Shell Oil Products US

May 13, 2010

**Re: First Quarter 2010 Semi-Annual Groundwater Monitoring and Quarterly Feasibility Study Report**
Shell-branded Service Station
5251 Hopyard Road
Pleasanton, California

Dear Mr. Jerry Wickham:

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Sincerely,
Shell Oil Products US

Denis L. Brown
Project Manager

20945 S. Wilmington Avenue, Carson, CA 90810 P: (559) 645-9306; F: (559) 645-5643

May 13, 2010
Delta Project No. SCA5251H1D
SAP No. 135785

Mr. Jerry Wickham, PG, CHG
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6540

**Re: FIRST QUARTER 2010 SEMI-ANNUAL GROUNDWATER MONITORING AND QUARTERLY FEASIBILITY STUDY REPORT**
Shell-Branded Service Station
5251 Hopyard Road
Pleasanton, California

DELTA

Dear Mr. Wickham:

On behalf of Equilon Enterprises LLC *dba* Shell Oil Products (Shell), Delta Consultants (Delta) has prepared this *First Quarter 2010 Groundwater Monitoring Report* for the site referenced above. Sampling activities at the site were performed by Blaine Tech Services, Inc. (Blaine Tech) under contract to Shell and included the collection of groundwater samples and static water level measurements. Delta did not provide any oversight of Blaine Tech's work or protocol. A Delta staff member performed an evaluation of the data provided to us under the supervision of a California Registered Civil Engineer or a California Professional Geologist.

A magnesium sulfate ($MgSO_4$) feasibility pilot study was initiated based on the work plan submitted December 11, 2009 and approved in a letter from the Alameda County Health Care Services Agency (ACHCSA) dated January 12, 2010. In addition, at a meeting with Shell and Delta on February 3, 2010 Jerry Wickham of the ACHCSA requested that two additional observation wells (S-1 and S-10) be added to the scope of work. The work plan and agency letter are included as Appendix A in the attached monitoring report.

The anaerobic sulfate reduction of hydrocarbons uses ferric (insoluble) iron as a co-metabolite. A preliminary evaluation on October 30, 2009 of groundwater at the site indicated that sulfate is utilized and depleted during the degradation of hydrocarbons, with an increase in the concentration of ferrous (soluble) iron in the center of the plume (EW-1). This data point strongly suggested sulfate was being consumed in the process of anaerobic hydrocarbon biodegradation, and that the current low sulfate concentrations may be a limiting factor for continued bioremediation of the plume.

a member of: Inogen Environmental Alliance
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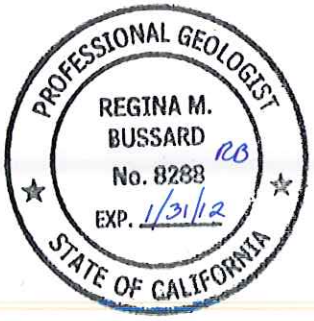
Prior to the initial $MgSO_4$ application on April 8, 2010, baseline groundwater samples were collected from application wells EW-1 and S-3 and observation wells S-1, S-2, and S-10. Analytical samples were submitted to a California state-certified laboratory and analyzed for total petroleum hydrocarbons as gasoline (TPH-g), benzene, toluene, ethylbenzene and total xylenes (BTEX compounds), methyl tert-butyl ether (MTBE), sulfate, ferrous iron and ferric iron. The initial ferrous iron results were run out of hold (according to the method analysis should be performed within 24 hours of sample collection), and are therefore not considered representative of actual concentrations at the site. Subsequent measurements for ferrous iron will be taken using a field sample kit; field samples collected May 11, 2010 reported 2.4 and 4.8 milligrams per liter (mg/L) ferrous iron at wells EW-1 and S-3, respectively.

Two drums (approximately 55 gallons each) of EAS™ (electron acceptor solution) were obtained from EOS Remediation, LLC and transported to the site. One drum of EAS™ was introduced to each application well (EW-1 and S-3) following completion of baseline sampling; samples for sulfate were collected two to four hours following completion of the $MgSO_4$ introduction. Additional samples collected to date from the application wells include sulfate samples on April 21, 2010 and samples for TPH-g, BTEX compounds, MTBE, sulfate, ferrous iron and ferric iron on May 11, 2010 (sample results are pending). Initial results indicate that sulfate has been utilized and depleted at the application points by an order of magnitude over a two-week period. It is anticipated that two additional applications will be performed in May and June or July, and additional information on the degradation trend and resulting attenuation of contaminants should be available following the collection of that data. Tables 1 through 3 included in the attached monitoring report provide historic groundwater concentrations, analytical results from the initial MgSO4 evaluation, and initial pilot study results.

This report represents Delta's professional opinions based upon the currently available information and is arrived at in accordance with currently acceptable professional standards. This report is based upon a specific scope of work requested by the client. The Contract between Delta and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were performed. This report is intended only for the use of Delta's Client and anyone else specifically listed on this report. Delta will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Delta makes no express or implied warranty as to the contents of this report. If you have any questions regarding this site, please contact Suzanne McClurkin-Nelson (Delta Project Manager) at (408) 826-1875 or Denis Brown (Shell Site Manager) at (707) 865-0251.

Sincerely,
**Delta Consultants**




Suzanne McClurkin-Nelson
Senior Project Manager

Regina Bussard, P.G.
Project Geologist

Attachment: First Quarter 2010 Groundwater Monitoring Report

cc: Denis Brown, Shell Oil Products US, Carson
Carl Cox, C and J Cox Corporation, Pleasanton
Colleen Winey, Zone 7 Water Agency, Livermore
Danielle Stefani, Livermore-Pleasanton Fire Department, Pleasanton

# SHELL SEMI-ANNUAL STATUS REPORT

| | |
|---|---|
| Station Address: | 5251 Hopyard Road, Pleasanton, California |
| DELTA Project No.: | SCA5251H1D |
| SHELL Project Manager / Phone No.: | Denis Brown / (707) 865-0251 |
| DELTA Site Manager / Phone No.: | Suzanne McClurkin-Nelson / (408) 826-1875 |
| Primary Agency / Regulatory ID No.: | Alameda County Environmental Health<br>(Mr. Jerry Wickham, P.G., CHG) |
| Other Agencies to Receive Copies: | Zone 7 Water Agency, Livermore-Pleasanton Fire Department |

**WORK PERFORMED THIS PERIOD (FOURTH – 2009 & FIRST –2010):**

1. Submit 3Q09 semi-annual monitoring report (11/11/2009).
2. Submit $MgSO_4$ Application Work Plan (12/11/2009)
3. Semi-annual groundwater monitoring and sampling (2/9/2010).

