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9:22 am, Jul 29, 2010

Alameda County Environmental Health

ARCADIS U.S., Inc.
100 Montgomery Street, Suite 300
San Francisco, California 94104
Tel 415.374.2744
Fax 415.374.2745
www.arcadis-us.com

Re: Second Quarter 2010 Ground-Water Monitoring Report Former BP Service Station #11127

5425 Martin Luther King Jr. Way Oakland, California

ACEH Case #RO0000241

"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."

Date:

07/27/2010

ENVIRONMENTAL

Contact:

Hollis E. Phillips

Phone:

415.374.2744 ext 13

Email:

Hollis.phillips@arcadisus.com

Our ref:

GP09BPNA.C109

Submitted by:

ARCADIS U.S., Inc.

Hollis E. Phillips, PG Project Manager



Second Quarter 2010 Ground-Water Monitoring Report

Former BP Service Station #11127 5425 Martin Luther King Jr. Way Oakland, California ACEH Case #RO0000241

Prepared for

Ms. Hollis Phillips, PG Senior Geologist ARCADIS-US, Inc. 100 Montgomery Street, Ste. 300 San Francisco, California 94104

On behalf of
Atlantic Richfield Company
PO Box 1257
San Ramon, California 94583

Prepared by



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

July 27, 2010

Project No. 09-88-671



July 27, 2010

Project No. 09-88-671

ARCADIS-US, Inc. 100 Montgomery Street, Ste. 300 San Francisco, California 94104

Attn.: Ms. Hollis Phillips, PG

Re: Second Quarter 2010 Ground-Water Monitoring Report, Former BP Service Station

#11127, 5425 Martin Luther King Jr. Way, Oakland, Alameda County, California;

ACEH Case #RO0000241

Dear Ms. Phillips:

Provided herein is the *Second Quarter 2010 Ground-Water Monitoring Report* for Former BP Service Station #11127 located at 5425 Martin Luther King Jr. Way, Oakland, California (Site). This report presents the results of ground-water monitoring conducted at the Site during the Second Quarter of 2010.

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

Sincerely,

BROADBENT & ASSOCIATES, INC.

Jason Duda Project Scientist

Thomas A. Venus, P.E.

Senior Engineer

Enclosure

cc: Mr. Paresh Khatri, Alameda County Environmental Health (Submitted via ACEH ftp site)
Ms. Shelby Lathrop, ConocoPhillips, 76 Broadway, Sacramento, California 95818

Electronic copy uploaded to GeoTracker

NEVADA

ARIZONA

CALIFORNIA

TEXAS

STATION #11127 GROUND-WATER MONITORING REPORT

Facility: #11127 Address: 5425 Martin Luther King Jr. Way, Oakland
ARCADIS Project Manager: Ms. Hollis Phillips, PG
Consulting Co./Contact Persons: Broadbent & Associates, Inc.(BAI)/Jason Duda & Tom Venus (530) 566-1400

Primary Agency/Regulatory ID No.: Alameda County Environmental Health (ACEH)
ACEH Case #RO0000241

Consultant Project No.: 09-88-671

Facility Permits/Permitting Agency: NA

WORK PERFORMED THIS QUARTER (Second Quarter 2010):

1. Conducted ground-water monitoring/sampling for Second Quarter 2010. Work performed by BAI on April 20, 2010.

WORK PROPOSED FOR NEXT QUARTER (Third Quarter 2010):

- 1. Prepared and submitted this Second Quarter 2010 Ground-Water Monitoring Report (contained herein).
- 2. Prepare and submit a Case Closure Summary.
- 3. No environmental work is scheduled at the Site during the Third Quarter of 2010.

QUARTERLY RESULTS SUMMARY:

Current phase of project:	Case Closure Evaluation
Frequency of ground-water	One-Time Monitoring Event (2Q10)
monitoring:	
Frequency of ground-water sampling:	One-Time Sampling Event (2Q10)
Is free product (FP) present on-site:	No
FP recovered this quarter:	None
Current remediation techniques:	NA
Depth to ground water (below TOC):	8.36 ft (MW-1) to 10.6 ft (MW-3)
General ground-water flow direction:	West
Approximate hydraulic gradient:	0.005 ft/ft

DISCUSSION:

Second Quarter 2010 ground-water monitoring and sampling was conducted at Station #11127 on April 20, 2010 by BAI. Water levels were gauged in each of the four wells associated with the Site. No irregularities were noted during water level gauging. Depth to ground-water measurements ranged from 8.36 ft at well MW-1 to 10.6 ft in well MW-3. Resulting ground-water surface elevations ranged from 74.36 ft above datum in well MW-3 to 73.99 ft in well MW-1. Water level elevations yielded a potentiometric ground-water flow direction and gradient magnitude toward the west at approximately 0.005 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. A Site Location Map is provided 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 through MW-4. No irregularities were reported during sampling. Samples were submitted under chain-of-custody protocol to TestAmerica Laboratories, Inc. (Pleasanton, California), for analysis of Gasoline Range Organics (GRO, C6-12), Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX), tert-Amyl methyl ether (TAME), tert-Butyl alcohol (TBA), Di-isopropyl ether (DIPE),

1,2-Dibromomethane (EDB), 1,2-Dichloroethane (1,2-DCA), Ethanol, Ethyl tert-butyl ether (ETBE), and Methyl tert-butyl ether (MTBE) by EPA Method 8260B. No irregularities were encountered during laboratory analysis of applicable samples. Ground-water sampling field data sheets and the laboratory analytical report, including chain-of-custody documentation, are provided in Appendix A.

Methyl tert-butyl (MTBE) was detected above the laboratory reporting limit in one of the four wells sampled at a concentration of 16 micrograms per liter (µg/L) in well MW-1. The remaining analytes were not detected above their laboratory reporting limits in the four wells sampled this quarter. Historic 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.

