RECEIVED

9:20 am, Dec 20, 2010

Alameda County

Environmental Health

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

Client:

Manwel Shuwayhat

Project Location:

Livermore Gas, 160 Holmes Street, Livermore, California

Subject:

Interim Remedial Action Status Report

Report Date:

December 10, 2010

To Whom It May Concern:

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

Sincerely,

Manwel Shuwayhat, Owner



Interim Remedial Action Status Report 160 Holmes Street, Livermore, California

Date: December 10, 2010

Project No.: 160

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

Allterra Environmental, Inc.

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

> Phone: (831) 425-2608 Fax: (831) 425-2609 http://www.allterraenv.com



December 10, 2010 Project No.: 160

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

SUBJECT: Interim Remedial Action Status Report, Fuel Leak Case No. RO0000324, 160 Holmes Street, Livermore, California

Dear Manwel and Samira Shuwayhat:

On your behalf, Allterra Environmental, Inc. (Allterra) has prepared this 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 the fourth quarter 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), and existing monitoring and extraction wells, are presented in Figure 2.

Interim Remedial Action

Based on the results of pilot scale remedial operations performed during the second quarter of 2010 and a subsequent meeting with the Alameda County Environmental Health Services (ACEHS) on August 18, 2010, Allterra recommended implementation of additional interim remedial action that would be adaptive to Site conditions. The preferred method of interim remedial action at the Site was contingent upon measured groundwater levels within the area of concern (immediately downgradient of the former UST pit). If groundwater elevations remained high, interim groundwater extraction (GWE) would be considered the most effective method for contaminant mass removal. However, if groundwater elevations dropped significantly (as they did in 2008-2009), interim soil vapor extraction (SVE) would be considered the most effective method for contaminant mass removal.

Current Site Conditions

On October 7 and 12, and November 4, 11, and 17, 2010, Allterra personnel measured depths to groundwater in monitoring and extraction wells near the area of concern (MW-1A, MW-3A, EW-1, EW-2, and EW-3) (Table 1). These measurements indicated that groundwater elevations had not dropped significantly since the second quarter of 2010. Also, because the measured depths to groundwater in EW-3 during October and November 2010 ranged from 25.72 to 26.60 feet below ground surface (bgs), performing SVE at this well would likely produce a mounding affect in the water column, thus completely blinding off the well screen (25 to 30 feet below top of casing) and

significantly limiting the effectiveness of SVE. Therefore, GWE was determined to be the preferred method of interim remedial action in the area of concern during this time period.

Remediation Compound

To facilitate interim remedial activities, a temporary remediation compound was constructed along the northeastern edge of the property (Figure 2). The compound consists of conveyance piping, two 55-gallon carbon treatment drums, and two 2,400-gallon low-profile storage tanks to contain extracted and treated groundwater prior to batch discharge to the sanitary sewer.

Interim GWE Activities

Interim GWE field activities included collection of groundwater samples for laboratory analyses, recording system operation data (total flows and flow rates, groundwater elevations, qualitative observations, etc.), and collecting data from observation wells. System data, such as groundwater elevations, flow rates, and sample results, are presented in Tables 1 through 3.

On October 7, 2010, Allterra personnel attempted GWE from well EW-3 located in the area of concern. However, the measured sustainable pumping rate during extraction from EW-3 was only approximately 0.5 gallons per minute (gpm). In an effort to increase the total volume of impacted groundwater extracted and treated during interim remedial activities, Allterra personnel initiated GWE from well EW-1 on October 12, 2010. EW-1 is located downgradient from EW-3, but still lies within the area of concern. The measured sustainable pumping rate during extraction from EW-1 was approximately 5.0 gpm. To date, the interim GWE system has removed a total of approximately 7,200 gallons of impacted groundwater from EW-1 and three 2,400-gallon treated batches were sampled and discharged to the sanitary sewer system. Following discharge of the third batch on November 17, 2010, interim GWE activities were discontinued due to a minimal rate of recovery.

On November 11, 2010, Allterra personnel re-attempted GWE from well EW-3. However, during this second attempt, the measured sustainable pumping rate from EW-3 was only approximately 0.3 gallons per minute (gpm). Due to the very low pumping rate and minimal rate of recovery, GWE from EW-3 was only performed for one day and then discontinued. On November 11, 2010, the interim GWE system removed a total of approximately 4.0 gallons of impacted groundwater from EW-3, which was treated and discharged to the sanitary sewer system.

Sample Collection

On October 28, November 4, and November 11, 2010, Allterra collected stream samples from groundwater entering the storage tanks (GW-IN and EW-3-IN) and from treated water (Tank-2) prior to batch discharge to the sanitary sewer system. GW-IN and EW-3-IN samples were collected to determine dissolved contaminant masses removed during interim GWE activities. Sample analytical results are presented in Table 2.

Laboratory Analysis

Groundwater samples from GWE activities were submitted under chain-of-custody protocol to McCampbell Analytical, Inc. of Pacheco, California, a state of California certified laboratory (ELAP #1644). 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. The certified analytical reports for the samples, including quality assurance and quality control (QA/QC) data, are included in Appendix A.

Interim Remedial Action Results

Since the commencement of interim GWE activities on October 12, 2010, the interim GWE system has removed approximately 7,200 gallons of impacted groundwater from extraction well EW-1 and three 2,400-gallon batches were treated, sampled, and discharged to the sanitary sewer system. Additionally, on November 11, 2010, the interim GWE system removed a total of approximately 4.0 gallons of impacted groundwater from EW-3, which was also treated and discharged to the sanitary sewer system. GWE data including flow rates and volumes is presented in Tables 3 and 4. Analytical results for samples collected from the groundwater influent stream (GW-IN and EW-3-IN) and from treated water prior to discharge (Tank-2) are summarized below:

Sample ID	Date	ТРНд	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
Extraction	Well EW-1	(results in μ	g/L)				
EW-1	7/20/10	400	4.4	6.6	1.8	4.4	590
GW-IN	10/28/10	180	3.7	1.0	< 0.5	2.8	3,400
GW-IN	11/4/10	790	20	3.0	39	76	6,900
Extraction	Well EW-3	results in μ	g/L)				
EW-3-IN	11/11/10	20,000	310	160	610	2,600	280,000
Prior to Di	ischarge (Ta	nk-2) (resul	ts in µg/L)				
Batch-1	10/28/10	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
Batch-2	11/4/10	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
Batch-3	11/11/10	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0

Third quarter 2010 groundwater monitoring data (July 20, 2010) was used as initial influent data for EW-1 contaminant mass removal calculations. Additionally, analytical data from GWE samples are presented in Table 2 and certified analytical reports are attached as Appendix A.

Interim GWE Contaminant Mass Removal

To date, the interim GWE system removed, treated, and discharged a total of approximately 7,200 gallons of impacted groundwater from EW-1 (three 2,400-gallon batches). Based on the volume of groundwater processed and laboratory analytical results, the GWE system removed a total of approximately 0.027 pounds of TPHg, 0.00056 pounds of benzene, and 0.22 pounds of MTBE from EW-1 (Table 5). Also, the interim GWE system removed, treated, and discharged approximately 4.0 gallons of impacted groundwater from EW-3. Based on the very low volume of groundwater processed, insignificant contaminant mass was removed from EW-3 (Table 5).



Conclusions

Based on data collected during October and November 2010, Allterra concludes the following:

- Groundwater elevations in site wells continue to remain high; therefore interim GWE was considered the most effective method for contaminant mass removal in the area of concern.
- Since October 12, 2010, the interim GWE system removed approximately 7,200 gallons of groundwater from EW-1, which was treated and discharged in three batches, resulting in the removal of approximately 0.027 pounds of TPHg, 0.00056 pounds of benzene, and 0.22 pounds of MTBE. Also, the interim GWE system removed and treated approximately 4.0 gallons of groundwater from EW-3.
- Based on a minimal rate of recovery observed during interim GWE from EW-1 and EW-3, continuing to perform GWE does not appear to be the most effective strategy to remove contaminant mass from the area of concern at the Site.

Recommendations

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

- Discontinue operation of interim GWE equipment at the Site due to a minimal rate of recovery observed during recent extraction from EW-1 and EW-3.
- If groundwater elevations within the area of concern drop significantly within the next few months, initiate interim SVE from EW-3.
- Prepare a work plan to implement pilot scale in-situ soil and groundwater remedial technology in the area of concern at the Site and submit to Alameda County Environmental Health Services by January 31, 2010.

Limitations

Allterra prepared this report for the use of Manwel and Samira Shuwayhat, Alameda County Environmental 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.