**WORK PROPOSED FOR NEXT PERIOD (SECOND & THIRD –2010):**

1. Submit 1Q10 semi-annual monitoring report.
2. Initiate $MgSO_4$ feasibility study for hot spot bioremediation via sulfate applications.
3. Semi-annual groundwater monitoring and sampling (3Q10 - August).

| | |
|---|---|
| Current Phase of Project: | Groundwater monitoring and interim remediation activities. |
| Site Use: | Shell-branded Service Station |
| Frequency of Sampling: | Semi-Annual (1Q/3Q) |
| Frequency of Monitoring: | Semi-Annual (1Q/3Q) |
| Is Separate Phase Hydrocarbon Present On-site (Well #'s): | ☐ Yes ☒ No |
| Cumulative SPH Recovered to Date: | NA |
| SPH Recovered This Quarter : | None |
| Groundwater Recovered During Sampling This Quarter: | 238.8 gallons were recovered during sampling February 9, 2010. |
| Sensitive Receptor(s) and Respective Direction(s): | Chabot canal is located approximately 1133 feet north-east of the site and Hewlett Canal is located approximately 1156 feet east of the site. No municipal water supply wells were identified within a 1-mile radius of the site. |
| General Site Lithology: | The site and property to the north are underlain predominantly by clay and silt. |
| Current Remediation Techniques: | None |
| Permits for Discharge: | None |
| Approximate Depth to Groundwater: | 6.91 to 9.99 feet below top of well casing. |
| Groundwater Gradient: | Northeast at approximately 0.003 ft/ft |
| Current Agency Correspondence: | January 12, 2010; $MgSO_4$ work plan approval |

# SHELL SEMI-ANNUAL STATUS REPORT (CONT.)

| | |
|---|---|
| Date of Most Recent Work Plan Approval: | January 12, 2010 (Appendix A) |
| Site History: | |
| Case Opening | September 2004 |
| Onsite Assessment | May 2005 |
| Offsite Assessment | None |
| Passive Remediation | Monitor Natural Attenuation |
| Active Remediation | Batch Extraction 2007 |
| Closure | N/A |
| Summary of Unusual Activity: | Wells S-10, S-11, and S-12 have been incorporated into the monitoring program. $MgSO_4$ pilot study has been initiated. |

Discussion:

A magnesium sulfate ($MgSO_4$) feasibility pilot study was initiated April 8, 2010 using wells S-3 and EW-1 as application points and wells S-1, S-2 and S-10 as observation wells. Following collection of baseline samples at all wells, one drum of EAS™ (electron acceptor solution) was gravity fed into each application well; sulfate samples were collected from those wells two to four hours after application. Follow up sampling occurred on April 21st, 2010 to monitor the sulfate concentration. Results from the initial feasibility evaluation are included in Table 2 and results to date from the feasibility study are included in Table 3. The $MgSO_4$ work plan (text, tables and figures) is included as Appendix A, field data sheets and field procedures are included as Appendices B and C, and analytical results received to date are included as Appendix D. Monthly sampling for TPH-g, BTEX compounds, MTBE, sulfate, ferrous iron and ferric iron at wells EW-1 and S-3 occurred on May 11, 2010; those results will be included in the next quarterly feasibility study report due by August 15, 2010.

## ATTACHMENTS:

Figures:

- Figure 1 – Site Location Map
- Figure 2 – Groundwater Elevation Contour Map – 2/9/2010
- Figure 3 – Groundwater Hydrocarbon Distribution Map – 2/9/2010

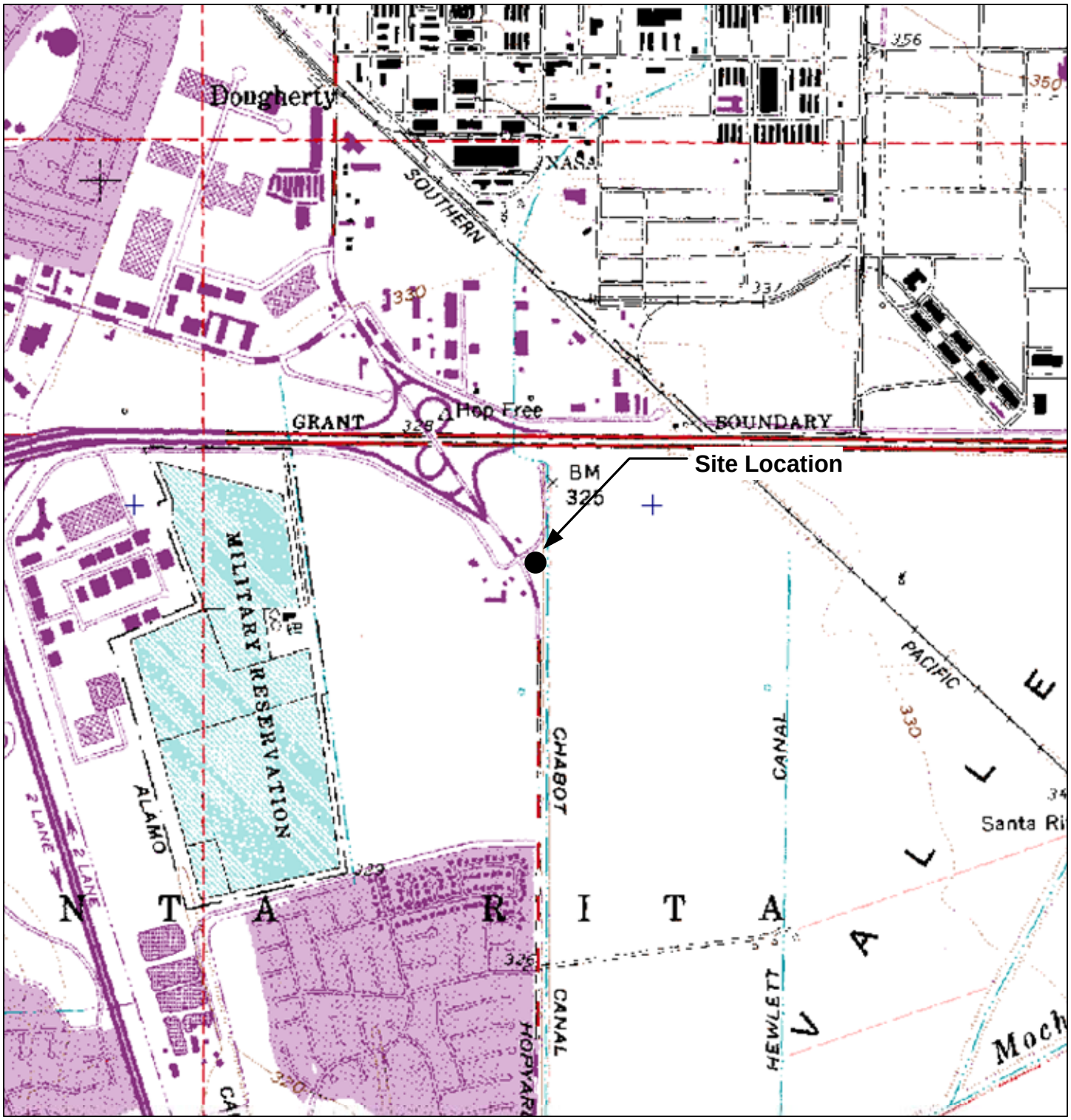
Tables:

- Table 1 – Well Concentrations
- Table 2 – $MgSO_4$ Feasibility Evaluation
- Table 3 – $MgSO_4$ Feasibility Pilot Study

Appendices:

- Appendix A – Agency Correspondence and $MgSO_4$ Feasibility Study and Work Plan
- Appendix B – Blaine Tech Services, Inc. and Delta Consultants Field Data Sheets
- Appendix C – Blaine Tech Services, Inc. Field Procedures
- Appendix D – Certified Analytical Reports with Chain-of-Custody Documentation

# FIGURES




GENERAL NOTES:
Base Map from: DeLorme Yarmouth, ME 04096
Source Data: USGS

North

QUADRANGLE LOCATION

0 1,300 2,600
Scale, Feet

FIGURE 1
SITE LOCATION MAP

SHELL-BRANDED SERVICE STATION
5251 Hopyard Road
Pleasanton, California

| | |
|---|---|
| PROJECT NO. SCA5251H1D | DRAWN BY V. F. 3/31/05 |
| FILE NO. | PREPARED BY VF |
| REVISION NO. | REVIEWED BY |

DELTA CONSULTANTS

PROJECT NUMBER SCA5251H1D

APPROVED BY

CHECKED BY

DRAWN BY J.F.F. 3/15/2010

OWENS DRIVE

HOPYARD ROAD

PLANTER

PLANTER

PLANTER

PLANTER

PLANTER

S-2 318.30

S-8 318.12

S-10 318.34

S-11 316.13*

S-9 318.09

S-7 318.21

S-6 318.36

S-4 318.65

S-3 318.65

S-1 318.56

S-5 318.53

S-12 318.94

EW-1 318.78

EW-2 318.53

V-1

V-2

V-3

UST (TYP.)

FORMER UST COMPLEX

SHELL-BRANDED SERVICE STATION BUILDING

CAR WASH

DISPENSER ISLAND (TYP.)

TRASH

318.10

318.20

318.30

318.40

318.50

318.60

318.70

318.80

318.90

0.003 ft/ft

0.003 ft/ft

0 20 40 SCALE IN FEET

N W E S

LEGEND

| | |
|---|---|
| MW-1 ◆ | GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION |
| EW-1 ■ | GROUNDWATER EXTRACTION WELL LOCATION AND DESIGNATION |
| V-3 ▲ | SOIL VAPOR EXTRACTION WELL LOCATION AND DESIGNATION |
| 318.68 | GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (Ft/MSL) |
| 318.40 — — | GROUNDWATER CONTOUR IN FEET ABOVE MEAN SEA LEVEL (Ft/MSL) CONTOUR INTERVAL=0.10 FEET |
| * | ANOMALOUS DATA NOT USED IN CONTOURING |
| 0.003 ft/ft | APPROXIMATE GROUNDWATER DIRECTION |
| NG | NOT GAUGED |

HISTORIC GROUNDWATER FLOW DIRECTIONS

| DATE | FLOW DIRECTION |
|---|---|
| 1/14/2005 | W, WSW |
| 8/5/2005 | W, WSW |
| 11/8/2005 | W |
| 6/16/2006 | W, WNW |
| 8/23/2006 | WNW |
| 11/13/2006 | W, WSW |
| 2/1/2007 | NNW |
| 5/23/2008 | NNW |
| 8/7/2007 | WNW |
| 11/29/2007 | NNW |
| 1/31/2008 | W, WSW |
| 2/8/2008 | NNW |
| 5/21/2008 | N |
| 8/6/2008 | NNW |
| 11/18/2008 | Undetermined |
| 1/20/2009 | Undetermined |
| 5/6/2009 | N |
| 7/6/2009 | Undetermined |
| 2/9/2010 | NW |

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SHELL BRANDED SERVICE STATION
PLEASANTON, CALIFORNIA

**FIGURE 2**

**GROUNDWATER ELEVATION CONTOUR MAP**
**2/9/2010**

5251 HOPYARD ROAD
PLEASANTON, CALIFORNIA

PROJECT NUMBER SCA5251H1D

APPROVED BY

CHECKED BY

DRAWN BY J.F.F. 3/15/2010

OWENS DRIVE

HOPYARD ROAD

| S-10 | | | | |
|---|---|---|---|---|
| DATE | TPH-g (µg/L) | BENZENE (µg/L) | MTBE (µg/L) | TBA (µg/L) |
| 2/9/10 | **65** | ND<0.50 | **1.7** | **1,400** |

| S-2 | | | | |
|---|---|---|---|---|
| DATE | TPH-g (µg/L) | BENZENE (µg/L) | MTBE (µg/L) | TBA (µg/L) |
| 2/9/10 | **62** | ND<0.50 | **42** | ND<10 |

| S-9 | | | | |
|---|---|---|---|---|
| DATE | TPH-g (µg/L) | BENZENE (µg/L) | MTBE (µg/L) | TBA (µg/L) |
| 2/9/10 | ND<50 | ND<0.50 | ND<1.0 | ND<10 |

| S-11 | | | | |
|---|---|---|---|---|
| DATE | TPH-g (µg/L) | BENZENE (µg/L) | MTBE (µg/L) | TBA (µg/L) |
| 2/9/10 | ND<50 | ND<0.50 | ND<1.0 | ND<10 |

| S-8 | | | | |
|---|---|---|---|---|
| DATE | TPH-g (µg/L) | BENZENE (µg/L) | MTBE (µg/L) | TBA (µg/L) |
| 2/9/10 | ND<50 | ND<0.50 | ND<1.0 | ND<10 |

| S-1 | | | | |
|---|---|---|---|---|
| DATE | TPH-g (µg/L) | BENZENE (µg/L) | MTBE (µg/L) | TBA (µg/L) |
| 2/9/10 | **8,800** | **18** | **13** | **66** |

| S-7 | | | | |
|---|---|---|---|---|
| DATE | TPH-g (µg/L) | BENZENE (µg/L) | MTBE (µg/L) | TBA (µg/L) |
| 2/9/10 | ND<50 | ND<0.50 | **8.4** | ND<10 |

| S-5 | | | | |
|---|---|---|---|---|
| DATE | TPH-g (µg/L) | BENZENE (µg/L) | MTBE (µg/L) | TBA (µg/L) |
| 2/9/10 | **130** | **2.3** | **2.4** | ND<10 |

| EW-1 | | | | |
|---|---|---|---|---|
| DATE | TPH-g (µg/L) | BENZENE (µg/L) | MTBE (µg/L) | TBA (µg/L) |
| 2/9/10 | **12,000** | **13** | ND<5.0 | ND<50 |

| S-3 | | | | |
|---|---|---|---|---|
| DATE | TPH-g (µg/L) | BENZENE (µg/L) | MTBE (µg/L) | TBA (µg/L) |
| 2/9/10 | **1,400** | **180** | **12** | **32** |

| S-12 | | | | |
|---|---|---|---|---|
| DATE | TPH-g (µg/L) | BENZENE (µg/L) | MTBE (µg/L) | TBA (µg/L) |
| 2/9/10 | **57** | ND<0.50 | **26** | **11** |

| S-6 | | | | |
|---|---|---|---|---|
| DATE | TPH-g (µg/L) | BENZENE (µg/L) | MTBE (µg/L) | TBA (µg/L) |
| 2/9/10 | ND<50 | ND<0.50 | ND<1.0 | ND<10 |

| S-4 | | | | |
|---|---|---|---|---|
| DATE | TPH-g (µg/L) | BENZENE (µg/L) | MTBE (µg/L) | TBA (µg/L) |
| 2/9/10 | ND<50 | ND<0.50 | ND<1.0 | ND<10 |

PLANTER

SHELL-BRANDED SERVICE STATION BUILDING

UST (TYP.)