CONSLUSIONS AND RECOMMENDATIONS:

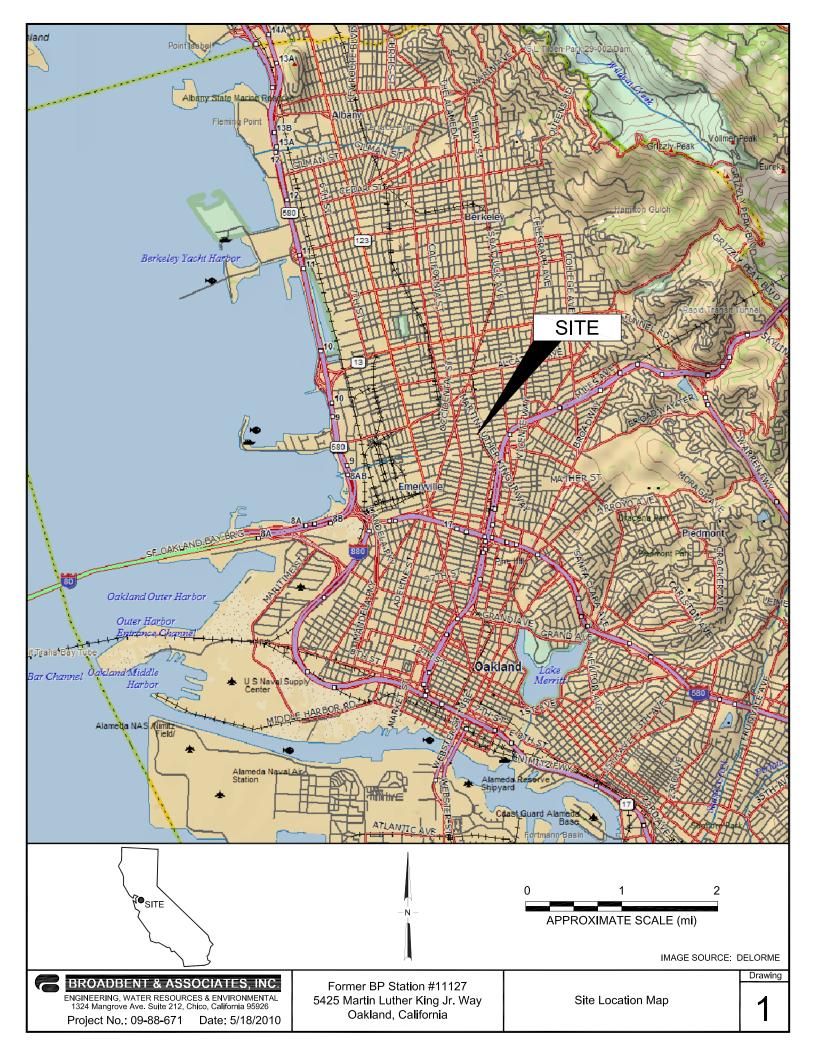
Hydrocarbon concentrations within the ground-water at the Site have diminished to below laboratory detection limits for each constitutent analyzed with the exception of MTBE, which was observed at a minimal concentration of $16\,\mu\text{g/L}$ in well MW-1. A case closure summary will be completed and submitted during the Third Quarter of 2010. No further environmental work is scheduled to occur at the site.

CLOSURE:

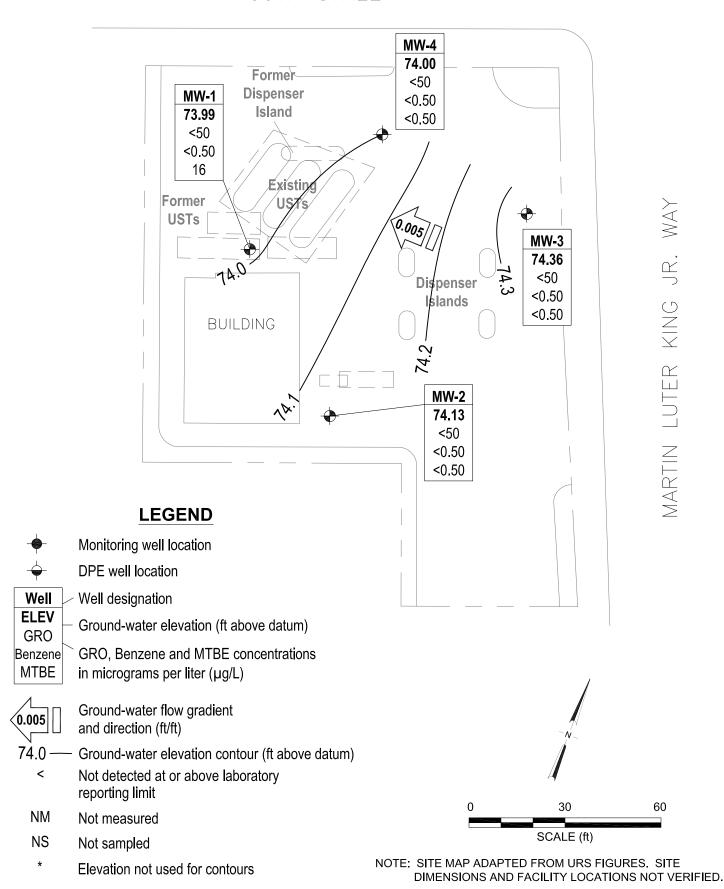
The findings presented in this report are based upon: observations of BAI field personnel (see Appendix A), the points investigated, and results of laboratory tests performed by TestAmerica (Pleasanton, California). Our services were performed in accordance with the generally accepted standard of practice 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 ARCADIS-US, Inc. and Atlantic Richfield Company (a BP affiliated 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, Former BP Service Station #11127, 5425 Martin Luther King Jr. Way, Oakland, California
- Drawing 2. Ground-Water Elevation Contour and Analytical Summary Map, April 20, 2010, Former BP Service Station #11127, 5425 Martin Luther King Jr. Way, Oakland, California
- Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses, Station #11127, 5425 Martin Luther King Jr. Way, Oakland, California
- Table 2. Summary of Fuel Additives Analytical Data, Station #11127, 5425 Martin Luther King Jr. Way, Oakland, California
- Appendix A. BAI Ground-Water Sampling Data (Includes Field Data Sheets, Laboratory Report, Chain-of-Custody Documentation, Non-Hazardous Waste Data Form, and Field Procedures)
- Appendix B. GeoTracker Upload Confirmations



55TH STREET



BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
1324 Mangrove Ave. Suite 212, Chico, California 95926

Date: 5/18/2010

Project No.: 09-88-671

Former BP Station #11127 5425 Martin Luther King Jr. Way Oakland, California Ground-Water Elevation Contour and Analytical Summary Map April 20, 2010 Drawing

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses
Former BP Station #11127, 5425 Martin Luther King Jr. Way, Oakland, CA

		тос	Depth to	Water Level			Concentr	ations in (µ	ıg/L)			
Well and		Elevation	Water	Elevation	GRO/			Ethyl-	Total		DO	
Sample Date	P/NP	(feet)	(feet)	(feet)	TPHg	Benzene	Toluene	Benzene	Xylenes	MTBE	(mg/L)	Comments
MW-1												
4/29/2008	P	82.35	9.22	73.13	1,700	<2.5	<2.5	<2.5	<2.5	330		
4/20/2010	P	82.35	8.36	73.99	<50	< 0.50	<0.50	< 0.50	<1.0	16	2.04	
MW-2												
4/29/2008	P	83.48	10.40	73.08	110	< 0.50	< 0.50	1.5	< 0.50	3.1		
4/20/2010	P	83.48	9.35	74.13	<50	< 0.50	<0.50	< 0.50	<1.0	< 0.50	0.96	
MW-3												
4/20/2010	P	84.96	10.60	74.36	<50	<0.50	<0.50	<0.50	<1.0	< 0.50	0.96	
MW-4												
4/29/2008	P	82.70	9.75	72.95	<50	< 0.50	< 0.50	< 0.50	< 0.50	0.52		
4/20/2010	P	82.70	8.70	74.00	<50	<0.50	<0.50	<0.50	<1.0	< 0.50	3.59	

ABBREVIATIONS AND SYMBOLS:

- -- = Not analyzed/measured/applicable
- < = Not detected at or above laboratory reporting limit

DO = Dissolved oxygen

GRO = Gasoline range organics

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 in ft

TPHg = Total petroleum hydrocarbons as gasoline

 $\mu g/L = Micrograms per liter$

NOTES:

Values for DO and pH were obtained through field measurements.

