# **Atlantic Richfield Company**

Chuck Carmel Environmental Business Manager

PO Box 1257 San Ramon, CA 94583 Phone: (925) 275-3803 Fax: (925) 275-3815 E-Mail: charles.carmel@bp.com

## RECEIVED

9:09 am, Jan 06, 2010

Alameda County Environmental Health

5 January 2010

Re: Fourth Quarter 2009 Ground-Water Monitoring Report Former Richfield Oil Company Station #472 6415 International Boulevard, Oakland, California ACEH Case #RO0002982

"I declare, that to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached document are true and correct.

Submitted by,

Im

Chuck Carmel Environmental Business Manager

Attachment:



Prepared for

Mr. Chuck Carmel Environmental Business Manager Atlantic Richfield Company P.O. Box 1257 San Ramon, California 94583

Prepared by

## Fourth Quarter 2009 Ground-Water Monitoring Report

Former Richfield Oil Company Service Station #472 6415 International Boulevard, Oakland, California ACEH Case #RO0002982 BROADBENT & ASSOCIATES, INC. ENGINEERING, WATER RESOURCES & ENVIRONMENTAL

1324 Mangrove Avenue, Suite 212 Chico, California 95926 (530) 566-1400 www.broadbentinc.com

5 January 2010

Project No. 09-88-601



5 January 2010

Project No. 09-88-601

Atlantic Richfield Company P.O. Box 1257 San Ramon, California 94583 Submitted via ENFOS

Attn.: Mr. Chuck Carmel

Re: Fourth Quarter 2009 Ground-Water Monitoring Report, Former Richfield Oil Company Service Station #472, 6415 International Boulevard, Oakland, California ACEH Case #RO0002982

Dear Mr. Carmel:

Provided herein is the *Fourth Quarter 2009 Ground-Water Monitoring Report* for Former Richfield Oil Company Service Station #472 (aka Plucky Liquors) located at 6415 International Boulevard, Oakland, Alameda County, California (Site). This report presents results of the ground-water monitoring conducted at the Site during the Fourth Quarter of 2009.

Should you have questions regarding the work performed or results obtained, please do not hesitate to contact me at (530) 566-1400.

Sincerely,

**BROADBENT & ASSOCIATES, INC.** 

Thomas A. Venus, P.E. Senior Engineer

Enclosures



cc: Mr. Paresh Khatri, Alameda County Environmental Health (Submitted via ACEH ftp site) Electronic copy uploaded to GeoTracker

## STATION #472 GROUND-WATER MONITORING REPORT

Facility: <u>#472</u> Address:	6415 International Boulevard, Oakland, California
Environmental Business Manager:	Mr. Chuck Carmel
Consulting Co./Contact Person:	Broadbent & Associates, Inc.(BAI)/Mr. Tom Venus, PE
	(530) 566-1400
Consultant Project No.:	09-88-601
Primary Agency/Regulatory ID No.:	Alameda County Environmental Health (ACEH)
	ACEH Case #RO0002982
Facility Permits/Permitting Agency:	NA

#### WORK PERFORMED THIS QUARTER (Fourth Quarter 2009):

- 1. Prepared and submitted *Third Quarter 2009 Ground-Water Monitoring Report* (BAI, 10/30/2009).
- 2. Conducted ground-water monitoring/sampling for Fourth Quarter 2009. Work performed on 11 November 2009 by Broadbent & Associates, Inc. (BAI).
- 3. Re-packaged and submitted *Revised Soil & Ground-Water Investigation with Third Quarter* 2009 Ground-Water Monitoring Report (BAI, 11/17/2009).

#### WORK PROPOSED FOR NEXT QUARTER (First Quarter 2010):

- 1. Prepared and submitted *Fourth Quarter 2009 Ground-Water Monitoring Report* (contained herein).
- 2. Conduct ground-water monitoring/sampling for First Quarter 2010.

#### **QUARTERLY RESULTS SUMMARY:**

Current phase of project:	Ground-water monitoring/sampling
Frequency of ground-water	Quarterly = MW-1, MW-2, and MW-3
monitoring:	
Frequency of ground-water sampling:	Quarterly = MW-1, MW-2, and MW-3
Is free product (FP) present on-site:	No
Current remediation techniques:	NA
Depth to ground water (below TOC):	8.09 ft (MW-2) to 9.56 ft (MW-3)
General ground-water flow direction:	South-Southwest
Approximate hydraulic gradient:	0.008 ft/ft

#### **DISCUSSION:**

Fourth Quarter 2009 ground-water monitoring and sampling was conducted at Station #472 on 11 November 2009 by BAI. Water levels were gauged in each of the three wells at the Site. No irregularities were noted during water level gauging. Depth-to-water measurements ranged from 8.09 ft at MW-2 to 9.56 ft at MW-3. Resulting ground-water surface elevations ranged from 15.95 ft above datum in well MW-1 to 15.17 ft in well MW-3. Water level elevations are summarized in Table 1. Water level elevations yielded a potentiometric ground-water flow direction and gradient to the south-southwest at approximately 0.008 ft/ft. Ground-water monitoring field data sheets are provided within Appendix A. Measured depths to ground water and respective ground-water elevations are summarized in Table 1. Current and historic ground-water flow directions and gradients are provided in Table 3. A Site Location Map is presented as Drawing 1. Potentiometric ground-water elevation contours are presented in Drawing 2.

Consistent with the current ground-water sampling schedule, water samples were collected from wells MW-1, MW-2, and MW-3 on 11 November 2009. No irregularities were reported during sampling. Samples were submitted under chain-of-custody protocol to Calscience Environmental Laboratories, Inc. (Garden Grove, California), for analysis of Gasoline Range Organics (GRO, C6-C12) by EPA Method 8015B; for Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX) by EPA Method 8260B; and Methyl Tert-Butyl Ether (MTBE), Ethyl Tert-Butyl Ether (ETBE), Tert-Amyl Methyl Ether (TAME), Di-Isopropyl Ether(DIPE), Tert-Butyl Alcohol (TBA), 1,2-Dibromomethane (EDB), 1,2-Dichloroethane (1,2-DCA), and Ethanol by EPA Method 8260B. The laboratory noted that during the GRO analysis of sample MW-3 an unknown hydrocarbon(s) was encountered based on the gasoline reference standard. No other significant irregularities were encountered during laboratory analysis of the samples. Ground-water sampling field data sheets and the laboratory analytical report, including chain-of-custody documentation, are provided in Appendix A.

GRO was detected above the laboratory reporting limit in MW-3 at a concentration of 88 micrograms per liter ( $\mu$ g/L). The remaining analytes were not detected above their laboratory reporting limits in the three wells sampled this quarter. Ground-water monitoring laboratory analytical results are summarized in Table 1 and Table 2. The most recent GRO, Benzene, and MTBE concentrations are also presented in Drawing 2. Ground-water monitoring data (GEO\_WELL) and laboratory analytical results (EDF) were uploaded to the GeoTracker AB2886 database. Upload confirmation receipts are provided in Appendix B.