FORMER UST COMPLEX

CAR WASH

DISPENSER ISLAND (TYP.)

CANOPY

TRASH

0.003 ft/ft

N

W E

S

0 20 40 SCALE IN FEET

LEGEND

- MW-1 ◆ GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- EW-1 ■ GROUNDWATER EXTRACTION WELL LOCATION AND DESIGNATION
- V-3 ▲ SOIL VAPOR EXTRACTION WELL LOCATION AND DESIGNATION
- TPH-g TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- MTBE METHYL TERT-BUTYL ETHER
- TBA TERT-BUTYL ALCOHOL
- µg/L MICROGRAMS PER LITER
- ND< NOT DETECTED ABOVE LIMIT NOTED
- NS NOT SAMPLED
- 0.003 ft/ft APPROXIMATE GROUNDWATER DIRECTION

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SHELL BRANDED SERVICE STATION
PLEASANTON, CALIFORNIA

**FIGURE 3**
**GROUNDWATER HYDROCARBON DISTRIBUTION MAP**
**2/9/2010**

5251 HOPYARD ROAD
PLEASANTON, CALIFORNIA

# TABLES

# TABLE 1
# WELL CONCENTRATIONS
# Shell-branded Service Station
# 5251 Hopyard Road
# Pleasanton, CA

| Well ID | Date | TPPH (ug/L) | TEPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | DIPE (ug/L) | ETBE (ug/L) | TAME (ug/L) | TBA (ug/L) | Ethanol (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-1 | 1/25/1991 | 2,500 | 1,500 | 460 | <25 | 130 | 36 | NA | NA | NA | NA | NA | NA | NA | 326.73 | NA | NA | NA |
| S-1 | 4/6/1991 | 6,700 | 2,600 a | 2,600 | 14 | 580 | 250 | NA | NA | NA | NA | NA | NA | NA | 326.73 | NA | NA | NA |
| S-1 | 7/24/1991 | 8,800 | 3,800 a | 2,300 | 30 | 640 | 220 | NA | NA | NA | NA | NA | NA | NA | 326.73 | NA | NA | NA |
| S-1 | 10/18/1991 | 12,000 | 3,300 a | 3,600 | 380 | 990 | 580 | NA | NA | NA | NA | NA | NA | NA | 326.73 | 8.85 | 317.88 | NA |
| S-1 | 1/23/1992 | 1,600 | 890 | 450 | 3 | 120 | 17 | NA | NA | NA | NA | NA | NA | NA | 326.73 | NA | NA | NA |
| S-1 | 4/27/1992 | 1,100 g | 500 a | 610 | <10 | 110 | 10 | NA | NA | NA | NA | NA | NA | NA | 326.73 | NA | NA | NA |
| S-1 | 7/21/1992 | 5,100 | 290 c | 1,900 | 54 | 460 | 140 | NA | NA | NA | NA | NA | NA | NA | 326.73 | NA | NA | NA |
| S-1 | 10/16/1992 | 13,000 | 390 c | 3,200 | 310 | 780 | 360 | NA | NA | NA | NA | NA | NA | NA | 326.73 | NA | NA | NA |
| S-1 | 1/23/1993 | 2,300 | 30 d | 640 | <5 | 110 | 13 | NA | NA | NA | NA | NA | NA | NA | 326.73 | 7.96 | 318.77 | NA |
| S-1 | 4/28/1993 | 4,600 | 390 | 780 | <0.5 | 250 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.73 | 9.07 | 317.66 | NA |
| S-1 | 9/22/1993 | 3,000 | 610 a | 660 | 28 | 160 | 17 | NA | NA | NA | NA | NA | NA | NA | 326.73 | 8.68 | 318.05 | NA |
| S-1 | 12/8/1993 | 520 | 280 | 210 | <2.5 | 49 | <2.5 | NA | NA | NA | NA | NA | NA | NA | 326.73 | 8.23 | 318.50 | NA |
| S-1 | 3/4/1994 | 640 | NA | 190 | 1.4 | 18 | 1.3 | NA | NA | NA | NA | NA | NA | NA | 326.73 | 8.81 | 317.92 | NA |
| S-1 (D) | 3/4/1994 | 640 | NA | 180 | 1.7 | 17 | 1.3 | NA | NA | NA | NA | NA | NA | NA | 326.73 | 8.81 | 317.92 | NA |
| S-1 | 6/16/1994 | 2,500 | NA | 390 | 9.5 | 31 | 7.5 | NA | NA | NA | NA | NA | NA | NA | 326.73 | 8.80 | 317.93 | NA |
| S-1 (D) | 6/16/1994 | 2,000 | NA | 410 | 7.8 | 120 | 20 | NA | NA | NA | NA | NA | NA | NA | 326.73 | 8.80 | 317.93 | NA |
| S-1 | 9/13/1994 | 1,400 | NA | 310 | 7.7 | 29 | 8.5 | NA | NA | NA | NA | NA | NA | NA | 326.73 | 8.62 | 318.11 | NA |
| S-1 (D) | 9/13/1994 | 1,400 | NA | 240 | 7.9 | 44 | 6.3 | NA | NA | NA | NA | NA | NA | NA | 326.73 | 8.62 | 318.11 | NA |
| S-1 | 5/5/1995 | 800 | NA | 120 | 3.6 | 26 | 2.7 | NA | NA | NA | NA | NA | NA | NA | 326.73 | 11.54 | 315.19 | NA |
| S-1 (D) | 5/5/1995 | 710 | NA | 110 | 3.4 | 19 | 2.7 | NA | NA | NA | NA | NA | NA | NA | 326.73 | 11.54 | 315.19 | NA |
| S-1 | 5/21/1996 | 1,500 | NA | 170 | 8.5 | 120 | 6.7 | NA | NA | NA | NA | NA | NA | NA | 326.73 | 8.88 | 317.85 | NA |
| S-1 | 5/12/1997 | 4,700 | NA | 200 | 15 | 210 | 20 | 2,300 | NA | NA | NA | NA | NA | NA | 326.73 | 11.19 | 315.54 | 2.4 |
| S-1 (D) | 5/12/1997 | 4,800 | NA | 210 | 16 | 190 | 16 | 3,200 | 2,900 | NA | NA | NA | NA | NA | 326.73 | 11.19 | 315.54 | 2.4 |
| S-1 | 5/8/1998 | 500 | NA | 18 | 2.1 | 2.3 | 2 | 1,000 | NA | NA | NA | NA | NA | NA | 326.73 | 8.38 | 318.35 | 2.1 |
| S-1 | 6/27/1999 | 2,970 | NA | 117 | 32.0 | 69.1 | 17.5 | 374 | NA | NA | NA | NA | NA | NA | 326.73 | 8.79 | 317.94 | 2.4 |
| S-1 | 4/28/2000 | 1,920 | NA | 50.5 | 15.0 | 67.2 | 46.7 | 276 | NA | NA | NA | NA | NA | NA | 326.73 | 8.50 | 318.23 | 2.8 |
| S-1 | 5/30/2001 | 3,900 | NA | 27 | 12 | 140 | 28 | NA | 140 | NA | NA | NA | NA | NA | 326.73 | 8.18 | 318.55 | 2.6 |
| S-1 | 6/17/2002 | 2,700 | NA | 25 | 11 | 51 | 14 | NA | 140 | NA | NA | NA | NA | NA | 326.73 | 8.39 | 318.34 | 3.2 |
| S-1 | 5/30/2003 | 3,900 | NA | 12 | 8.2 | 47 | 12 | NA | 270 | NA | NA | NA | NA | NA | 326.74 | 7.41 | 319.33 | 1.2 |
| S-1 | 5/3/2004 | 3,700 | NA | 32 | 21 | 170 | 34 | NA | 410 | NA | NA | NA | NA | NA | 326.74 | 11.18 | 315.56 | 2.4 |