GRO analysis was completed by EPA method 8015B (C6-C12) for samples collected April 29, 2008. The analysis for GRO was changed to EPA method 8260B (C6-C12) for samples collected April 20, 2010.

Table 2. Summary of Fuel Additives Analytical Data Former BP Station #11127, 5425 Martin Luther King Jr. Way, Oakland, CA

Well and				Concentration	ons in (µg/L)				
Sample Date	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	Comments
MW-1									
4/29/2008	<1,500	< 50	330	<2.5	<2.5	<2.5	<2.5	<2.5	
4/20/2010	<100	<4.0	16	<0.50	< 0.50	<0.50	< 0.50	<0.50	
MW-2									
4/29/2008	<300	<10	3.1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
4/20/2010	<100	<4.0	<0.50	<0.50	< 0.50	< 0.50	< 0.50	<0.50	
MW-3									
4/20/2010	<100	<4.0	<0.50	<0.50	<0.50	<0.50	< 0.50	<0.50	
MW-4									
4/29/2008	<300	<10	0.52	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
4/20/2010	<100	<4.0	<0.50	<0.50	< 0.50	< 0.50	< 0.50	<0.50	

ABBREVIATIONS AND SYMBOLS:

TBA = tert-butyl alcohol DIPE = Di-isopropyl ether

ETBE = Ethyl tert-butyl ether

MTBE = Methyl tert-butyl ether TAME = tert-amyl methyl ether

1,2-DCA = 1,2-Dichloroethane

EDB = 1,2-Dibromoethane

 $\mu g/L = Micrograms per Liter$

< = Not detected at or above the laboratory reporting limit

-- = Not analyzed/applicable/measured/available

NOTES:

All volatile organic compounds analyzed using EPA Method 8260B.

APPENDIX A

BAI GROUND-WATER SAMPLING DATA
(INCLUDES FIELD DATA SHEETS, LABORATORY REPORT, CHAIN-OF-CUSTODY DOCUMENTATION, NON-HAZARDOUS WASTE DATA FORM, AND FIELD PROCEDURES)



Well I.D.:		-		١-١	·			
Project Na	ame/Loc	ation:	BPI	1127				1: 09-88-671
Sampler's	Name:		1. G	edda			Date: 4	(/20/10
Purging E	quipmen	nt:	PM	^p	<u>. :</u>			· · · · · · · · · · · · · · · · · · ·
Sampling	Equipmo	ent:	Bail	er				
Casing Ty	pe: PVC			/ 1	·		:	
Casing Dia	ameter:			· <u> </u>	inch		*UNIT	CASING VOLUMES
Total Well	Depth:			<u> 27.</u>				= 0.16 gal/lin ft.
Depth to	Water:			- <u>8.3</u>	66 feet		3"	= 0.37 gal/lin ft.
Water Col	umn Thi	ickness:	<u> </u>	= 19	, 4feet			= 0.65 gal/lin ft.
Unit Casir	ig Volum	1e*:		×6	gallon / fo	oot	6"	= 1.47 gal/lin ft.
Casing Wa	ater Volu	ıme:		= <u>12.</u>	4 gallons			•
Casing Vo	lume:			×	3 each			
Estimated	Purge \	/olume:		= <u> </u>	gallons			
Free prod	uct mea	suremei	nt (if pr	esent):	:			
Purged	Time	DO	ORP	Fe	Conductance	Temperature	pН	Observations
(gallons)	(24:00)		(mV)	<u> </u>	(μS)	(Fahrenheit)	710	
0	1357	2.04	-13		228,7	66.5	7.12	
10	1400	х	X	X	224.7	64.5	7.00	
15	1401	x	х	Х	209.0	64.3	7.02	
20	1403	х	Х	х	239.1	64.3	6.91	
26	1405	- ×78	x	X	252,5	64.5	6-90	
		х	х	X				
		Х	×	X				
··-		х	×	X				
Total Wate	er Volun	ne Purge	ed:	:	26	gallons		
Depth to \		_		tion:	24.92	feet		
Sample C				: '	1412		•	ged Dry? (Y/N)
)				1			,	
Comment	s:			:				
	1	5 ml	Dec	ion b	Vater			
3								
				:	:. 		:	
				:		- Na	1.	



