						•			
	[8]					'						Maria	Venega	ıs
		3 8	<u> </u>		<u> </u>						9	8 9 10	8 9 10	

Comments: 24hr Rush

Sample Receipt Checklist

Client Name:	Allterra Environn	nental, Inc			Date ar	nd Time Received:	4/20/2010	2:55:48 PM
Project Name:	#160; 160 Holmes	Street, Livermo	re CA		Checkl	list completed and re	eviewed by:	Maria Venegas
WorkOrder N°:	1004584	Matrix Water			Carrier	: <u>Benjamin Ysla</u> :	s (MAI Courier	1
		<u>Chair</u>	of Cu	stody (C	OC) Informat	tion		
Chain of custody	/ present?		Yes	V	No 🗆			
Chain of custody	signed when relinqui	shed and received?	Yes	V	No \square			
Chain of custody	agrees with sample l	abels?	Yes	✓	No 🗌			
Sample IDs noted	d by Client on COC?		Yes	V	No \square			
Date and Time of	f collection noted by Cli	ent on COC?	Yes	✓	No \square			
Sampler's name r	noted on COC?		Yes	✓	No 🗆			
		<u>s</u>	ample	Receipt	Information			
Custody seals in	tact on shipping conta	iner/cooler?	Yes		No 🗆		NA 🔽	
Shipping contain	er/cooler in good cond	ition?	Yes	V	No 🗆			
Samples in prope	er containers/bottles?		Yes	✓	No 🗆			
Sample containe	ers intact?		Yes	✓	No 🗆			
Sufficient sample	e volume for indicated	test?	Yes	✓	No 🗌			
		Sample Prese	rvatior	n and Ho	old Time (HT)	Information		
All samples recei	ived within holding time	e?	Yes	✓	No 🗌			
Container/Temp I	Blank temperature		Coole	er Temp:	23.4°C		NA \square	
Water - VOA via	ls have zero headspa	ce / no bubbles?	Yes	V	No \square	No VOA vials subm	itted 🗆	
Sample labels ch	hecked for correct pres	servation?	Yes	~	No 🗌			
Metal - pH accep	otable upon receipt (pH	<2)?	Yes		No \square		NA 🗹	
Samples Receive	ed on Ice?		Yes	✓	No \square			
		(Ice Typ	e: WE	TICE)			
* NOTE: If the "N	No" box is checked, se	ee comments below.						
=====		======	=	:		======		======
Client contacted:		Date contac	ted:			Contacted	by:	
0								

Allterra Environmental, Inc	Client Project ID: #160; 160 Holmes Street, Livermore CA	Date Sampled:	04/20/10		
849 Almar Ave, Ste. C #281	Street, Livermore CA	Date Received:	04/20/10		
,	Client Contact: James Allen	Date Extracted:	04/20/10-04/21/10		
Santa Cruz, CA 95060	Client P.O.:	Date Analyzed:	04/20/10-04/21/10		

	G	asoline Ra	ange (C6-C12)) Volatile Hy	drocarbons	as Gasoline	e with BTEX a	and MTBE	*		
Extraction n	nethod: SW5030B			Analy	tical methods:	SW8021B/8015	5Bm		Wor	k Order:	1004584
Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	T-1	W	3800	61,000	14	18	ND<10	730	20	107	d1
002A	GW-IN	w	30,000	170,000	260	1300	840	7400	50	108	d1
											_
	g Limit for DF =1;	W	50	5.0	0.5	0.5	0.5	0.5		μg/I	
	he reporting limit	S	1.0	0.05	0.005	0.005	0.005	0.005		mg/k	Σg

* 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:

d1) weakly modified or unmodified gasoline is significant

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 50097 WorkOrder 1004584

EPA Method SW8021B/8015Bm	Extra	ction SW	5030B					S	Spiked San	nple ID:	: 1004595-0	101A	
Analyte	Sample	Spiked	MS	MSD	MSD MS-MSD LCS LCSD LCS-LCSD Acceptance C								
/ way to	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD	
TPH(btex [£]	ND	60	94.5	89.3	5.70	96.3	101	4.58	70 - 130	20	70 - 130	20	
MTBE	ND	10	102	88.5	13.8	89.3	89	0.387	70 - 130	20	70 - 130	20	
Benzene	ND	10	92	89.4	2.90	80.5	87.1	7.78	70 - 130	20	70 - 130	20	
Toluene	ND	10	89	85.8	3.68	78.4	84.7	7.69	70 - 130	20	70 - 130	20	
Ethylbenzene	ND	10	87.9	84.2	4.29	77.8	84.6	8.32	70 - 130	20	70 - 130	20	
Xylenes	ND	30	88.2	83.7	5.29	78.3	85	8.20	70 - 130	20	70 - 130	20	
%SS:	101	10	103	108	5.20	98	99	1.12	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 50097 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1004584-001A	04/20/10 10:30 AM	04/20/10	04/20/10 4:54 PM	1004584-001A	04/20/10 10:30 AM	04/21/10	04/21/10 2:46 AM
1004584-002A	04/20/10 10:35 AM	04/20/10	04/20/10 5:24 PM	1004584-002A	04/20/10 10:35 AM	04/21/10	04/21/10 10:50 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 = matrix interference and/or 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, or inconsistency in sample containers.

A QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

Allterra Environmental, Inc	Client Project ID: 160 Holmes Street, Livermore, CA	Date Sampled: 04/27/10
849 Almar Ave, Ste. C #281		Date Received: 04/27/10
049 Minut 11ve, 5te. C #201	Client Contact: Nathaniel Allen	Date Reported: 04/30/10
Santa Cruz, CA 95060	Client P.O.:	Date Completed: 04/30/10

WorkOrder: 1004834

April 30, 2010

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Enclosed within are:

- 1) The results of the 1 analyzed sample from your project: 160 Holmes Street, Livermore, CA,
- 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 Applytical Inc

McCampbell Analytical, Inc.

