



Atlantic Richfield Company
(a BP affiliated company)

P.O. Box 1257
San Ramon, California 94583
Phone: (925) 275-3801
Fax: (925) 275-3815

30 October 2008

Re: Third Quarter 2008 Annual Ground-Water Monitoring Report
Former BP Service Station # 11270
3255 Mecartney Road
Alameda, California
ACEH Case #RO0000511

RECEIVED

1:14 pm, Oct 30, 2008

Alameda County
Environmental Health



"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:

Paul Supple
Environmental Business Manager

Third Quarter 2008 Annual Ground-Water Monitoring Report

Former BP Service Station #11270

3255 Mecartney Road

Alameda, California

Prepared for

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

Prepared by



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

30 October 2008

Project No. 06-08-661

30 October 2008

Project No. 06-08-661

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

Attn.: Mr. Paul Supple

Re: Third Quarter 2008 Annual Ground-Water Monitoring Report, Former BP Service
Station #11270, 3255 Mecartney Road, Alameda, California. ACEH Case #RO0000511

Dear Mr. Supple:

Attached is the *Third Quarter 2008 Annual Ground-Water Monitoring Report* for Former BP Service Station #11270 located at 3255 Mecartney Road, Alameda, California (Site). This report presents results of ground-water monitoring conducted at the Site during the Third Quarter of 2008.

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

Sincerely,

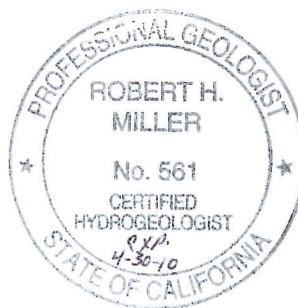
BROADBENT & ASSOCIATES, INC.



Thomas A. Venus, P.E.
Senior Engineer



Robert H. Miller, P.G., C.HG.
Principal Hydrogeologist



Enclosures

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

STATION #11270 ANNUAL GROUND-WATER MONITORING REPORT

Facility: #11270	Address:	3255 Mecartney Road, Alameda, California
Environmental Business Manager:		Mr. Paul Supple
Consulting Co./Contact Persons:		Broadbent & Associates, Inc.(BAI)/Rob Miller & Tom Venus (530) 566-1400
Consultant Project No.:		06-08-661
Primary Agency/Regulatory ID No.:		Alameda County Environmental Health (ACEH) ACEH Case #RO0000511
Facility Permits/Permitting Agency:		NA

WORK PERFORMED THIS QUARTER (Third Quarter 2008):

1. Prepared and submitted Second Quarter 2008 Status Report.
2. Conducted ground-water monitoring/sampling for Third Quarter 2008. Work performed on 19 September 2008 by Stratus Environmental, Inc. (Stratus).

WORK PROPOSED FOR NEXT QUARTER (Fourth Quarter 2008):

1. Prepared and submitted this Third Quarter 2008 Annual Ground-Water Monitoring Report (contained herein).
2. Implement Work Plan for On-Site Soil Investigation (BAI, 10/20/2008) upon approval from ACEH.

QUARTERLY RESULTS SUMMARY:

Current phase of project:	Ground-water monitoring/sampling
Frequency of ground-water monitoring:	Annually: MW-5, MW-6, MW-7, XW-1, XW-2, and XW-3
Frequency of ground-water sampling:	Annually (3Q): MW-5, MW-6, MW-7, XW-1, XW-2, and XW-3
Is free product (FP) present on-site:	No
Current remediation techniques:	NA
Depth to ground water (below TOC):	6.90 ft (XW-1) to 9.00 ft (MW-5)
General ground-water flow direction:	West-Northwest
Approximate hydraulic gradient:	0.01 ft/ft

DISCUSSION:

Ground-water monitoring and sampling was initiated at the Site following a directive letter from Mr. Paresh Khatri of ACEH, dated 21 August 2008. The existing wells on-site have not been utilized for monitoring by BP since 2001. As a result, well development activities took place on 5 September 2008, two weeks prior to sampling. Well development activities for wells MW-5, MW-6, MW-7, XW-1, XW-2, and XW-3 consisted of surging and pumping each well until relatively silt-free water was removed. Each well purged dry before ten casing volumes were removed. The wells were left to hydraulically equilibrate prior to water level measurement and sampling. A well development data package including field data sheets is provided in Appendix A.

Third quarter 2008 ground-water monitoring and sampling was conducted at Station #11270 on 19 September 2008 by Stratus. Water levels were gauged in each of the six wells at the Site. No irregularities were noted in the field during the annual water level gauging. Depth-to-water measurements ranged from 6.90 ft at XW-1 to 9.00 ft at MW-5. Resulting ground-water surface

elevations ranged from -1.20 ft below mean sea level (msl) in well MW-7 to 0.59 ft above msl at well XW-1. Water level elevations yielded a potentiometric ground-water flow direction and gradient to the west-northwest at approximately 0.01 ft/ft. Ground-water monitoring field data sheets are provided within Appendix B. Potentiometric ground-water elevation contours are presented in Drawing 1.

Water samples were collected from wells MW-5 through MW-7 and XW-1 through XW-3 at the Site. Wells MW-5, MW-6, and XW-3 purged dry prior to the removal of three casing volumes. No other 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, C6-12) by EPA Method 8015B; for Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX) by EPA Method 8260B; and 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 significant irregularities were noted 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 B.

Gasoline range organics (GRO) were detected above the laboratory reporting limits in one of the six wells sampled at a concentration of 83 micrograms per liter ($\mu\text{g/L}$) in well MW-6. Toluene, ethylbenzene, and total xylenes were detected above laboratory reporting limits in well MW-6 at concentrations of 4.1 $\mu\text{g/L}$, 2.0 $\mu\text{g/L}$, and 17 $\mu\text{g/L}$, respectively. MTBE was detected above the laboratory reporting limits in four of the six wells sampled at concentrations up to 3.4 $\mu\text{g/L}$ in well MW-6. The remaining fuel additives and oxygenates were not detected above their laboratory reporting limits in the six wells sampled this quarter.

Historic ground-water data are summarized in Appendix C. The most recent GRO, Benzene, and MTBE concentrations are also presented in Drawing 1. A copy of the laboratory analytical report, including chain-of-custody documentation is provided in Appendix B. Ground-water monitoring data (GEO_WELL) and laboratory analytical results (EDF) were uploaded to the GeoTracker AB2886 database. Upload confirmation pages are provided in Appendix D.

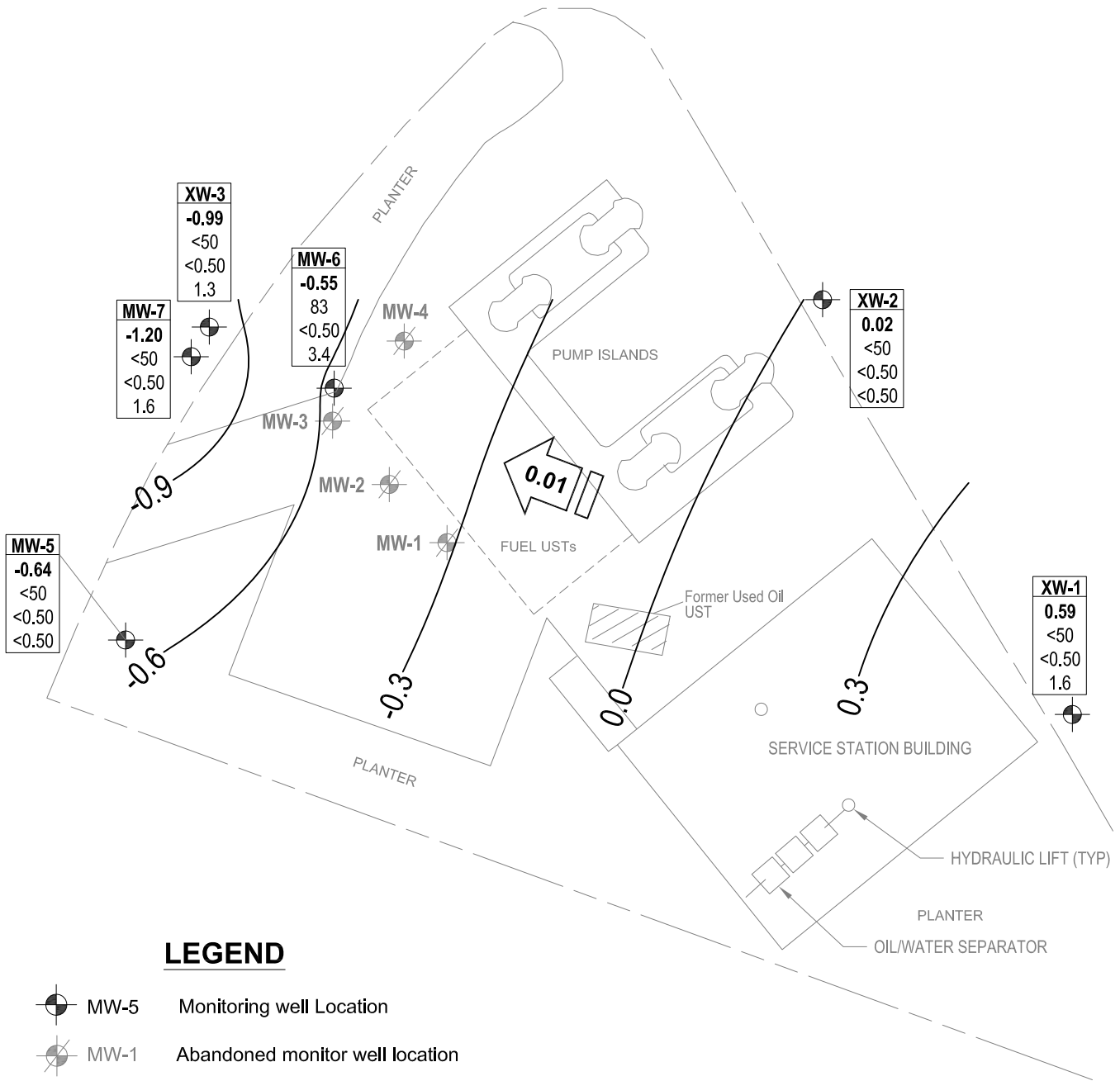
CLOSURE:

The findings presented in this report are based upon: observations of Stratus 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:

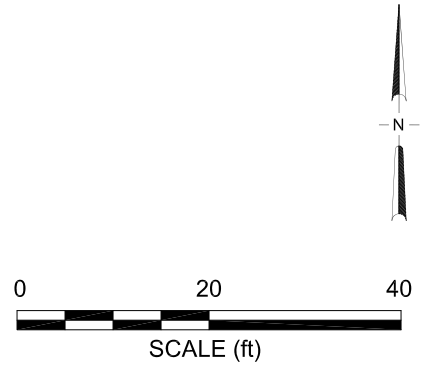
- Drawing 1. Ground-Water Elevation Contours and Analytical Summary Map, 19 September 2008, Station #11270, 3255 Mecartney Road, Alameda, California
- Appendix A. Stratus Well Development Data Package (Includes Field Data Sheets and Field Procedures)

- Appendix B. Stratus Ground-Water Sampling Data Package (Includes Field Data Sheets, Laboratory Analytical Report with Chain-of-Custody Documentation, and Field Procedures)
- Appendix C. Historic Ground-Water Data
- Appendix D. GeoTracker Upload Confirmations



LEGEND

- MW-5 Monitoring well Location
- MW-1 Abandoned monitor well location
- 0.0 Groundwater elevation contour (ft MSL)
- Well** / Well designation
- ELEV** / Groundwater elevation (ft MSL)
- GRO** / GRO, Benzene and MTBE concentrations (µg/L)
- Benzene**
- MTBE**
- <** / Not detected at or above laboratory reporting limits
- 0.01 Groundwater elevation flow direction and gradient (ft/ft)



APPENDIX A

STRATUS WELL DEVELOPMENT DATA PACKAGE (INCLUDES FIELD DATA
SHEETS AND FIELD PROCEDURES)



3330 Cameron Park Drive, Ste 550
Cameron Park, California 95682
(530) 676-6004 ~ Fax: (530) 676-6005

October 16, 2008

Mr. Rob Miller
Broadbent & Associates, Inc.
2000 Kirman Avenue
Reno, NV 89502

Re: Well Development Data Package, ARCO Service Station No. 11270, located at
3255 McCartney Road, Alameda, California.

General Information

Data Submittal Prepared / Reviewed by: Becky Carroll / Jay Johnson

Phone Number: (530) 676-6000

On-Site Supplier Representative: Chris Hill

Sampling Date: September 5, 2008

Arrival: Not noted *Departure:* Not noted.

Weather Conditions: Not noted.

Unusual Field Conditions: None noted

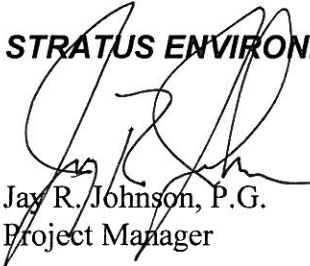
Scope of Work: Development of wells MW-5, MW-6, MW-7, XW-1, XW-2 and XW-3.

Variations from Work Scope: All wells purged dry before ten casing volumes could be removed.

This submittal presents the tabulation of data collected in association with routine groundwater monitoring. The attachments include field data sheets, non-hazardous waste data form, and field procedures for groundwater sampling documentation. The information is being provided to BP-ARCO's Scoping Supplier for use in preparing a report for regulatory submittal. This submittal is limited to presentation of collected data and does not include data interpretation or conclusions or recommendations. Any questions concerning this submittal should be addressed to the Preparer/Reviewer identified above.

Sincerely,

STRATUS ENVIRONMENTAL, INC.


Jay R. Johnson, P.G.
Project Manager



Attachments:

- Field Data Sheets
- Non-Hazardous Waste Data Form
- Field Procedures for Groundwater Sampling

cc: Mr. Paul Supple, BP/ARCO



Site Address 3255 McCarty Rd
 City Alameda
 Sampled by: CHILL
 Signature [Signature]

Site Number Arco 11270
 Project Number _____
 Project PM JAY
 DATE 9/20/08

ORIGINAL

Water Level Data				Purge Volume Calculations						Purge Method				Sample Record			Field Data
Well ID	Time	Depth to Product (feet)	Depth to Water (feet)	Total Depth (feet)	Water column (feet)	Diameter (inches)	Multiplier	10 casing volumes (gallons)	Actual water purged (gallons)	No Purge	Bailer	Pump	other	DTW at sample time (feet)	Sample I.D.	Sample Time	DO (mg/L)
MW 5	1016		8.93	14.90	5.07	4	.65	32	10 DRY		X	X					
MW 6	0954		7.31	14.90	7.69	4	.65	49	15 DRY		X	X					
MW 7	1007		7.81	14.70	7.19	2	.16	11	7 DRY		X	X					
XW 1	0938		6.76	15.70	8.24	2	.66	13	10 DRY		X	X					
XW 2	1034		7.39	14.30	6.61	2	.16	10	4 DRY		X	X					
XW 3	1006		7.90	13.20	6.1	2	.16	9	7 DRY		X	X					
Surge well with Bailer then Pump well																	

Multiplier
 2" = 0.5 3" = 1.0 4" = 2.0 6" = 4.4

Please refer to groundwater sampling field procedures
 pH/Conductivity/temperature Meter - Oakton Model PC-10
 DO Meter - Oakton 300 Series (DO is always measured before purge)

CALIBRATION DATE _____
 pH _____
 Conductivity _____
 DO _____

NO. 669919

NON-HAZARDOUS WASTE DATA FORM

TO BE COMPLETED BY GENERATOR

SITE:

NAME **BP WEST COAST PRODUCTS LLC ARCO # 11270**

EPA I.D. NO.

NOT REQUIRED

ADDRESS **P.O. BOX 80249**

PROFILE NO.

RANCHO SANTA MARGARITA

CITY, STATE, ZIP **CA 92688**

PHONE NO. ()

CONTAINERS: No. _____ VOLUME **52** WEIGHT _____

TYPE: TANK TRUCK DUMP TRUCK DRUMS CARTONS OTHER _____

WASTE DESCRIPTION **NON-HAZARDOUS WATER** GENERATING PROCESS **WELL PURGING/DECON WATER**

COMPONENTS OF WASTE PPM % COMPONENTS OF WASTE PPM %

1. **WATER 99-100%**

5. _____

2. **TPH <1%**

6. _____

3. _____

7. **BESI#**

4. _____

8. _____

PROPERTIES: **7-10** pH SOLID LIQUID SLUDGE SLURRY OTHER _____

HANDLING INSTRUCTIONS: **WEAR ALL APPROPRIATE PROTECTIVE CLOTHING**

THE GENERATOR CERTIFIES THAT THE WASTE AS DESCRIBED IS 100% NON-HAZARDOUS.

Larry Moothart BESI for BP
TYPED OR PRINTED FULL NAME & SIGNATURE

9508
DATE

TRANSPORTER

NAME **Transporter #1 STRATUS ENVIRONMENTAL** **Transporter #2**

EPA I.D. NO.

ADDRESS **3330 CAMERON PARK DR**

SERVICE ORDER NO. _____

CITY, STATE, ZIP **CAMERON PARK, CA 95682**

PICK UP DATE _____

PHONE NO. **530-676-2031**

Ch. H. [Signature]
TYPED OR PRINTED FULL NAME & SIGNATURE

9508
DATE

TRUCK, UNIT, I.D. NO. _____

TSD FACILITY

NAME **INSTRAT, INC**

EPA I.D. NO.

DISPOSAL METHOD

ADDRESS **1105 AIRPORT RD #C**

LANDFILL OTHER _____

CITY, STATE, ZIP **RIO VISTA, CA 94571**

PHONE NO. **530-753-1829**

TYPED OR PRINTED FULL NAME & SIGNATURE

DATE

GEN	OLD/NEW	L	A	TONS
TRANS		S	B	
C/Q		RT/CD	HWDF	NONE

DISCREPANCY

ATTACHMENT

FIELD PROCEDURES FOR GROUNDWATER SAMPLING

The sampling procedures for groundwater monitoring events are contained in this appendix.

Equipment Calibration

Standard groundwater sampling equipment – pH/Conductivity/Temperature meter, and dissolved oxygen (DO) meters are calibrated prior to all field work. All calibration is conducted in accordance with equipment manufacturer's recommended procedure and buffer solutions. MSDS for all buffer solutions are maintained in Stratus vehicles. Calibration is completed everyday prior to field work and also once a week. The pH probe is calibrated for a pH of 7.0 daily and for 4.0, 7.0 and 10.0 weekly. The conductivity probe is calibrated for 1413 μs daily and 1413 μs and 447 μs weekly. The temperature probe is calibrated weekly with a NIST-traceable thermometer. The DO probe is calibrated for 100% oxygen daily and 0% and 100% oxygen weekly. All calibration logs are maintained in the Stratus office.

Groundwater and Liquid-Phase Petroleum Hydrocarbon Depth Assessment

Prior to measuring the depth to liquid in the well, the well caps are removed and the liquid level allowed to stabilize. A water/hydrocarbon interface probe is used to assess the liquid-phase petroleum hydrocarbon (LPH) thickness, if present, and a water level indicator is used to measure the groundwater depth in monitoring wells that do not contain LPH. Depth to groundwater or LPH is measured from a datum point at the top of each monitoring well casing. The datum point is typically a notch cut in the north side of the casing edge. If a water level indicator is used, the tip is subjectively analyzed for hydrocarbon sheen.