Well I.D.:			M	J-2					
Project Na	me/Loc	ation:	BP 1	1127	,		Project :	#: 09-88.67	<u> </u>
Sampler's	Name:	-		Was		• :	Date:	4/20/10	
Purging E	quipmer	nt:	Pum				·		
Sampling	Equipm	ent:	Beiles	·	mass _e ,				
Casing Ty	pe: PVC	;		. 1			able.		
Casing Dia	meter:		-	· <u> </u>	inch	$f^{\mu\nu}$	*UNIT	CASING VOL	UMES
Total Well	Depth:				.8/_feet	' ur	2"	= 0.16 gal/lin f	t.
Depth to \	Water:			- 9.	35 feet			= 0.37 gal/lin f	
Water Col	umn Th	ickness:		= 17.	96 feet		4"	= 0.65 gal/lin f	t.
Unit Casin	g Volun	ne * :	····	. x (gallon / fo	oot	6"	= 1.47 gal/lin f	t.
Casing Wa	iter Voli	ume:		<u> </u>	3 gallons	**		٠	
Casing Vo	lume:				3 each			-	
Estimated					04 gallons		in the second		
Free prode	uct mea	sureme	nt (if pr	eșent):			4.3	· · · · · · · · · · · · · · · · · · ·	
Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (µS)	Temperature (Fahrenheit)	pН	Observation	15
12	1323	,96	14		418.3	67.5	7.12		
10	1325	х	Х	х	419.1	66.6	6.73		
15	1327	х	×	X	410.3	66.2	6.66		
20	1328	1.12	х	×	407.0	65.9	6.63	•	•
		x	х	Х				12-	
		х	х	х		2 W 14/3			
		х	×	х	ente el de la T				
	-	х	x	X					
Total Wate	r Volum	ne Purge	ed:		20	gallons			1 1 • 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Depth to V	Vater at	Sample	Collect	tion:	9.62	řeet	,		•.*
Sample C	ollectio	n Time	:		1335	•	Purg	ged Dry? (Y//f	(U
Comments	:			•	ĀP.		•	, , , , ,	
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· Well I.D.:			MI	U-3		·		
Project Na		ation:	BPIII	27		oggical Re	Project :	#: 09-88-671
Sampler's				eddes =	A	•	Date: L	1/26/10
Purging E		nt:	teril	er	* :			· · · · · · · · · · · · · · · · · · ·
Sampling			Bailo	~ ' '				- · · · · · · · · · · · · · · · · · · ·
Casing Ty			-					j.
Casing Di				2	inch		*UNIT	CASING VOLUMES
Total Well				24	,70 feet	•	2"	= 0.16 gal/lin ft.
Depth to				- 16.	67) feet	•		= 0.37 gal/lin ft.
Water Col		ickness:		= <u> L ,</u>	feet			= 0.65 gal/lin ft.
Unit Casir	ıg Volun	ne*:		x	bgallon / f	oot	6"	= 1.47 gal/lin ft.
Casing Wa	ater Vol	ume:		=_2.	2gations			
Casing Vo	lume:			х	3each			
Estimated	Purge \	/ol <u>ume:</u>		= 6.	Zgallons			
Free prod	uct mea	sureme	nt (if pr	esent):				
Purged	Time	DO	ORP	Fe	Conductance	Temperature	pH .	Observations
(gallons)	(24:00)		(mV)		(μS)	(Fahrenheit)		
<u> </u>	14136	.96	-412		397.4	64,3	6.85	-
2	1438	х	х	X	396.3	63.9	6.65	
Ц	(44)	1.63	Х	×	3923	63.9	6.59	
		х	х	X				
		Х	X	X			,	
		х	х	x				e pr
		х	х	х				
-	as.	х	х	х	· · · · · · · · · · · · · · · · · · ·			:
Total Wate	er Volum	ne Purge	ed:		4	gallons		
Depth to V		_		tion:	12.85	feet		
Sample C		-	*	•	1445		Puro	ged Dry? (Y/🐠)
			1 6	ا ا	4 041	201		342 317. (1762)
Comments	<u>:</u>	<u>167a</u>	-	10PT	n 29-1	10.		
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	*							
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Well I.D.:			M	W-4						
Project Na	ame/Loc	ation:	<i>B0</i> 11	127				Project :	#: 09-88-	671
Sampler's	: Name:			adis			•		1/20/10	
Purging E	quipmer	nt:		clar			<u>-</u>			
Sampling			Buch	1						
Casing Ty	pe: PVC									-
Casing Di	-			. <u>2</u>	i	inch	•	*UNIT	CASING	VOLUMES
Total Wel	! Depth:			24.	75	feet	•	. 2"	= 0.16 ga	l/lin ft.
Depth to				- 8.	70	feet ·		3"	= 0.37 ga	l/lin ft.
Water Co		ickness:		= 16	.05	feet			= 0.65 ga	
Unit Casir	ng Volun	ne*:		x(6	gallon / fo	oot	6"	= 1.47 ga	l/lin ft.
Casing W				= 2.	5	gallons				F
Casing Vo				×	3	each				
Estimated		/olume:		= 7	7	gallons				
Free prod	uct mea	sureme	nt (if pr	eșent):						
Purged	Time	DO	ORP	Fe	Cond	uctance	Temperature	pH	Obse	rvations
(gallons)	(24:00)		(mV)		. (μ5)	(Fahrenheit)			·
<u> </u>	1502	359	-12_	i 	137	<u>'7</u>	63.8	7.15		· · · · · · · · · · · · · · · · · · ·
2	1504	Х	Х	Х	13	8.8	625	6-91		
3	1506	2.22	X	×,	14)1.	5	C2C	6.82		
		X,	X	x .						
Mary Comment	·	х	х	х	:		agi			
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Total Wate	er Volun	ne Purge	<u>.</u> d: ∴	Ser Block	-	3	gallons			- 1985 - 1985 - 1985
Depth to \		111	74.4	ion:	9,2	19	feet	(NA)	M., .	e e
Sample C				•	15	10		Purc	ed Dry? (Y/ND
				•				. 4.5	,00 517. (
Comment	5:									-
				2.55						
										The state of
								-		
		*		, -				<u> </u>	· · · · · · · · · · · · · · · · · · ·	
		 							·	



ANALYTICAL REPORT

Job Number: 720-27656-1

Job Description: BP #11127, Oakland

For:
ARCADIS U.S., Inc.
155 Montgomery Street
Suite 1500
San Francisco, CA 94104

Attention: Hollis Phillips

Approved for releas Dimple Sharma Project Manager I 5/10/2010 4:28 PM

Dimple Sharma
Project Manager I
dimple.sharma@testamericainc.com
05/10/2010

cc: Mr. Jason Duda Mr. Ben McKenna

CA ELAP Certification # 2496

The Chain(s) of Custody are included and are an integral part of this report.

The report shall not be reproduced except in full, without the written approval of the laboratory. The client, by accepting this report, also agrees not to alter any reports whether in the hard copy or electronic format and to use reasonable efforts to preserve the reports in the form and substance originally provided by TestAmerica.

A trip blank is required to be provided for volatile analyses. If trip blank results are not included in the report, either the trip blank was not submitted or requested to be analyzed.

Job Narrative 720-27656-1

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS VOA

No analytical or quality issues were noted.

EXECUTIVE SUMMARY - Detections

Client: ARCADIS U.S., Inc. Job Number: 720-27656-1

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-27656-1 MTBE	MW-1(04/20/10)	16	0.50	ug/L	8260B/CA LUFTMS

METHOD SUMMARY

Client: ARCADIS U.S., Inc. Job Number: 720-27656-1

Description	Lab Location	Method Preparation Method
Matrix Water		
8260B / CA LUFT MS	TAL SF	SW846 8260B/CA_LUFTMS
Purge and Trap	TAL SF	SW846 5030B

Lab References:

TAL SF = TestAmerica San Francisco

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

SAMPLE SUMMARY

Client: ARCADIS U.S., Inc. Job Number: 720-27656-1

			Date/Time	Date/Time
Lab Sample ID	Client Sample ID	Client Matrix	Sampled	Received
720-27656-1	MW-1(04/20/10)	Water	04/20/2010 1412	04/23/2010 1930
720-27656-2	MW-2(04/20/10)	Water	04/20/2010 1335	04/23/2010 1930
720-27656-3	MW-3(04/20/10)	Water	04/20/2010 2144	04/23/2010 1930
720-27656-4	MW-4(04/20/10)	Water	04/20/2010 1510	04/23/2010 1930