Interim Remedial Action Status Report 160 Holmes Street, Livermore, California Page 5

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

Sincerely,

Allterra Environmental, Inc.

James Allen, R.E.A.II

Project Manager

<u>List of Figures</u>

Figure 1, Site Vicinity Map

Figure 2, Interim Groundwater Extraction System

List of Tables

Table 1, Groundwater Elevation Data – Area of Concern

Table 2, Interim Groundwater Extraction Sample Results

Table 3, Interim Groundwater Extraction Operational Data

Table 4, Dissolved Phase Contaminant Mass Removal Data

List of Appendices

Appendix A, Certified Analytical Reports and Chains-of-Custody

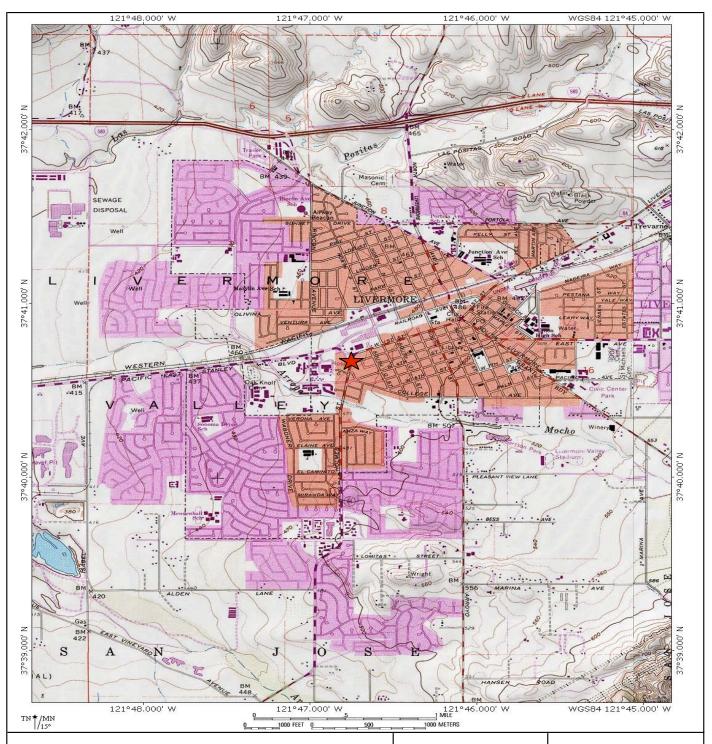
cc: Mr. Jerry Wickham, Alameda County Environmental Health Services



Joe Mangine, P.G. 8423 Project Geologist



FIGURES 1-2



Site Vicinity Map

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

ALLTERRA

4/8/10

849 Almar Avenue, Suite C, No. 281 Santa Cruz, California http://www.allterraenv.com



TABLES 1 - 4

Table 1 Groundwater Elevation Data - Area of Concern

160 Holmes Street, Livermore, California

			Ervermore, eu		
Monitoring Well ID	Date	Top of Casing Elevation* (feet, msl)	Screen Interval (feet, bgs)	Depth to Groundwater (feet)	Groundwater Elevation (feet, msl)
		(Icct, IIIsI)		(Icct)	(ICCL, IIISI)
MW-1A*	4/6/06	465.03	15-30	15.60	449.43
	7/27/06	465.03		22.42	442.61
	10/12/06	465.03		23.46	441.57
	1/3/07	465.03		21.00	444.03
	4/13/07	465.03		23.24	441.79
	7/16/07 10/29/07	465.03 465.03		Dry Dry	NC NC
	2/1/08	465.03		Dry	NC NC
	4/18/08	465.03		27.34	437.69
	7/28/08	465.03		Dry	NC
	11/18/08	465.03		Dry	NC
	2/4/09	465.03		Dry	NC
	4/21/09	465.03		Dry	NC
	9/24/09	465.03		35.00	430.03
	3/4/10	465.03		28.05	436.98
	7/19/10	465.03		23.85	441.18
	10/7/10 10/12/10	465.03 465.03		25.50 25.60	439.53 439.43
	11/4/10	465.03		25.67	439.36
	11/11/10	465.03		25.69	439.34
	11/17/10	465.03		25.28	439.75
MW-3A	4/6/06	465.84	15-30	16.02	449.82
	7/27/06	465.84		22.90	442.94
	10/12/06	465.84		23.99	441.85
	1/3/07	465.84		21.52	444.32
	4/13/07	465.84		23.78	442.06
	7/16/07 10/29/07	465.84 465.84		Dry Dry	NC NC
	2/1/08	465.84		Dry	NC NC
	4/18/08	465.84		27.86	437.98
	7/28/08	465.84		Dry	NC
	11/18/08	465.84		Dry	NC
	2/4/09	465.84		Dry	NC
	4/21/09	465.84		Dry	NC
	9/24/09	465.84		Dry	NC
	3/4/10 7/19/10	465.84 465.84		27.95 26.55	437.89 439.29
	10/12/10	465.84		26.05	439.79
	11/11/10	465.84		26.15	439.69
	11/17/10	465.84		25.81	440.03
EW-1**	4/6/06	465.45	15-40	15.99	449.46
	7/27/06	465.45		23.85	441.60
	10/12/06	465.45		23.51	441.94
	1/3/07	465.45		21.45	444.00
	4/13/07	465.45		23.69 NM	441.76 NC
	10/29/07 2/1/08	465.45 465.45		NM NM	NC NC
	4/18/08	465.45		27.83	437.62
	7/28/08	465.45		NM	NC
	11/18/08	465.45		Dry	NC
	2/4/09	465.45		Dry	NC
	4/21/09	465.45		Dry	NC
	9/24/09	465.45		Dry	NC
	3/4/10	465.45		27.87	NC
	7/20/10 10/12/10	465.45 465.45		24.35 26.05	441.10 439.40
	10/12/10	465.45 465.45		26.14	439.40
	11/1/10	465.45		26.13	439.32
	11/17/10	465.45		25.72	439.73

Table 1 Groundwater Elevation Data - Area of Concern

160 Holmes Street, Livermore, California

Monitoring Well ID	Date	Top of Casing Elevation* (feet, msl)	Screen Interval (feet, bgs)	Depth to Groundwater (feet)	Groundwater Elevation (feet, msl)
EW-2**	4/6/06	465.99	15-40	16.20	449.79
2., 2	7/27/06	465.99	15 10	23.10	442.89
	10/12/06	465.99		21.48	444.51
	1/3/07	465.99		21.66	444.33
	4/13/07	465.99		23.93	442.06
	10/29/07	465.99		Dry	NC
	2/1/08	465.99		NM	NC
	4/18/08	465.99		28.04	437.95
	7/28/08	465.99		NM	NC
	11/18/08	465.99		Dry	NC
	2/4/09	465.99		Dry	NC
	4/21/09	465.99		Dry	NC
	9/24/09	465.99		Dry	NC
	3/4/10	465.99		25.89	NC
	7/20/10	465.99		24.45	441.54
	10/7/10	465.99		26.11	439.88
	10/12/10	465.99		26.25	439.74
	11/4/10	465.99		26.35	439.64
	11/11/10	465.99		26.30	439.69
	11/17/10	465.99		25.92	440.07
EW-3 (a)	11/18/08	NC	25-30	Dry	NC
	2/4/09	NC		33.80	NC
	4/21/09	NC		Dry	NC
	9/24/09	NC		Dry	NC
	3/4/10	NC		28.02	NC
	7/20/10	NC		NM	NC
	10/7/10	NC		26.60	NC
	10/12/10	NC		26.02	NC
	11/4/10	NC		26.13	NC
	11/11/10	NC		26.15	NC
	11/17/10	NC		25.72	NC

Notes:

MSL: mean sea level bgs: below ground surface NA: well not accessible NC: elevation not calculated NM: well not measured

* = Well MW-1 renamed MW-1A

** = Well installed on 2/22/06-2/28/06

(a) = Well EW-3 is 35 feet deep with a screen interval from 25 to 30 feet bgs.



Table 2 Interim Groundwater Extraction Sample Results

160 Holmes Street, Livermore, California

Sample ID	Sample Date	Total Petroleum Hydrocabons as (ug/L)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
		Gasoline					
Extraction V	 Well EW-1						
EW-1	7/20/10	400	4.4	6.6	1.8	4.4	590
GW-IN	10/28/10	180	3.7	1.0	< 0.5	2.8	3,400
GW-IN	11/4/10	790	20	3.0	39	76	6,900
Extraction V	Well EW-3						
EW-3-IN	11/11/10	20,000	310	160	610	2,600	280,000
Prior to Dis	l charge (Tan	l k-2)					
Batch-1	10/28/10	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
Batch-2	11/4/10	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
Batch-3	11/11/10	<50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0

Notes:

All results in micrograms per liter (ug/L)

MTBE = Methyl tertiary butyl ether

GW-IN = Sample collected from influent groundwater stream

Tank-2 = Sample collected from treated groundwater prior to batch discharge to sanitary sewer Samples analyzed for TPHg by EPA Method 8015CM, BTEX/MTBE by EPA Method 8021B.