Subjective Analysis of Groundwater

Prior to purging, a water sample is collected from the monitoring well for subjective assessment. The sample is retrieved by gently lowering a clean, disposable bailer to approximately one-half the bailer length past the air/liquid interface. The bailer is then retrieved, and the sample contained within the bailer is examined for floating LPH and the appearance of a LPH sheen.

Monitoring Well Sampling

In many cases, determining whether to purge or not to purge wells prior to sample collection is made in the field and is often based on depth to water relative to the screen interval of the well. Site-specific field data sheets present details associated with the purge method and equipment used.

Monitoring wells, when purged, use a pump or bailer until pH, temperature, and conductivity of the purge water has stabilized and a minimum of three well volumes of water has been removed. Field measuring equipment is calibrated and maintained according to the manufacturer's instructions. If three well volumes cannot be removed in one half hour's time the well is allowed to recharge to 80% of original level. After recharging, a groundwater sample is then collected from each of the wells using disposable bailers.

A Teflon bailer, electric submersible or bladder pump will be the only equipment used for well sampling. When samples for volatile organic analysis are being collected, the pump flow will be regulated at approximately 100 milliliters per minute to minimize pump effluent turbulence and aeration. Glass bottles of at least 40-milliliters volume and fitted with Teflon-lined septa will be used in sampling for volatile organics. These bottles will be filled completely to prevent air accumulation in the bottle. A positive meniscus forms when the bottle is completely full. A convex Teflon septum will be placed over the positive meniscus to eliminate air. After the bottle is capped, it is inverted and tapped to verify that it contains no air bubbles. The sample containers for other parameters will be filled, filtered as required, and capped. Glass and plastic bottles used by Stratus to collect groundwater samples are supplied by the laboratory.

Groundwater Sample Labeling and Preservation

Samples are collected in appropriate containers supplied by the laboratory. All required chemical preservation is added to the bottles prior to delivery to Stratus. Sample label information includes a unique sample identification number, job identification number, date, and time. After labeling, all groundwater samples are placed in a Ziploc® type bag and placed in an ice chest cooled to approximately 4° Celsius. Upon arriving at Stratus' office the samples are transferred to a locked refrigerator cooled to approximately 4° Celsius. Chemical preservation is controlled by the required analysis and is noted on the chain-of-custody form. Trip and temperature blanks supplied by the laboratory accompany the groundwater sample containers and groundwater samples.

Sample Identification and Chain-of-Custody Procedures

Sample identification and chain-of-custody procedures document sample possession from the time of collection to ultimate disposal. Each sample container submitted for analysis has a label affixed to identify the job number, sampler, date and time of sample collection, and a sample number unique to that sample. This information, in addition to a description of the sample, field measurements made, sampling methodology, names of on-site personnel, and any other pertinent field observations, is recorded in the field records. The samples are analyzed by a California-certified laboratory.

A chain-of-custody form is used to record possession of the sample from time of collection to its arrival at the laboratory. When the samples are shipped, the person in custody of them relinquishes the samples by signing the chain-of-custody form and noting the time. The sample-control officer at the laboratory verifies sample integrity and confirms that the samples are collected in the proper containers, preserved correctly, and

contain adequate volumes for analysis. These conditions are noted on a Laboratory Sample Receipt Checklist that becomes part of the laboratory report upon request.

If these conditions are met, each sample is assigned a unique log number for identification throughout analysis and reporting. The log number is recorded on the chain-of-custody form and in the legally-required log book maintained by the laboratory. The sample description, date received, client's name, and other relevant information is also recorded.

Equipment Cleaning

All reusable sampling equipments are cleaned using phosphate-free detergents and rinsed with de-ionized water.

APPENDIX B

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



3330 Cameron Park Drive, Ste 550
Cameron Park, California 95682
(530) 676-6004 ~ Fax: (530) 676-6005

October 10, 2008

Mr. Rob Miller
Broadbent & Associates, Inc.
2000 Kirman Avenue
Reno, NV 89502

Re: Groundwater Sampling Data Package, ARCO Service Station No. 11270, located at
3255 McCartney Road, Alameda, California.

General Information

Data Submittal Prepared / Reviewed by: Becky Carroll / Jay Johnson

Phone Number: (530) 676-6000

On-Site Supplier Representative: Tony Hill

Sampling Date: September 19, 2008

Arrival: 04:20 *Departure:* 08:10

Weather Conditions: Clear

Unusual Field Conditions: None noted

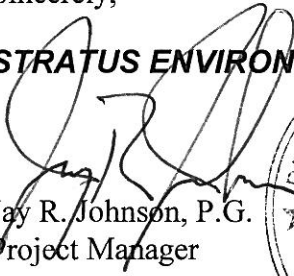
Scope of Work Performed: Quarterly groundwater monitoring and sampling.

Variations from Work Scope: Wells MW-3, MW-5, and MW-7 all purged dry before three casing volumes could be removed.

This submittal presents the tabulation of data collected in association with routine groundwater monitoring. The attachments include field data sheets, chain of custody documentation, certified analytical results, and field procedures for groundwater sampling documentation. The information is being provided to BP-ARCO's Scoping Supplier for use in preparing a report for regulatory submittal. This submittal is limited to presentation of collected data and does not include data interpretation or conclusions or recommendations. Any questions concerning this submittal should be addressed to the Preparer/Reviewer identified above.

Sincerely,

STRATUS ENVIRONMENTAL INC.

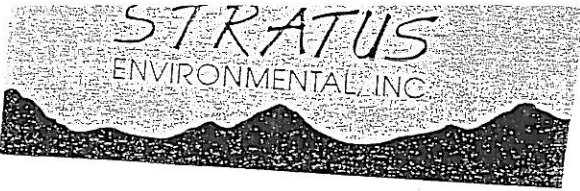

Jay R. Johnson, P.G.
Project Manager



Attachments:

- Field Data Sheets
- Chain of Custody Documentation
- Certified Analytical Results
- Field Procedures for Groundwater Sampling

cc: Mr. Paul Supple, BP/ARCO



Site Address 3255 Macarthy Rd.
 City Alameda, CA
 Site Sampled by TH

Site Number Arw 11270
 Project No. E. 11270-04
 Project PM Jay Johnson
 Date Sampled 9/19/02

Well ID <u>MW-5</u>					Well ID <u>XW-2</u>				
purge start time <u>0550</u>					purge start time <u>0620</u>				
<u>odor</u>					<u>odor</u>				
Temp C	pH	cond	gallons		Temp C	pH	cond	gallons	
time	<u>01</u>	<u>7.16</u>	<u>6.60m</u>	<u>0</u>	time	<u>21.8</u>	<u>7.21</u>	<u>3.35m</u>	<u>0</u>
time	<u>19.5</u>	<u>7.1</u>	<u>7.51m</u>	<u>3</u>	time	<u>21.4</u>	<u>7.22</u>	<u>1751</u>	<u>3.5</u>
time	<u>DRY @ 3</u>				time				
time					time				
purge stop time					purge stop time				
Well ID <u>XW-3</u>					Well ID <u>MW-7</u>				
purge start time <u>0705</u>					purge start time <u>0755</u>				
<u>odor</u>					<u>odor</u>				
Temp C	pH	cond	gallons		Temp C	pH	cond	gallons	
time	<u>21.3</u>	<u>7.24</u>	<u>9.79m</u>	<u>0</u>	time	<u>21.0</u>	<u>7.13</u>	<u>10.19m</u>	<u>0</u>
time	<u>20.8</u>	<u>7.26</u>	<u>8.53m</u>	<u>2.5</u>	time	<u>20.6</u>	<u>7.23</u>	<u>7.76m</u>	<u>3.5</u>
time	<u>DRY @ 2.5</u>				time				
time					time				
purge stop time					purge stop time				
Well ID <u>MW-6</u>					Well ID <u>XW-1</u>				
purge start time <u>0730</u>					purge start time <u>0755</u>				
<u>odor</u>					<u>odor</u>				
Temp C	pH	cond	gallons		Temp C	pH	cond	gallons	
time	<u>22.4</u>	<u>7.1</u>	<u>1149</u>	<u>0</u>	time	<u>20</u>	<u>6.92</u>	<u>1024</u>	<u>0</u>
time	<u>21.3</u>	<u>7.14</u>	<u>868</u>	<u>7</u>	time	<u>19.3</u>	<u>7.08</u>	<u>1117</u>	<u>4.5</u>
time	<u>DRY @ 7</u>				time				
time					time				
purge stop time					purge stop time				
Well ID					Well ID				
purge start time					purge start time				
Temp C	pH	cond	gallons		Temp C	pH	cond	gallons	
time					time				
time					time				
time					time				
time					time				
purge stop time					purge stop time				

ORIGINAL



City Alameda, CA
 Sampled by: FH
 Signature: [Signature]

Project Number E11270-04
 Project PM Johnson
 DATE 9/19/08

Water Level Data					Purge Volume Calculations					Purge Method				Sample Record		Field Data	
Well ID	Time	Depth to Product (feet)	Depth to Water (feet)	Total Depth (feet)	Water column (feet)	Diameter (inches)	Multiplier	3 casing volumes (gallons)	Actual water purged (gallons)	No Purge	Bailer	Pump	other	DTW at sample time (feet)	Sample I.D	Sample Time	DO (mg/L)
MW-5	0520		9	14.56	5.56	4	2	11.12	3		X	Day @ 3		12.37	MW-5	0550	2.73
XW-2	0451		7.46	14.46	7	2	.5	3.5	3.5		X			7.46	XW-2	0620	1.23
XW-3	0510		7.83	13.6	5.77	2	.5	2.89	2.5		X	Day @ 2.5		8.2	XW-3	0705	1.84
MW-7	0505		7.82	14.6	6.78	2	.5	3.39	3.5		X			7.91	MW-7	0655	1.66
MW-6	0457		7.43	14.7	7.27	4	2	14.54	-		X			11.82	MW-6	0730	1.67
XW-1	0445		6.9	15.5	8.6	2	.5	4.3	-		X			7.82	XW-1	0755	1.66