#### **CONCLUSIONS AND RECOMMENDATIONS:**

It is somewhat premature to make conclusions based on two rounds of ground-water monitoring and sampling at Station #472. That stated, ground-water elevations, flow direction, and hydraulic gradient were generally consistent with expectations. No petroleum hydrocarbon contaminants were detected in the sample from wells MW-1 and MW-2. Monitoring well MW-2 is in close proximity to the assumed former underground storage tank pit. BAI continues to recommend that one year of quarterly monitoring and sampling be performed to seek trends in the ground-water elevations, flow directions, horizontal gradients, and contaminant concentrations. Four quarters of data should be available following the Second Quarter 2010 ground-water monitoring event. A ground-water monitoring report will be submitted for the next sampling event scheduled for the First Quarter of 2010.

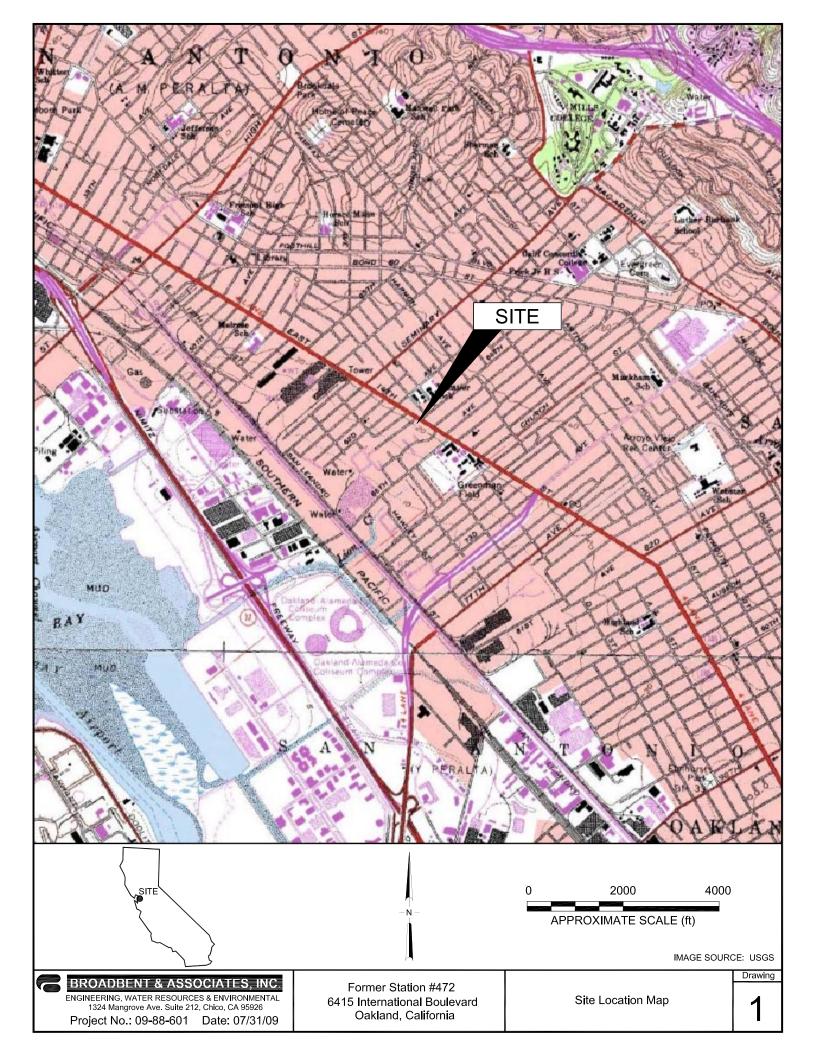
#### **CLOSURE:**

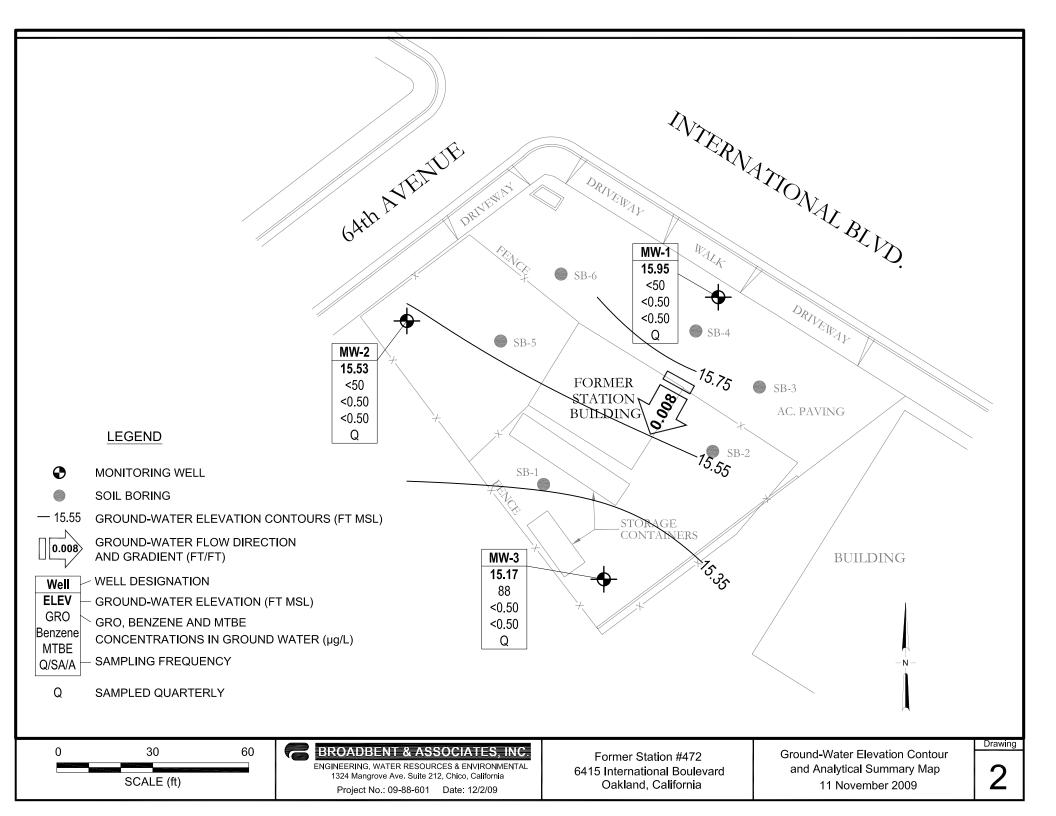
The findings presented in this report are based upon: observations of BAI field personnel (see Appendix A), the points investigated, and results of laboratory tests performed by Calscience Environmental Laboratories, Inc. (Garden Grove, California). Our services were performed in accordance with the generally accepted standard of practice at the time this report was written. No other warranty, expressed or implied was made. This report has been prepared for the exclusive use of Atlantic Richfield Company. It is possible that variations in soil or ground-water conditions could exist beyond points explored in this investigation. Also, changes in site conditions could occur in the future due to variations in rainfall, temperature, regional water usage, or other factors.