^{-- =} not analyzed

Table 3
Interim Groundwater Extraction Operational Data

160 Holmes Street, Livermore, California

			GWE System					
Date	Average Flow Rate (gpm)	Total Flow Volume (gallons)	Cummulative Flow Volume (gallons)	Extraction Wells In Use	Date Added to System	Notes		
10/12/10 to 11/4/10	5.0	7,200	7,200	EW-1	10/12/10	Groundwater extracted from EW-1 on October 12, October 26 to 28, and November 3 to 4, 2010.		
11/11/10	0.3	4.0	4.0	EW-3	11/11/10	Groundwater extracted from EW-3 on November 11, 2010, then discontinued due to low flow rate		

Notes:

GWE = groundwater extraction

gpm = gallons per minute

Total Flow Volume = gallons of impacted groundwater removed from subsurface



Table 4
Dissolved Phase Contaminant Mass Removal Data
160 Holmes Street, Livermore, California

Date Batch	Influe	ent Concentr	ation	Gallons Proce	agad (EW 1)	Mass Removed (pounds)								
****	(με	g/L) (per bate	ch)	Gallolis Floce	sseu (EW-1)	Quar	ter/ Month To	otal	Cumulative Total					
Sampled	TPHg	Benzene	MTBE	Per Batch	Total	TPHg	Benzene	MTBE	TPHg	Benzene	MTBE			
7/20/10*	400	4.4	590	2,400		0.0080	0.000088	0.012						
10/28/10	180	3.7	3,400	2,400	7,200	0.0036	0.000074	0.068	0.027	0.00056	0.22			
11/4/10	790	20	6,900	2,400		0.016	0.00040	0.14						
Dete Detel	Influe	ent Concentr	ation	Callana Drago	and (EW 2)		M	lass Remo	ved (pounds)				
Date Batch	(μ <u>ε</u>	g/L) (per bate	ch)	Gallons Proce	ssed (EW-3)	Quar	ter/ Month To	otal	Cu	mulative Tot	al			
Sampled	TPHg	Benzene	MTBE	Per Batch	Total	TPHg	Benzene	MTBE	TPHg	Benzene	MTBE			
11/11/10	20,000	310	280,000	4.0	4.0	0.00067	0.000010	0.0093	0.00067	0.000010	0.0093			

Notes:

All concnetrations listed in micrograms per liter (μg/L)

All masses listed in pounds (lb)



^{* =} Initial influent data used for EW-1 is from the Third Quarter 2010 groundwater monitoring event

APPENDIX A Certified Analytical Reports and Chains-of-Custody

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	Date Sampled: 10/28/10
849 Almar Ave, Ste. C #281		Date Received: 10/28/10
019 11111111 1110, 500 0 11201	Client Contact: Erik Allen	Date Reported: 11/02/10
Santa Cruz, CA 95060	Client P.O.:	Date Completed: 11/01/10

WorkOrder: 1010786

November 02, 2010

Dear 1	Limit	7.
Dear	En	Ν.

Enclosed within are:

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

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

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

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius Laboratory Manager

McCampbell Analytical, Inc.

			LLT	1/1/2	1												(Cha	in o	of C	ust	ody	Re	cor	d			
				e, Suite C,		1									Tu	irn Arc	ound Ti	me (ci	rcle or	ne) E	RUSH	24H	R 4	8HR	72HR	5 I	Day	
		Sant Web ne: (831) 4	ta Cruz, Ca site: www.a 25-2608 Fa	lifornia 950 allterraenv. acsimile: (8	060 com		609			72-22	200			8015/8021)				(09				(07	0)	310)		9		
Report and Bill to; Project Number; Project Location; Project Name:	Allterra Envir 160 160 Holmes S Livermore Ga	Street, Live	rmore, Ca							1/2				MTBE (EPA 80			260)	Ethanol and Methanol (EPA 8260)	(260)	A 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)	ssay	(EPA 6010/200.9/200.8)		
Sampler Signature:	6	nit	-										-	Ę	20	15)	A S	tha	(S)	EP	dis	S (E	田	EP/	ioa	0720		
	Sample Oc	ollection.		Containers		1	Matri	ix		P	reser	vatio	M)	×	8	000	EP	Me	ger	000	百	官	als	S	N/B	001		70
Field Point Name / Sample ID	Date	Time	Number of Containers	Container Type	Air	Water	Soil	Studge	Other	Ice	HCI	HNO,	Other	TPHg/BTEX/	BTEX (EPA 8020)	TPHd (EPA 8015)	5-fuel oxys (EPA 8260)	Ethanol and	Lead Scavengers (8260)	Total HVOCs (EPA	Hardness/To	CAM-17 Mc	LUFT 5 Met	PAH's/PNA	Fish Toxicity/Bioassay	Lead (EPA 6		EDF required
GW-IN	10/28/10	12:00	2	VOAs		Х								X	X								-					X
																												0.70
					-																							
					-			114 111					********					-										-
					F							-									-							
						-		11						.75														
																								1-1-1				
Sampled By: ER	ik Aue	:1	Date:	Time:	Rec	eive	d By:							Com	ment:	s:		ا. ر	+									1
Received By:	,,,,,,		Date:	Time:	Rec	eive	d By:				9						OD C		TEDI	миль	2	PROP CON'	TAINE SERV	RS_ ED IN	LAB_			
Received By:	-		Date: 10/28/1	Time:	Rec	eive	Ву:	م	4	1	1						RESER		- V	OAS	0 & G	METAL	S OT	HER				

McCampbell Analytical, Inc.

1534 Willow Pass Rd

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Pittsburg, CA 94565-1701 WorkOrder: 1010786 ClientCode: ATRS (925) 252-9262 WaterTrax WriteOn ✓ EDF Excel Fax ✓ Email HardCopy ThirdParty J-flag Bill to: Report to: Requested TAT: 3 days Erik Allen Email: erik@allterraenv.com, micah@allterraenv. Accounts Payable Allterra Environmental, Inc. Allterra Environmental cc: Date Received: 10/28/2010 PO: 849 Almar Ave, Ste. C #281 849 Almar Ave, Ste. C #281 Santa Cruz, CA 95060 ProjectNo: #160; 160 Holmes Street Santa Cruz, CA 95060 Date Printed: 11/01/2010 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 1010786-001 **GW-IN** Water 10/28/2010 12:00 Α Test Legend: 5 2 G-MBTEX_W PREDF REPORT 3 7 10 6 8 12 11 Prepared by: Ana Venegas

Comments: 72hr rush on 11/01/10

Sample Receipt Checklist

Client Name:	Allterra Environ	mental, Inc			Date a	and Time Received:	10/28/2010	4:38:09 PM
Project Name:	#160; 160 Holmo	es Street			Check	dist completed and r	eviewed by:	Ana Venegas
WorkOrder N°:	1010786	Matrix Water			Carrie	r: <u>Courier</u>		
		Chain	of Cu	stody (C	COC) Informa	ation		
Chain of custody	/ present?		Yes	V	No 🗆			
Chain of custody	signed when relinqu	uished and 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 C	Client on COC?	Yes	~	No 🗆			
Sampler's name r	noted on COC?		Yes	V	No 🗆			
		<u>s</u>	ample	Receipt	t Information	ļ		
Custody seals in	tact on shipping cont	ainer/cooler?	Yes		No 🗆		NA 🗹	
Shipping contain	er/cooler in good cor	dition?	Yes	V	No 🗆			
Samples in prope	er containers/bottles	?	Yes	V	No 🗆			
Sample containe	ers intact?		Yes	✓	No 🗆			
Sufficient sample	e volume for indicate	d test?	Yes	✓	No 🗌			
		Sample Prese	rvatio	n and Ho	old Time (HT)) Information		
All samples recei	ived within holding tir	me?	Yes	✓	No 🗌			
Container/Temp I	Blank temperature		Coole	er Temp:	5.4°C		NA \square	
Water - VOA via	ls have zero headsp	ace / no bubbles?	Yes	✓	No 🗆	No VOA vials subm	itted \square	
Sample labels ch	necked for correct pr	eservation?	Yes		No 🗸			
Metal - pH accep	table upon receipt (p	H<2)?	Yes		No 🗆		NA 🔽	
Samples Receive	ed on Ice?		Yes	✓	No 🗆			
		(Ice Typ	e: WE	TICE)			
* NOTE: If the "N	No" box is checked,	see comments below.						
			=	:				======
Client contacted:		Date contact	ted:			Contacted	by:	
Comments:								