			LLT	-/ / Jes	-									Chain of Custody Record														
			Almar Aven													Turn /	Around					24HR			72HR (5 Day)	
	*.	W	anta Cruz, Ca ebsite: www.	allterraenv.c	om	5-260)9							8015/8021)				0					_	10)				
Report and Bill to: A	Allterra Enviror	mental, Inc.												015				1560			sp	9050	020	/83		_		
Project Number:	160													8 V				× ×			soli	9/01	9/0	625		0.8		
Project Location:	160 Holmes	Street, Liver	more, CA											(E)				Œ	6	09	8	8	98	270		720		
Project Name:			/											BE			260	lou	826	82	8	PA	P.A	8	ssa)	90.0		
Sampler Signature:			6											Σ	20)	5	× ×	otha	S.	EP/	dis	S (F	Ξ	EP	ioa	0/2		
	Sample C	Collection	_	Containers	-	- 1	Matri	X		F	reser	rvatio	n	×	80	80	(EP	ž	18c	18	otal	etal	120	s,	y/B	201		p
Field Point Name Sample ID	Date	Time	Number of Containers	Container	Air	Water	Soil	Sludge	Other	lce	HCI	HNOs	Other	TPHg/ BTEX/ MTBE (EPA	BTEX (EPA 8020)	TPHd (EPA 8015)	5-fuel oxys (EPA 8260)	Ethanol and Methanol (EPA 8260)	Lead Scavengers (8260)	Total HVOCs (EPA 8260)	Hardness/Total dissolved solids	CAM-17 Metals (EPA 6010/6020)	LUFT 5 Metals (EPA 6010/6020)	PAH's/ PNA's (EPA 8270,625/8310)	Fish Toxicity/Bioassay	Lead (EPA 6010/200.9/200.8)		EDF required
YES IN	4.2710	1:00		BAG										X										•				
Sampled By: Received By:			Date: 4-17-10 Date: 4/27/10 Date: 4/27/10	Time:	Reco	eived eived	By	<u> </u>)	~		4	27		ments			DEC	t O COM D SPACHLORI		SENT!	AP B VI	PROP CON' PRE METAL	PRIATE TAINE SERVI SI OTH	RS N LIER) AB .M	lk:	

McCampbell Analytical, Inc.

1534 Willow Pass Rd (925) 252-9262

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Pittsburg, CA 94565-1701 WorkOrder: 1004834 ClientCode: ATRS WaterTrax WriteOn EDF Excel Fax ✓ Email HardCopy ThirdParty J-flag Report to: Bill to: Requested TAT: 5 days Nathaniel Allen Email: allterraenvironmental@yahoo.com, mic Accounts Payable Allterra Environmental, Inc. Allterra Environmental cc: Date Received: 04/27/2010 PO: 849 Almar Ave, Ste. C #281 849 Almar Ave, Ste. C #281 Santa Cruz, CA 95060 ProjectNo: 160 Holmes Street, Livermore, CA Santa Cruz, CA 95060 Date Printed: 04/27/2010 831-425-2608 FAX 831-425-2609 micah@allterraenv.com Requested Tests (See legend below) Lab ID **Client ID** Collection Date Hold 2 3 5 6 8 9 10 12 Matrix 1 11 1004834-001 VES-IN Air 4/27/2010 13:00 Test Legend: 5 2 G-MBTEX_AIR 3 7 10 6 8 12 The following SampID: 001A contains testgroup. Prepared by: Samantha Arbuckle

Comments:

Allterra Environmental, Inc

Client Name:

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

4/27/2010 6:24:28 PM

Date and Time Received:

Sample Receipt Checklist

Project Name:	160 Holmes Stre	eet, Live	ermore, CA	Check	Checklist completed and reviewed by: Samantha Arbuckle						
WorkOrder N°:	1004834	Matrix	<u>Air</u>			Carrie	r: <u>Benjamin Yslas</u>	(MAI Courie	r).		
			<u>Chai</u>	n of Cu	stody	(COC) Informa	<u>ation</u>				
Chain of custody	present?			Yes	V	No \square					
Chain of custody	signed when relinqu	uished an	d received?	Yes	V	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 0	Client on C	COC?	Yes	✓	No 🗆					
Sampler's name r	noted on COC?			Yes	~	No 🗆					
			<u> </u>	Sample	Recei	pt Information	1				
Custody seals in	tact on shipping con	tainer/cod	oler?	Yes		No \square		NA 🔽			
Shipping contain	er/cooler in good cor	ndition?		Yes	V	No \square					
Samples in prope	er containers/bottles	?		Yes	✓	No \square					
Sample containe	ers intact?			Yes	✓	No \square					
Sufficient sample	e volume for indicate	d test?		Yes	✓	No 🗌					
		Sa	ample Prese	ervatio	n and I	Hold Time (HT)) Information				
All samples recei	ived within holding ti	me?		Yes	✓	No 🗌					
Container/Temp I	Blank temperature			Coole	er Temp):		NA 🗹			
Water - VOA via	ls have zero headsp	ace / no l	bubbles?	Yes		No 🗆	No VOA vials submi	tted 🗹			
Sample labels ch	necked for correct pr	eservatio	n?	Yes	V	No 🗌					
Metal - pH accep	table upon receipt (p	H<2)?		Yes		No 🗆		NA 🗹			
Samples Receive	ed on Ice?			Yes		No 🗸					
* NOTE: If the "N	No" box is checked,	see comr	ments below. — — — —	===	===	=====	=====	====	======		
Client contacted:			Date contac	cted:			Contacted	by:			
Comments:											

Santa Cruz, CA 95060

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

Date Analyzed:

04/28/10

Allterra Environmental, Inc

Client Project ID: 160 Holmes Street,
Livermore, CA

Date Sampled: 04/27/10

Date Received: 04/27/10

Client Contact: Nathaniel Allen

Date Extracted: 04/28/10

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1004834

Client P.O.:

Extractio	n method: SW5030B			Analy	tical methods: S	SW8021B/8015	Bm		Wor	k Order:	1004834
Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	VES-IN	A	ND	4.2	ND	0.31	ND	0.94	1	96	
Repor	ting Limit for DF =1;	A	25	2.5	0.25	0.25	0.25	0.25		μg/I	
	eans not detected at or the reporting limit	S	1.0	0.05	0.005	0.005	0.005	0.005		mg/K	

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg,	wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.
* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg,	wipe samples in μ g/wipe, product/oil/non-aqueous liquid samples in mg/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:

Allterra Environmental, Inc	Client Project ID: 160 Holmes Street, Livermore, CA	Date Sampled:	04/27/10
849 Almar Ave, Ste. C #281	Liverniole, CA	Date Received:	04/27/10
	Client Contact: Nathaniel Allen	Date Extracted:	04/28/10
Santa Cruz, CA 95060	Client P.O.:	Date Analyzed:	04/28/10