#### **ATTACHMENTS:**

Drawing 1. Site Location Map, Station #472, 6415 International Boulevard, Oakland, California

Drawing 2.	Ground-Water Elevation Contour and Analytical Summary Map, 11 November 2009, Station #472, 6415 International Boulevard, Oakland, California
Table 1.	Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses, Station #472, 6415 International Blvd., Oakland, California
Table 2.	Summary of Fuel Additives Analytical Data, Station #472, 6415 International Blvd., Oakland, California
Table 3.	Historical Ground-Water Flow Direction and Gradient, Station #472, 6415 International Blvd., Oakland, California
Appendix A.	BAI Ground-Water Sampling Data Package (Includes Field Data Sheets, Laboratory Analytical Report with Chain-of-Custody Documentation, and Field Procedures)
Appendix B.	GeoTracker Upload Confirmation Receipts





Well and			TOC Elevation	DTW	Product Thickness		GRO/			ons in (µg/ Ethyl-	Total		DO			DRO/ TPHd	TOG
Sample Date	P/NP	Footnote	(feet)	(feet)	(feet)	(feet)	TPHg	Benzene	Toluene	Benzene	Xylenes	MtBE	(mg/L)	Lab	pН	(µg/L)	(µg/L)
MW-1																	
8/25/2009	Р	LX (DRO)	24.17	9.29		14.88	530	< 0.50	< 0.50	< 0.50	< 0.50	0.54		CEL	7.21	190	
11/11/2009	NP		24.17	8.22		15.95	<50	<0.50	<0.50	<0.50	<0.50	<0.50		CEL			
MW-2																	
8/25/2009	Р		23.62	9.65		13.97	<50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50		CEL	7.30	<50	
11/11/2009	NP		23.62	8.09		15.53	<50	<0.50	<0.50	<0.50	<0.50	<0.50		CEL			
MW-3																	
8/25/2009	Р		24.73	11.07		13.66	63	< 0.50	1.2	< 0.50	< 0.50	< 0.50		CEL	7.09	85	
11/11/2009	NP	LW (GRO)	24.73	9.56		15.17	88	<0.50	<0.50	<0.50	<0.50	<0.50		CEL			

 Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

#### Station #472, 6415 International Boulevard, Oakland, CA

#### ABBREVIATIONS & SYMBOLS: --/--- = Not analyzed/applicable/measured/available < = Not detected at or above specified laboratory reporting limit DO = Dissolved oxygen DRO = Diesel range organics DTW = Depth to water in ft bgsGRO = Gasoline range organics, range C4-C12 GWE = Groundwater elevation measured in ft HVOC = Halogenated volatile organic compounds mg/L = Milligrams per liter MTBE = Methyl tert-butyl ether NP = Well not purged prior to sampling P = Well purged prior to sampling TOC = Top of casing measured in ftTOG = Total oil and grease TPH-d = Total petroleum hydrocarbons as diesel TPH-g = Total petroleum hydrocarbons as gasoline $\mu g/L =$ Micrograms per liter

CEL = CalScience Environmental Laboratories, Inc.

#### FOOTNOTES:

LW = Quantitation of unknown hydrocarbon(s) in sample based on gasoline.

LX = Quantitation of unknown hydrocarbon(s) in sample based on diesel.

#### Table 2. Summary of Fuel Additives Analytical Data

Well and				Concentrati	ons in (µg/L)				
Sample Date	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	Comments
MW-1									
8/25/2009	<300	<10	0.54	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
11/11/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-2									
8/25/2009	<300	<10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
11/11/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-3									
8/25/2009	<300	<10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
11/11/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	

#### Station #472, 6415 International Boulevard, Oakland, CA

#### ABBREVIATIONS & SYMBOLS:

--- = Not analyzed/applicable/measured/available < = Not detected at or above specified laboratory reporting limit 1,2-DCA = 1,2-Dichloroethane DIPE = Di-isopropyl ether EDB = 1,2-Dibromoethane ETBE = Ethyl tert-butyl ether MTBE = Methyl tert-butyl ether TAME = tert-Amyl methyl ether TBA = tert-Butyl alcohol µg/L = Micrograms per Liter

NOTES:

All volatile organic compounds were analyzed using EPA Method 8260B.

Date Sampled	Approximate Flow Direction	Approximate Hydraulic Gradient
8/25/2009	Southwest	0.01
11/11/2009	South-Southwest	0.008

# Table 3. Historical Ground-Water Flow Direction and GradientStation #472, 6415 International Boulevard, Oakland, CA

## **APPENDIX** A

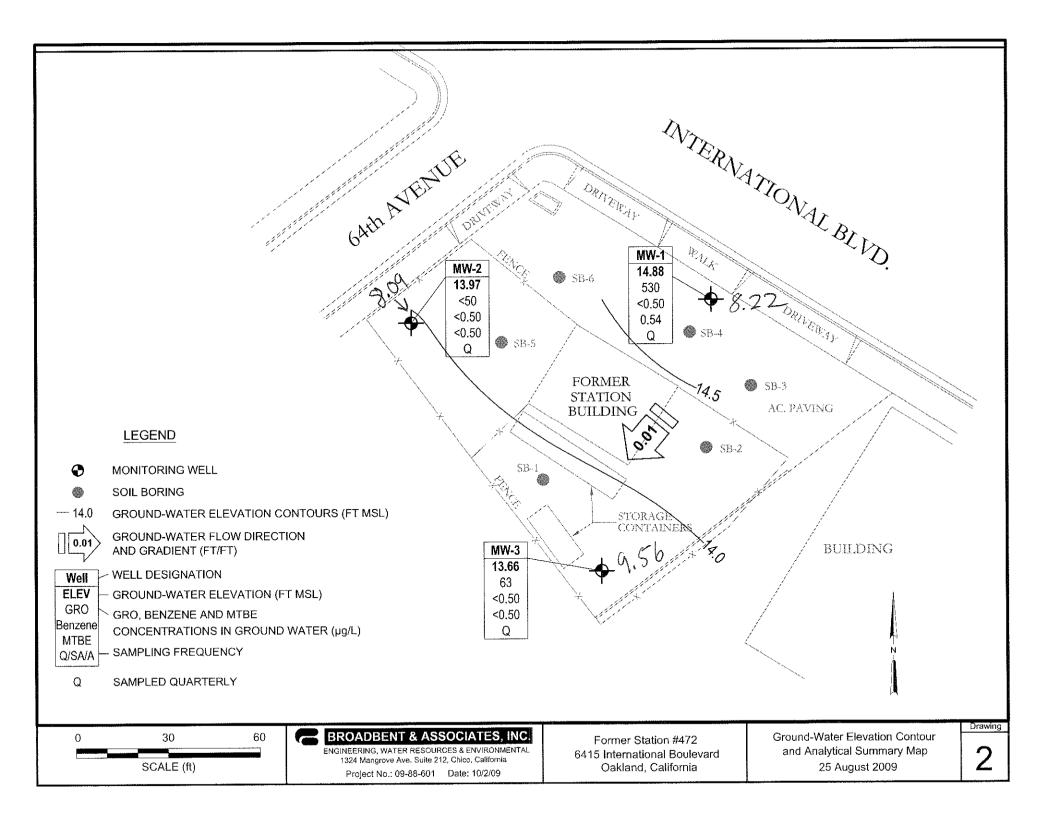
BAI GROUND-WATER SAMPLING DATA PACKAGE (INCLUDES FIELD DATA SHEETS, LABORATORY ANALYTICAL REPORT WITH CHAIN-OF-CUSTODY DOCUMENTATION, AND FIELD PROCEDURES)