Allterra Environmental, Inc	Client Project ID: #160; 160 Holmes Street	Date Sampled:	10/28/10
849 Almar Ave, Ste. C #281	Sileet	Date Received:	10/28/10
	Client Contact: Erik Allen	Date Extracted:	10/30/10-11/01/10
Santa Cruz, CA 95060	Client P.O.:	Date Analyzed:	10/30/10-11/01/10

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

Analytical methods: SW8021B/8015Bm Extraction method: SW5030B Work Order: 1010786 Lab ID Client ID Matrix TPH(g) MTBE Benzene Toluene Ethylbenzene Xylenes DF % SS Comments001A GW-IN W 180 3400 3.7 1.0 ND 2.8 102 d1 Reporting Limit for DF = 1; 0.5 W 5.0 0.5 0.5 50 0.5 μ g/L ND means not detected at or 1.0 0.05 0.005 0.005 0.005 0.005 mg/Kg

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

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

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

+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

above the reporting limit

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 54079 WorkOrder 1010786

EPA Method SW8021B/8015Bm Extraction SW5030B Spiked Sample ID: 1010771-005A												05A
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	92.6	94.4	2.00	91.1	99.2	8.48	70 - 130	20	70 - 130	20
MTBE	ND	10	121	124	2.94	121	117	3.90	70 - 130	20	70 - 130	20
Benzene	ND	10	111	109	2.16	101	113	10.9	70 - 130	20	70 - 130	20
Toluene	ND	10	101	97.6	3.04	91.4	104	12.5	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	99.8	97.6	2.16	91.7	100	8.89	70 - 130	20	70 - 130	20
Xylenes	ND	30	113	110	2.12	104	114	8.76	70 - 130	20	70 - 130	20
%SS:	102	10	103	102	1.55	97	106	8.66	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 54079 SUMMARY

Lab ID	D Date Sampled Date Extra		Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed	
1010786-001A	10/28/10 12:00 PM	10/30/10	10/30/10 12:32 AM	1010786-001A	10/28/10 12:00 PM	11/01/10	11/01/10 11:44 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).

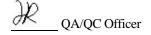
MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the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

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

Allterra Environmental, Inc	Client Project ID: #160; 160 Holmes Street	Date Sampled: 10/28/10
849 Almar Ave, Ste. C #281		Date Received: 10/28/10
019 11111111 1110, 500 0 11201	Client Contact: Erik Allen	Date Reported: 11/01/10
Santa Cruz, CA 95060	Client P.O.:	Date Completed: 11/01/10

WorkOrder: 1010787

November 02, 2010

_	-	
Llaar	14.00	1-
Dear	En	K

Enclosed within are:

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

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

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

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius Laboratory Manager

McCampbell Analytical, Inc.

1010787

ALLTERRA																	(Cha	in o	of C	ust	ody	Re	cor	d,			
USI	100			ne, Suite C,								-			Tu	ım Arc	ound Ti	me (ci	rcle on	e) F	RUSH	24H	IR 4	8HR	72HR	7 5 E	Day	
Report and Bill to: Project Number: Project Location: Project Name:	Website: www.allterraenv.com Phone: (831) 425-2608 Facsimite: (831) 425-2609 Report and Bill to: Allterra Environmental, Inc. Project Number: 160 Project Location: 160 Holmes Street, Livermore, Ca Project Name: Livermore Gas & Mini Mart Sampler Signature: Sample Containers Matrix Preserva												(TBE (EPA 8015/8021)	(0)	5)	(8260)	Ethanol and Methanol (EPA 8260)	(8260)	PA 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)	oassay	Lead (EPA 6010/200.9/200.8)			
	Sample Collection Sample Containers Matrix Preservat						vatio	n	5	800	801	EP	Met	96	s (E	[B]	tals	Sla	S (F	/Bi	010		_					
Field Point Name / Sample ID	Date	Time	Number of Containers	Container	Air	Water	Soil	Sludge	Other	Ice	HCI	HNOs	Other	TPHg/ BTEX/ MTBE	BTEX (EPA 8020)	TPHd (EPA 8015)	5-fuel oxys (EPA 8260)	Ethanol and	Lead Scavengers (8260)	Total HVOCs (EPA 8260)	Hardness/Tot	CAM-17 Me	LUFT 5 Met	PAH's/PNA'	Fish Toxicity/Bioassay	Lead (EPA 6		EDF required
Tank-2	10/28/10	12:00	3	VOAs		X								X	X													
												+																
						-						-					-											
	-				-	-			-					alle a		-				_			-					-
						-			-		-	-						_	-82		-							
					-	-			-			-								-			-					
										-						-	-											
	-										-				-			-						-7	1			
	1												-							-								
	and the Property of the Parket		No. Section 6										- 1 1000				-					-		+ 17-	-	-		
																				_		_				-		
					1			-									-							. +		1000-		
																	1							managed to the	-			- 1
																							- 100.000			-		
																								-	-			
															0.000070		250.00											
																											* ****	
						-										1									77.5			
Sampled By: ER	KAUE	ν.	Date:	Time:	Rec	eived	By:							Com	ment	s:	E/t°	1.7	/									
Received By:			Date:	Time:	Rec	eived	Ву:			3						HE	AD SI	PACE	ABSE	NT_		CON	PRIATI	RS				
Received By:			Date:	Time:	Rec	rive	Ву:	~	Y	U	8	1				DE	ESER	RINA	TED II	N LAE	3	PRE	SERV	ED IN	LAB_	_		

McCampbell Analytical, Inc.

1534 Willow Pass Rd

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Pittsburg (925) 25:	, CA 94565-1701 2-9262				V	Vork	Order:	1010	787	•	ClientC	Code: A	ATRS				
		WaterTrax	WriteOn	☐ EDF		Excel		Fax		✓ Email		Hard	Сору	Thi	rdParty	☐ J-	flag
Report to: Erik Allen Allterra Envir 849 Almar Av Santa Cruz, 0 831-425-2608	e, Ste. C #281	cc: PO:	erik@allterrae ±160; 160 Ho	nv.com, micah@a lmes Street	allterrae		All 84 Sa	terra Ei 9 Alma nta Cru	Payabl nvironm r Ave, S uz, CA S Ilterrae	nental Ste. C # 95060			Dat	uested e Rece e Prin	ived:		
Lab ID	Client ID		Matrix	Collection Date	Hold	1	2	3	Req 4	uested 5	Tests 6	(See le	gend b	elow)	10	11	12
1010787-001	Tank-2		Water	10/28/2010 12:00		Α											
Test Legend: 1 G-MBT 6	EX_W 2 7 12			3 8					1 0					5 10 ared by	r: Ana	Venega	

Comments: 72hr rush on 11/1/10

Sample Receipt Checklist

Client Name:	Allterra Enviro	nmental, Inc			Date ar	nd Time Received:	10/28/2010	5:00:51 PM
Project Name:	#160; 160 Holn	nes Street			Checkl	list completed and re	eviewed by:	Ana Venegas
WorkOrder N°:	1010787	Matrix Water			Carrier	: <u>Courier</u>		
		<u>Chair</u>	of Cu	stody (C	COC) Informat	tion		
Chain of custody	y present?		Yes	V	No 🗆			
Chain of custody	signed when reline	quished and received?	Yes	V	No 🗆			
Chain of custody	y agrees with samp	e labels?	Yes	V	No 🗌			
Sample IDs noted	d by Client on COC?		Yes	V	No \square			
Date and Time of	f collection noted by	Client on COC?	Yes	~	No \square			
Sampler's name	noted on COC?		Yes	V	No 🗆			
		<u>s</u>	ample	Receipt	: Information			
Custody seals in	tact on shipping co	ntainer/cooler?	Yes		No 🗆		NA 🔽	
Shipping contain	er/cooler in good co	andition?	Yes	V	No 🗆			
Samples in prop	er containers/bottle	s?	Yes	~	No 🗆			
Sample containe	ers intact?		Yes	✓	No \square			
Sufficient sample	e volume for indicat	ed test?	Yes	✓	No 🗆			
		Sample Prese	rvatio	n and Ho	old Time (HT)	Information		
All samples rece	ived within holding	ime?	Yes	✓	No 🗌			
Container/Temp	Blank temperature		Coole	er Temp:	5.2°C		NA \square	
Water - VOA via	lls have zero heads	pace / no bubbles?	Yes	V	No \square	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	V	No 🗆			
		(Ice Typ	e: WE	T ICE)			
* NOTE: If the "I	No" box is checked	see comments below.						
=====	=====	======		===:		======	=====	======
Client contacted:		Date contac	ted:			Contacted	by:	
Comments:								