Multiplier
 2" = 0.5 3" = 1.0 4" = 2.0 6" = 4.4

Please refer to groundwater sampling field procedures
 pH/Conductivity/temperature Meter - Oakton Model PC-10
 DO Meter - Oakton 300 Series (DO is always measured before purge)

CALIBRATION DATE
 pH ATU 9/19/08
 Conductivity
 DO

WELLHEAD OBSERVATION FORM



Site Name/Number: Ar 11270

Date: 9/19/08 Technician: A. Hill

Well I.D.	Box in Good Condition? <small>X = Yes Blank = No</small>	Lock Missing? <small>X = Yes (replaced) Blank = No</small>	Water in Wellbox? <small>X = Yes Blank = No</small>	Water Level Relative to Cap? <small>A = Above cap B = Below cap L = Level w/cap</small>	Well Cap? <small>I = Intact M = Missing or Compromised (replaced)</small>	Bolts Missing? <small>X = Yes Blank = No</small>	Bolts Stripped? <small>X = Yes Blank = No</small>	Bolt Holes Stripped? <small>X = Yes Blank = No</small>	Cracked or Broken Lid? <small>X = Yes Blank = No</small>	Cracked or Broken Box? <small>X = Yes Blank = No</small>	Grout Level more than 1ft below TOC? <small>X = Yes Blank = No</small>	Additional Comments <small>(such as missing lid, concrete needs replacement, or other - explain)</small>
MW-5	X											
XW-2						X-2						
MW-7			X	A		X-1						
XW-3		X-4				X-1						
MW-6	X											
MW-1		X-4			X-Replaced	X-2						

DRUM INVENTORY

Drums on site? Yes No (circle)
 Type and # Steel: _____ Plastic: _____

Note whether drums are full or empty, solids or liquids:

Drum label info (description, date, contact info):

GENERAL SITE CONDITIONS

Make notes on housekeeping conditions (such as trash around remediation system enclosure/compound, bent or missing bollards, signs missing from compound fences, graffiti on compound, etc.)

(updated 3-28-08, SS)



Chain of Custody Record

Project Name: ARCO
 BP BU/AR Region/Enfos Segment: BP > Americas > West > Retail > Alameda > 11270
 State or Lead Regulatory Agency: Alameda County environmental Health
 Requested Due Date (mm/dd/yy): 5TD - TAT

On-site Time: <u>0420</u>	Temp: <u>50'S</u>
Off-site Time: <u>0810</u>	Temp: <u>60'S</u>
Sky Conditions: <u>Clear</u>	
Meteorological Events: <u>—</u>	
Wind Speed: <u>—</u>	Direction: <u>—</u>

Lab Name: <u>Cal-Science</u>	BP/AR Facility No.: <u>11270</u>	Consultant/Contractor: <u>Stratus Environmental, Inc.</u>
Address: <u>7440 Lincoln Way</u>	BP/AR Facility Address: <u>3255 Mecartney Rd. Alameda Ca.</u>	Address: <u>3330 Cameron Park Drive, Suite 550</u>
<u>Garden Grove Ca. 92841-1427</u>	Site Lat/Long:	<u>Cameron Park, CA 95682</u>
Lab PM: <u>Linda Sharpenberg</u>	California Global ID No.: <u>T060010115</u>	Consultant/Contractor Project No.:
Tele/Fax: <u>714-895-5494 714-895-7501 (fax)</u>	Enfos Project No.:	Consultant/Contractor PM: <u>Jay Johnson</u>
BP/AR PM Contact: <u>Paul Supple</u>	Provision or OGC (circle one) <u>Provision</u>	Tele/Fax: <u>(530) 676-6000 / (530) 676-6005</u>
Address: <u>2010 Crow Canyon Place, Suite 150</u>	Phase/WBS: <u>04-Monitoring</u>	Report Type & QC Level: <u>Level 1 with EDF</u>
<u>San Ramon, CA</u>	Sub Phase/Task: <u>03-Analytical</u>	E-mail EDD To: <u>bcarroll@stratusinc.net</u>
Tele/Fax: <u>925-275-3506</u>	Cost Element: <u>01-Contractor labor</u>	Invoice to: <u>Atlantic Richfield Co.</u>

Item No.	Sample Description	Time	Date	Matrix			Laboratory No.	No. of Containers	Preservative					Requested Analysis					Sample Point Lat/Long and Comments		
				Soil/Solid	Water/Liquid	Air			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	Methanol	GROBTEX/Oxy*	1,2-DCA	Ethanol	EEDB	DRO			
1	MW-5	0550	9/19	X				6				X	X	X	X						
2	XW-2	0630																			
3	XW-3	0705																			
4	MW-7	0655																			
5	MW-6	0730																			
6	XW-1	0755		✓	✓			1				✓	✓	✓	✓						
7																					
8	TB-1070-0919 2008							2	_____												on Hold
9																					
10																					

Sampler's Name: <u>Anthony Hill</u>	Relinquished By / Affiliation: <u>[Signature]</u>	Date: <u>9/19/09</u>	Time: <u>0910</u>	Accepted By / Affiliation: <u>[Signature]</u>	Date: <u>9-20-09</u>	Time: <u>0910</u>
Sampler's Company:						
Shipment Date:						
Shipment Method:						
Shipment Tracking No.:						

Special Instructions: Please cc results to rmiller@broadbentinc.com

Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

ATTACHMENT

FIELD PROCEDURES FOR GROUNDWATER SAMPLING

The sampling procedures for groundwater monitoring events are contained in this appendix.

Equipment Calibration

Standard groundwater sampling equipment – pH/Conductivity/Temperature meter, and dissolved oxygen (DO) meters are calibrated prior to all field work. All calibration is conducted in accordance with equipment manufacturer's recommended procedure and buffer solutions. MSDS for all buffer solutions are maintained in Stratus vehicles. Calibration is completed everyday prior to field work and also once a week. The pH probe is calibrated for a pH of 7.0 daily and for 4.0, 7.0 and 10.0 weekly. The conductivity probe is calibrated for 1413 μs daily and 1413 μs and 447 μs weekly. The temperature probe is calibrated weekly with a NIST-traceable thermometer. The DO probe is calibrated for 100% oxygen daily and 0% and 100% oxygen weekly. All calibration logs are maintained in the Stratus office.

Groundwater and Liquid-Phase Petroleum Hydrocarbon Depth Assessment

Prior to measuring the depth to liquid in the well, the well caps are removed and the liquid level allowed to stabilize. A water/hydrocarbon interface probe is used to assess the liquid-phase petroleum hydrocarbon (LPH) thickness, if present, and a water level indicator is used to measure the groundwater depth in monitoring wells that do not contain LPH. Depth to groundwater or LPH is measured from a datum point at the top of each monitoring well casing. The datum point is typically a notch cut in the north side of the casing edge. If a water level indicator is used, the tip is subjectively analyzed for hydrocarbon sheen.

Subjective Analysis of Groundwater

Prior to purging, a water sample is collected from the monitoring well for subjective assessment. The sample is retrieved by gently lowering a clean, disposable bailer to approximately one-half the bailer length past the air/liquid interface. The bailer is then retrieved, and the sample contained within the bailer is examined for floating LPH and the appearance of a LPH sheen.

Monitoring Well Sampling

In many cases, determining whether to purge or not to purge wells prior to sample collection is made in the field and is often based on depth to water relative to the screen interval of the well. Site-specific field data sheets present details associated with the purge method and equipment used.

Monitoring wells, when purged, use a pump or bailer until pH, temperature, and conductivity of the purge water has stabilized and a minimum of three well volumes of water has been removed. Field measuring equipment is calibrated and maintained according to the manufacturer's instructions. If three well volumes cannot be removed in one half hour's time the well is allowed to recharge to 80% of original level. After recharging, a groundwater sample is then collected from each of the wells using disposable bailers.

A Teflon bailer, electric submersible or bladder pump will be the only equipment used for well sampling. When samples for volatile organic analysis are being collected, the pump flow will be regulated at approximately 100 milliliters per minute to minimize pump effluent turbulence and aeration. Glass bottles of at least 40-milliliters volume and fitted with Teflon-lined septa will be used in sampling for volatile organics. These bottles will be filled completely to prevent air accumulation in the bottle. A positive meniscus forms when the bottle is completely full. A convex Teflon septum will be placed over the positive meniscus to eliminate air. After the bottle is capped, it is inverted and tapped to verify that it contains no air bubbles. The sample containers for other parameters will be filled, filtered as required, and capped. Glass and plastic bottles used by Stratus to collect groundwater samples are supplied by the laboratory.

Groundwater Sample Labeling and Preservation

Samples are collected in appropriate containers supplied by the laboratory. All required chemical preservation is added to the bottles prior to delivery to Stratus. Sample label information includes a unique sample identification number, job identification number, date, and time. After labeling, all groundwater samples are placed in a Ziploc[®] type bag and placed in an ice chest cooled to approximately 4° Celsius. Upon arriving at Stratus' office the samples are transferred to a locked refrigerator cooled to approximately 4° Celsius. Chemical preservation is controlled by the required analysis and is noted on the chain-of-custody form. Trip and temperature blanks supplied by the laboratory accompany the groundwater sample containers and groundwater samples.

Sample Identification and Chain-of-Custody Procedures

Sample identification and chain-of-custody procedures document sample possession from the time of collection to ultimate disposal. Each sample container submitted for analysis has a label affixed to identify the job number, sampler, date and time of sample collection, and a sample number unique to that sample. This information, in addition to a description of the sample, field measurements made, sampling methodology, names of on-site personnel, and any other pertinent field observations, is recorded in the field records. The samples are analyzed by a California-certified laboratory.