	<u></u>					Page of
roject: <u>BP 7</u>	2107, B	P472	Pi	roject No.:	19-88-601	
-						11/09
ime Onsite:	From:	To:	; From:	To:	; From:;	To:
🟒 UST E	mergency Sys	tem Shut-o	asses <u></u> Ha: ff Switches Locato Other PPE (de	ed 💆 P	roper Gloves	Safety Vest
Equipment In	and <u>y 60</u> Use: <u>Serv.</u> (	ie Trac				
TIME:			WORK DE	SCRIPTION:		
0 600	@ offic	C, Pap	work B Samp	de shippi	5	yan ka ku
0830	Orpert	for 1	3P 2107		092	
Discolo	Onsite	2107				
230	offsite	2/07			······	
125C	cn site	BP47,	2			
1350	offster	BP47	2			
		,				
					****	an a
······································						
				ala an		
						·····

## FIELD DATA REPORT

BROADBENT & ASSOCIATES, INC. ENGINEERING, WATER RESOURCES & ENVIRONMENTAL

DATE: PERSO	11/11/6 NNEL: 7	9 [b·E.F.			PROJE COMMI	<u>CT NO.:</u> ENTS:	69-	88-60	>			
WEATH	ER:	· ~			Equip:	Geosquirt	Tubing	Bailers	DO	wli	Ec/pH	
Well ID	Time	MEASURING POINT	DTW (FT)	PRODUCT THICKNESS	pН	Cond. (X100)	Temp. (C/F)	DO (mg/l)	Redox (mV)	lron (mg/l)	Alk. (mg/l)	WELL HEAD CONDITION: VAULT, BOLTS, CAP, LOCK, ETC
MW-1 MW-2 MW-3	1340		8,22 8.09 9.56									Nopwac
MW-2	[325		8.09									Nopurge
MW3	1320		9.56									No purge No purge No purge
				<b>-</b>		-						
										•		
L										ļ		· · · · · · · · · · · · · · · · · · ·
						<u> </u>						
				-					<u> </u>	<b> </b>		
						-						
										1		
												······································



#### FIELD PROCEDURES

#### A.1 QUALITY ASSURANCE/QUALITY CONTROL FIELD PROTOCOLS

Field protocols have been implemented to maximize the accuracy and reliability of data collection, ground-water sample collection, transportation and laboratory analysis. Discussion of these protocols is provided below.

#### A.1.1 Water Level & Free-Phase Product Measurement

Prior to ground-water sample collection from each monitor well, the presence of free-phase product and depth to ground water shall be measured. Depth to ground water will be measured with a standard M-Scope water level indicator (or equivalent) that has been decontaminated prior to its use in accordance with procedures discussed below. Depth to ground water will be gauged from a saw cut notch at the top of the well casing on each well head. Once depth to water has been measured, a new disposable bailer will be utilized to monitor for the presence and thickness of free-phase product.

#### A.1.2 Monitor Well Purging

Subsequent to measuring depth to ground water, a minimum of three casing volumes of water will be purged from each monitor well using a Geosquirt submersible pump (or equivalent) and disposable plastic tubing dedicated to each individual well. The well will be purged at a low flow rate to minimize the possibility of purging the well dry. To assure that the sample collected is representative of formation water, several field parameters will be monitored during the purging process and the sample will not be collected until these parameters have stabilized to within 10% of a measured value. These parameters will include temperature, pH, and conductivity. If a well is purged dry, the sample will not be collected until the well has recovered to a minimum 50% of its initial volume.

Ground-water sampling equipment (e.g., M-scope and the Geosquirt purge pump) will be thoroughly cleansed with a solution of Liquinox, rinsed with tap water, and finally rinsed with control water prior to use in each well. Pre-cleaned disposable bailers and disposable plastic tubing will be dedicated to each individual well.

#### A.1.3 Ground-Water Sample Collection

Once the wells are satisfactorily purged, water samples will be collected from each well. Water samples for organic analyses will be collected using a clean disposable bailer and transferred to laboratory-prepared 40 ml vials, in duplicate; such that no head space or air bubbles are present in the sample. The samples will be properly labeled (sample identification, sampler initials, date and time of collection, site location, and requested analyses), placed in an ice chest with blue ice, and delivered to an analytical laboratory.

#### A.1.4 Surface Water Sample Collection

Surface water samples will be collected from mid-depth in the central area of the associated stream. Water samples will be collected in laboratory-prepared 40 ml vials by dipping the vial into the stream water. Each vial will be inverted to check that no head space or bubbles are present. The samples will be properly labeled and transported as described above.

#### A.1.5 Chain of Custody Procedure

Sample identification documents will be carefully prepared so identification and chain of custody can be maintained and sample disposition can be controlled. The sample identification documents include Chain-of-Custody (COC) records and Daily Field Report forms. Chain of custody procedures are outlined below.

#### Field Custody Procedures

The field sampler is personally responsible for the care and custody of the samples collected until they are properly transferred.

Samples will have individual labels. The information on these labels will correspond to the COC which shows the identification of individual samples and the contents of the shipping container. The original COC will accompany the shipment and a copy will be retained by the sampler for the client.

The staff person conducting the sampling will determine whether proper custody procedures were followed during the field work.

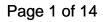
#### Transfer of Custody and Shipment

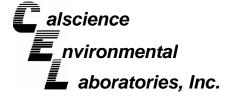
A COC will accompany samples during transfer and shipment. When transferring samples, the individual's relinquishing and receiving the samples will sign, date, and note the time on the COC. This COC documents the sample custody transfer.

Samples will be packaged properly for shipment and dispatched to the appropriate laboratory for analysis, with a separate COC accompanying each shipment. Shipments will be accompanied by the original COC. Samples will be delivered by BAI personnel to the laboratory, or shipped by courier.

#### A.1.6 Field Records

In addition to sample identification numbers and Chain-of Custody records, Daily Field Report records will be maintained by staff personnel to provide daily records of significant events, observations, and measurements during field investigations. These documents will contain information such as: personnel present, site conditions, sampling procedures, measurement procedures, calibration records, etc. Field measurements will be recorded on the appropriate forms. Entries on the data forms will be signed and dated. The data forms will be kept as permanent records.