Account of the Control of the Contro				
Allterra Environmental, Inc	Client Project ID: #160; 160 Street	Holmes	Date Sampled:	10/28/10
849 Almar Ave, Ste. C #281	Street		Date Received:	10/28/10
	Client Contact: Erik Allen		Date Extracted:	10/30/10
Santa Cruz, CA 95060	Client P.O.:		Date Analyzed:	10/30/10

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

Analytical methods: SW8021B/8015Bm Extraction method: SW5030B Work Order: 1010787 Lab ID Client ID Matrix TPH(g) MTBE Benzene Toluene Ethylbenzene Xylenes DF % SS Comments 001A W ND ND Tank-2 ND ND ND ND 98

Reporting Limit for DF =1;	W	50	5.0	0.5	0.5	0.5	0.5	μg/L
ND means not detected at or above the reporting limit	S	1.0	0.05	0.005	0.005	0.005	0.005	mg/Kg

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

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

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

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

OC for		
	Angela Rydelius,	, Lab Manage

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 54092 WorkOrder 1010787

EPA Method SW8021B/8015Bm Extraction SW5030B Spiked Sample ID: 1010787-001A											01A	
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)	
7 may to	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex)	ND	60	92.8	92.3	0.524	91.7	91.4	0.308	70 - 130	20	70 - 130	20
MTBE	ND	10	123	119	3.03	115	117	1.39	70 - 130	20	70 - 130	20
Benzene	ND	10	113	116	3.04	108	110	1.98	70 - 130	20	70 - 130	20
Toluene	ND	10	97.9	103	4.79	98.4	96.1	2.38	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	99.3	103	3.65	98.2	96.7	1.51	70 - 130	20	70 - 130	20
Xylenes	ND	30	111	116	4.40	111	109	2.23	70 - 130	20	70 - 130	20
%SS:	98	10	102	105	3.20	100	101	0.382	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 54092 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1010787-001A	10/28/10 12:00 PM	1 10/30/10	10/30/10 2:09 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).

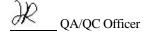
MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the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



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, Livermore	Date Sampled: 11/04/10
849 Almar Ave, Ste. C #281		Date Received: 11/04/10
019 Filmai Five, 8tc. C #201	Client Contact: James Allen	Date Reported: 11/05/10
Santa Cruz, CA 95060	Client P.O.:	Date Completed: 11/05/10

WorkOrder: 1011159

November 05, 2010

_	•
Llaar	James:
17541	Janues

Enclosed within are:

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

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

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

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius Laboratory Manager

McCampbell Analytical, Inc.



	ALLTERRA														oay	Ke	cor	er	10	-	-							
			lmar Avenu			I							- 9		Tu	irn Arc	und Ti	me (ci	rele or	e) I	RUSH	241	IR 4	8HR	72HR	الحارا	Say/	
			ita Cruz, Ca											21)							1			8				
	2.3		site: www.											708/				_						6				
			425-2608 F	acsimile: (8	31) 4	125-2	:609							510				560			100	070	20	83				
Report and Bill to:	Allterra Envir	onmental,	Inc.											8				90			bile :	9,0	99	25		8		
Project Number:														/dE				EP/	1,22	9	d Sc	Š	1 8	9,0		200		
	160 Holmes,	Livermore	, CA											E (1			60	10	09	826	100	A 6	8	827	ay	9.		
Project Name:	160	15				_								TB	6	_	82	anx	(82	×.	SSO	E E	EP/	Y.	ass	200		
Sampler Signature:	Sample &	10		2	$\overline{}$	-	1.1.1.1	7//		D				\geq	050	015	PA	feth	e s	Ξ.	p I	SIS.	ls (8	Bio	9		
	Sample Co	niection		Containers	-	1	Matri	X		P	reser	vatic)II	X	<	8	E)	Q P	£ 50	. 0	jo j	let.	eta	A's	15	9		pa
Field Point Name / Sample ID	Date	Time	Number of Containers	Container	Air	Water	Soil	Sludge	Other	lce	HCI	HNO3	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
✓ Tank-2	11/4/2010		3	Voas		X	Sec. 10)			X	X			X														X
																									*			
	,																											
						-			-																			
									-																			
									-																			
				- 1																								
																							- 10					
Sampled By: De. VON C	wens		Date:	Time: 1740		eived Oh	1	-						Com	ments	<u>S</u> :												
Received By:	4		Date:	Time: 1 900	4	eive	test	12	J.	-1	1/4	1/1	0															
Received By:			Date:	Time:	Rec	eivec	By:					7																
						,																						
																	1-1	00	7.5									

ICE It 5.6	
GOOD CONDITION APPROPRIATE	
HEAD SPACE ABSENT CONTAINERS	
DECHLORINATED IN LAB PRESERVED IN LAB	
VOAS O & G METALS OTHER	
PRESERVATION V	

McCampbell Analytical, Inc.

1534 Willow Pass Rd (925) 252-9262

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Pittsburg, CA 94565-1701 WorkOrder: 1011159 ClientCode: ATRS WaterTrax WriteOn ✓ EDF Excel Fax ✓ Email HardCopy ThirdParty J-flag Report to: Bill to: Requested TAT: 3 days James Allen Email: allterraenvironmental@yahoo.com, micah Accounts Payable Allterra Environmental, Inc. Allterra Environmental cc: Date Received: 11/04/2010 PO: 849 Almar Ave, Ste. C #281 849 Almar Ave, Ste. C #281 Santa Cruz, CA 95060 ProjectNo: #160; 160 Holmes, Livermore Santa Cruz, CA 95060 Date Printed: 11/05/2010 831-425-2608 FAX 831-425-2609 Requested Tests (See legend below) Lab ID **Client ID** Collection Date Hold 2 3 5 6 9 10 12 Matrix 11 1011159-001 Tank-2 Water 11/4/2010 Α Test Legend: 5 2 G-MBTEX_W PREDF REPORT 3 7 10 6 8 11 12 **Prepared by: Shino Hamilton**

Comments: changed to 72hr per email 11/05/10.

Sample Receipt Checklist

Client Name:	Allterra Envi	onmental, Inc			Date a	and Time Received:	11/4/2010	7:05:46 PM
Project Name:	#160; 160 Ho	lmes, Livermore			Check	list completed and r	eviewed by:	Shino Hamilton
WorkOrder N°:	1011159	Matrix Water			Carrie	r: <u>Derik Cartan (</u>	MAI Courier)	
		<u>Chair</u>	of Cu	ıstody (C	COC) Informa	ition		
Chain of custody	y present?		Yes	V	No 🗆			
Chain of custody	y signed when rel	nquished and received?	Yes	V	No 🗆			
Chain of custody	y agrees with sam	ple labels?	Yes	✓	No 🗌			
Sample IDs noted	d by Client on COC	0?	Yes	V	No 🗆			
Date and Time o	of collection noted by	by Client on COC?	Yes	✓	No 🗆			
Sampler's name	noted on COC?		Yes	✓	No 🗆			
		<u>s</u>	ample	Receipt	t Information			
Custody seals in	ntact on shipping o	container/cooler?	Yes		No 🗆		NA 🔽	
Shipping contain	ner/cooler in good	condition?	Yes	V	No 🗆			
Samples in prop	er containers/bott	les?	Yes	~	No 🗆			
Sample containe	ers intact?		Yes	✓	No 🗆			
Sufficient sample	e volume for indic	ated test?	Yes	✓	No 🗌			
		Sample Prese	rvatio	n and Ho	old Time (HT)) Information		
All samples rece	eived within holdin	g time?	Yes	✓	No 🗌			
Container/Temp	Blank temperature	•	Coole	er Temp:	5.6°C		NA \square	
Water - VOA via	als have zero head	dspace / no bubbles?	Yes	~	No 🗆	No VOA vials subm	itted	
Sample labels c	hecked for correc	t preservation?	Yes	~	No 🗌			
Metal - pH accep	ptable upon receip	t (pH<2)?	Yes		No 🗆		NA 🔽	
Samples Receiv	red on Ice?		Yes	~	No 🗆			
		(Ice Typ	e: WE	ET ICE)			
* NOTE: If the "I	No" box is checke	ed, see comments below.						
=====	=====	=======		===	=====	=	====	
Client contacted:	:	Date contac	ted:			Contacted	by:	
Comments:								

Allterra Environmental, Inc	Client Project ID: #	‡160; 160 Holmes,	Date Sampled:	11/04/10				
849 Almar Ave, Ste. C #281	Livermore		Date Received:	11/04/10				
	Client Contact: Jan	mes Allen	Date Extracted:	11/05/10				
Santa Cruz, CA 95060	Client P.O.:		Date Analyzed:	11/05/10				

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

Analytical methods: SW8021B/8015Bm Extraction method: SW5030B Work Order: 1011159 Lab ID Client ID Matrix TPH(g)MTBE Benzene Toluene Ethylbenzene Xylenes DF % SS Comments 001A W ND ND Tank-2 ND ND ND ND 102

	above the reporting limit	S	1.0	0.05	0.005	0.005	0.005	0.005	mg/Kg		
Ī	* 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										

0.5

0.5

0.5

0.5

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

5.0

50

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

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

OC for		
	Angela Rydelius,	, Lab Manage

 $\mu g/L$

Reporting Limit for DF =1;

TCLP & SPLP extracts in mg/L.