Client: ARCADIS U.S., Inc. Job Number: 720-27656-1

Client Sample ID: MW-1(04/20/10)

Lab Sample ID: 720-27656-1 Date Sampled: 04/20/2010 1412

Client Matrix: Water Date Received: 04/23/2010 1930

Method: 8260B/CA_LUFTMS Instrument ID: CHMSV2 Analysis Batch: 720-70361 Preparation: Lab File ID: 04281011.D 5030B Initial Weight/Volume: Dilution: 10 mL 04/28/2010 1251 Date Analyzed: Final Weight/Volume: 10 mL

Date Prepared: 04/28/2010 1251

Result (ug/L) Qualifier RL Analyte MTBE 16 0.50 Benzene ND 0.50 EDB ND 0.50 1,2-DCA ND 0.50 Ethylbenzene ND 0.50 Toluene ND 0.50 Xylenes, Total ND 1.0 Gasoline Range Organics (GRO)-C6-C12 ND 50 TBA ND 4.0 Ethanol ND 100 DIPE ND 0.50 **TAME** ND 0.50 Ethyl t-butyl ether ND 0.50 Surrogate %Rec Qualifier Acceptance Limits 4-Bromofluorobenzene 99 67 - 130 1,2-Dichloroethane-d4 (Surr) 109 67 - 130 Toluene-d8 (Surr) 97 70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-27656-1

Client Sample ID: MW-2(04/20/10)

Lab Sample ID: 720-27656-2 Date Sampled: 04/20/2010 1335

Client Matrix: Water Date Received: 04/23/2010 1930

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method: 8260B/CA_LUFTMS Analysis Batch: 720-70361 Instrument ID: CHMSV2 Preparation: 5030B Lab File ID: 04281012.D Dilution: Initial Weight/Volume: 10 mL 04/28/2010 1323 Date Analyzed: Final Weight/Volume: 10 mL

Date Prepared: 04/28/2010 1323

Analyte	Result (ug/L)	Qualifier	RL
MTBE	ND		0.50
Benzene	ND		0.50
EDB	ND		0.50
1,2-DCA	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C6-C12	ND		50
TBA	ND		4.0
Ethanol	ND		100
DIPE	ND		0.50
TAME	ND		0.50
Ethyl t-butyl ether	ND		0.50
Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	101		67 - 130
1,2-Dichloroethane-d4 (Surr)	107		67 - 130
Toluene-d8 (Surr)	98		70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-27656-1

Client Sample ID: MW-3(04/20/10)

Lab Sample ID: 720-27656-3 Date Sampled: 04/20/2010 2144

Client Matrix: Water Date Received: 04/23/2010 1930

8260B/CA	LLIETMS 826	OB / CA LUFT MS

Method:8260B/CA_LUFTMSAnalysis Batch: 720-70361Instrument ID:CHMSV2Preparation:5030BLab File ID:04281013.DDilution:1.0Initial Weight/Volume:10 mLDate Analyzed:04/28/2010 1356Final Weight/Volume:10 mL

 Date Analyzed:
 04/28/2010
 1356
 Final Weight/Volume:

 Date Prepared:
 04/28/2010
 1356
 Final Weight/Volume:

Result (ug/L) Qualifier RL Analyte MTBE ND 0.50 Benzene ND 0.50 EDB ND 0.50 1,2-DCA ND 0.50 Ethylbenzene ND 0.50 Toluene ND 0.50 Xylenes, Total ND 1.0 Gasoline Range Organics (GRO)-C6-C12 ND 50 TBA ND 4.0 Ethanol ND 100 DIPE ND 0.50 **TAME** ND 0.50 Ethyl t-butyl ether ND 0.50 Surrogate %Rec Qualifier Acceptance Limits 4-Bromofluorobenzene 67 - 130 96 1,2-Dichloroethane-d4 (Surr) 107 67 - 130 Toluene-d8 (Surr) 95 70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-27656-1

Client Sample ID: MW-4(04/20/10)

Lab Sample ID: 720-27656-4 Date Sampled: 04/20/2010 1510

Client Matrix: Water Date Received: 04/23/2010 1930

8260B/CA	LUFTMS	8260B /	CAL	LUFT	MS
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Analysis Batch: 720-70361 Method: 8260B/CA_LUFTMS Instrument ID: CHMSV2 Preparation: 5030B Lab File ID: 04281014.D Dilution: Initial Weight/Volume: 10 mL Date Analyzed: 04/28/2010 1428 Final Weight/Volume: 10 mL

Date Prepared: 04/28/2010 1428

Analyte	Result (ug/L)	Qualifier	RL
MTBE	ND	Qualifici	0.50
	ND		0.50
Benzene			
EDB	ND		0.50
1,2-DCA	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C6-C12	ND		50
TBA	ND		4.0
Ethanol	ND		100
DIPE	ND		0.50
TAME	ND		0.50
Ethyl t-butyl ether	ND		0.50
Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	95		67 - 130
1,2-Dichloroethane-d4 (Surr)	107		67 - 130
Toluene-d8 (Surr)	94		70 - 130

DATA REPORTING QUALIFIERS

Lab Section Qualifier Description

Client: ARCADIS U.S., Inc. Job Number: 720-27656-1

QC Association Summary

Report Basis **Client Matrix** Lab Sample ID **Client Sample ID** Method Prep Batch GC/MS VOA Analysis Batch:720-70361 Т 8260B/CA_LUFT LCS 720-70361/5 Lab Control Sample Water Т Water 8260B/CA_LUFT LCS 720-70361/7 Lab Control Sample Т Lab Control Sample Duplicate 8260B/CA_LUFT LCSD 720-70361/6 Water Т LCSD 720-70361/8 Lab Control Sample Duplicate Water 8260B/CA_LUFT MB 720-70361/4 Method Blank Т Water 8260B/CA_LUFT 720-27656-1 Т MW-1(04/20/10) Water 8260B/CA_LUFT Т Water 720-27656-2 MW-2(04/20/10) 8260B/CA_LUFT Т 720-27656-3 MW-3(04/20/10) Water 8260B/CA_LUFT Т 720-27656-4 MW-4(04/20/10) Water 8260B/CA_LUFT 720-27656-4MS Matrix Spike Т Water 8260B/CA_LUFT Matrix Spike Duplicate Т Water 720-27656-4MSD 8260B/CA_LUFT

Report Basis

T = Total

Client: ARCADIS U.S., Inc. Job Number: 720-27656-1

Method Blank - Batch: 720-70361

Method: 8260B/CA_LUFTMS

Preparation: 5030B

Lab Sample ID: MB 720-70361/4

Client Matrix:

Dilution:

Water

1.0

Date Analyzed: 04/28/2010 0855 Date Prepared: 04/28/2010 0855 Analysis Batch: 720-70361