November 24, 2009

Tom Venus Broadbent & Associates, Inc. 1324 Mangrove Ave, Ste 212 Chico, CA 95926-2642

Subject: Calscience Work Order No.: 09-11-0984 Client Reference: BP 472

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 11/12/2009 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Richard Villey.

Calscience Environmental Laboratories, Inc. Richard Villafania Project Manager

 CA-ELAP ID: 1230
 NELAP ID: 03220CA
 CSDLAC ID: 10109
 SCAQMD ID: 93LA0830

 A
 7440 Lincoln Way, Garden Grove, CA 92841-1427
 TEL:(714) 895-5494
 FAX: (714) 894-7501

## Page 2 of 14





Broadbent & Associates, Inc. 1324 Mangrove Ave, Ste 212 Chico, CA 95926-2642

Project: BP 472

Date Received: Work Order No: Preparation: Method:

## Page 1 of 1

11/12/09

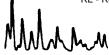
09-11-0984

EPA 5030B

EPA 8015B (M)

								igo i oi i
Client Sample Number		Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-1		09-11-0984-1-D	11/11/09 13:40	Aqueous	GC 11	11/18/09	11/19/09 06:05	091118B01
Parameter	Result	<u>RL</u>	DF	<u>Qual</u>	<u>Units</u>			
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L			
Surrogates:	<u>REC (%)</u>	Control Limits		<u>Qual</u>				
1,4-Bromofluorobenzene	49	38-134						
MW-2		09-11-0984-2-D	11/11/09 13:25	Aqueous	GC 11	11/18/09	11/18/09 17:43	091118B01
Parameter	<u>Result</u>	<u>RL</u>	DF	<u>Qual</u>	<u>Units</u>			
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L			
Surrogates:	<u>REC (%)</u>	Control Limits		<u>Qual</u>				
1,4-Bromofluorobenzene	47	38-134						
MW-3		09-11-0984-3-D	11/11/09 13:20	Aqueous	GC 11	11/18/09	11/19/09 06:38	091118B01
Comment(s): -LW = Quantitation Parameter	of unknown hydr <u>Result</u>	ocarbon(s) in sample <u>RL</u>	based on gas <u>DF</u>	oline. <u>Qual</u>	Units			
Gasoline Range Organics (C6-C12)	<u>88</u>	50	<u>br</u> 1	Quai	ug/L			
Surrogates:	<u>REC (%)</u>	Control Limits	·	<u>Qual</u>	ug/L			
1,4-Bromofluorobenzene	45	<u>38-134</u>		<u>Quai</u>				
Method Blank		099-12-695-693	N/A	Aqueous	GC 11	11/18/09	11/18/09 16:02	091118B01
Parameter	<u>Result</u>	<u>RL</u>	DF	<u>Qual</u>	<u>Units</u>			
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L			
Surrogates:	<u>REC (%)</u>	Control Limits		<u>Qual</u>				
1,4-Bromofluorobenzene	43	38-134						

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



7440 Lincoln Way, Garden Grove, CA 92841-1427 · TEL:(714) 895-5494 · FAX: (714) 894-7501

# Calscience Invironmental aboratories, Inc.

Date Received:

Work Order No:

Page 3 of 14

11/12/09

09-11-0984



Broadbent & Associates, Inc. 1324 Mangrove Ave, Ste 212 Chico, CA 95926-2642

Chico, CA 95926-2642					Preparat Method: Units:	ion:				EPA	A 5030B A 8260B ug/L
Project: BP 472										Pag	e 1 of 2
Client Sample Number				ab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/T I Analyz		QC Batch ID
MW-1			09-11-	0984-1-A	11/11/09 13:40	Aqueous	GC/MS BE	3 11/1 <b>9/0</b> 9	11/19/ 17:5		091119L01
Parameter	Result	<u>RL</u>	DF	Qual	Parameter			<u>Result</u>	<u>RL</u>	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl	Ether (MTB	E)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alc	``	,	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Et	. ,		ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl E	```		ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Me			ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol		,	ND	300	1	
Surrogates:	REC (%)	Control	•	Qual	Surrogates:			REC (%)	Control	·	Qual
	<u> </u>	Limits							Limits		
1,2-Dichloroethane-d4	107	80-128			Dibromofluoro	methane		102	80-127		
Toluene-d8	101	80-120			1,4-Bromofluc	orobenzene		95	68-120		
MW-2			09-11-	0984-2-A	11/11/09 13:25	Aqueous	GC/MS BE	<b>11/19/0</b> 9	11/19/ 18:2		091119L01
Parameter	<u>Result</u>	<u>RL</u>	DF	Qual	Parameter			<u>Result</u>	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl	Ether (MTR	E)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alc	· ·	L)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Et	`` '		ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl E			ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Me			ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol			ND	300	1	
<u>Surrogates:</u>	REC (%)	Control	1	Qual	Surrogates:			<u>REC (%)</u>	<u>Control</u>	'	Qual
<u></u>	<u></u>	Limits			<u>eanegateen</u>			<u></u>	Limits		
1,2-Dichloroethane-d4	108	80-128			Dibromofluoro	methane		101	80-127		
Toluene-d8	101	80-120			1,4-Bromofluc	orobenzene		94	68-120		
MW-3			09-11-	0984-3-B	11/11/09 13:20	Aqueous	GC/MS BE	3 11/2 <b>0/0</b> 9	11/20/ 13:1		091120L01
Parameter	<u>Result</u>	<u>RL</u>	DF	Qual	Parameter			<u>Result</u>	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl	Ether (MTB	E)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alc	``	_,	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Et			ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl E			ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Me			ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	,	,	ND	300	1	
Surrogates:	REC (%)	Control	•	Qual	Surrogates:			REC (%)	Control	•	Qual
<u></u>	<u> </u>	Limits							Limits		
1,2-Dichloroethane-d4	91	80-128			Dibromofluoro	methane		96	80-127		
Toluene-d8	100	80-120			1,4-Bromofluc	orobenzene		92	68-120		

RL - Reporting Limit , DF - Dilution Factor

, Qual - Qualifiers

Mulana

7440 Lincoln Way, Garden Grove, CA 92841-1427 · TEL:(714) 895-5494 · FAX: (714) 894-7501

# Calscience nvironmental aboratories, Inc.

**Analytical Report** 

Units:

Broadbent & Associates, Inc. 1324 Mangrove Ave, Ste 212 Chico, CA 95926-2642

	A A A A A A A A A A A A A A A A A A A
Date Received:	11/12/09
Work Order No:	09-11-0984
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: BP 472