# TABLE 1
# WELL CONCENTRATIONS
## Shell-branded Service Station
## 5251 Hopyard Road
## Pleasanton, CA

| Well ID | Date | TPPH (ug/L) | TEPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | DIPE (ug/L) | ETBE (ug/L) | TAME (ug/L) | TBA (ug/L) | Ethanol (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-1 | 1/14/2005 | 4,200 | NA | 22 | 34 | 380 | 33 | NA | 100 | NA | NA | NA | NA | NA | 326.74 | 7.10 | 319.64 | 0.58 |
| S-1 | 5/5/2005 | 5,000 | NA | 33 | 110 | 970 | 210 | NA | 190 | <0.50 | <0.50 | 0.95 | 630 | NA | 326.74 | 11.32 | 315.42 | NA |
| S-1 | 08/05/2005 l | 4,600 | NA | 32 | 52 | 420 | 69 | NA | 110 | <40 | <40 | <40 | 410 | NA | 326.74 | 9.04 | 317.70 | NA |
| S-1 | 9/16/2005 | 3,300 | NA | 14 | 28 | 280 | 43 | NA | 60 | 51 | <10 | <10 | 260 | NA | 326.74 | 11.37 | 315.37 | NA |
| S-1 | 11/8/2005 | 4,700 | NA | 19.2 | 47 | 416 | 84.0 | NA | 50.2 | <0.500 | <0.500 | <0.500 | <10.0 | NA | 326.74 | 9.06 | 317.68 | NA |
| S-1 | 1/31/2006 | 6,380 | NA | 21.0 | 33.1 | 280 | 31.0 | NA | 59.9 | <0.500 | <0.500 | <0.500 | 306 | NA | 326.74 | 8.12 | 318.62 | NA |
| S-1 | 5/16/2006 | 9,080 | NA | 25.8 | 46.6 | 517 | 86.6 m | NA | 69.5 | <0.500 | <0.500 | <0.500 | 268 | NA | 326.74 | 7.95 | 318.79 | NA |
| S-1 | 8/23/2006 | 4,980 | NA | 19.0 | 22.7 | 74.7 | 38.7 | NA | 42.9 | <0.500 | <0.500 | <0.500 | 252 | NA | 326.74 | 7.95 | 318.79 | NA |
| S-1 | 11/13/2006 | 7,900 | NA | 38 | 41 | 480 | 52 | NA | 44 | <5.0 | <5.0 | <5.0 | 480 | NA | 326.74 | 7.99 | 318.75 | NA |
| S-1 | 2/1/2007 | 1,500 | NA | 18 | 15 | 110 | 17 | NA | 27 | <10 | <10 | <10 | 640 | NA | 326.74 | 8.19 | 318.55 | NA |
| S-1 | 5/23/2007 | 5,300 n | NA | 35 | 42 | 260 | 67.9 | NA | <5.0 | <10 | <10 | <10 | 720 | NA | 326.74 | 10.50 | 316.24 | NA |
| S-1 | 8/7/2007 | 6,900 n | NA | 26 | 31 | 240 | 40.9 o | NA | 30 | <10 | <10 | <10 | 270 | NA | 326.74 | 8.13 | 318.61 | NA |
| S-1 | 11/29/2007 | 840 n | NA | 16 | 18 | 120 | 14.5 | NA | 26 | <2.0 | <2.0 | <2.0 | 190 | NA | 326.74 | 9.40 | 317.34 | NA |
| S-1 | 2/8/2008 | 4,500 n | NA | 25 | 39 | 410 | 37 | NA | 28 | <10 | <10 | <10 | 330 | NA | 326.74 | 7.91 | 318.83 | NA |
| S-1 | 2/20/2008 | 5,700 n | NA | 29 | 56 | 650 | 89 | NA | 35 | <10 | <10 | <10 | 200 | <500 | 326.74 | 8.70 | 318.04 | NA |
| S-1 | 3/7/2008 | 6,800 n | NA | 25 | 37 | 310 | 59.2 | NA | <5.0 | <10 | <10 | <10 | 240 | <500 | 326.74 | 10.54 | 316.20 | NA |
| S-1 | 3/21/2008 | 5,300 | NA | 22 | 23 | 210 | 38.7 | NA | <2.0 | <4.0 | <4.0 | <4.0 | 220 | <200 | 326.74 | 9.79 | 316.95 | NA |
| S-1 | 4/8/2008 | 4,200 | NA | 15 | 18 | 230 | 26.4 | NA | <2.0 | <4.0 | <4.0 | <4.0 | 240 | <200 | 326.74 | 8.27 | 318.47 | NA |
| S-1 | 4/21/2008 | 6,600 | NA | 21 | 27 | 440 | 53 | NA | <2.0 | <4.0 | <4.0 | <4.0 | 170 | <200 | 326.74 | 8.17 | 318.57 | NA |
| S-1 | 5/6/2008 | 5,700 | NA | 21 | 29 | 440 | 56 | NA | <5.0 | <10 | <10 | <10 | 270 | <500 | 326.74 | 8.00 | 318.74 | NA |
| S-1 | 5/21/2008 | 7,800 | NA | 29 | 51 | 620 | 108 | NA | 40 | <10 | <10 | <10 | 190 | <500 | 326.74 | 8.27 | 318.47 | NA |
| S-1 | 8/6/2008 | 7,600 | NA | 17 | 27 | 140 | 30.0 | NA | 24 | <10 | <10 | <10 | 180 | NA | 326.74 | 8.01 | 318.73 | NA |
| S-1 | 11/18/2008 | 6,500 | NA | 27 | 35 | 310 | 45.0 | NA | 22 | <20 | <20 | <20 | 180 | NA | 326.74 | 7.59 | 319.15 | NA |
| S-1 | 1/20/2009 | 5,100 | NA | 19 | 21 | 140 | 22 | NA | 21 | <10 | <10 | <10 | 230 | NA | 326.74 | 8.28 | 318.46 | NA |
| S-1 | 5/6/2009 | 6,100 | NA | 26 | 37 | 520 | 51 | NA | 27 | <10 | <10 | <10 | 180 | NA | 326.74 | 8.04 | 318.70 | NA |
| S-1 | 7/6/2009 | 5,800 | NA | 25 | 34 | 370 | 44 | NA | 22 | <10 | <10 | <10 | 180 | NA | 326.74 | 8.42 | 318.32 | NA |
| **S-1** | **2/9/2010** | **8,800** | **NA** | **18** | **33** | **340** | **37** | **NA** | **13** | **NA** | **NA** | **NA** | **66** | **NA** | **326.74** | **8.18** | **318.56** | **NA** |
| S-2 | 1/25/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.59 | NA | NA | NA |
| S-2 | 4/16/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.59 | NA | NA | NA |