Prep Batch: N/A

Units: ug/L

Instrument ID: CHMSV2 Lab File ID: 04281004.D Initial Weight/Volume: 10 mL

Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
MTBE	ND		0.50
Benzene	ND		0.50
EDB	ND		0.50
1,2-DCA	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
m-Xylene & p-Xylene	ND		1.0
o-Xylene	ND		0.50
Xylenes, Total	ND		1.0
Gasoline Range Organics (GRO)-C6-C12	ND		50
TBA	ND		4.0
Ethanol	ND		100
DIPE	ND		0.50
TAME	ND		0.50
Ethyl t-butyl ether	ND		0.50
Surrogate	% Rec	Acceptance Limits	
4-Bromofluorobenzene	96	67 - 130	
1,2-Dichloroethane-d4 (Surr)	103	67 - 130	
Toluene-d8 (Surr)	96	70 - 130	

Client: ARCADIS U.S., Inc. Job Number: 720-27656-1

Lab Control Sample/ Method: 8260B/CA_LUFTMS

Preparation: 5030B Lab Control Sample Duplicate Recovery Report - Batch: 720-70361

LCS Lab Sample ID: LCS 720-70361/5

Water Client Matrix: Dilution: 1.0

04/28/2010 0928 Date Analyzed: Date Prepared: 04/28/2010 0928

Analysis Batch: 720-70361

Prep Batch: N/A Units: ug/L

Instrument ID: CHMSV2

Lab File ID: 04281005.D Initial Weight/Volume: 10 mL Final Weight/Volume:

10 mL

LCSD Lab Sample ID: LCSD 720-70361/6

Client Matrix: Water Dilution: 1.0

04/28/2010 1000 Date Analyzed: Date Prepared: 04/28/2010 1000

Analysis Batch: 720-70361

Prep Batch: N/A Units: ug/L

CHMSV2 Instrument ID:

Lab File ID: 04281006.D Initial Weight/Volume: 10 mL Final Weight/Volume: 10 mL

	<u>.</u>	<u>% Rec.</u>					
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
MTBE	96	94	73 - 123	2	20		
Benzene	101	100	82 - 127	1	20		
EDB	101	98	70 - 130	3	20		
1,2-DCA	105	102	75 - 145	3	20		
Ethylbenzene	106	104	86 - 135	2	20		
Toluene	103	101	83 - 129	1	20		
m-Xylene & p-Xylene	103	101	70 - 142	2	20		
o-Xylene	104	103	89 - 136	2	20		
TBA	99	98	85 - 110	1	20		
Ethanol	111	101	31 - 216	10	20		
DIPE	99	97	74 - 155	2	20		
TAME	102	98	79 - 129	4	20		
Ethyl t-butyl ether	98	97	70 - 130	1	20		
Surrogate	L	.CS % Rec	LCSD %	Rec	Accep	tance Limits	
4-Bromofluorobenzene	9	9	98		6	7 - 130	
1,2-Dichloroethane-d4 (Surr)	1	02	100		6	7 - 130	
Toluene-d8 (Surr)	9	8	98		7	0 - 130	

67 - 130

70 - 130

Client: ARCADIS U.S., Inc. Job Number: 720-27656-1

Lab Control Sample/ Method: 8260B/CA_LUFTMS

Lab Control Sample Duplicate Recovery Report - Batch: 720-70361 Preparation: 5030B

LCS Lab Sample ID: LCS 720-70361/7 Analysis Batch: 720-70361 Instrument ID: CHMSV2

Client Matrix: Water Prep Batch: N/A Lab File ID: 04281007.D

Dilution: 1.0 Units: ug/L Initial Weight/Volume: 10 mL

Date Analyzed: 04/28/2010 1032 Final Weight/Volume: 10 mL Date Prepared: 04/28/2010 1032

LCSD Lab Sample ID: LCSD 720-70361/8 Analysis Batch: 720-70361 Instrument ID: CHMSV2
Client Matrix: Water Prep Batch: N/A Lab File ID: 04281008.D

Dilution: 1.0 Units: ug/L Initial Weight/Volume: 10 mL

Date Analyzed: 04/28/2010 1104 Final Weight/Volume: 10 mL

Date Prepared: 04/28/2010 1104

110

98

% Rec. Analyte LCS LCSD Limit **RPD** RPD Limit LCS Qual LCSD Qual Gasoline Range Organics (GRO)-C6-C12 97 70 - 130 20 99 2 Surrogate LCS % Rec LCSD % Rec Acceptance Limits 4-Bromofluorobenzene 101 67 - 130 100

107

99

1,2-Dichloroethane-d4 (Surr)

Toluene-d8 (Surr)

Client: ARCADIS U.S., Inc. Job Number: 720-27656-1

Matrix Spike/ Method: 8260B/CA_LUFTMS

Matrix Spike Duplicate Recovery Report - Batch: 720-70361 Preparation: 5030B

MS Lab Sample ID: 720-27656-4
Client Matrix: Water

Dilution: 1.0

Date Analyzed: 04/28/2010 1637 Date Prepared: 04/28/2010 1637 Analysis Batch: 720-70361

Prep Batch: N/A

Instrument ID: CHMSV2 Lab File ID: 04281018.D

Initial Weight/Volume: 10 mL Final Weight/Volume: 10 mL

MSD Lab Sample ID: 720-27656-4

Client Matrix: Water Dilution: 1.0

Date Analyzed: 04/28/2010 1710
Date Prepared: 04/28/2010 1710

Analysis Batch: 720-70361

Prep Batch: N/A

Instrument ID: CHMSV2
Lab File ID: 04281019.D
Initial Weight/Volume: 10 mL

Final Weight/Volume: 10 mL

	<u>%</u>	Rec.					
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
МТВЕ	101	97	60 - 138	4	20		
Benzene	100	100	60 - 140	0	20		
EDB	105	100	60 - 140	5	20		
1,2-DCA	112	108	60 - 140	4	20		
Ethylbenzene	104	104	60 - 140	0	20		
Toluene	100	100	60 - 140	1	20		
m-Xylene & p-Xylene	100	100	60 - 140	0	20		
o-Xylene	103	103	60 - 140	0	20		
TBA	99	96	60 - 140	3	20		
Ethanol	92	95	60 - 140	3	20		
DIPE	101	100	60 - 140	1	20		
TAME	105	98	60 - 140	7	20		
Ethyl t-butyl ether	102	99	60 - 140	3	20		
Surrogate		MS % Rec	MSD	% Rec	Acce	eptance Limits	
4-Bromofluorobenzene		101	99		6	7 - 130	
1,2-Dichloroethane-d4 (Surr)		109	104		6	7 - 130	
Toluene-d8 (Surr)		98	98		7	0 - 130	