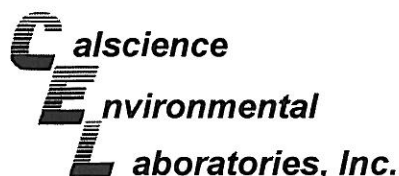
A chain-of-custody form is used to record possession of the sample from time of collection to its arrival at the laboratory. When the samples are shipped, the person in custody of them relinquishes the samples by signing the chain-of-custody form and noting the time. The sample-control officer at the laboratory verifies sample integrity and confirms that the samples are collected in the proper containers, preserved correctly, and

contain adequate volumes for analysis. These conditions are noted on a Laboratory Sample Receipt Checklist that becomes part of the laboratory report upon request.

If these conditions are met, each sample is assigned a unique log number for identification throughout analysis and reporting. The log number is recorded on the chain-of-custody form and in the legally-required log book maintained by the laboratory. The sample description, date received, client's name, and other relevant information is also recorded.

Equipment Cleaning

All reusable sampling equipments are cleaned using phosphate-free detergents and rinsed with de-ionized water.



October 06, 2008

Jay Johnson
Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Subject: **Calscience Work Order No.: 08-09-1925**
Client Reference: **ARCO 11270**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 9/20/2008 and analyzed in accordance with the attached chain-of-custody.

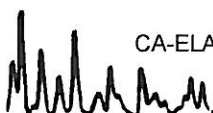
Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows 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.

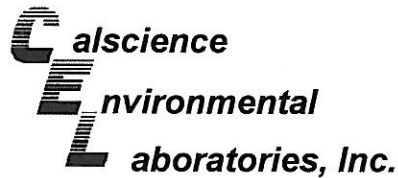
If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

A handwritten signature in cursive script that reads "Philip Samelle for".

Calscience Environmental
Laboratories, Inc.
Linda Scharpenberg
Project Manager





Analytical Report



Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 09/20/08
Work Order No: 08-09-1925
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: ARCO 11270

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-5	08-09-1925-1-C	09/19/08 05:50	Aqueous	GC 30	09/30/08	09/30/08 18:55	080930B01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	83	38-134			

XW-2	08-09-1925-2-D	09/19/08 06:20	Aqueous	GC 30	09/22/08	09/22/08 19:33	080922B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	78	38-134			

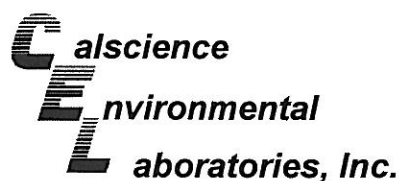
XW-3	08-09-1925-3-D	09/19/08 07:05	Aqueous	GC 30	09/22/08	09/22/08 20:07	080922B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	74	38-134			

MW-7	08-09-1925-4-D	09/19/08 06:55	Aqueous	GC 30	09/22/08	09/22/08 20:41	080922B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	78	38-134			

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



Analytical Report



Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 09/20/08
Work Order No: 08-09-1925
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: ARCO 11270

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-6	08-09-1925-5-D	09/19/08 07:30	Aqueous	GC 30	09/22/08	09/22/08 21:14	080922B01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	83	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	85	38-134			

XW-1	08-09-1925-6-D	09/19/08 07:55	Aqueous	GC 30	09/22/08	09/22/08 21:48	080922B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	52	38-134			

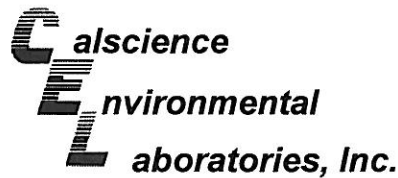
Method Blank	099-12-695-278	N/A	Aqueous	GC 30	09/22/08	09/22/08 13:56	080922B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	85	38-134			

Method Blank	099-12-695-286	N/A	Aqueous	GC 30	09/30/08	09/30/08 15:17	080930B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	80	38-134			

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



Analytical Report



Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 09/20/08
Work Order No: 08-09-1925
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: ARCO 11270

Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-5	08-09-1925-1-A	09/19/08 05:50	Aqueous	GC/MS BB	09/28/08	09/29/08 06:23	080928L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	111	73-157			Dibromofluoromethane	104	82-142		
Toluene-d8	100	82-112			1,4-Bromofluorobenzene	101	75-105		

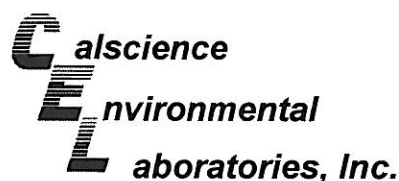
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
XW-2	08-09-1925-2-A	09/19/08 06:20	Aqueous	GC/MS BB	09/28/08	09/29/08 06:57	080928L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	105	73-157			Dibromofluoromethane	103	82-142		
Toluene-d8	101	82-112			1,4-Bromofluorobenzene	99	75-105		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
XW-3	08-09-1925-3-A	09/19/08 07:05	Aqueous	GC/MS BB	09/28/08	09/29/08 07:30	080928L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	1.3	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	109	73-157			Dibromofluoromethane	104	82-142		
Toluene-d8	100	82-112			1,4-Bromofluorobenzene	100	75-105		

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



Analytical Report

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 09/20/08
Work Order No: 08-09-1925
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: ARCO 11270

Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-7	08-09-1925-4-A	09/19/08 06:55	Aqueous	GC/MS BB	09/28/08	09/29/08 08:04	080928L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	1.6	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	110	73-157			Dibromofluoromethane	105	82-142		
Toluene-d8	101	82-112			1,4-Bromofluorobenzene	100	75-105		

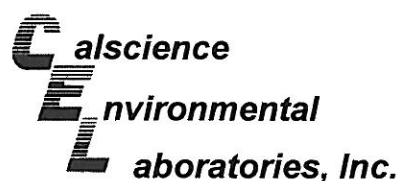
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-6	08-09-1925-5-A	09/19/08 07:30	Aqueous	GC/MS BB	09/28/08	09/29/08 08:37	080928L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	3.4	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	2.0	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	4.1	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	17	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	108	73-157			Dibromofluoromethane	105	82-142		
Toluene-d8	100	82-112			1,4-Bromofluorobenzene	99	75-105		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
XW-1	08-09-1925-6-A	09/19/08 07:55	Aqueous	GC/MS BB	09/28/08	09/29/08 09:10	080928L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	106	73-157			Dibromofluoromethane	104	82-142		
Toluene-d8	100	82-112			1,4-Bromofluorobenzene	99	75-105		

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



Analytical Report



Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 09/20/08
Work Order No: 08-09-1925
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: ARCO 11270

Page 3 of 3

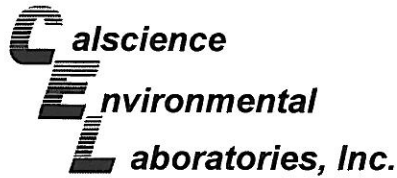
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-703-471	N/A	Aqueous	GC/MS BB	09/28/08	09/29/08 01:22	080928L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	101	73-157			Dibromofluoromethane	99	82-142		
Toluene-d8	99	82-112			1,4-Bromofluorobenzene	100	75-105		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-703-475	N/A	Aqueous	GC/MS BB	09/30/08	09/30/08 14:20	080930L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	101	73-157			Dibromofluoromethane	99	82-142		
Toluene-d8	100	82-112			1,4-Bromofluorobenzene	100	75-105		

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



Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

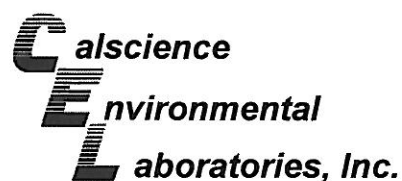
Date Received: 09/20/08
Work Order No: 08-09-1925
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project ARCO 11270

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-09-1808-2	Aqueous	GC 30	09/22/08	09/22/08	080922S01

<u>Parameter</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Gasoline Range Organics (C6-C12)	102	88	38-134	11	0-25	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate



Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

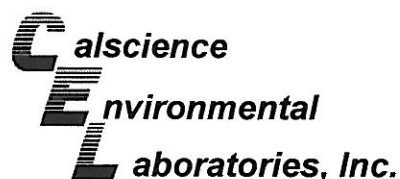
Date Received: 09/20/08
Work Order No: 08-09-1925
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project ARCO 11270

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-09-2413-3	Aqueous	GC 30	09/30/08	09/30/08	080930S01

<u>Parameter</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Gasoline Range Organics (C6-C12)	116	109	38-134	5	0-25	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

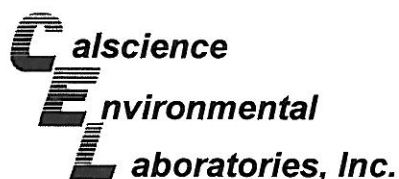
Date Received: 09/20/08
Work Order No: 08-09-1925
Preparation: EPA 5030B
Method: EPA 8260B

Project ARCO 11270

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-09-1923-2	Aqueous	GC/MS BB	09/28/08	09/29/08	080928S02

<u>Parameter</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Benzene	106	106	86-122	0	0-8	
Carbon Tetrachloride	95	91	78-138	4	0-9	
Chlorobenzene	102	102	90-120	0	0-9	
1,2-Dibromoethane	97	96	70-130	1	0-30	
1,2-Dichlorobenzene	104	102	89-119	1	0-10	
1,1-Dichloroethene	122	118	52-142	3	0-23	
Ethylbenzene	101	100	70-130	1	0-30	
Toluene	101	101	85-127	0	0-12	
Trichloroethene	97	97	78-126	0	0-10	
Vinyl Chloride	140	137	56-140	2	0-21	
Methyl-t-Butyl Ether (MTBE)	108	105	64-136	3	0-28	
Tert-Butyl Alcohol (TBA)	97	97	27-183	0	0-60	
Diisopropyl Ether (DIPE)	114	111	78-126	3	0-16	
Ethyl-t-Butyl Ether (ETBE)	109	106	67-133	3	0-21	
Tert-Amyl-Methyl Ether (TAME)	97	97	63-141	0	0-21	
Ethanol	84	81	11-167	3	0-64	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate



Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

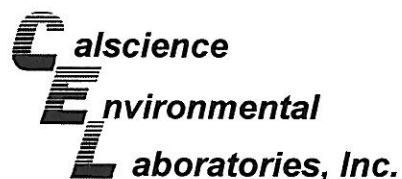
Date Received: 09/20/08
Work Order No: 08-09-1925
Preparation: EPA 5030B
Method: EPA 8260B

Project ARCO 11270

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-09-2146-8	Aqueous	GC/MS BB	09/30/08	09/30/08	080930S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	92	98	86-122	2	0-8	
Carbon Tetrachloride	87	89	78-138	1	0-9	
Chlorobenzene	103	103	90-120	1	0-9	
1,2-Dibromoethane	88	97	70-130	10	0-30	
1,2-Dichlorobenzene	99	102	89-119	3	0-10	
1,1-Dichloroethene	106	102	52-142	4	0-23	
Ethylbenzene	99	91	70-130	4	0-30	
Toluene	99	100	85-127	1	0-12	
Trichloroethene	99	99	78-126	0	0-10	
Vinyl Chloride	109	107	56-140	2	0-21	
Methyl-t-Butyl Ether (MTBE)	78	103	64-136	23	0-28	
Tert-Butyl Alcohol (TBA)	91	93	27-183	2	0-60	
Diisopropyl Ether (DIPE)	103	111	78-126	8	0-16	
Ethyl-t-Butyl Ether (ETBE)	91	102	67-133	11	0-21	
Tert-Amyl-Methyl Ether (TAME)	86	99	63-141	14	0-21	
Ethanol	90	72	11-167	22	0-64	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

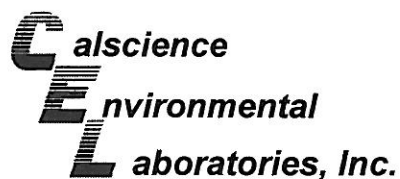
Date Received: N/A
Work Order No: 08-09-1925
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: ARCO 11270

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-695-278	Aqueous	GC 30	09/22/08	09/22/08	080922B01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	91	101	78-120	11	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

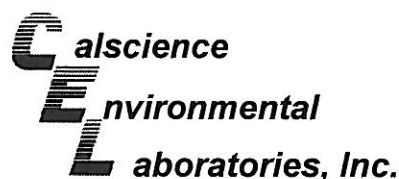
Date Received: N/A
Work Order No: 08-09-1925
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: ARCO 11270

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-695-286	Aqueous	GC 30	09/30/08	09/30/08	080930B01

<u>Parameter</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Gasoline Range Organics (C6-C12)	108	109	78-120	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

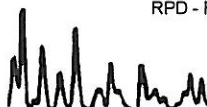
Date Received: N/A
Work Order No: 08-09-1925
Preparation: EPA 5030B
Method: EPA 8260B

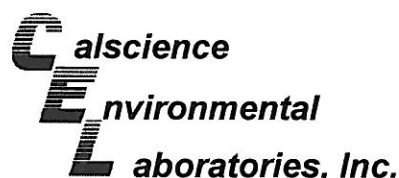
Project: ARCO 11270

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number		
099-12-703-471	Aqueous	GC/MS BB	09/28/08	09/28/08	080928L02		
<u>Parameter</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>ME CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Benzene	108	114	87-117	82-122	5	0-7	
Carbon Tetrachloride	93	98	78-132	69-141	5	0-8	
Chlorobenzene	104	110	88-118	83-123	6	0-8	
1,2-Dibromoethane	97	98	80-120	73-127	1	0-20	
1,2-Dichlorobenzene	106	111	88-118	83-123	5	0-8	
1,1-Dichloroethene	123	129	71-131	61-141	5	0-14	
Ethylbenzene	103	109	80-120	73-127	6	0-20	
Toluene	102	108	85-127	78-134	5	0-7	
Trichloroethene	109	110	85-121	79-127	1	0-11	
Vinyl Chloride	136	141	64-136	52-148	4	0-10	
Methyl-t-Butyl Ether (MTBE)	108	108	67-133	56-144	0	0-16	
Tert-Butyl Alcohol (TBA)	93	99	34-154	14-174	6	0-19	
Diisopropyl Ether (DIPE)	115	118	80-122	73-129	2	0-8	
Ethyl-t-Butyl Ether (ETBE)	109	112	73-127	64-136	2	0-11	
Tert-Amyl-Methyl Ether (TAME)	98	100	69-135	58-146	2	0-12	
Ethanol	75	87	34-124	19-139	15	0-44	

Total number of LCS compounds : 16
Total number of ME compounds : 1
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate



Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: N/A
Work Order No: 08-09-1925
Preparation: EPA 5030B
Method: EPA 8260B

Project: ARCO 11270

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number		
099-12-703-475	Aqueous	GC/MS BB	09/30/08	09/30/08	080930L01		
Parameter	LCS %REC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	108	110	87-117	82-122	1	0-7	
Carbon Tetrachloride	92	93	78-132	69-141	1	0-8	
Chlorobenzene	106	106	88-118	83-123	1	0-8	
1,2-Dibromoethane	102	104	80-120	73-127	2	0-20	
1,2-Dichlorobenzene	105	106	88-118	83-123	1	0-8	
1,1-Dichloroethene	120	112	71-131	61-141	7	0-14	
Ethylbenzene	104	104	80-120	73-127	0	0-20	
Toluene	104	104	85-127	78-134	0	0-7	
Trichloroethene	101	102	85-121	79-127	2	0-11	
Vinyl Chloride	116	116	64-136	52-148	0	0-10	
Methyl-t-Butyl Ether (MTBE)	107	109	67-133	56-144	2	0-16	
Tert-Butyl Alcohol (TBA)	93	94	34-154	14-174	1	0-19	
Diisopropyl Ether (DIPE)	111	113	80-122	73-129	1	0-8	
Ethyl-t-Butyl Ether (ETBE)	107	108	73-127	64-136	1	0-11	
Tert-Amyl-Methyl Ether (TAME)	100	103	69-135	58-146	3	0-12	
Ethanol	72	97	34-124	19-139	29	0-44	

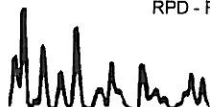
Total number of LCS compounds : 16

Total number of ME compounds : 0

Total number of ME compounds allowed : 1

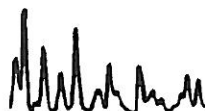
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit



Work Order Number: 08-09-1925

<u>Qualifier</u>	<u>Definition</u>
AX	Sample too dilute to quantify surrogate.
DU	There was no MS/MSD analyzed with this batch due to insufficient sample volume (NR = not reported). See Blank Spike/Blank Spike Duplicate.
BA,AY	Relative percent difference out of control, 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.
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.
ET	Sample was extracted past end of recommended max. holding time.
EY	Result exceeds normal dynamic range; reported as a min est.
GS	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	Surrogate recovery below the acceptance limit.
LH	Surrogate recovery above the acceptance limit.
LM,AY	MS and/or MSD above acceptance limits. See Blank Spike (LCS). Matrix interference suspected.
LN,AY	MS and/or MSD below acceptance limits. See Blank Spike (LCS). Matrix interference suspected.
LQ	LCS recovery above method control limits.
LR	LCS recovery below method control limits.



Work Order Number: 08-09-1925

<u>Qualifier</u>	<u>Definition</u>
MB	Analyte present in the method blank.
MG	Analyte is a suspected lab contaminate.
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.





Chain of Custody Record

1925

Project Name: ARCO
 BP BU/AR Region/Enfos Segment: BP > Americas > West > Retail > Alameda > 11270
 State or Lead Regulatory Agency: Alameda County environmental Health
 Requested Due Date (mm/dd/yy): 5TD - TAT

On-site Time:	0420	Temp:	50'S
Off-site Time:	0810	Temp:	60'S
Sky Conditions:	Clear		
Meteorological Events:	-		
Wind Speed:	-	Direction:	-

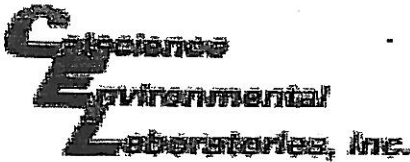
Lab Name: Cal-Science	BP/AR Facility No.: 11270	Consultant/Contractor: Stratus Environmental, Inc.
Address: 7440 Lincoln Way	BP/AR Facility Address: 3255 Mecartney Rd. Alameda Ca.	Address: 3330 Cameron Park Drive, Suite 550
Garden Grove Ca. 92841-1427	Site Lat/Long:	Cameron Park, CA 95682
Lab PM: Linda Sharpenberg	California Global ID No.: T060010115	Consultant/Contractor Project No.:
Tele/Fax: 714-895-5494 714-895-7501 (fax)	Enfos Project No.:	Consultant/Contractor PM: Jay Johnson
BP/AR PM Contact: Paul Supple	Provision or OOC (circle one) Provision	Tele/Fax: (530) 676-6000 / (530) 676-6005
Address: 2010 Crow Canyon Place, Suite 150	Phase/WBS: 04-Monitoring	Report Type & QC Level: Level 1 with EDF
San Ramon, CA	Sub Phase/Task: 03-Analytical	E-mail EDD To: bcarroll@stratusinc.net
Tele/Fax: 925-275-3506	Cost Element: 01-Contractor labor	Invoice to: Atlantic Richfield Co.