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

Extraction	on method: SW5030	В		I	Analytical methods	s: SW8021B/80	15Bm		Wor	k Order:	1004834
Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	VES-IN	A	ND	1.2	ND	0.080	ND	0.21	1	96	

ppm (mg/I	ppm (mg/L) to ppmv (ul/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.														
Reporting Limit for DF =1;	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L						
ND means not detected at or above the reporting limit	S	NA	NA	NA	NA	NA	NA	1	mg/Kg						

^{*} vapor samples are reported in $\mu L/L$, soil/sludge/solid samples in mg/kg, wipe samples in $\mu g/wipe$, 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:

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Air QC Matrix: Water BatchID: 50257 WorkOrder 1004834

EPA Method SW8021B/8015Bm	Extra	tion SW	5030B	Spiked Sample ID: 1004843-004									
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acc	eptance	Criteria (%)	1	
, undry to	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD	
TPH(btex)	ND	60	101	97.3	3.91	101	96.5	4.73	70 - 130	20	70 - 130	20	
MTBE	ND	10	104	102	1.61	104	105	0.587	70 - 130	20	70 - 130	20	
Benzene	ND	10	89.4	90.5	1.21	88.4	88.7	0.409	70 - 130	20	70 - 130	20	
Toluene	ND	10	91.4	91	0.344	89.1	89.1	0	70 - 130	20	70 - 130	20	
Ethylbenzene	ND	10	89.9	89.9	0	87.1	88	1.02	70 - 130	20	70 - 130	20	
Xylenes	ND	30	92.4	91.4	1.09	88.9	89.7	0.958	70 - 130	20	70 - 130	20	
%SS:	99	10	95	96	1.22	94	95	1.52	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 50257 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1004834-001A	04/27/10 1:00 PM	M 04/28/10	04/28/10 12:50 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).

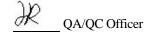
MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the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

Allterra Environmental, Inc	Client Project ID: 160 Holmes Street, Livermore, CA	Date Sampled: 04/27/10
849 Almar Ave, Ste. C #281		Date Received: 04/27/10
019 Filmar Frve, 8te. C #201	Client Contact: Nathaniel Allen	Date Reported: 05/03/10
Santa Cruz, CA 95060	Client P.O.:	Date Completed: 05/03/10

WorkOrder: 1004833

May 03, 2010

1		3 T .1		•
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Enclosed within are:

- 1) The results of the 1 analyzed sample from your project: 160 Holmes Street, Livermore, CA,
- 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.

	ALLTERES																Ch	ain	of C	Cust	ody	Rec	ord		_		
			Almar Aven													Turn	Around	Time (circle o	ne)	RUSH	24HR	481	IR 7	2HR (5 Day	
	•	W	anta Cruz, Ca 'ebsite: www.) 425-2608 F	allterraenv.c	com	5-260	19							8015/8021)				0				0		(01			
Report and Bill to: A														015				260			ds	020	020	93			
Project Number:	160													× ×				×8 ×			100	9/01	0/6	625		8.0	
Project Location:									E			÷	Ξ.	6	090	pay	09	109	270		20						
Project Name:														BE			260	lou	826	80	los	PA	PA	00	SSa	8	
Sampler Signature:					-						-		_	Ξ	20)	15	A &	etha	20	EP.	-S	ls (I	E.	E	Sioa	0.72	
	Sample C	ollection		Containers	-		Matri	X		1	rese	rvatio	n	×	08.1	80	Ē	×	nge	S	ota	eta	42	.53	J. B.	9	8
Field Point Name Sample ID	Date	Time	Number of Containers	Container Type	Air	Water	Soil	Sludge	Other	lce	HCI	HNO,	Other	TPHg/ BTEX/ MTBE (EPA	BTEX (EPA 8020)	TPHd (EPA 8015)	5-fuel oxys (EPA 8260)	Ethanol and Methanol (EPA 8260)	Lead Scavengers (8260)	Total HVOCs (EPA 8260)	Hardness/Total dissolved solids	CAM-17 Metals (EPA 6010/6020)	LUFT 5 Metals (EPA 6010/6020)	PAH's/ PNA's (EPA 8270,625/8310)	Fish Toxicity/Bioassay	Lead (EPA 6010/200.9/200.8)	EDF required
CM-IN-EM-	1 4.27.10	1:50	3	VOA		×			+	X	×			X													
2																											
																							-		7		
-																											
	4)												_ 4	c					
Received By:			Date: 4.27.0 Date: 4.27.0 Date: 4.27.0 Date: 4.27.0	Time: 130 Time: 1745 Time:	Reco	eived eived	By:	V	~		10	17:	D 45	Com	ments	:			OD CO AD SP/ CHLOR	NOTTO ACE AL	VOMO	AB M	PPRO CON PRE META	PRIAT TAINE SERV	E ERS_MED IN	LAB_N	40

McCampbell Analytical, Inc.

1534 Willow Pass Rd

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Pittsburg, (925) 252-	CA 94565-1701 9262					Work	Order	: 1004	1833	(ClientC	ode: A	TRS				
		WaterTrax	WriteOr	n EDF		Excel		Fax	[✓ Email		Hard	Сору	Thir	dParty	☐ J-	flag
Report to: Nathaniel Aller Allterra Enviror 849 Almar Ave Santa Cruz, CA 831-425-2608	nmental, Inc , Ste. C #281	cc: PO:	allterraenviro 160 Holmes S		ic	All 84 Sa	counts Iterra E 9 Alma anta Cru	Payable nvironm Ir Ave, S uz, CA 9 Illterrael	nental Ste. C #2 95060			Date	uested Rece Print	ived:	5 (04/27/) 04/27/		
									Req	uested	Tests	(See le	gend be	elow)			
Lab ID	Client ID		Matrix	Collection Date	Hold	1	2	3	4	5	6	7	8	9	10	11	12
1004833-001	GW-IN-EW-1		Water	4/27/2010 13:50		Α											
Test Legend: 1	X_W 2 7 12			3 8					4 9					5 10			
												P	repared	l by: Sa	amanth	ıa Arbu	ckle

Comments:

Allterra Environmental, Inc

Client Name:

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

4/27/2010 6:19:26 PM

Date and Time Received:

Sample Receipt Checklist

Project Name:	160 Holmes Stree	t, Livermore, CA	A		Check	list completed and reviewe	ed by: Samantha Arbuckle
WorkOrder N°:	1004833	Matrix Water			Carrie	r: <u>Benjamin Yslas (MAI</u>	Courier)
		<u>Chai</u>	n of Cu	stody (C	OC) Informa	<u>ition</u>	
Chain of custody	present?		Yes	V	No 🗆		
Chain of custody	signed when relinquis	shed and received?	Yes	V	No 🗆		
Chain of custody	agrees with sample la	abels?	Yes	✓	No 🗌		
Sample IDs noted	by Client on COC?		Yes	V	No 🗆		
Date and Time of	collection noted by Clie	ent on COC?	Yes	✓	No 🗆		
Sampler's name n	oted on COC?		Yes	~	No 🗆		
		<u>;</u>	Sample	Receipt	Information	ı	
Custody seals into	act on shipping contai		Yes		No 🗆	NA 🛂	2
Shipping containe	er/cooler in good condi	tion?	Yes	V	No 🗆		
Samples in prope	er containers/bottles?		Yes	✓	No 🗆		
Sample container	rs intact?		Yes	✓	No 🗆		
Sufficient sample	volume for indicated t	est?	Yes	V	No 🗌		
		Sample Pres	ervatio	n and Ho	old Time (HT)) Information	
All samples receiv	ved within holding time	?	Yes	✓	No 🗌		
Container/Temp B	Blank temperature		Coole	er Temp:	2.8°C	NA []
Water - VOA vials	s have zero headspac	e / no bubbles?	Yes	✓	No 🗆	No VOA vials submitted	3
Sample labels ch	ecked for correct pres	ervation?	Yes	~	No 🗌		
Metal - pH accept	table upon receipt (pH-	<2)?	Yes		No 🗆	NA 🗹	2
Samples Receive	ed on Ice?		Yes	✓	No 🗆		
		(Ice Ty	pe: WE	T ICE)		
* NOTE: If the "N	lo" box is checked, se	e comments below.					
=====	======	=====	=		====	=======	=======
Client contacted:		Date conta	cted:			Contacted by:	
Comments:							

1534 Willow Pass Road, Pittsburg, CA 94565-1701 Telephone: 877-252-9262 Fax: 925-252-9269

Allterra Environmental, Inc	Client Project ID: 160 Holmes Street, Livermore, CA	Date Sampled:	04/27/10
849 Almar Ave, Ste. C #281	Liverniole, CA	Date Received:	04/27/10
	Client Contact: Nathaniel Allen	Date Extracted:	04/29/10-04/30/10
Santa Cruz, CA 95060	Client P.O.:	Date Analyzed:	04/29/10-04/30/10

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

Analytical methods: SW8021B/8015Bm Extraction method: SW5030B Work Order: 1004833 Lab ID Client ID Matrix TPH(g) MTBE Benzene Toluene Ethylbenzene Xylenes % SS Comments 001A GW-IN-EW-1 W 1900 3500 19 69 41 350 99 Reporting Limit for DF = 1; W 0.5 0.5 50 5.0 0.5 0.5 μ g/L ND means not detected at or 0.05 1.0 0.005 0.005 0.005 0.005 mg/Kg above the reporting limit

* 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:

d1) weakly modified or unmodified gasoline is significant

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 50257 WorkOrder 1004833

EPA Method SW8021B/8015Bm	Extrac	ction SW	5030B					5	Spiked San	nple ID	: 1004843-0	04A
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)	
Analyto	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex ^f)	ND	60	101	97.3	3.91	101	96.5	4.73	70 - 130	20	70 - 130	20
MTBE	ND	10	104	102	1.61	104	105	0.587	70 - 130	20	70 - 130	20
Benzene	ND	10	89.4	90.5	1.21	88.4	88.7	0.409	70 - 130	20	70 - 130	20
Toluene	ND	10	91.4	91	0.344	89.1	89.1	0	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	89.9	89.9	0	87.1	88	1.02	70 - 130	20	70 - 130	20
Xylenes	ND	30	92.4	91.4	1.09	88.9	89.7	0.958	70 - 130	20	70 - 130	20
%SS:	99	10	95	96	1.22	94	95	1.52	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 50257 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1004833-001A	04/27/10 1:50 PM	f 04/29/10	04/29/10 8:05 PM	1004833-001A	04/27/10 1:50 PM	04/30/10	04/30/10 11:51 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).

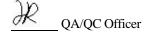
MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the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



McCampbell Analytical,	Inc.
"When Quality Counts"	

Allterra Environmental, Inc	Client Project ID: #160 Holmes Street, Livermore, C.A.	Date Sampled: 04/29/10
849 Almar Ave, Ste. C #281		Date Received: 04/29/10
049 Milital Mve, Ste. C #201	Client Contact: Nathaniel Allen	Date Reported: 05/06/10
Santa Cruz, CA 95060	Client P.O.:	Date Completed: 05/06/10

WorkOrder: 1004914

May 06, 2010

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Enclosed within are:

- 1) The results of the 1 analyzed sample from your project: #160 Holmes Street, Livermore, C.A.,
- 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 Applytical Inc

McCampbell Analytical, Inc.

			LLTI															Cha	ain (of C	uste	ody l	Rec	ord				
			Almar Avenu													Turn /	Around	Time (circle o	ne)	RUSH	24HR	48F	IR 7:	2HR	5 Dày		
		W	anta Cruz, Ca ebsite: www.) 425-2608 F	allterraenv.c	om	260	9							8015/8021)										0)				
Report and Bill to: A Project Number: Project Location:		mental, Inc.	/											(EPA 8015/				(EPA 8260	90	(09	ed solids	6010/6020	010/6020)	70,625/831		(200.8)		
Project Name:		_												BE		V. 100	8260	anol	8260	A 82	vloss	EPA	PA 6	A 82	SSAV	6.00		
Sampler Signature:	Sample C	ollection	Sample (Containers	1	N	Matrix			P	reser	vation	1	/M	8020	015)	BA 8	/leth:	sers ((EP	al dis	als (JS (E	(EP	Bios	10/2		
Field Point Name Sample ID	Date	Time	Number of Containers	Container Type	Air	Water	Soil	Sludge	Other	Ice	HCI	HNO;	Other	TPHg/ BTEX/ MTBE (EPA	BTEX (EPA 8020)	TPHd (EPA 8015)	5-fuel oxys (EPA 8260)	Ethanol and Methanol (EPA 8260)	Lead Scavengers (8260)	Total HVOCs (EPA 8260)	Hardness/Total dissolved solids	CAM-17 Metals (EPA 6010/6020)	LUFT 5 Metals (EPA 6010/6020)	PAH's/ PNA's (EPA 8270,625/8310)	Fish Toxicity/Bioassay	Lead (EPA 6010/200.9/200.8)		EDF required
VES IN	4-29-10	11:15	(BAG	X									x														K
VES EFF	4-29-10	11:20	1	BAG	×									×														K
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Sampled By:	()		Date:	Time: 1630	Receive		4		>	_	_	_		Comi	nents:			IC G	CE/t	MA	TION_	/	APPE	ODDI	ATE			
Received By:		-	Date: 4/29/10	Time: 18/5	Receiv	Ψ	-	V	~	~	4/3	18:	ß					H	EAD S	PACE	TEDIN	LABV	C.P	ONTAI	NERS RVED	N LAB	M	-
Received By:			Date:	Time:	Recen	ed l	By:												RESE			AS O &	6 ME	TALS	OTHER			

McCampbell Analytical, Inc.