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 54197 WorkOrder 1011159

EPA Method SW8021B/8015Bm	Extra	tion SW	5030B					S	Spiked San	nple ID	: 1011098-0	01A
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)	
7 may to	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex)	ND	60	93.1	95	2.08	95.5	93.9	1.66	70 - 130	20	70 - 130	20
MTBE	ND	10	121	119	1.81	113	125	10.2	70 - 130	20	70 - 130	20
Benzene	ND	10	110	107	3.34	104	112	6.95	70 - 130	20	70 - 130	20
Toluene	ND	10	99.7	95.3	4.59	94.9	102	7.02	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	101	96.6	4.38	95.4	101	5.42	70 - 130	20	70 - 130	20
Xylenes	ND	30	115	109	4.77	108	114	5.49	70 - 130	20	70 - 130	20
%SS:	96	10	99	97	2.53	99	100	0.633	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 54197 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1011159-001A	11/04/1	0 11/05/10	11/05/10 2:56 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).

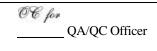
MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the 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; 160 Holmes, Livermore	Date Sampled: 11/04/10
849 Almar Ave, Ste. C #281		Date Received: 11/04/10
049 Minut 11ve, 5te. C #201	Client Contact: James Allen	Date Reported: 11/09/10
Santa Cruz, CA 95060	Client P.O.:	Date Completed: 11/09/10

WorkOrder: 1011160

November 09, 2010

D :	T
I laar	Iames:

Enclosed within are:

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

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

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

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius Laboratory Manager

McCampbell Analytical, Inc.



1011160

Chain of Custody Record ALLTERES Turn Around Time (circle one) RUSH 24HR 48HR 72HR 5-Day 849 Almar Avenue, Suite C, #281 Santa Cruz, California 95060 TPHg/ BTEX/ MTBE (EPA 8015/8021) Website: www.allterraenv.com PAH's/ PNA's (EPA 8270,625/8310) Ethanol and Methanol (EPA 8260) CAM-17 Metals (EPA 6010/6020) Phone: (831) 425-2608 Facsimile: (831) 425-2609 LUFT 5 Metals (EPA 6010/6020) Hardness/Total dissolved solids Report and Bill to: Allterra Environmental, Inc. Lead (EPA 6010/200.9/200.8) Project Number: (otal HVOCs (EPA 8260) Lead Scavengers (8260) Project Location: 160 Holmes, Livermore, CA 5-fuel oxys (EPA 8260) Fish Toxicity/Bioassay Project Name: BTEX (EPA 8020) FPHd (EPA 8015) Sampler Signature: Sample Collection Sample Containers Matrix Preservation EDF required Number of Containers Container Type Field Point Name Sludge Water HNO; Other Other Time Soil Date Air Ice H / Sample ID X GW-IN 11/4/2010 3 X XX X Voas Received By; Time: Comments: Dul he 11-4-10 1740 Received By Received By Date: Time: 11/4/10 7200 Date: Time: Received By: Received By

GOOD CONDITION APPROPRIATE
HEAD SPACE ABSENT CONTAINERS
DECHLORINATED IN LAB PRESERVED IN LAB
PRESERVATION YOAS 10 & G METALS OTHER

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

- 3 K	/illow Pass Rd																
	rg, CA 94565-1701 252-9262					Work	Order	: 1011	160	(ClientC	ode: A	TRS				
		WaterTrax	WriteOn	✓ EDF		Excel		Fax	[✓ Email		Hard	Сору	Thir	dParty	J-	flag
	rironmental, Inc Ave, Ste. C #281	cc: PO:		nmental@yahoo.d	com, n		All 84	counts terra Er 9 Almai inta Cru	nvironm r Ave, S	iental ste. C #2	281		Dat	uested e Rece e Prin	ived:		
831-425-260		,	,					cah@a									
									Req	uested	Tests	(See le	gend b	elow)			
Lab ID	Client ID		Matrix	Collection Date	Hold	1	2	3	4	5	6	7	8	9	10	11	12
1011160-001	GW-IN		Water	11/4/2010		Α	Α										
<u>Test Legend</u> : 1	BTEX_W 2 7 12	PREDF REP	ORT	3 8				9						5 10			
													Prepa	red by:	Shino	Hamilt	<u>on</u>

changed to 72hr per email 11/05/10. **Comments:**

Sample Receipt Checklist

Client Name:	Allterra Environme	ntal, Inc			Date a	and Time Received:	11/4/2010	7:17:27 PM
Project Name:	#160; 160 Holmes,	Livermore			Check	klist completed and r	eviewed by:	Shino Hamilton
WorkOrder N°:	1011160 M	latrix <u>Water</u>			Carrie	er: <u>Derik Cartan (I</u>	MAI Courier)	
		<u>Chain</u>	of Cu	stody (C	COC) Informa	ation		
Chain of custody	/ present?		Yes	V	No 🗆			
Chain of custody	signed when relinquishe	ed and received?	Yes	V	No 🗆			
Chain of custody	agrees with sample labe	els?	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 r	noted on COC?		Yes	✓	No 🗆			
		<u>Sa</u>	mple	Receipt	Information	<u>1</u>		
Custody seals int	tact on shipping containe	r/cooler?	Yes		No 🗆		NA 🔽	
Shipping containe	er/cooler in good conditio	n?	Yes	V	No 🗆			
Samples in prope	er containers/bottles?		Yes	V	No 🗆			
Sample containe	ers intact?		Yes	✓	No 🗆			
Sufficient sample	e volume for indicated tes	it?	Yes	✓	No 🗌			
		Sample Preser	vatio	n and Ho	old Time (HT) Information		
All samples recei	ived within holding time?		Yes	V	No 🗌			
Container/Temp B	Blank temperature		Coole	er Temp:	5.6°C		NA 🗆	
Water - VOA vial	ls have zero headspace	/ no bubbles?	Yes	✓	No 🗆	No VOA vials subm	itted 🗆	
Sample labels ch	necked for correct preser	vation?	Yes	✓	No 🗌			
Metal - pH accep	otable upon receipt (pH<2)?	Yes		No 🗆		NA 🔽	
Samples Receive	ed on Ice?		Yes	✓	No 🗆			
		(Ice Type	e: WE	TICE)			
* NOTE: If the "N	No" box is checked, see o	comments below.						
=====	======	=====	===	===:	=	======	====	======
Olient contests d		Data assistant	- al.			Control	. 	
Client contacted:		Date contact	ea:			Contacted	by:	
Comments:								

			,, ,	
Allterra Environmental, Inc	Client Project ID: #	#160; 160 Holmes,	Date Sampled:	11/04/10
849 Almar Ave, Ste. C #281	Liverniole		Date Received:	11/04/10
	Client Contact: Jar	mes Allen	Date Extracted:	11/05/10-11/08/10
Santa Cruz, CA 95060	Client P.O.:		Date Analyzed:	11/05/10-11/08/10

E		asoline Ra	ange (C6-C12)				e with BTEX a	and MTBE		k Order:	1011160
Lab ID	raction method: SW5030B Analytical methods: SW8021B/8015Bm ID Client ID Matrix TPH(g) MTBE Benzene Toluene Ethylbenzene Xylenes									% SS	Comment
001A	GW-IN	W	790	6900	20	3.0	39	76	DF 1	113	d1
	g Limit for DF =1; s not detected at or	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

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

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

- %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor
- +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: 54197 WorkOrder 1011160

EPA Method SW8021B/8015Bm	Extra	ction SW	5030B					5	Spiked San	nple ID:	: 1011098-0	001A
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	93.1	95	2.08	95.5	93.9	1.66	70 - 130	20	70 - 130	20
MTBE	ND	10	121	119	1.81	113	125	10.2	70 - 130	20	70 - 130	20
Benzene	ND	10	110	107	3.34	104	112	6.95	70 - 130	20	70 - 130	20
Toluene	ND	10	99.7	95.3	4.59	94.9	102	7.02	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	101	96.6	4.38	95.4	101	5.42	70 - 130	20	70 - 130	20
Xylenes	ND	30	115	109	4.77	108	114	5.49	70 - 130	20	70 - 130	20
%SS:	96	10	99	97	2.53	99	100	0.633	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 54197 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1011160-001A	11/04/10	11/05/10	11/05/10 6:56 PM	1011160-001A	11/04/10	11/08/10	11/08/10 7:02 PM

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

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

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

NR = 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.