Client Sample Number				ıb Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Ti Analyz		QC Batch ID
Method Blank			099-12	-703-1,132	. N/A	Aqueous	GC/MS BE	3 11/19/09	11/19/ 11:40		091119L01
Parameter	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	Parameter			<u>Result</u>	<u>RL</u>	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl	Ether (MTB	E)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alc	ohol (TBA)		ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Et	her (DIPE)		ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl E	ther (ETBE)	1	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Me	thyl Ether (T	AME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol			ND	300	1	
Surrogates:	<u>REC (%)</u>	<u>Control</u>		<u>Qual</u>	Surrogates:			<u>REC (%)</u>	<u>Control</u>		<u>Qual</u>
	100	Limits			D'I			00	Limits		
1,2-Dichloroethane-d4	102	80-128			Dibromofluoro			99	80-127		
Toluene-d8	100	80-120			1,4-Bromofluc	propenzene		96	68-120		
Method Blank			099-12	-703-1,133	s N/A	Aqueous	GC/MS BE	3 11/20/09	11/20/ 12:30		091120L01
Parameter	Result	<u>RL</u>	DF	Qual	Parameter			Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl	Ether (MTB	E)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alc	ohol (TBA)	,	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Et	her (DIPE)		ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl E	ther (ETBE)	1	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Me	thyl Ether (T	AME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol			ND	300	1	
Surrogates:	<u>REC (%)</u>	<u>Control</u> Limits		<u>Qual</u>	Surrogates:			<u>REC (%)</u>	<u>Control</u> Limits		<u>Qual</u>
1,2-Dichloroethane-d4	104	80-128			Dibromofluoro	omethane		98	80-127		
Toluene-d8	99	80-120			1,4-Bromofluc	orobenzene		94	68-120		

MM



7440 Lincoln Way, Garden Grove, CA 92841-1427 · TEL:(714) 895-5494 · FAX: (714) 894-7501

ug/L

Page 2 of 2





Broadbent & Associates, Inc. 1324 Mangrove Ave, Ste 212 Chico, CA 95926-2642	Date Received: Work Order No: Preparation: Method:	11/12/09 09-11-0984 EPA 5030B EPA 8015B (M)
		()

Project BP 472

Quality Control Sample ID	Matrix	Instrument	Date Prepared		Date Analyzed	MS/MSD Batch Number
MW-2	Aqueous	GC 11	11/18/09		11/18/09	091118S01
Parameter	<u>MS %REC</u>	MSD %REC	<u>%REC CL</u>	<u>RPD</u>	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	76	76	38-134	0	0-25	

RPD - Relative Percent Difference, CL - Control Limit

7440 Lincoln Way, Garden Grove, CA 92841-1427 . TEL:(714) 895-5494

5-5494 · FAX: (714) 894-7501





Date Received: Work Order No: Preparation: Method:	11/12/09 09-11-0984 EPA 5030B EPA 8260B
mouroa.	ELACOZOOD
	Work Order No: Preparation:

Project BP 472

Quality Control Sample ID	Matrix	Instrument	Date Prepared	l	Date Analyzed	MS/MSD Batch Number
09-11-0995-2	Aqueou	IS GC/MS BB	11/19/09		11/19/09	091119S01
Parameter	MS %REC	MSD %REC	<u>%REC CL</u>	<u>RPD</u>	RPD CL	Qualifiers
Benzene	103	105	76-124	2	0-20	
Carbon Tetrachloride	100	102	74-134	1	0-20	
Chlorobenzene	100	103	80-120	3	0-20	
1,2-Dibromoethane	97	100	80-120	2	0-20	
1,2-Dichlorobenzene	100	102	80-120	2	0-20	
1,1-Dichloroethene	99	96	73-127	3	0-20	
Ethylbenzene	99	103	78-126	4	0-20	
Toluene	100	101	80-120	2	0-20	
Trichloroethene	103	103	77-120	0	0-20	
Vinyl Chloride	100	100	72-126	0	0-20	
Methyl-t-Butyl Ether (MTBE)	71	16	67-121	13	0-49	LN,AY
Tert-Butyl Alcohol (TBA)	133	121	36-162	4	0-30	
Diisopropyl Ether (DIPE)	101	102	60-138	1	0-45	
Ethyl-t-Butyl Ether (ETBE)	98	99	69-123	1	0-30	
Tert-Amyl-Methyl Ether (TAME)	99	101	65-120	2	0-20	
Ethanol	99	94	30-180	5	0-72	

RPD - Relative Percent Difference, CL - Control Limit

MM 7440 Lincoln Way, Garden Grove, CA 92841-1427 . TEL:(714) 895-5494 · FAX: (714) 894-7501





Broadbent & Associates, Inc.	Date Received:	11/12/09
1324 Mangrove Ave, Ste 212	Work Order No:	09-11-0984
Chico, CA 95926-2642	Preparation:	EPA 5030B
	Method:	EPA 8260B

Project BP 472

Quality Control Sample ID	Matrix	Instrument	Date Prepared		Date Analyzed	MS/MSD Batch Number
MW-3	Aqueou	IS GC/MS BB	11/20/09		11/20/09	091120S01
Parameter	MS %REC	MSD %REC	<u>%REC CL</u>	<u>RPD</u>	RPD CL	Qualifiers
Benzene	108	104	76-124	4	0-20	
Carbon Tetrachloride	108	105	74-134	3	0-20	
Chlorobenzene	106	102	80-120	3	0-20	
1,2-Dibromoethane	101	101	80-120	0	0-20	
1,2-Dichlorobenzene	102	100	80-120	2	0-20	
1,1-Dichloroethene	107	99	73-127	7	0-20	
Ethylbenzene	106	103	78-126	3	0-20	
Toluene	106	102	80-120	4	0-20	
Trichloroethene	108	102	77-120	6	0-20	
Vinyl Chloride	105	101	72-126	4	0-20	
Methyl-t-Butyl Ether (MTBE)	87	87	67-121	1	0-49	
Tert-Butyl Alcohol (TBA)	114	113	36-162	1	0-30	
Diisopropyl Ether (DIPE)	104	102	60-138	2	0-45	
Ethyl-t-Butyl Ether (ETBE)	98	98	69-123	0	0-30	
Tert-Amyl-Methyl Ether (TAME)	99	99	65-120	0	0-20	
Ethanol	115	102	30-180	12	0-72	

RPD - Relative Percent Difference, CL - Control Limit

MM

7440 Lincoln Way, Garden Grove, CA 92841-1427 . TEL:(714) 895-5494 · FAX: (714) 894-7501





Broadbent & Associates, Inc.	Date Received:	N/A
1324 Mangrove Ave, Ste 212	Work Order No:	09-11-0984
Chico, CA 95926-2642	Preparation:	EPA 5030B
	Method:	EPA 8015B (M)

Project: BP 472

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Ba Number	tch
099-12-695-693	Aqueous	GC 11	11/18/09	11/18/09	091118B01	
Parameter	LCS %	REC LCSD	<u>%REC %F</u>	REC CL R	PD RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	91	83	7	78-120 1	0 0-20	

RPD - Relative Percent Difference, CL - Control Limit

Mulhan

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501





Broadbent & Associates, Inc. 1324 Mangrove Ave, Ste 212 Chico, CA 95926-2642 Date Received: Work Order No: Preparation: Method: N/A 09-11-0984 EPA 5030B EPA 8260B