# TABLE 1
# WELL CONCENTRATIONS
# Shell-branded Service Station
# 5251 Hopyard Road
# Pleasanton, CA

| Well ID | Date | TPPH (ug/L) | TEPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | DIPE (ug/L) | ETBE (ug/L) | TAME (ug/L) | TBA (ug/L) | Ethanol (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-2 | 7/24/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.59 | NA | NA | NA |
| S-2 | 10/18/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.59 | 8.83 | 317.76 | NA |
| S-2 | 1/23/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.59 | NA | NA | NA |
| S-2 | 4/27/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.59 | NA | NA | NA |
| S-2 | 7/17/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.59 | NA | NA | NA |
| S-2 | 10/16/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.59 | NA | NA | NA |
| S-2 | 1/23/1993 | <50 | 140 b | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.59 | 8.10 | 318.49 | NA |
| S-2 | 4/28/1993 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.59 | 9.06 | 317.53 | NA |
| S-2 | 9/22/1993 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 326.59 | 8.91 | 317.68 | NA |
| S-2 | 12/8/1993 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 326.59 | 9.07 | 317.52 | NA |
| S-2 | 3/4/1994 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 326.59 | 8.90 | 317.69 | NA |
| S-2 | 6/16/1994 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 326.59 | 8.98 | 317.61 | NA |
| S-2 | 9/13/1994 | <50 | NA | <0.5 | 2.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.59 | 8.78 | 317.81 | NA |
| S-2 | 5/5/1995 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.59 | 8.60 | 317.99 | NA |
| S-2 | 5/21/1996 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.59 | 8.75 | 317.84 | NA |
| S-2 | 5/12/1997 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 | NA | NA | NA | NA | NA | NA | 326.59 | 8.72 | 317.87 | 3.4 |
| S-2 | 5/8/1998 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | NA | NA | NA | NA | NA | 326.59 | 8.63 | 317.96 | 3.1 |
| S-2 | 6/27/1999 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.00 | NA | NA | NA | NA | NA | NA | 326.59 | 8.79 | 317.80 | 2.6 |
| S-2 | 4/28/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | NA | NA | NA | NA | NA | 326.59 | 8.33 | 318.26 | 2.0 |
| S-2 | 5/30/2001 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | <0.50 | NA | NA | NA | NA | NA | 326.59 | 8.56 | 318.03 | 1.8 |
| S-2 | 6/17/2002 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | <5.0 | NA | NA | NA | NA | NA | 326.59 | 8.87 | 317.72 | i |
| S-2 | 5/30/2003 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | 18 | NA | NA | NA | NA | NA | 326.47 | 7.89 | 318.58 | 1.7 |
| S-2 | 5/3/2004 | <250 | NA | <2.5 | <2.5 | <2.5 | <5.0 | NA | 510 | NA | NA | NA | NA | NA | 326.47 | 5.44 | 321.03 | 0.1 |
| S-2 | 1/14/2005 | <250 | NA | <2.5 | <2.5 | <2.5 | <5.0 | NA | 270 | NA | NA | NA | NA | NA | 326.47 | 7.88 | 318.59 | NA |
| S-2 | 5/5/2005 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | 280 | <0.50 | <0.50 | 0.55 | 8.9 j | NA | 326.47 | 8.14 | 318.33 | NA |
| S-2 | 08/05/2005 l | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | 320 | <2.0 | <2.0 | <2.0 | 510 | NA | 326.47 | 8.24 | 318.23 | NA |
| S-2 | 9/16/2005 | <250 | NA | <2.5 | <2.5 | <2.5 | <5.0 | NA | 320 | <10 | <10 | <10 | 1,800 | NA | 326.47 | 8.06 | 318.41 | NA |
| S-2 | 11/8/2005 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | NA | 375 | <0.500 | <0.500 | 0.610 | 1,130 | NA | 326.47 | 8.20 | 318.27 | NA |
| S-2 | 1/31/2006 | 281 | NA | <0.500 | <0.500 | <0.500 | <0.500 | NA | 354 | <0.500 | <0.500 | <0.500 | 3,090 | NA | 326.47 | 8.18 | 318.29 | NA |
| S-2 | 5/16/2006 | 785 | NA | <0.500 | <0.500 | <0.500 | <0.500 | NA | 282 | <0.500 | <0.500 | <0.500 | 3,250 | NA | 326.47 | 8.34 | 318.13 | NA |