OC for

QA/QC Officer

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 St., Livermore, CA	Date Sampled: 11/11/10
849 Almar Ave, Ste. C #281		Date Received: 11/12/10
019 Filmai Five, 8tc. C #201	Client Contact: James Allen	Date Reported: 11/16/10
Santa Cruz, CA 95060	Client P.O.:	Date Completed: 11/15/10

WorkOrder: 1011373

November 16, 2010

_	•
Llaar	James:
17541	Janues

Enclosed within are:

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

	849 Almar Avenue, Suite C, #281														Ch	ain	of C	ust	ody	Rec	ord						
		849	Almar Aven	ue, Suite C,	#281											Turn	Around	Time (circle o	one)	RUSH	24HF	481	HR 7	2HR	5 Day	
Project Number: Project Location: Project Name:	roject Location: 160 Holmes St., Livermore, CA							TPHg/ BTEX/ MTBE (EPA 8015/8021)			260)	Ethanol and Methanol (EPA 8260)	8260)	4 8260)	solved solids	CAM-17 Metals (EPA 6010/6020)	LUFT 5 Metals (EPA 6010/6020)	PAH's/ PNA's (EPA 8270,625/8310)	ssay	00.9/200.8)	•						
Sampler Signature:	Sample C	ollection	Sample	Containers	T-	,	Matri	0		P	rese	rvation	n	M	020	015)	PA 8	letha	ers ((EP)	l dis	als (F	s (E	(EP)	Bioa	10/2	
Field Point Name Sample ID	Date	Тіте	Number of Containers	Container	Air	Water	Soil	Sludge	Other	Ice	HCI	HNOs	Other	TPHg/BTEX	BTEX (EPA 8020)	TPHd (EPA 8015)	5-fuel oxys (EPA 8260)	Ethanol and N	Lead Scavengers (8260)	Total HVOCs (EPA 8260)	Hardness/Total dissolved solids	CAM-17 Met	LUFT 5 Meta	PAH's/ PNA's	Fish Toxicity/Bioassay	Lead (EPA 6010/200.9/200.8)	EDF required
Batch-3	11/11/10	12:00	3	voa		X				X	X			X													
Received By:	MANIDINE	9v	Date:	Time: Time:	Rece			Va	00	11/	μ/	10 9	7:4	Comi	ments		D SPACHLORI	AMIED	IN LA	5	PRES	RIATE AINER SERVE	DINI	AB_	4		

_____ 1534 Willow Pass Rd

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

	rg, CA 94565-1701 252-9262					Work	Order	: 1011	373	(Client(Code: A	TRS				
		WaterTrax	WriteOn	EDF		Excel		Fax		🗸 Email		Hard	Юору	Thir	dParty	☐ J-	flag
	rironmental, Inc Ave, Ste. C #281 , CA 95060	cc: PO:		nmental@yahoo.c			All 84 Sa	counts Iterra E 9 Alma anta Cru	ız, CA 9	nental Ste. C #:			Dat	uested e Rece e Prini	ived:		
Lab ID	Client ID		Matrix	Callagtion Data	Uala	4	_					(See le			10		12
1011373-001	Client ID Batch-3		Matrix Water	Collection Date 11/11/2010 12:00	Hola	1 A	2	3	4	5	6	7	8	9	10	11	12
Test Legend:																	
1 G-MB	BTEX_W 2			3					4				_	5			
11	12			8				(9					10			
													Prepa	red by:	Melis	sa Valle	es

Comments:

Sample Receipt Checklist

Client Name:	Allterra Enviro	nmental, Inc			Date a	and Time Received:	11/12/2010	0 10:02:38 AM
Project Name:	160 Holmes St.	, Livermore, CA			Check	list completed and r	eviewed by:	Melissa Valles
WorkOrder N°:	1011373	Matrix Water			Carrie	r: <u>OnTrac</u>		
		<u>Chain</u>	of Cu	stody (C	COC) Informa	ntion		
Chain of custody	present?		Yes	V	No 🗆			
Chain of custody	signed when relind	uished and received?	Yes	V	No 🗆			
Chain of custody	agrees with sampl	e labels?	Yes	✓	No 🗌			
Sample IDs noted	by Client on COC?		Yes	V	No 🗆			
Date and Time of	collection noted by	Client on COC?	Yes	✓	No 🗆			
Sampler's name r	noted on COC?		Yes	V	No 🗆			
		<u>s</u>	ample	Receipt	Information	!		
Custody seals in	tact on shipping cor	ntainer/cooler?	Yes		No 🗆		NA 🗹	
Shipping containe	er/cooler in good co	ndition?	Yes	V	No 🗆			
Samples in prope	er containers/bottles	\$?	Yes	V	No 🗆			
Sample containe	rs intact?		Yes	✓	No 🗆			
Sufficient sample	e volume for indicate	ed test?	Yes	✓	No 🗌			
		Sample Prese	rvatio	n and Ho	old Time (HT)) Information		
All samples recei	ived within holding t	ime?	Yes	✓	No 🗌			
Container/Temp B	Blank temperature		Coole	er Temp:	5.6°C		NA \square	
Water - VOA vial	ls have zero heads	pace / no bubbles?	Yes	V	No 🗆	No VOA vials subm	itted 🗆	
Sample labels ch	necked for correct p	reservation?	Yes	✓	No 🗌			
Metal - pH accep	table upon receipt (pH<2)?	Yes		No 🗆		NA 🗹	
Samples Receive	ed on Ice?		Yes	V	No 🗆			
		(Ice Typ	e: WE	TICE)			
* NOTE: If the "N	No" box is checked,	see comments below.						
			===					======
Client contacted:		Date contact	ted:			Contacted	by:	
Comments:								

Allterra Environmental, Inc	Client Project ID: 160 Holmes St., Livermore, CA	Date Sampled:	11/11/10
849 Almar Ave, Ste. C #281	Liverniole, CA	Date Received:	11/12/10
,	Client Contact: James Allen	Date Extracted:	11/13/10
Santa Cruz, CA 95060	Client P.O.:	Date Analyzed:	11/13/10

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1011373

Extraction	on method: Sw5030B			Allaly	near methods:	W 6021D/6013	DIII		WOI	1011373	
Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	Batch-3	W	ND	ND	ND	ND	ND	ND	1	110	
	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 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.

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

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

W.O. Sample Matrix: Water

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

BatchID: 54351

WorkOrder 1011373

QC SUMMARY REPORT FOR SW8021B/8015Bm

QC Matrix: Water

EPA Method SW8021B/8015Bm	Extra	ction SW	5030B						Spiked Sar	nple ID:	: 1011384-0	05A
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(btexf)	ND	60	106	98.1	7.36	96.3	103	6.95	70 - 130	20	70 - 130	20
MTBE	ND	10	114	124	8.11	119	121	2.28	70 - 130	20	70 - 130	20
Benzene	ND	10	108	114	5.90	107	112	4.55	70 - 130	20	70 - 130	20
Toluene	ND	10	94.1	97.6	3.57	95.5	100	5.03	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	95.4	99	3.70	94.4	97.4	3.12	70 - 130	20	70 - 130	20
Xylenes	ND	30	110	111	1.66	108	114	4.78	70 - 130	20	70 - 130	20
%SS:	108	10	101	104	2.45	102	104	2.37	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 54351 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1011373-001A	11/11/10 12:00 PM	1 11/13/10	11/13/10 1:34 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).