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Pittsbur	g, CA 94565-1701 52-9262					Worl	Order	: 1004	914	(ClientC	Code: A	TRS				
		WaterTrax	WriteOn	✓ EDF		Excel		Fax	[✓ Email		Hard	Сору	Thir	dParty	J-	flag
	ronmental, Inc ve, Ste. C #281 CA 95060	cc: PO:		mental@yahoo.d Street, Livermore		nicah	All 84 Sa	terra Er 9 Almaı ınta Cru	Payable nvironm r Ave, S nz, CA 9 Ilterraer	ental ite. C #2 5060	281		Date	e Rece	ived:		
									Req	uested	Tests	(See leg	gend be	elow)			
Lab ID	Client ID		Matrix	Collection Date	Hold	1	2	3	4	5	6	7	8	9	10	11	12
1004914-001	VES-IN		Air	4/29/2010 11:15		Α	Α										
Test Legend:								_	_				F				
	EX_AIR 2	PREDF REF	PORT	3				4						5			
11	12			8				9	9				Ľ	10			
The following Sar	npIDs: 001A, 002A contain te	stgroup.										<u>P</u>	repared	l by: Sa	amanth	a Arbu	ckle

not enough air in sample -001 to analyze. Spoke to client re: this on 04/30/10 - Angela **Comments:**

1534 Willow Pass Road, Pittsburg, CA 94565-1701 Telephone: 877-252-9262 Fax: 925-252-9269

Sample Receipt Checklist

Client Name:	Allterra Environmenta	ıl, Inc			Date a	and Time Received:	4/29/2010	7:07:50 PM
Project Name:	#160 Holmes Street, I	_ivermore, C.A.			Check	list completed and re	eviewed by:	Samantha Arbuckle
WorkOrder N°:	1004914 Matri	x <u>Air</u>			Carrie	r: <u>Benjamin Ysla</u>	s (MAI Courier)	1
		Chain of	Cu	stody (CO	C) Informa	ition		
Chain of custody	y present?	Ye	es	V	No 🗆			
Chain of custody	y signed when relinquished a	and received? Ye	es	V	No 🗆			
Chain of custody	y agrees with sample labels	? Ye	es	✓	No 🗌			
Sample IDs noted	d by Client on COC?	Ye	es	V	No 🗆			
Date and Time o	f collection noted by Client or	COC? Ye	es	V	No 🗆			
Sampler's name	noted on COC?	Ye	es	V	No 🗆			
		<u>Sam</u> j	ole	Receipt In	nformation			
Custody seals in	ntact on shipping container/c	ooler? Ye	es		No 🗆		NA 🔽	
Shipping contain	ner/cooler in good condition?	Ye	es	V	No 🗆			
Samples in prop	er containers/bottles?	Ye	es	V	No 🗆			
Sample containe	ers intact?	Ye	es	✓	No 🗆			
Sufficient sample	e volume for indicated test?	Ye	es	✓	No 🗌			
		Sample Preservat	ior	n and Hold	I Time (HT)	Information		
All samples rece	eived within holding time?	Ye	es	✓	No 🗌			
Container/Temp	Blank temperature	Co	ole	r Temp:			NA 🗹	
Water - VOA via	als have zero headspace / no	bubbles? Ye	es		No 🗆	No VOA vials subm	itted 🗹	
Sample labels c	hecked for correct preservat	ion? Ye	es	V	No 🗌			
Metal - pH accep	otable upon receipt (pH<2)?	Ye	es		No 🗆		NA 🔽	
Samples Receive	ed on Ice?	Ye	es		No 🔽			
* NOTE: If the "I	No" box is checked, see cor	nments below.		===	:===:	======	====	:======
Client contacted	:	Date contacted:				Contacted	by:	
Comments:	not enough air in sample -00	Spoke to client re	e: th	nis on 04/30)/10 - Angel	a		

Allterra Environmental, Inc	Client Project ID: #160 Holmes Street, Livermore, C.A.	Date Sampled: 04/29/10				
849 Almar Ave, Ste. C #281	Liverillote, C.A.	Date Received:	04/29/10			
	Client Contact: Nathaniel Allen	Date Extracted:	04/30/10			
Santa Cruz, CA 95060	Client P.O.:	Date Analyzed:	04/30/10			

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

Analytical methods: SW8021B/8015Bm Extraction method: SW5030B Work Order: 1004914 Lab ID Client ID Matrix TPH(g) MTBE Benzene Toluene Ethylbenzene Xylenes Comments 002A **VES-EFF** ND ND ND ND ND ND 99 Reporting Limit for DF =1; Α 2.5 0.25 0.25 0.25 0.25 25 μ g/L ND means not detected at or 0.05 1.0 0.005 0.005 0.005 0.005 mg/Kg above the reporting limit

* water and vapor samples are reported in μg/L, soil/sludge/solid samples in mg/k	
	, wipe samples in ug/wipe, product/oil/non-aqueous liquid samples in mg/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:

Allterra Environmental, Inc	Client Project ID: #160 Holmes Street, Livermore, C.A.	Date Sampled:	04/29/10
849 Almar Ave, Ste. C #281	Livermore, C.A.	Date Received:	04/29/10
,	Client Contact: Nathaniel Allen	Date Extracted:	04/30/10
Santa Cruz, CA 95060	Client P.O.:	Date Analyzed:	04/30/10

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

Extraction	on method: SW5030	В		I		Wor	k Order:	1004914			
Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
002A	VES-EFF	A	ND	ND	ND	ND	ND	ND	1	99	

ppm (mg/L) to ppmv (ul/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.													
Reporting Limit for DF =1;	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L				
ND means not detected at or above the reporting limit	S	NA	NA	NA	NA	NA	NA	1	mg/Kg				