San Francisco

1220 Quarry Lane

720 - 27656 Chain of Custody Record

Pleasanton, CA 94566

THE LEADER IN ENVIRONMENTAL TESTING

phone 925,484,1919 fax 925,600,3002																	TestAmerica Laboratories, In-
Client Contact		anager: Jas				Site	Cont	act: (rai	460	ddes	Da	te: 4	211	10		COC No:
Broadbent & Associates	Tel/Fax: (530) 566-140				Lab	Cont	act: Di	imple	Sharn	18	Ca	rrier:				of L COCs
1324 Mangrove Ave Suite 212			arnaround			- 8	_		-								Jeb No.
Chico, CA 95926	Calenda	at (C) or Wo	ork Days (W)			2608					- '					
(530) 566-1400		t if different fr	om Bolow <u>St</u>	andard	-		\$ \$			1.							
(530) 566-1401		. 2	2 weeks				要 爻										SDG No.
Project Name: BP 11127 Site: 5425 Martin Luther King Jr., Oakland, CA	_		week				2 3	.	İ	1 1		1					
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	Sample	C1-	S				2 S	150									
Sample Identification	Date	Sample Time	Sample Type	Matrix	# of Cent.		GRO and BTEX by 8260B SOxys, EDB, and 1.2-DCA by 8260B	Ethanol by 8260B									Sample Specific Notes:
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MW-2 (04/20/10)		1335		_	3	1 2	₹ X	Χ		\perp	44		<u> </u>	11	$\bot \bot$	$\perp \perp$	
MW-3 (64/20/10)		1445			3	þ	<u> </u>	х				1					
MW-4 (04/20/10)	,	1510			3	þ	x x	x									
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Preservation Used: 1= Ice 2= HCI; 3= H2SO4; 4=HNO3; 5=Na	OH; 6= Other	Ť												\Box			
Possible Hazard Identification						s					e may t	****					ed longer than 1 month)
Non-Hazard Flammable Skin Irritant	Poison E		Jnknown					Return	To C	lient	L	Disp	osal By	Lab	L] Archivi	re For Months
Special Instructions/QC Requirements & Comments: Invoice to	Hollis Phi	llips, ARC	ADIS														e Madha
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17

Login Sample Receipt Check List

Client: ARCADIS U.S., Inc.

Job Number: 720-27656-1

Login Number: 27656 List Source: TestAmerica San Francisco

Creator: Hoang, Julie List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified	True	

NON-HAZARDOUS WASTE DATA FORM

		w- 1	BESI #	į.
			w w allen address)	
T (Benerator's Name and Malling Address	Generator's Site Address	(if different than mailing address)	
	BP WEST COAST PRODUCTS, LLC	11127	•	
•		5425 GROVE 5	3T	
	P.O. BOX 80249	OAKLAND, CA	94609	
	RANCHO SANTA MARGARITA, CA 92688	-		
				2022
I,	Senerator's Phone: 949-460-5200	24-HOUR EME	RGENCY PHONE: 800-424-	9300
lõ	Container type removed from site:	Container type tra	nsported to receiving facility:	
- 1		□ Dome □ \	/acuum Truck 🔲 Roll-off Truck	☐ Dump Truck
	🖵 Drums 🏻 💢 Vacuum Truck 🕒 Roll-off Truck 🚨 Dump Truck	Ca Dialila ·	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
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Ì	☐ Other	Other		
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ō	Quantity 68 gal	Quantity	Volume	
F	Oddinity			
出一			SESS WELL PURGING / DEC	ON WATER
GENERATOR	WASTE DESCRIPTION NON-HAZARDOUS WATER			PPM %
빘	COMPONENTS OF WASTE PPM %	COM	APONENTS OF WASTE	
١	NATED 99-100%) ,	· <u></u>	
	1. WATER 99-100%	·		
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	Waste Profile PROPERTIES: pH_7-10	LI SOLID AMI LIGOR		
		IN DOOTECTIVE	FOURMENT.	
	HANDLING INSTRUCTIONS: WEAR ALL APPROPRIATE PERSON	ANT LIKOTERITAE	. L. W	
	Signatura			Month Day Year
İ	Generator Printed/Typed Name Emily LEANE Signature			131/10
	On Behalf of BP West Coast Products, LLC			1012 10
	The Generator certifies that the waste as described is 100% non-hazardous			
	Transporter 1 Company Name		Phone#	
1	13AT			احمالا
	1 1 / / / /	. Grander <u>a de la casa /u>	530.566	
	Transporter 1 Printed/Typed Name Signature	1	18/	Month Day Year
世	Transporter 1 Printed/Typeu Name	1-1	B ()	Month Day Year
RTER	Transporter 1 Printed/typed Ivalities	1-12	B. J. 12	
	Transporter Acknowledgment of Receipt of Materials	1. /2	Phone#	Month Day Year
	Transporter 1 Printed/typed Ivalities	1. hay	20	Month Day Year
	Transporter Acknowledgment of Receipt of Materials Transporter 2 Company Name	1- hay	20	Month Day Year
	Transporter 2 Company Name	1-12	20	Month Day Year
TRANSPORTER	Transporter Acknowledgment of Receipt of Materials Transporter 2 Company Name	1. hy	20	Month Day Year
	Transporter Acknowledgment of Receipt of Materials Transporter 2 Company Name Transporter 2 Printed/Typed Name Signature Transporter Acknowledgment of Receipt of Materials	1. hy	20	Month Day Year
	Transporter Acknowledgment of Receipt of Materials Transporter 2 Company Name Transporter 2 Printed/Typed Name Signature Transporter Acknowledgment of Receipt of Materials Designated Facility Name and Site Address	1 hay	Phone#	Month Day Year
TRANSPO	Transporter Acknowledgment of Receipt of Materials Transporter 2 Company Name Transporter 2 Printed/Typed Name Signature Transporter Acknowledgment of Receipt of Materials Designated Facility Name and Site Address INSTRAT, INC.	1. hy	Phone#	Month Day Year
TRANSPO	Transporter Acknowledgment of Receipt of Materials Transporter 2 Company Name Transporter 2 Printed/Typed Name Transporter Acknowledgment of Receipt of Materials Designated Facility Name and Site Address INSTRAT, INC. 1105 AIRPORT RD.	1. hay	Phone#	Month Day Year
TRANSPO	Transporter Acknowledgment of Receipt of Materials Transporter 2 Company Name Transporter 2 Printed/Typed Name Signature Transporter Acknowledgment of Receipt of Materials Designated Facility Name and Site Address INSTRAT, INC.	1. has	Phone#	Month Day Year
TRANSPO	Transporter Acknowledgment of Receipt of Materials Transporter 2 Company Name Transporter 2 Printed/Typed Name Transporter Acknowledgment of Receipt of Materials Designated Facility Name and Site Address INSTRAT, INC. 1105 AIRPORT RD.	1. has	Phone#	Month Day Year
TRANSPO	Transporter Acknowledgment of Receipt of Materials Transporter 2 Company Name Transporter 2 Printed/Typed Name Transporter Acknowledgment of Receipt of Materials Designated Facility Name and Site Address INSTRAT, INC. 1105 AIRPORT RD.	1 has	Phone#	Month Day Year
TRANSPO	Transporter Acknowledgment of Receipt of Materials Transporter 2 Company Name Transporter 2 Printed/Typed Name Transporter Acknowledgment of Receipt of Materials Designated Facility Name and Site Address INSTRAT, INC. 1105 AIRPORT RD.	1 has	Phone#	Month Day Year
TRANSPO	Transporter Acknowledgment of Receipt of Materials Transporter 2 Company Name Transporter 2 Printed/Typed Name Transporter Acknowledgment of Receipt of Materials Designated Facility Name and Site Address INSTRAT, INC. 1105 AIRPORT RD.	A. Long	Phone#	Month Day Year
TRANSPO	Transporter Acknowledgment of Receipt of Materials Transporter 2 Company Name Transporter 2 Printed/Typed Name Transporter Acknowledgment of Receipt of Materials Designated Facility Name and Site Address INSTRAT, INC. 1105 AIRPORT RD. RIO VISTA, CA 94571	A. hay	Phone#	Month Day Year
TRANSPO	Transporter Acknowledgment of Receipt of Materials Transporter 2 Company Name Transporter 2 Printed/Typed Name Transporter Acknowledgment of Receipt of Materials Designated Facility Name and Site Address INSTRAT, INC. 1105 AIRPORT RD.	1. ho	Phone#	Month Day Year Month Day Year
	Transporter Acknowledgment of Receipt of Materials Transporter 2 Company Name Transporter 2 Printed/Typed Name Transporter Acknowledgment of Receipt of Materials Designated Facility Name and Site Address INSTRAT, INC. 1105 AIRPORT RD. RIO VISTA, CA 94571		Phone#	Month Day Year Month Day Year