### Project: BP 472

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Da Anal		LCS/LCSD I Numbe	
099-12-703-1,132	Aqueous	GC/MS BB	11/19/09	11/19/	/09	091119L	01
Parameter	LCS %REC	LCSD %REC	<u>%REC CL</u>	ME CL	<u>RPD</u>	RPD CL	<b>Qualifiers</b>
Benzene	101	106	80-120	73-127	5	0-20	
Carbon Tetrachloride	102	107	74-134	64-144	5	0-20	
Chlorobenzene	101	105	80-120	73-127	5	0-20	
1,2-Dibromoethane	98	105	79-121	72-128	7	0-20	
1,2-Dichlorobenzene	100	104	80-120	73-127	4	0-20	
1,1-Dichloroethene	103	107	78-126	70-134	3	0-28	
Ethylbenzene	103	107	80-120	73-127	4	0-20	
Toluene	100	106	80-120	73-127	5	0-20	
Trichloroethene	99	106	79-127	71-135	6	0-20	
Vinyl Chloride	102	107	72-132	62-142	5	0-20	
Methyl-t-Butyl Ether (MTBE)	98	104	69-123	60-132	6	0-20	
Tert-Butyl Alcohol (TBA)	95	94	63-123	53-133	1	0-20	
Diisopropyl Ether (DIPE)	102	107	59-137	46-150	5	0-37	
Ethyl-t-Butyl Ether (ETBE)	98	104	69-123	60-132	6	0-20	
Tert-Amyl-Methyl Ether (TAME)	95	105	70-120	62-128	10	0-20	
Ethanol	92	86	28-160	6-182	7	0-57	

Total number of LCS compounds :16Total number of ME compounds :0Total number of ME compounds allowed ::LCS ME CL validation result :Pass

nM

RPD - Relative Percent Difference, CL - Control Limit

1

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501





Broadbent & Associates, Inc. 1324 Mangrove Ave, Ste 212 Chico, CA 95926-2642 Date Received: Work Order No: Preparation: Method: N/A 09-11-0984 EPA 5030B EPA 8260B

#### Project: BP 472

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Da Anal		LCS/LCSD Numbe	
099-12-703-1,133	Aqueous	GC/MS BB	11/20/09	11/20/	/09	091120L	D1
Parameter	LCS %REC	LCSD %REC	<u>%REC CL</u>	ME CL	<u>RPD</u>	RPD CL	<u>Qualifiers</u>
Benzene	106	114	80-120	73-127	7	0-20	
Carbon Tetrachloride	106	118	74-134	64-144	10	0-20	
Chlorobenzene	104	110	80-120	73-127	6	0-20	
1,2-Dibromoethane	98	112	79-121	72-128	13	0-20	
1,2-Dichlorobenzene	103	111	80-120	73-127	8	0-20	
1,1-Dichloroethene	105	116	78-126	70-134	9	0-28	
Ethylbenzene	105	109	80-120	73-127	4	0-20	
Toluene	105	113	80-120	73-127	7	0-20	
Trichloroethene	106	114	79-127	71-135	7	0-20	
Vinyl Chloride	102	120	72-132	62-142	17	0-20	
Methyl-t-Butyl Ether (MTBE)	85	113	69-123	60-132	28	0-20	RB
Tert-Butyl Alcohol (TBA)	107	105	63-123	53-133	2	0-20	
Diisopropyl Ether (DIPE)	102	118	59-137	46-150	15	0-37	
Ethyl-t-Butyl Ether (ETBE)	96	114	69-123	60-132	17	0-20	
Tert-Amyl-Methyl Ether (TAME)	97	115	70-120	62-128	17	0-20	
Ethanol	98	111	28-160	6-182	12	0-57	

Total number of LCS compounds :16Total number of ME compounds :0Total number of ME compounds allowed :LCS ME CL validation result :Pass

nM

RPD - Relative Percent Difference, CL - Control Limit

1

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 • FAX: (714) 894-7501



K M.M.



Work Order Number: 09-11-0984

<u>Qualifier</u>	Definition
AX	Sample too dilute to quantify surrogate.
BA	Relative percent difference out of control.
BA,AY	BA = Relative percent difference out of control. AY = Matrix interference suspected.
BB	Sample > 4x spike concentration.
BF	Reporting limits raised due to high hydrocarbon background.
BH	Reporting limits raised due to high level of non-target analytes.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
BY	Sample received at improper temperature.
BZ	Sample preserved improperly.
CL	Initial analysis within holding time but required dilution.
CQ	Analyte concentration greater than 10 times the blank concentration.
CU	Surrogate concentration diluted to not detectable during analysis.
DF	Reporting limits elevated due to matrix interferences.
DU	Insufficient sample quantity for matrix spike/dup matrix spike.
ET	Sample was extracted past end of recommended max. holding time.
EY	Result exceeds normal dynamic range; reported as a min est.
GR	Internal standard recovery is outside method recovery limit.
IB	CCV recovery abovelimit; analyte not detected.
IH	Calibrtn. verif. recov. below method CL for this analyte.
IJ	Calibrtn. verif. recov. above method CL for this analyte.
J,DX	J=EPA Flag -Estimated value; DX= Value < lowest standard (MQL), but > than MDL.
LA	Confirmatory analysis was past holding time.
LG,AY	LG= Surrogate recovery below the acceptance limit. AY= Matrix interference suspected
LH,AY	LH= Surrogate recovery above the acceptance limit. AY= Matrix interference suspecte
LM,AY	LM= MS and/or MSD above acceptance limits. See Blank Spike (LCS). AY= Matrix interference suspected.
LN,AY	LN= MS and/or MSD below acceptance limits. See Blank Spike (LCS). AY= Matrix interference suspected.
LQ	LCS recovery above method control limits.

Qualifier	Definition
LR	LCS recovery below method control limits.
LW	Quantitation of unknown hydrocarbon(s) in sample based on gasoline.
LX	Quantitation of unknown hydrocarbon(s) in sample based on diesel.
MB	Analyte present in the method blank.
PC	Sample taken from VOA vial with air bubble > 6mm diameter.
PI	Primary and confirm results varied by $>$ than 40% RPD.
RB	RPD exceeded method control limit; % recoveries within limits.
SG	A silica gel cleanup procedure was performed.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.