^{*} vapor samples are reported in $\mu L/L$, soil/sludge/solid samples in mg/kg, wipe samples in $\mu g/wipe$, 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:

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Air QC Matrix: Water BatchID: 50339 WorkOrder 1004914

EPA Method SW8021B/8015Bm Extraction SW5030B Spiked Sample ID: 1004920-004A													
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)		
/ way to	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD	
TPH(btex ^f)	ND	60	101	99.1	1.75	98.8	101	1.79	70 - 130	20	70 - 130	20	
MTBE	ND	10	101	105	3.91	89	99	10.7	70 - 130	20	70 - 130	20	
Benzene	ND	10	89.5	90.7	1.38	83.8	86.6	3.28	70 - 130	20	70 - 130	20	
Toluene	ND	10	90.3	88.8	1.74	82.2	86.4	4.96	70 - 130	20	70 - 130	20	
Ethylbenzene	ND	10	89.1	88.8	0.320	82	86.2	4.98	70 - 130	20	70 - 130	20	
Xylenes	ND	30	91.1	90.6	0.553	83.5	88.6	5.98	70 - 130	20	70 - 130	20	
%SS:	101	10	96	96	0	91	95	4.36	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 50339 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1004914-002A	04/29/10 11:20 AM	1 04/30/10	04/30/10 4:37 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 = <math>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.

QA/QC Officer

McCampbell Analytical, 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 Holmes Street, Livermore, C.A.	Date Sampled: 04/29/10
849 Almar Ave, Ste. C #281		Date Received: 04/29/10
019 11111111 1110, 2001 0 11201	Client Contact: Nathaniel Allen	Date Reported: 05/05/10
Santa Cruz, CA 95060	Client P.O.:	Date Completed: 05/05/10

WorkOrder: 1004912

May 05, 2010

T .	3 T .1		
Dear	Nath	2n1A	۰

Enclosed within are:

- 1) The results of the 1 analyzed sample from your project: #160 Holmes Street, Livermore, C.A.,
- 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	LLT		79											10		Ch	ain	of C	ust	ody	Rec	ord	1			
			Almar Aven													Turn	Around	Time (circle o	ne)	RUSH	24HR	481	IR 7	72HR (5 Day	7	
Santa Cruz, California 95060 Website: www.allterraeny.com Phone: (831) 425-2608 Facsimile: (831) 425-2609 Report and Bill to: Allterra Environmental, Inc. Project Number: 160 Project Location: 160 Holmes Street, Livermore, CA											EPA 8015/8021)																	
Project Name: Sampler Signature:										TBE (I	-	_	8260)	anol ((8260)	A 826	ssolve	EPA 6	PA 60	A 827	assay	2/6:002						
Sampler Signature.									N D	8020	5103	EPA	Meth	Sers	S (EI	al di	sals (als (F	S (EI	/Bio	7010		_					
Field Point Name Sample ID	Date	Time	Number of Containers	Container	Air	Water	Soil	Sludge	Other	lce	HCI	HNOs	Other	TPHg/ BTEX/ MTBE (EPA	BTEX (EPA 8020)	TPHd (EPA 8015)	5-fuel oxys (EPA 8260)	Ethanol and Methanol (EPA 8260)	Lead Scavengers (8260)	Total HVOCs (EPA 8260)	Hardness/Total dissolved solids	CAM-17 Metals (EPA 6010/6020)	LUFT 5 Metals (EPA 6010/6020)	PAH's/ PNA's (EPA 8270,625/8310)	Fish Toxicity/Bioassay	Lead (EPA 6010/200.9/200.8)		X EDF required
GW-TN	4-29-10	11:00	3	Vo A		X				x	*			(X
Sampled By: Received By:			Date: 4/29-10 Date: 4/29/10 Date: 4/29/10	Time: 1635 Time: 1815 Time:	Recei	m	y	V	~) 	ৰ্	29 18	O :\!	Com	ments					CONDITION OF THE PACE OR INA	VO	NT_LABV	APPR Ci VM P	ROPRI. ONTA PRESE	ATE NERS RVED OTHER	N LAB	W	A

McCampbell Analytical, Inc.

1534 Willow Pass Rd

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

	rg, CA 94565-1701 252-9262					Work	Order	: 1004	912	Client(Code: A	ΓRS				
		WaterTrax	⟨ WriteOn	✓ EDF		Excel		Fax	✓ Em	ail	Hard0	Сору	Third	lParty	☐ J-f	lag
Report to: Nathaniel A	llen	Email:	allterraenviro	nmental@yahoo.d	com n	nic	Bill to:		Payable			Req	uested 1	ГАТ:	5 d	lays
Allterra Env	rironmental, Inc Ave, Ste. C #281 , CA 95060	cc: PO:		Street, Livermore			Al 84 Sa	lterra Ei 19 Alma anta Cru	nvironmental r Ave, Ste. C ız, CA 95060 Ilterraenv.co	#281			e Recei e Printe		04/29/2 04/29/2	
									Requeste	d Tests	(See leg	end b	elow)			
Lab ID	Client ID		Matrix	Collection Date	Hold	1	2	3	4 5	6	7	8	9	10	11	12
1004912-001	GW-IN		Water	4/29/2010 11:00		Α	Α									

Test Legend:

1	G-MBTEX_W		2 PREDF REPORT	3	4	5
6			7	8	9	10
44		Г	12			

Prepared by: Samantha Arbuckle

Comments:

Allterra Environmental, Inc

Client Name:

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

4/29/2010 6:57:57 PM

Date and Time Received:

Sample Receipt Checklist

Project Name:	#160 Holmes Stre	et, Livermore, C.		Checklist completed and reviewed by: Samantha Arbuckle					
WorkOrder N°:	1004912	Matrix <u>Water</u>			Carrie	r: <u>Benjamin Yslas (MA</u>	d Courier)		
		<u>Chain</u>	of Cu	stody (C	OC) Informa	ition			
Chain of custody	present?		Yes	V	No 🗆				
Chain of custody	signed when relinquis	hed and received?	Yes	V	No 🗆				
Chain of custody	agrees with sample la	abels?	Yes	✓	No 🗌				
Sample IDs noted	by Client on COC?		Yes	✓	No \square				
Date and Time of	collection noted by Clie	ent on COC?	Yes	✓	No \square				
Sampler's name n	oted on COC?		Yes	✓	No 🗆				
		<u>Sa</u>	mple	Receipt	Information				
Custody seals into	act on shipping contain	ner/cooler?	Yes		No 🗆	NA I	V		
Shipping containe	er/cooler in good condi	tion?	Yes	✓	No 🗆				
Samples in prope	r containers/bottles?		Yes	✓	No 🗆				
Sample container	s intact?		Yes	✓	No 🗆				
Sufficient sample	volume for indicated t	est?	Yes	✓	No 🗌				
		Sample Preser	vatior	n and Ho	old Time (HT)	<u> Information</u>			
All samples receiv	ved within holding time	?	Yes	✓	No 🗌				
Container/Temp B	Blank temperature		Coole	er Temp:	3.7°C	NA I			
Water - VOA vials	s have zero headspac	e / no bubbles?	Yes	✓	No 🗆	No VOA vials submitted			
Sample labels che	ecked for correct pres	ervation?	Yes	✓	No 🗌				
Metal - pH accept	able upon receipt (pH-	<2)?	Yes		No \square	NA I	▼		
Samples Receive	d on Ice?		Yes	✓	No 🗆				
		(Ice Type	e: WE	TICE)				
* NOTE: If the "N	o" box is checked, se	e comments below.							
=====	======	======	===		====	======	========		
Client contacted:		Date contact	ed:			Contacted by:			
Comments:									

Allterra Environmental, Inc	Client Project ID: #160 Holmes Street,	Date Sampled:	04/29/10
849 Almar Ave, Ste. C #281	Livermore, C.A.	Date Received:	04/29/10
	Client Contact: Nathaniel Allen	Date Extracted:	04/30/10-05/03/10
Santa Cruz, CA 95060	Client P.O.:	Date Analyzed:	04/30/10-05/03/10

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

Analytical methods: SW8021B/8015Bm Extraction method: SW5030B Work Order: 1004912 Lab ID Client ID Matrix TPH(g) MTBE Benzene Toluene Ethylbenzene Xylenes % SS Comments 1500 001A GW-IN W 30,000 190,000 300 1000 5300 200 97 d1 Reporting Limit for DF = 1; W 0.5 0.5 50 5.0 0.5 0.5 μ g/L ND means not detected at or 0.05 1.0 0.005 0.005 0.005 0.005 mg/Kg above the reporting limit

$\ ^*$ water and vapor samples are reported in ug/L, soil/sludge/solid samples in mg/kg,	wipe samples in $\mu g/\text{wipe},$ 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:

d1) weakly modified or unmodified gasoline is significant

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 50339 WorkOrder 1004912

EPA Method SW8021B/8015Bm	Extra	ction SW	5030B					5	Spiked San	nple ID:	: 1004920-0	004A
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%))
7 mary to	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex ^f)	ND	60	101	99.1	1.75	98.8	101	1.79	70 - 130	20	70 - 130	20
MTBE	ND	10	101	105	3.91	89	99	10.7	70 - 130	20	70 - 130	20
Benzene	ND	10	89.5	90.7	1.38	83.8	86.6	3.28	70 - 130	20	70 - 130	20
Toluene	ND	10	90.3	88.8	1.74	82.2	86.4	4.96	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	89.1	88.8	0.320	82	86.2	4.98	70 - 130	20	70 - 130	20
Xylenes	ND	30	91.1	90.6	0.553	83.5	88.6	5.98	70 - 130	20	70 - 130	20
%SS:	101	10	96	96	0	91	95	4.36	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 50339 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1004912-001A	04/29/10 11:00 AM	04/30/10	04/30/10 10:12 PM	1004912-001A	04/29/10 11:00 AM	05/03/10	05/03/10 9:38 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).

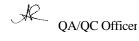
MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the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



McCampbell Analytical, Inc. "When Ouality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701 Telephone: 877-252-9262 Fax: 925-252-9269

Allterra Environmental, Inc	Client Project ID: 160 Holmes Street,	Date Sampled: 04/30/10
849 Almar Ave, Ste. C #281	Livermore, CA	Date Received: 04/30/10
019 Filmai FFV0, Stel. C 11201	Client Contact: James Allen	Date Reported: 05/05/10
Santa Cruz, CA 95060	Client P.O.:	Date Completed: 05/03/10

WorkOrder: 1004948

May 05, 2010

D	T				
Dear	J	ลา	m	es	

Enclosed within are:

- 1) The results of the 1 analyzed sample from your project: 160 Holmes Street, Livermore, CA,
- 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.

		4	LLT	HILE	7																		Rec					
		849	Almar Aver	nue, Suite C,	#281											Turn	Around	Time (circle o	one)	RUSH	24HI	R 481	HR 7	2HR (5 Day)	_
	p	W	ebsite: www	alifornia 950 allterraenv.c Facsimile: (83	om	5-260)9							8015/8021)				_						(0				
Report and Bill to: A			7 100 0000	desiline jus										115/				092			S	020	50)	83.1				
Project Number:	160													180				80			pilo	09/0	09/	25/		80		
Project Location:	160 Holmes St	treet, Liver	more, CA											EP				E	_	9	S D	100	010	9,07		200		
Project Name:														3E			093	loi	260	826	olve	P.A	A 6	82	Say	0.9/		
Sampler Signature:	gi ar		ga = 111-112 =		725			33						Ę	6	8	8	thar	8 (8	PA:	diss	E (E	(EP	EP.A	oas	07/2		
	Sample Co	ollection	Sample	Containers		- 1	Matri	X		F	rese	rvatio	n	2	80	801	EP	Me	ger	S (I	臣	stals	Sign	s (I	N/B	010		70
Field Point Name Sample ID	Date	Time	Number of Containers	Container Type	Air	Water	Soil	Sludge	Other	lce	HCI	HNO3	Other	IPHg/ BTEX/ MTBE (EPA	BTEX (EPA 8020)	TPHd (EPA 8015)	5-fuel oxys (EPA 8260)	Ethanol and Methanol (EPA 8260)	Lead Scavengers (8260)	Total HVOCs (EPA 8260)	Hardness/Total dissolved solids	CAM-17 Metals (EPA 6010/6020)	LUFT 5 Metals (EPA 6010/6020)	PAH's/ PNA's (EPA 8270,625/8310)	Fish Toxicity/Bioassay	Lead (EPA 6010/200.9/200.8)		EDF required
VES-IN	4/30/10		1	Tedlor	V					/				/			4,		_		100			in the second	-	-		V
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								/				2-00								1000								
Sampled By:	h Alle	h	Date: 4-30-10	Time:	Rece	ived	By.	L	/		_			Comi	ments	: 1/6	por	(6m	ole	- K	Rusi	h					
Received By:	K	•	Date: 4/30/10	Time:	1	ived	a	m	a.	1	2/	-	5			V-1		2	, 1				•					
Received By:			Date:	Time:	Rece	eived	By:						0 10-1															

McCampbell Analytical, Inc.