Item No.	Sample Description	Time	Date	Matrix			Laboratory No.	No. of Containers	Preservative					Requested Analysis					Sample Point Lat/Long and Comments	
				Soil/Solid	Water/Liquid	Air			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	Methanol	GRO/BTEX/Oxy*	1,2-DCA	Ethanol	EDB	DRO		
1	MW-5	0550	9/19	X				6						X	X	X	X			
2	XW-2	0630																		
3	XW-3	0705																		
4	MW-7	0665																		
5	MW-6	0730																		
6	XW-1	0755																		
7																				
8	IB-1070-0919 2008							2												on Hold
9																				
10																				

Sampler's Name: Anthony Hill	Relinquished By / Affiliation: <u>Anthony Hill</u>	Date: 9/19/08	Time: 0910	Accepted By / Affiliation: <u>[Signature]</u>	Date: 9-19-08	Time: 0910
Shipment Date:	Shipment Method: <u>GSD</u>	Shipment Tracking No: <u>510996997</u>	Special Instructions: Please cc results to rmiller@broadbentinc.com			

Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

10 of 18



WORK ORDER #: 08 - 09 - 1925

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: STRATUS

DATE: 09-20-08

TEMPERATURE - SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

- Chilled, cooler with temperature blank provided.
Chilled, cooler without temperature blank.
Chilled and placed in cooler with wet ice.
Ambient and placed in cooler with wet ice.
Ambient temperature (For Air & Filter only).
°C Temperature blank.

LABORATORY (Other than CalScience Courier):

- °C Temperature blank.
05.2 °C IR thermometer.
Ambient temperature (For Air & Filter only).

Initial: TD

CUSTODY SEAL INTACT:

Sample(s): Cooler: [checked] No (Not Intact): Not Present:

Initial: TD

SAMPLE CONDITION:

Table with 4 columns: Description, Yes, No, N/A. Rows include Chain-Of-Custody document(s), Sampler's name, Sample container label(s), Sample container(s) intact, Correct containers and volume, Proper preservation, VOA vial(s) free of headspace, Tedlar bag(s) free of condensation.

Initial: TD

COMMENTS:

Blank lines for handwritten comments.

APPENDIX C

HISTORIC GROUND-WATER DATA

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	TDS (ug/l)	DO (ppm)	LAB
MW-1	(c) 10/29/92	7.49	7.28	--	0.21	--	--	--	--	--	--	--	--	--	--
MW-1	(c) 06/21/93	7.49	5.40	--	2.09	--	--	--	--	--	--	--	--	--	--
MW-1	04/05/94	7.49	5.64	--	1.85	1700	--	20	1.1	3.9	7.6	--	--	--	PACE
MW-1	07/28/94	7.49	6.22	--	1.27	--	--	--	--	--	--	--	--	--	--
MW-1	10/26/94	7.49	6.40	--	1.09	--	--	--	--	--	--	--	--	--	--
MW-1	(d) 02/05/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	10/29/92	7.07	6.84	--	0.23	2500	3900	140	ND<10	65	22	--	--	--	--
MW-2	06/21/93	7.07	5.49	--	1.58	720	770	12	1.5	11	12	--	--	--	--
MW-2	04/05/94	7.07	5.40	--	1.67	420	1300	ND<0.5	ND<0.5	ND<0.5	4	4500 (e)	--	1.8	PACE
MW-2	07/28/94	7.07	5.97	--	1.10	--	--	--	--	--	--	--	--	--	--
MW-2	10/26/94	7.07	6.10	--	0.97	--	--	--	--	--	--	--	--	--	--
MW-2	(d) 02/05/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	(c) 10/29/92	7.08	7.14	--	-0.06	--	--	--	--	--	--	--	--	--	--
MW-3	(c) 06/21/93	7.08	5.84	--	1.24	--	--	--	--	--	--	--	--	--	--
MW-3	04/05/94	7.08	5.83	--	1.25	990	4300	3.2	ND<0.5	ND<0.5	1.3	790 (e)	--	--	PACE
MW-3	07/28/94	7.08	6.32	--	0.76	--	--	--	--	--	--	--	--	--	--
MW-3	10/26/94	7.08	6.42	--	0.66	--	--	--	--	--	--	--	--	--	--
MW-3	(d) 02/05/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	10/29/92	7.13	6.90	--	0.23	2600	--	250	2.5	74	6.6	--	--	--	--
MW-4	06/21/93	7.13	5.54	--	1.59	1400	1100	24	2.9	2.6	7.9	--	--	--	--
MW-4	04/05/94	7.13	5.46	--	1.67	930	940	33	0.8	ND<0.5	2.8	8700 (e)	--	2.7	PACE
MW-4	07/28/94	7.13	6.02	--	1.11	2400	1400	19	1.8	0.5	8	--	--	6.7	PACE
QC-1	(f) 07/28/94	--	--	--	--	2300	--	19	1.7	0.5	7.4	--	--	--	PACE
MW-4	10/26/94	7.13	6.13	--	1.00	--	--	--	--	--	--	--	--	--	--
MW-4	(d) 02/05/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	TDS (ug/l)	DO (ppm)	LAB
MW-5	06/21/93	8.36	7.44	---	0.92	ND<50	100	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---
MW-5	04/05/94	8.36	7.42	---	0.94	ND<50	100	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	---
QC-1 (f)	04/05/94	---	---	---	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	2.5	PACE
MW-5	07/28/94	8.36	7.88	---	0.48	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	---	PACE
MW-5	10/26/94	8.36	7.92	---	0.44	ND<50	160	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	---	7.4	PACE
QC-1 (f)	10/26/94	---	---	---	---	ND<50	---	ND<0.5	0.5	ND<0.5	ND<0.5	---	---	5.5	PACE
MW-5	02/05/95	8.36	7.83	---	0.53	ND<50	ND<500	ND<0.25	ND<0.25	ND<0.25	ND<0.50	---	---	---	PACE
QC-1 (f)	02/05/95	---	---	---	---	ND<50	---	ND<0.25	ND<0.25	ND<0.25	ND<0.50	---	---	---	ATI
MW-5	05/05/95	8.36	9.00	---	-0.64	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	---	ATI
MW-5	07/19/95	8.36	9.03	---	-0.67	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	---	3.1	ATI
MW-5	10/12/95	8.36	9.15	---	-0.79	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	---	14700	4.6	ATI
MW-5	01/08/96	8.36	9.04	---	-0.68	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	8490	4.3	ATI
MW-5	09/11/97	8.36	8.90	---	-0.54	ND<50	---	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	10000	4.9	ATI
MW-5	01/27/98	8.36	8.27	---	0.09	ND<50	---	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	---	4	SPL
MW-5	04/19/98	8.36	8.60	---	-0.24	---	---	---	---	---	---	---	---	---	---
MW-5	09/27/00	8.36	8.68	---	-0.32	---	---	---	---	---	---	---	---	---	---
MW-5	03/21/01	8.36	8.13	---	0.23	---	---	---	---	---	---	---	---	---	---
MW-5 (k)	09/18/01	8.36	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-6	02/05/95	6.88	6.39	---	0.49	1000	1000	7.6	19	9.1	96	---	(g) ---	5	ATI
MW-6	05/05/95	6.88	6.85	---	0.03	2300	---	49	9	130	46	---	---	3.3	ATI
QC-1 (f)	05/05/95	---	---	---	---	2400	---	49	9.2	140	48	---	---	---	ATI
MW-6	07/19/95	6.88	7.13	---	-0.25	1500	---	64	3.3	28	24	---	---	---	ATI
QC-1 (f)	07/19/95	---	---	---	---	1500	---	89	3.8	30	26	---	(g) 818	3.7	ATI
MW-6	10/12/95	6.88	7.35	---	-0.47	1800	---	38	13	38	86	2500	---	---	ATI
QC-1 (f)	10/12/95	---	---	---	---	1100	---	33	7	18	44	2200	---	---	ATI
MW-6	01/08/96	6.88	7.04	---	-0.16	1300	---	31	4.7	60	53	170	474	4.2	ATI
QC-1 (f)	01/08/96	---	---	---	---	1000	---	27	4	49	44	150	---	---	ATI
MW-6	09/11/97	6.88	7.29	---	-0.41	ND<250	---	8.5	ND<5.0	11	6	1400	---	---	ATI
QC-1 (f)	09/11/97	---	---	---	---	210	---	8.7	ND<5.0	14	8	1400	---	3.5	SPL
MW-6	01/27/98	6.88	6.20	---	0.68	47000	---	350	150	360	690	38000	---	4.6	SPL
QC-1 (f)	01/27/98	---	---	---	---	51000	---	290	120	300	580	35000	---	---	SPL
MW-6	04/19/98	6.88	6.64	---	0.24	36000	---	40	510	140	10500	660	---	4	SPL
QC-1 (f)	04/19/98	---	---	---	---	24000	---	20	360	81	7100	480	---	---	SPL
MW-6	09/27/00	6.88	6.99	---	-0.11	1400	---	6.9	19	110	53	33/32 (i)	---	---	PACE
MW-6	03/21/01	6.88	6.36	---	0.52	330	---	2.2	1.42	50.4	10.2	56.3	---	---	PACE
MW-6	09/18/01	6.88	7.11	---	-0.23	290	---	0.957	ND<5.0	11.2	6.83	50.7	---	---	PACE