Mulum. 7440 Lincoln Way, Garden Grove, CA 92841-1427 · TEL:(714) 895-5494 · FAX: (714) 894-7501

# Laboratory Management Program LaMP Chain of Custody Record



BP/ARC Project Name: BP 472

**BP/ARC Facility No:** 

\_ Req Due Date (mm/dd/yy):

472

Lab Work Order Number:

i V

Lab Name: Calscience					BP/ARC Facility Address: 6415 International Blvd.										Consultant/Contractor: Broadbent & Associates, Inc.													
Lab Address: 7440 Lincoln Way				City, State, ZIP Code: Oakland, CA																								
Lab PM: Richard Villafania				<u> </u>	Lead Regulatory Agency: ACEH																							
Lab Phone: 714-895-5494					California Global ID No.: T1000000417											Address: 1324 Mangrove Ave. Ste. 212, Chico, CA 95926												
																Consultant/Contractor PM: Tom Venus												
Lab Bottle Order No:															Phone: 530-566-1400													
														Email EDD To: tvenus@broadbentinc.com														
Other Info:														Invoice To: BP/ARC X Contractor														
BP/ARC EBM: Chuck Carmel					Ma	trix		No	o. Co	Containers / Preservative				Requ				uested Analyses				_	Report Type & QC Level					
EBM Phone:								s				[	ĺ						Ô							Stan	dard <u>X</u>	_
EBM Email:							Containers																	Full (	Data Pack	kage	_	
		Date	Time		Water / Liquid			Total Number of Con					Methanol		015)	3260)	8260	260)	1,2-DCA (8260)	Ethanol (8260)			1					
Lab				Solid					Unpreserved	ĺ					GRO (8015)	BTEX (8260)	5 Oxys (8260)	EDB (8260)					ļ					
No.	Sample Description					apor									ŭ	В	50								Comments			
				Soil / Solid	/ater	Air / Vapor				H₂SO₄	60NH														Note: If sam Sample" in c			
,	MW-1		10/10	S.		Ā	4	Ĕ	5	ΞŤ	Ī	ΡĊ	Ž											L	and initial ar	y preprinte	ed sample	description.
<u> </u>		(1/11/09	1340	<u> </u>	X							X			х	х	Х	Х	х	x								
2	MW-2		1325		X							х			х	х	х	х	х	х								
	MW-3		1320		х							х			х	х	х	x	х	x								
4	Trip blank	Y																							Hold	Trio	bland	
;																		_	_ 1							<u> </u>	Vicip	
																				_								
																				$\neg$	-							
							-+																			. <u> </u>		
							-+													$\rightarrow$								
						-+																						
Sampler's Name:					Relinquished By / Affiliation												$ \rightarrow$									- 14		
Sampler's Name: Eric Fairar Sampler's Company: BAI														Date Time			Accepted By / Affiliation						$ \rightarrow $	Date	Time			
Shipment Method: 650 Ship Date: 1//1/09					Eric FAIRA, /BAL 11/11/09 1.									150	7													
Shipment Tracking No: 10 GY G2452																												
	Special Instructions:																					/	H	Ka	hr	<u> </u>	12/09	10450
					_		<u> </u>							_								_//						9
	THIS LINE - LAB USE ONLY: Custody	y Seals In Place	e: Yes / No	T	emp	Blank	: Yes	s / No		Co	oler T	emp o	on Rec	ceipt:			°E/C		Trip	Blank	: Yes	/ No		MS	MSD Sampl	e Submit	ted: Yes /	No <b>P</b>

Page \_\_\_\_\_ of \_\_\_\_\_

Rush TAT: Yes \_\_\_\_ No \_X\_\_

and the second second

BP/ARC LaMP COC Rev. 6 01/01/2009

.

-

Caleclance - WORK ORDER #: 09-1	1-0984
,	Cooler of
CLIENT: <u>Broadbert</u> DATE:	<b>11</b> /12 / 09
TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)	
Temperature <u>5</u> .1 °C - 0.8 °C (CF) = <u>4</u> .3 °C $\square$ Blank	☐ Sample
□ Sample(s) outside temperature criteria (PM/APM contacted by:).	
$\square$ Sample(s) outside temperature criteria but received on ice/chilled on same day of samp	ling.
□ Received at ambient temperature, placed on ice for transport by Courier.	
Ambient Temperature: Air	Initial: <u></u>
CUSTODY SEALS INTACT:	
Cooler  NA	Initial: $\underline{10}$
□ Sample □ □ No (Not Intact) ☑ Not Present	Initial:
	( <u></u>
SAMPLE CONDITION: Yes	No N/A
Chain-Of-Custody (COC) document(s) received with samples	
COC document(s) received complete	9 🗗 🗆
Collection date/time, matrix, and/ <u>or # of containers logg</u> ed in based on sample labels.	
COC not relinquished.	
Sampler's name indicated on COC	
Sample container label(s) consistent with COC	
Sample container(s) intact and good condition	
Correct containers and volume for analyses requested	
Analyses received within holding time	
Proper preservation noted on COC or sample container	
Unpreserved vials received for Volatiles analysis	
Volatile analysis container(s) free of headspace	
Tedlar bag(s) free of condensation	
CONTAINER TYPE:	o —
Solid: □4ozCGJ □8ozCGJ □16ozCGJ □Sleeve □EnCores <sup>®</sup> □TerraCor	
Water: □VOA _ ØVÔAh □VOAna₂ □125AGB □125AGBh □125AGBp □1AGB	
□500AGB □500AGJ □500AGJs □250AGB □250CGB □250CGBs □1PB	□500PB □500PBna
□250PB □250PBn □125PB □125PBznna □100PJ □100PJna₂ □ □_	□
Air: □Tedlar <sup>®</sup> □Summa <sup>®</sup> Other: □ Trip Blank Lot#:_ <u>091030B</u>	100
· · · · · · · · · · · · · · · · · · ·	Reviewed by: <u>1</u>
Preservative: h: HCL n: HNO3 na2:Na2S2O3 Na: NaOH p: H3PO4 s: H2SO4 znna: ZnAc2+NaOH f: Field-filtered	SOP T100_090 (07/16/0

## **APPENDIX B**

GEOTRACKER UPLOAD CONFIRMATION RECEIPTS

# GEOTRACKER ESI

#### UPLOADING A GEO\_WELL FILE

# SUCCESS

Processing is complete. No errors were found! Your file has been successfully submitted!

Submittal Type: Submittal Title: Facility Global ID: Facility Name: File Name: Organization Name: Username: IP Address: Submittal Date/Time: Confirmation Number: GEO\_WELL 4Q09 GEO\_WELL 472 T10000000417 ARCO # / PLUCKY LIQUORS GEO\_WELL.zip Broadbent & Associates, Inc. BROADBENT-C 67.118.40.90 12/8/2009 11:10:22 AM 8329194068

Copyright © 2008 State of California

# GEOTRACKER ESI

#### **UPLOADING A EDF FILE**

# SUCCESS

Processing is complete. No errors were found! Your file has been successfully submitted!

Submittal Type: Submittal Title: Facility Global ID: Facility Name: File Name: Organization Name: Username: IP Address: Submittal Date/Time: Confirmation Number: EDF - Monitoring Report - Quarterly 4Q09 GW Monitoring T10000000417 ARCO # / PLUCKY LIQUORS 09110984.zip Broadbent & Associates, Inc. BROADBENT-C 67.118.40.90 12/8/2009 11:12:07 AM 5706686735

**VIEW QC REPORT** 

**VIEW DETECTIONS REPORT** 

Copyright © 2008 State of California