1534 Willow Pass Rd Pittsburg, CA 94565-17 (925) 252-9262

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

	rg, CA 94565-1701 52-9262					Wor	kOrd	er:	10049	948	(Client(Code: A	TRS				
		WaterTrax	WriteOn	✓ EDF		Exce	el		Fax	ĺ	✓ Email		Hard	Сору	Thir	dParty	J-	flag
	ironmental, Inc Ave, Ste. C #281 CA 95060	cc: PO:		nmental@yahoo.d		nic		Acco Allte 849 Sant	rra Er Almar a Cru	z, CA 9	nental Ste. C #2	281		Date	uested Rece Print	ived:		
Lab ID	Client ID		Matrix	Collection Date	Hold	1	2		3	Req 4	uested 5	Tests 6	(See leg	end be	elow) 9	10	11	12
1004948-001	VES-IN		Air	4/30/2010	П	Α	А											
Test Legend:																		
-	TEX_AIR 2	PREDF REP	PORT	3					4						5			
11	12			8					9					Ľ	10			
	mpID: 001A contains testgrou	ıp.												Prepa	red by:	Meliss	sa Valle	es

Comments:

Sample Receipt Checklist

Client Name:	Allterra Environmental,	Inc		Date a	and Time Received:	4/30/2010	6:02:25 PM
Project Name:	160 Holmes Street, Live	ermore, CA		Chec	klist completed and i	eviewed by:	Melissa Valles
WorkOrder N°:	1004948 Matrix	<u>Air</u>		Carrie	er: <u>Benjamin Ysla</u>	s (MAI Courie	<u>.)</u>
		Chain of C	ustod	y (COC) Informa	ation_		
Chain of custody	present?	Yes	V	No 🗆			
Chain of custody	signed when relinquished and	d received? Yes	V	No 🗆			
Chain of custody	agrees with sample labels?	Yes	✓	No 🗆			
Sample IDs noted	d by Client on COC?	Yes	V	No 🗆			
Date and Time of	f collection noted by Client on C	OC? Yes	~	No 🗆			
Sampler's name i	noted on COC?	Yes	✓	No 🗆			
		Sample	e Rece	eipt Information	<u>1</u>		
Custody seals in	tact on shipping container/coo	ler? Yes		No 🗆		NA 🔽	
Shipping contain	er/cooler in good condition?	Yes	V	No □			
Samples in prope	er containers/bottles?	Yes	✓	No 🗆			
Sample containe	ers intact?	Yes	✓	No 🗆			
Sufficient sample	e volume for indicated test?	Yes	✓	No 🗆			
	Sa	mple Preservation	n and	Hold Time (HT	') Information		
All samples recei	ived within holding time?	Yes	✓	No 🗌			
Container/Temp I	Blank temperature	Cool	ler Ten	np:		NA 🔽	
Water - VOA via	ls have zero headspace / no b	oubbles? Yes		No 🗆	No VOA vials subm	nitted 🗹	
Sample labels ch	necked for correct preservation	n? Yes	✓	No 🗌			
Metal - pH accep	stable upon receipt (pH<2)?	Yes		No 🗆		NA 🗹	
Samples Receive	ed on Ice?	Yes		No 🗹			
* NOTE: If the "N	No" box is checked, see comn	nents below.	==	====	=====:	====	======
Client contacted:		Date contacted:			Contacted	l by:	
Comments:							

Allterra Environmental, Inc	Client Project ID: 160 Holmes Street, Livermore, CA	Date Sampled:	04/30/10
849 Almar Ave, Ste. C #281	Liverniole, CA	Date Received:	04/30/10
	Client Contact: James Allen	Date Extracted:	05/01/10
Santa Cruz, CA 95060	Client P.O.:	Date Analyzed:	05/01/10

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

Analytical methods: SW8021B/8015Bm Extraction method: SW5030B Work Order: 1004948 Lab ID Client ID Matrix TPH(g) MTBE Benzene Toluene Ethylbenzene Xylenes DF % SS Comments 001A 170 ND<1.0 7.2 VES-IN 130 9.6 1.1 110

Reporting Limit for DF =1;	A	25	2.5	0.25	0.25	0.25	0.25	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/Kg
						, ,		

^{*} water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/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:

d1) weakly modified or unmodified gasoline is significant

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Santa Cruz, CA 95060	Client P.O.:	Date Analyzed: 05/01/10

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

Extracti	on method: SW5030B			Analytical methods: SW8021B/8015Bm						k Order:	1004948
Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	VES-IN	A	49	35	ND<0.31	2.5	0.25	1.6	4	110	d1

ppm (mg/L) to ppmv (ul/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.										
Reporting Limit for DF =1;	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L	
ND means not detected at or above the reporting limit	S	NA	NA	NA	NA	NA	NA	1	mg/Kg	

^{*} vapor samples are reported in $\mu L/L$, soil/sludge/solid samples in mg/kg, wipe samples in $\mu g/wipe$, 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:

d1) weakly modified or unmodified gasoline is significant



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Air QC Matrix: Water BatchID: 50339 WorkOrder 1004948

EPA Method SW8021B/8015Bm Extraction SW5030B Spiked Sample ID: 1004									: 1004920-0	04A		
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
7 tildiyto	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btexf)	ND	60	101	99.1	1.75	98.8	101	1.79	70 - 130	20	70 - 130	20
MTBE	ND	10	101	105	3.91	89	99	10.7	70 - 130	20	70 - 130	20
Benzene	ND	10	89.5	90.7	1.38	83.8	86.6	3.28	70 - 130	20	70 - 130	20
Toluene	ND	10	90.3	88.8	1.74	82.2	86.4	4.96	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	89.1	88.8	0.320	82	86.2	4.98	70 - 130	20	70 - 130	20
Xylenes	ND	30	91.1	90.6	0.553	83.5	88.6	5.98	70 - 130	20	70 - 130	20
%SS:	101	10	96	96	0	91	95	4.36	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 50339 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1004948-001A	04/30/10	0 05/01/10	05/01/10 12:20 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.

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.

QA/QC Officer