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	TDS (ug/l)	DO (ppm)	LAB
MW-7	02/05/95	6.62	7.62	--	-1.00	280	ND<500	ND<0.25	ND<0.25	ND<0.25	ND<0.50	-- (g)	--	5.1	ATI
MW-7	05/05/95	6.62	7.64	--	-1.02	290	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	--	3.6	ATI
MW-7	07/19/95	6.62	7.70	--	-1.08	150	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	-- (g)	12100	4.6	ATI
MW-7	10/12/95	6.62	7.88	--	-1.26	110	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	390	14000	4.7	ATI
MW-7	01/08/96	6.62	7.66	--	-1.04	90	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	300	12060	4.9	ATI
MW-7	09/11/97	6.62	7.78	--	-1.16	ND<50	--	ND<2.5	ND<5.0	ND<5.0	ND<5.0	63	--	3.8	SPL
MW-7	01/27/98	6.62	7.30	--	-0.68	1400	--	7.7	ND<1.0	ND<1.0	ND<1.0	920	--	4.4	SPL
MW-7	04/19/98	6.62	7.52	--	-0.90	3500	--	15	7.7	11	19.3	3600	--	4.7	SPL
MW-7	09/27/00	6.62	7.71	--	-1.09	ND<50	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	71/70 (i)	--	--	PACE
MW-7 (i)	03/21/01	6.62	7.62	--	-1.00	--	--	--	--	--	--	--	--	--	--
MW-7	03/29/01	6.62	7.57	--	-0.95	80	--	ND<0.5	ND<0.5	ND<0.5	ND<1.5	88.2	--	--	PACE
MW-7	09/18/01	6.62	7.74	--	-1.12	ND<250	--	ND<2.5	ND<2.5	ND<2.5	ND<7.5	36.6	--	--	PACE
XW-1	06/21/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--
XW-1	04/05/94	--	5.36	--	--	ND<50	70	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	3	PACE
XW-1	07/28/94	--	5.92	--	--	--	--	--	--	--	--	--	--	--	PACE
XW-1	10/26/94	--	6.05	--	--	--	--	--	--	--	--	--	--	--	--
XW-1	02/05/95	7.49	5.82	--	1.67	ND<50	ND<500	ND<0.25	ND<0.25	ND<0.25	ND<0.50	--	--	4.9	ATI
XW-1	05/05/95	7.49	5.57	--	1.92	--	--	--	--	--	--	--	--	--	--
XW-1	07/19/95	7.49	6.12	--	1.37	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1680	4.3	ATI
XW-1	10/12/95	7.49	6.82	--	0.67	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	1150	3.8	ATI
XW-1	01/08/96	7.49	6.11	--	1.38	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	1300	4.7	ATI
XW-1	09/11/97	7.49	6.57	--	0.92	ND<50	--	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<10	--	3.3	SPL
XW-1	01/27/98	7.49	5.27	--	2.22	--	--	--	--	--	--	--	--	--	--
XW-1	04/19/98	7.49	5.24	--	2.25	--	--	--	--	--	--	--	--	--	--
XW-1	09/27/00	7.49	6.13	--	1.36	--	--	--	--	--	--	--	--	--	--
XW-1	03/21/01	7.49	5.97	--	1.52	--	--	--	--	--	--	--	--	--	--
XW-1	09/18/01	7.49	6.59	--	0.90	--	--	--	--	--	--	--	--	--	--

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	TDS (ug/l)	DO (ppm)	LAB
XW-2	06/21/93	7.48	5.89	--	1.59	--	--	--	--	--	--	--	--	--	--
XW-2	04/05/94	7.48	5.77	--	1.71	ND<50	160	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	3	PACE
XW-2	07/28/94	7.48	6.25	--	1.23	--	--	--	--	--	--	--	--	--	PACE
XW-2	10/26/94	7.48	6.39	--	1.09	--	--	--	--	--	--	--	--	--	--
XW-2	02/05/95	7.48	5.62	--	1.86	ND<50	ND<500	ND<0.25	0.38	ND<0.25	ND<0.50	--	--	5.2	ATI
XW-2	05/05/95	7.48	5.66	--	1.82	--	--	--	--	--	--	--	--	--	--
XW-2	07/19/95	7.48	6.8	--	0.68	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	4750	3.9	ATI
XW-2	10/12/95	7.48	7.21	--	0.27	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	3630	4.3	ATI
XW-2	01/08/96	7.48	6.79	--	0.69	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	3440	4.2	ATI
XW-2	09/11/97	7.48	6.86	--	0.62	ND<50	--	ND<0.5	ND<1.0	ND<1.0	ND<1.0	ND<5.0	--	3.6	SPL
XW-2	01/27/98	7.48	5.88	--	1.60	--	--	--	--	--	--	--	--	--	--
XW-2	04/19/98	7.48	5.42	--	2.06	--	--	--	--	--	--	--	--	--	--
XW-2	09/27/00	7.48	6.86	--	0.62	--	--	--	--	--	--	--	--	--	--
XW-2	03/21/01	7.48	6.60	--	0.88	--	--	--	--	--	--	--	--	--	--
XW-2	09/18/01	7.48	7.15	--	0.33	--	--	--	--	--	--	--	--	--	--
XW-3	06/21/93	6.84	5.85	--	0.99	--	--	--	--	--	--	--	--	--	--
XW-3	04/05/94	6.84	5.85	--	0.99	ND<50	150	ND<0.5	0.7	ND<0.5	ND<0.5	--	--	3.1	PACE
XW-3	07/28/94	6.84	6.28	--	0.56	--	--	--	--	--	--	--	--	--	PACE
XW-3	10/26/94	6.84	6.4	--	0.44	--	--	--	--	--	--	--	--	--	--
XW-3	02/05/95	6.84	7.23	--	-0.39	280	ND<500	ND<0.50	ND<0.50	0.63	ND<1.0	(g)	--	4.9	ATI
XW-3	05/05/95	6.84	7.43	--	-0.59	--	--	--	--	--	--	--	--	--	--
XW-3	07/19/95	6.84	7.6	--	-0.76	400	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	10400	4.3	ATI
XW-3	10/12/95	6.84	7.74	--	-0.90	130	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	480	(e) 8430	4.7	ATI
XW-3	01/08/96	6.84	7.58	--	-0.74	320	--	ND<2.5	ND<2.5	ND<2.5	ND<5.0	1100	10000	4.4	ATI
XW-3	01/27/98	6.84	7.01	--	-0.17	1200	--	2.8	ND<1.0	ND<1.0	ND<1.0	990	--	4.3	SPL
XW-3	04/19/98	6.84	7.28	--	-0.44	4500	--	ND<2.5	ND<5.0	ND<5.0	ND<5.0	4800	--	4.3	SPL
XW-3	09/27/00	6.84	7.59	--	-0.75	ND<50	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	35/38	(l)	--	PACE
XW-3	03/21/01	6.84	7.35	--	-0.51	ND<250	--	ND<2.5	ND<2.5	ND<2.5	ND<7.5	61.7	--	--	PACE
XW-3	09/18/01	6.84	7.70	--	-0.86	ND<250	--	ND<2.5	ND<2.5	ND<2.5	ND<7.5	23.4	--	--	PACE
QC-2 (h)	04/05/94	--	--	--	--	ND<50	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	PACE
QC-2 (h)	07/28/94	--	--	--	--	ND<50	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	PACE
QC-2 (h)	10/26/94	--	--	--	--	ND<50	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	PACE
QC-2 (h)	02/05/95	--	--	--	--	ND<50	--	ND<0.25	ND<0.25	ND<0.25	ND<0.50	--	--	--	ATI
QC-2 (h)	05/05/95	--	--	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	--	--	ATI
QC-2 (h)	07/19/95	--	--	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	--	--	ATI
QC-2 (h)	10/12/95	--	--	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	--	--	ATI
QC-2 (h)	01/08/96	--	--	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	--	--	ATI
QC-2 (h)	01/08/96	--	--	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	--	--	ATI

TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER MONITORING

ADDITIONAL ANALYSES

Well ID	DATE OF SAMPLING/ MONITORING	TBA (ug/l)	DIPE (ug/l)	ETBE (ug/l)	TAME (ug/l)	LAB
MW-6	09/27/00	ND<10	ND<1.0	ND<1.0	6.2	PACE
MW-7	09/27/00	20	ND<1.0	ND<1.0	9.4	PACE
XW-3	09/27/00	ND<10	ND<1.0	ND<1.0	6.2	PACE

ABBREVIATIONS:

TPH-G	Total petroleum hydrocarbons as gasoline
TPH-D	Total petroleum hydrocarbons as diesel
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
MTBE	Methyl tert butyl ether
TDS	Total dissolved solids
DO	Dissolved oxygen
ug/l	Micrograms per liter
mg/l	Milligrams per liter
ppm	Parts per million
—	Not analyzed/measured/applicable
ND	Not detected above reported detection limit
PACE	Pace, Inc.
ATI	Analytical Technologies, Inc.
SPL	Southern Petroleum Laboratories
DIPE	Di-Isopropyl Ether
ETBE	Ethyl t-Butyl Ether
TAME	t-Amyl Methyl Ether

NOTES:

Blaine Tech Services, Inc. began routine monitoring of this facility on September 27, 2000. All previous data provided by Alisto Engineering.

- (a) Casing elevations surveyed to nearest 0.01 foot relative to an arbitrary datum.
- (b) Groundwater elevations in feet above an arbitrary datum.
- (c) Not sampled due to inadequate recharge.
- (d) Wells destroyed by HETI on January 18 and 19, 1995.
- (e) A copy of the documentation for this data is included in Appendix C of Alisto report 10-206-04-001.
- (f) Blind duplicate.
- (g) MTBE peak present. See documentation for this data included in Appendix C of Alisto report 10-206-04-001.
- (h) Travel blank.
- (i) MTBE by 8020/8260.
- (j) Samples lost, resampled 3/29/01.
- (k) Unable to locate well.

APPENDIX D

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!

<u>Submittal Type:</u>	GEO_WELL
<u>Submittal Title:</u>	3Q08 GEO_WELL 11270
<u>Facility Global ID:</u>	T0600101198
<u>Facility Name:</u>	BP #11270
<u>File Name:</u>	GEO_WELL.zip
<u>Organization Name:</u>	Broadbent & Associates, Inc.
<u>Username:</u>	BROADBENT-C
<u>IP Address:</u>	67.118.40.90
<u>Submittal Date/Time:</u>	10/23/2008 3:17:00 PM
<u>Confirmation Number:</u>	9956929087

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER ESI

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<u>Submittal Type:</u>	GWM_R
<u>Submittal Title:</u>	3Q08 GW Monitoring
<u>Facility Global ID:</u>	T0600101198
<u>Facility Name:</u>	BP #11270
<u>File Name:</u>	08091925.zip
<u>Organization Name:</u>	Broadbent & Associates, Inc.
<u>Username:</u>	BROADBENT-C
<u>IP Address:</u>	67.118.40.90
<u>Submittal Date/Time:</u>	10/23/2008 3:00:06 PM
<u>Confirmation Number:</u>	8655913412

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