BROADBENT & ASSOCIATES INC. FIELD PROCEDURES

A.1 QUALITY ASSURANCE/QUALITY CONTROL FIELD PROTOCOLS

Field protocols have been implemented to enhance 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-Product Measurement

Prior to ground-water sample collection from each monitoring well, the presence of separate-phase hydrocarbons (SPH or free product, FP) and depth to ground water shall be measured. Depth to ground water will be measured with a standard water level indicator that has been decontaminated prior to its use in accordance with procedures discussed below. Depth to groundwater will be gauged from a saw cut notch at the top of the well casing on each well head. Where FP is suspected, the initial gauging will be done with an oil-water interface probe. Once depth to water has been measured, the first retrieval of a new disposable bailer will be scrutinized for the presence of SPH/FP.

A.1.2 Monitoring Well Purging

Subsequent to measuring depth to ground water and prior to the collection of ground-water samples, purging of standing water within the monitoring will be performed if called for. Consistent with the American Society for Testing and Materials (ASTM) Standard D6452-99, Section 7.1, the well will be purged of approximately three wetted-casing volumes of water, or until the well is dewatered, or until monitored field parameters indicate stabilization. The well will be purged using a pre-cleaned disposable bailer or submersible pump 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. So that the sample collected is representative of formation water, several field parameters will be monitored during the purging process. The sample will not be collected until these parameters (i.e. temperature, pH, and conductivity) have stabilized to within 10% of the previously measured value. If a well is purged dry, the sample should not be collected until the well has recovered to a minimum 50% of its initial volume.

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 pre-cleaned, new, disposable bailer and transferred into the appropriate, new, laboratory-prepared containers such that no head space or air bubbles are present in the sample container (if appropriate to the analysis). The samples will be properly labeled (i.e. sample identification, sampler initials, date/time of collection, site location, requested analyses), placed in an ice chest with bagged ice or ice substitute, and delivered to the contracted analytical laboratory.

A.1.4 Surface Water Sample Collection

Unless specified otherwise, surface water samples will be collected from mid-depth in the central area of the associated surface water body. Water samples will be collected into appropriate, new, laboratory-prepared containers by dipping the container into the surface water unless the container has a preservative present. If a sample preservative is present, a new, cleaned non-preserved surrogate container will be used to obtain the sample which will then be directly transferred into a new, laboratory-provided, preserved container. Samples will be properly labeled and transported as described above.

A.1.5 Decontamination Protocol

Prior to use in each well, re-usable ground-water sampling equipment (e.g., water level indicator, oil-interface probe, purge pump, etc.) will be decontaminated. Decontamination protocol will include thoroughly cleaning with a solution of Liquinox, rinsing with clean water, and final rinsing with control water (potable water of known quality, distilled, or de-ionized water). Pre-cleaned new disposable bailers and disposable plastic tubing will be dedicated to each individual well.

A.1.6 Chain of Custody Procedures

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 individually responsible for the care and custody of the samples collected until they are properly transferred.

Samples will have unique 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 field sampler.

Transfer of Custody and Shipment

A COC will accompany samples during transfer and shipment. When transferring samples, the individual relinquishing and the individual receiving the samples will each sign, date, and note the time on the COC. This 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 responsible courier. When a shipping courier is utilized, the sample shipment number will be identified on the COC.

A.1.7 Field Records

In addition to sample identification numbers and COC records, Daily Field Report records will be maintained by field staff to provide daily records of significant events, observations, and measurements during field investigations. These documents will contain observed information such as: the personnel present, site conditions, sampling procedures, measurement procedures, calibration records, equipment used, supplies used, 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 file records.

APPENDIX B

GEOTRACKER UPLOAD CONFIRMATIONS

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A GEO_WELL FILE

SUCCESS

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

Submittal Type: GEO_WELL

Submittal Title:2Q10 GEO_WELLFacility Global ID:T0600100206Facility Name:BP #11127File Name:GEO_WELL.zip

Organization Name: Broadbent & Associates, Inc.

<u>Username:</u> BROADBENT-C IP Address: 67.118.40.90

Submittal Date/Time: 5/18/2010 12:28:54 PM

Confirmation Number: 6234284758

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STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A EDF FILE

SUCCESS

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

Submittal Type: EDF - Monitoring Report - Annually

Submittal Title: 2Q10 GW Monitoring

Facility Global ID: T0600100206
Facility Name: BP #11127

File Name: 11127-720-27656-1.zip

Organization Name: Broadbent & Associates, Inc.

<u>Username:</u> BROADBENT-C IP Address: 67.118.40.90

Submittal Date/Time: 5/18/2010 12:30:46 PM

Confirmation Number: 3560037076

VIEW QC REPORT

VIEW DETECTIONS REPORT

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