# TABLE 1
# WELL CONCENTRATIONS
# Shell-branded Service Station
# 5251 Hopyard Road
# Pleasanton, CA

| Well ID | Date | TPPH (ug/L) | TEPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | DIPE (ug/L) | ETBE (ug/L) | TAME (ug/L) | TBA (ug/L) | Ethanol (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-2 | 8/23/2006 | 344 | NA | <0.500 | <0.500 | <0.500 | <0.500 | NA | 194 | <0.500 | <0.500 | 0.560 | 10,600 | NA | 326.47 | 8.32 | 318.15 | NA |
| S-2 | 11/13/2006 | 320 | NA | <5.0 f | <5.0 f | <5.0 f | <5.0 f | NA | 140 f | <5.0 f | <5.0 f | <5.0 f | 6,000 f | NA | 326.50 | 8.37 | 318.13 | NA |
| S-2 | 2/1/2007 | 160 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | 130 | <2.0 | <2.0 | <2.0 | 3,900 | NA | 326.50 | 8.13 | 318.37 | NA |
| S-2 | 5/23/2007 | 120 n | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 110 | <2.0 | <2.0 | <2.0 | 1,500 | NA | 326.50 | 8.55 | 317.95 | NA |
| S-2 | 8/7/2007 | 93 n,p | NA | <2.5 | <5.0 | <5.0 | <5.0 | NA | 120 | <10 | <10 | <10 | 1,700 | NA | 326.50 | 8.26 | 318.24 | NA |
| S-2 | 11/29/2007 | 110 n,p | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 98 | <2.0 | <2.0 | <2.0 | 880 | NA | 326.50 | 8.29 | 318.21 | NA |
| S-2 | 2/8/2008 | 110 n,p | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 110 | <2.0 | <2.0 | <2.0 | 830 | NA | 326.50 | 8.07 | 318.43 | NA |
| S-2 | 2/20/2008 | 73 n,p | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 100 | <2.0 | <2.0 | <2.0 | 650 | <100 | 326.50 | 8.30 | 318.20 | NA |
| S-2 | 3/7/2008 | <50 n | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 57 | <2.0 | <2.0 | <2.0 | 240 | <100 | 326.50 | 9.25 | 317.25 | NA |
| S-2 | 3/21/2008 | 73 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 91 | <2.0 | <2.0 | <2.0 | 480 | <100 | 326.50 | 9.01 | 317.49 | NA |
| S-2 | 4/8/2008 | 88 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 72 | <2.0 | <2.0 | <2.0 | 310 | <100 | 326.50 | 8.46 | 318.04 | NA |
| S-2 | 4/21/2008 | 60 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 8.6 | <2.0 | <2.0 | <2.0 | 310 | <100 | 326.50 | 9.60 | 316.90 | NA |
| S-2 | 5/6/2008 | 62 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 53 | <2.0 | <2.0 | <2.0 | 300 | <100 | 326.50 | 10.55 | 315.95 | NA |
| S-2 | 5/21/2008 | 130 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 61 | <2.0 | <2.0 | <2.0 | 320 | <100 | 326.50 | 9.43 | 317.07 | NA |
| S-2 | 8/6/2008 | 76 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 46 | <2.0 | <2.0 | <2.0 | 77 | NA | 326.50 | 8.41 | 318.09 | NA |
| S-2 | 11/18/2008 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 42 | <2.0 | <2.0 | <2.0 | 18 | NA | 326.50 | 8.38 | 318.12 | NA |
| S-2 | 1/20/2009 | 57 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 46 | <2.0 | <2.0 | <2.0 | 13 | NA | 326.50 | 8.64 | 317.86 | NA |
| S-2 | 5/6/2009 | 64 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 58 | <2.0 | <2.0 | <2.0 | <10 | NA | 326.50 | 8.31 | 318.19 | NA |
| S-2 | 7/6/2009 | 110 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 59 | <2.0 | <2.0 | <2.0 | <10 | NA | 326.50 | 8.53 | 317.97 | NA |
| **S-2** | **2/9/2010** | **62** | **NA** | **<0.50** | **<1.0** | **<1.0** | **<1.0** | **NA** | **42** | **NA** | **NA** | **NA** | **<10** | **NA** | **326.50** | **8.20** | **318.30** | **NA** |
| S-3 | 1/25/1991 | 870 | 330 | 230 | <2.5 | 130 | <2.5 | NA | NA | NA | NA | NA | NA | NA | 327.38 | NA | NA | NA |
| S-3 | 4/16/1991 | 190 | 140 a | 12 | 0.8 | 6.2 | 1.5 | NA | NA | NA | NA | NA | NA | NA | 327.38 | NA | NA | NA |
| S-3 | 7/24/1991 | 1,700 | 1,200 a | 450 | 4.4 | 150 | 2.9 | NA | NA | NA | NA | NA | NA | NA | 327.38 | NA | NA | NA |
| S-3 | 10/18/1991 | 1,900 | 500 | 370 | 3.1 | 120 | 220 | NA | NA | NA | NA | NA | NA | NA | 327.38 | 9.64 | 317.74 | NA |
| S-3 | 1/23/1992 | 2,000 | 650 a | 580 | 3 | 200 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 327.38 | NA | NA | NA |
| S-3 | 4/27/1992 | 1,100 | 230 a | 150 | <3 | 76 | 14 | NA | NA | NA | NA | NA | NA | NA | 327.38 | NA | NA | NA |
| S-3 | 7/17/1992 | 810 | 58 | 200 | <2.5 | 57 | 3.8 | NA | NA | NA | NA | NA | NA | NA | 327.38 | NA | NA | NA |
| S-3 | 10/16/1992 | 440 | 190 c | 79 | 1.8 | 18 | 4.6 | NA | NA | NA | NA | NA | NA | NA | 327.38 | NA | NA | NA |
| S-3 | 1/23/1993 | 670 | 170 d | 79 | 1.5 | 46 | 15 | NA | NA | NA | NA | NA | NA | NA | 327.38 | 8.81 | 318.57 | NA |