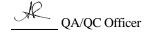
MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the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



McCampbell Analytical,	Inc.
"When Quality Counts"	

Allterra Environmental, Inc	Client Project ID: 160 Holmes St., Livermore, CA	Date Sampled: 11/11/10
849 Almar Ave, Ste. C #281		Date Received: 11/12/10
049 74iilidi 71Ve, 5te. C #201	Client Contact: James Allen	Date Reported: 11/18/10
Santa Cruz, CA 95060	Client P.O.:	Date Completed: 11/18/10

WorkOrder: 1011374

November 18, 2010

D :	T
I laar	Iames:

Enclosed within are:

- 1) The results of the 1 analyzed sample from your project: 160 Holmes St., 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
McGamaball Appletical In

McCampbell Analytical, Inc.

		A	LLT	d de	7															of C							
		849	Almar Aven	ue, Suite C,	#281											Turn	Around	Time (circle o	one) I	RUSH	24HF	481	HR 7	2HR	5 Day	
			ebsite: www. 425-2608 F	allterraenv.c	om:	25-260	09	2.12=5-						(8021)				6				6	_	10)			
Report and Bill to: Allterra Environmental, Inc. Project Number: 160 Project Location: 160 Holmes St., Livermore, CA Project Name: Sampler Signature:							TPHg/ BTEX/ MTBE (EPA 8015/8021)	20)	5)	A 8260)	Ethanol and Methanol (EPA 8260)	s (8260)	EPA 8260)	dardness/Total dissolved solids	AM-17 Metals (EPA 6010/6020)	UUFT 5 Metals (EPA 6010/6020)	PAH's/ PNA's (EPA 8270,625/8310)	ioassay	ead (EPA 6010/200.9/200.8)								
	Sample Collection Sample Co		Containers			Matri	X		- 1	rese	rvatio	n	×	80.	801	(EP.	Me	nger	8	otal	etal	stals	Vs ()	ty/B	00109	8	
Field Point Name Sample ID	Date	Time	Number of Containers	Container	Air	Water	Soil	Sludge	Other	Ice	HCI	HNOs	Other	TPHg/ BTE	BTEX (EPA 8020)	TPHd (EPA 8015)	5-fuel oxys (EPA 8260)	Ethanol and	Lead Scavengers (8260)	Total HVOCs (EPA 8260)	Hardness/To	CAM-17 M	LUFT 5 Mc	PAH's/PN/	Fish Toxicity/Bioassay	Lead (EPA	EDF required
EW-3-IN	11/11/10	12:05	3	voa		X				Х	Х			X					- 80000								X
																		-	-						£-		
																									+-		-
					-								-					-	-				-		-		-
	2			+														+							-		•
																	10										
																								+			
							-		ti.	-							-	-									
	-			+													+2							+			
							+											-						-	-		
																											-
		+											-				-							-			
Sampled By:		_	Date:	Time: 2:300	Rec	eived	By:	a	16	112	10	9:	45	Com	ments		11°5		ON_	/ 4	≠ PRO	PRIAT	E \	/			
Received By:			Date:	Time:	Rec	Received By:					DE	AD SP	RINATE			PR	SERV USLOT	EDIN	LAB_								
Received By:			Date:	Time:	Rec	eived	By:									30	cecm	AT OF	٧								

1534 Willow Pass Rd

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Pittsburg, (925) 252	CA 94565-1701 2-9262					WorkC)rder:	10113	374	Clie	entCod	de: ATRS				
		WaterTrax	WriteOn	✓ EDF		Excel	I	Fax	~	Email		HardCopy	Third	dParty	☐ J-1	flag
Report to: James Allen		Email:	allterraenviror	nmental@yahoo.c	om m		Bill to:	counts l	Payable			Red	quested	TAT:	5 c	lays
Allterra Enviro 849 Almar Ave Santa Cruz, C. 831-425-2608	e, Ste. C #281	cc: PO:		st., Livermore, CA	om, m	iouri	All: 84:	terra En 9 Almar	nvironmer Ave, Ste z, CA 950	. C #281	l		te Recei te Print		11/12/2 11/12/2	
									Reque	sted Te	sts (S	ee legend l	below)			
Lab ID	Client ID		Matrix	Collection Date	Hold	1	2	3	4	5	6	7 8	9	10	11	12
1011374-001	EW-3-IN		Water	11/11/2010 12:05		Α	Α									

Test Legend:

1 G-MBTEX_W	2 PREDF REPORT	3	4	5
6	7	8	9	10
11	12			
				Prepared by: Melissa Valles

Comments:

Sample Receipt Checklist

Client Name:	Allterra Enviro	nmental, Inc			Date a	and Time Received:	11/12/2010	0 10:11:34 AM
Project Name:	160 Holmes St	, Livermore, CA			Check	dist completed and r	eviewed by:	Melissa Valles
WorkOrder N°:	1011374	Matrix Water			Carrie	r: <u>OnTrac</u>		
		<u>Chain</u>	of Cu	stody (C	COC) Informa	ation		
Chain of custody	present?		Yes	V	No 🗆			
Chain of custody	signed when relind	quished and received?	Yes	V	No 🗆			
Chain of custody	agrees with samp	e labels?	Yes	✓	No 🗌			
Sample IDs noted	by Client on COC?		Yes	V	No 🗆			
Date and Time of	collection noted by	Client on COC?	Yes	✓	No 🗆			
Sampler's name r	noted on COC?		Yes	V	No 🗆			
		<u>s</u>	ample	Receipt	Information	ļ		
Custody seals in	tact on shipping co	ntainer/cooler?	Yes		No 🗆		NA 🗹	
Shipping containe	er/cooler in good co	andition?	Yes	V	No 🗆			
Samples in prope	er containers/bottle	s?	Yes	V	No 🗆			
Sample containe	rs intact?		Yes	✓	No 🗆			
Sufficient sample	e volume for indicate	ed test?	Yes	✓	No 🗌			
		Sample Prese	rvatio	n and Ho	old Time (HT) Information		
All samples recei	ived within holding t	ime?	Yes	✓	No 🗌			
Container/Temp B	Blank temperature		Coole	er Temp:	5.6°C		NA \square	
Water - VOA vial	ls have zero heads	pace / no bubbles?	Yes	V	No 🗆	No VOA vials subm	itted 🗆	
Sample labels ch	necked for correct p	reservation?	Yes	~	No 🗌			
Metal - pH accep	table upon receipt (pH<2)?	Yes		No 🗆		NA 🗹	
Samples Receive	ed on Ice?		Yes	V	No 🗆			
		(Ice Typ	e: WE	TICE)			
* NOTE: If the "N	No" box is checked,	see comments below.						
=====	=====	======				======		======
Client contacted:		Date contact	ted:			Contacted	by:	
Comments:								

Allterra Environmental, Inc	Client Project ID: 160 Holmes St.,	Date Sampled:	11/11/10		
940 A1 A Gt. C #301	Livermore, CA	Date Received:	11/12/10		
849 Almar Ave, Ste. C #281	Client Contact: James Allen	Date Extracted:	11/15/10-11/16/10		
Santa Cruz, CA 95060	Client P.O.:	Date Analyzed:	11/15/10-11/16/10		

		asoline Ra	ange (C6-C12				e with BTEX a	and MTBE			
Extraction m	ethod: SW5030B		Analytical methods: SW8021B/8015Bm								1011374
Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comment
001A	EW-3-IN	w	20,000	280,000	310	160	610	2600	100	108	d1
	g Limit for DF =1;	W	50	5.0	0.5	0.5	0.5	0.5		μg/I	·
ND means not detected at or above the reporting limit		S	1.0	0.05	0.005	0.005	0.005	0.005			

* 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.

- %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor
- +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

Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 54351 WorkOrder 1011374

EPA Method SW8021B/8015Bm Extraction SW5030B Spiked Sample ID: 1011384-005A									05A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			1
, mary to	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex)	ND	60	106	98.1	7.36	96.3	103	6.95	70 - 130	20	70 - 130	20
MTBE	ND	10	114	124	8.11	119	121	2.28	70 - 130	20	70 - 130	20
Benzene	ND	10	108	114	5.90	107	112	4.55	70 - 130	20	70 - 130	20
Toluene	ND	10	94.1	97.6	3.57	95.5	100	5.03	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	95.4	99	3.70	94.4	97.4	3.12	70 - 130	20	70 - 130	20
Xylenes	ND	30	110	111	1.66	108	114	4.78	70 - 130	20	70 - 130	20
%SS:	108	10	101	104	2.45	102	104	2.37	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 54351 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1011374-001A	11/11/10 12:05 PM	11/15/10	11/15/10 4:06 PM	1011374-001A	11/11/10 12:05 PM	11/16/10	11/16/10 7:35 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.