# TABLE 1
# WELL CONCENTRATIONS
# Shell-branded Service Station
# 5251 Hopyard Road
# Pleasanton, CA

| Well ID | Date | TPPH (ug/L) | TEPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | DIPE (ug/L) | ETBE (ug/L) | TAME (ug/L) | TBA (ug/L) | Ethanol (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-3 | 4/28/1993 | 2,000 | <50 | 300 | 3.4 | 210 | 38 | NA | NA | NA | NA | NA | NA | NA | 327.38 | 9.87 | 317.51 | NA |
| S-3 | 9/22/1993 | 4,800 | 670 a | 2,000 | 34 | 150 | 51 | NA | NA | NA | NA | NA | NA | NA | 327.38 | 9.65 | 317.73 | NA |
| S-3 | 12/8/1993 | 1,200 | 11 | 440 | <5.0 | 120 | 29 | NA | NA | NA | NA | NA | NA | NA | 327.38 | 9.26 | 318.12 | NA |
| S-3 | 3/4/1994 | 630 | NA | 130 | <0.5 | 17 | 0.8 | NA | NA | NA | NA | NA | NA | NA | 327.38 | 9.64 | 317.74 | NA |
| S-3 | 6/16/1994 | 1,800 | NA | 430 | 19 | 35 | 21 | NA | NA | NA | NA | NA | NA | NA | 327.38 | 9.78 | 317.60 | NA |
| S-3 | 5/5/1995 | 160 | NA | 50 | 0.9 | 7.2 | 4.1 | NA | NA | NA | NA | NA | NA | NA | 327.38 | 9.38 | 318.00 | NA |
| S-3 | 5/21/1996 | 270 | NA | 45 | <0.5 | 1.4 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 327.38 | 9.41 | 317.97 | NA |
| S-3 (D) | 5/21/1996 | 210 | NA | <0.5 | <0.5 | 0.95 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 327.38 | 9.41 | 317.97 | NA |
| S-3 | 5/12/1997 | 420 | NA | <1.0 | <1.0 | <1.0 | <1.0 | 57 | NA | NA | NA | NA | NA | NA | 327.38 | 9.30 | 318.08 | 2.5 |
| S-3 | 5/8/1998 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | NA | NA | NA | NA | NA | 327.38 | 9.12 | 318.26 | 2.2 |
| S-3 | 6/27/1999 | 106 | NA | 8.51 | <0.500 | <0.500 | <0.500 | 31.0 | NA | NA | NA | NA | NA | NA | 327.38 | 9.39 | 317.99 | 2.1 |
| S-3 | 4/28/2000 | 139 | NA | 7.58 | <0.500 | <0.500 | <0.500 | 42.6 | NA | NA | NA | NA | NA | NA | 327.38 | 9.04 | 318.34 | 1.8 |
| S-3 | 5/30/2001 | 2,200 | NA | 510 | 6.9 | 100 | 21 | NA | 33 | NA | NA | NA | NA | NA | 327.38 | 9.19 | 318.19 | 2.0 |
| S-3 | 6/17/2002 | 600 | NA | 150 | 2.1 | 30 | 11 | NA | 36 | NA | NA | NA | NA | NA | 327.38 | 9.35 | 318.03 | 0.1 |
| S-3 | 5/30/2003 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | 9.0 | NA | NA | NA | NA | NA | 327.04 | 8.39 | 318.65 | 1.2 |
| S-3 | 5/3/2004 | 61 k | NA | 0.90 | <0.50 | <0.50 | <1.0 | NA | 9.8 | NA | NA | NA | NA | NA | 327.04 | 8.73 | 318.31 | 1.2 |
| S-3 | 1/14/2005 | 94 | NA | 4.6 | <0.50 | 3.1 | 1.0 | NA | 13 | NA | NA | NA | NA | NA | 327.04 | 8.00 | 319.04 | NA |
| S-3 | 5/5/2005 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | 5.7 | <0.50 | <0.50 | <0.50 | <5.0 | NA | 327.04 | 8.31 | 318.73 | NA |
| S-3 | 08/05/2005 l | <50 | NA | 0.51 | <0.50 | <0.50 | <1.0 | NA | 6.0 | <2.0 | <2.0 | <2.0 | 42 | NA | 327.04 | 8.32 | 318.72 | NA |
| S-3 | 9/16/2005 | <50 | NA | 0.62 | <0.50 | <0.50 | <1.0 | NA | 7.9 | <2.0 | <2.0 | <2.0 | <5.0 | NA | 327.04 | 8.29 | 318.75 | NA |
| S-3 | 11/8/2005 | 166 | NA | 63.0 | 1.32 | 7.20 | 2.99 | NA | 8.67 | <0.500 | <0.500 | <0.500 | <10.0 | NA | 327.04 | 8.17 | 318.87 | NA |
| S-3 | 1/31/2006 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | NA | 7.05 | <0.500 | <0.500 | <0.500 | <10.0 | NA | 327.04 | 8.05 | 318.99 | NA |
| S-3 | 5/16/2006 | <50.0 | NA | 3.23 | <0.500 | 1.42 | 1.63 m | NA | 3.92 | <0.500 | <0.500 | <0.500 | <10.0 | NA | 327.04 | 8.62 | 318.42 | NA |
| S-3 | 8/23/2006 | <50.0 | NA | 18.9 | <0.500 | 1.72 | 0.800 | NA | 7.65 | <0.500 | <0.500 | <0.500 | <10.0 | NA | 327.04 | 8.54 | 318.50 | NA |
| S-3 | 11/13/2006 | 530 | NA | 130 f | 3.4 f | 10 f | 4.6 f | NA | 17 f | <2.0 f | <2.0 f | <2.0 f | <80 f | NA | 327.01 | 8.65 | 318.36 | NA |
| S-3 | 2/1/2007 | 430 | NA | 230 | 4.4 | 4.0 | <5.0 | NA | 17 | <10 | <10 | <10 | <25 | NA | 327.01 | 8.41 | 318.60 | NA |
| S-3 | 5/23/2007 | 1,400 n | NA | 370 | 11 | 17 | 11.58 o | NA | 21 | <2.0 | <2.0 | <2.0 | 12 | NA | 327.01 | 8.37 | 318.64 | NA |
| S-3 | 8/7/2007 | 1,000 n | NA | 150 | 4.6 o | 4.1 o | 4.0 o | NA | 21 | <10 | <10 | <10 | <50 | NA | 327.01 | 8.59 | 318.42 | NA |
| S-3 | 11/29/2007 | 710 n | NA | 110 | 3.1 | 3.8 | 5.3 o | NA | 17 | <2.0 | <2.0 | <2.0 | <10 | NA | 327.01 | 8.78 | 318.23 | NA |
| S-3 | 2/8/2008 | 300 n | NA | 2.7 | <1.0 | <1.0 | <1.0 | NA | 19 | <2.0 | <2.0 | <2.0 | <10 | NA | 327.01 | 8.05 | 318.96 | NA |

# TABLE 1
# WELL CONCENTRATIONS
# Shell-branded Service Station
# 5251 Hopyard Road
# Pleasanton, CA

| Well ID | Date | TPPH (ug/L) | TEPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | DIPE (ug/L) | ETBE (ug/L) | TAME (ug/L) | TBA (ug/L) | Ethanol (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-3 | 2/20/2008 | 620 n | NA | 150 | 4.1 | 11 | 11 | NA | 19 | <2.0 | <2.0 | <2.0 | <10 | <100 | 327.01 | 8.57 | 318.44 | NA |
| S-3 | 3/7/2008 | 170 n | NA | 15 | <1.0 | 2.5 | 4.0 | NA | 12 | <2.0 | <2.0 | <2.0 | <10 | <100 | 327.01 | 8.87 | 318.14 | NA |
| S-3 | 3/21/2008 | 68 | NA | 4.8 | <1.0 | 1.3 | 1.6 | NA | 8.6 | <2.0 | <2.0 | <2.0 | <10 | <100 | 327.01 | 9.00 | 318.01 | NA |
| S-3 | 4/8/2008 | 170 | NA | 7.8 | <1.0 | 2.6 | 4.0 | NA | 8.1 | <2.0 | <2.0 | <2.0 | <10 | <100 | 327.01 | 8.55 | 318.46 | NA |
| S-3 | 4/21/2008 | 350 | NA | 2.8 | <1.0 | 1.2 | 1.9 | NA | 12 | <2.0 | <2.0 | <2.0 | <10 | <100 | 327.01 | 8.65 | 318.36 | NA |
| S-3 | 5/6/2008 | 210 | NA | 2.3 | <1.0 | <1.0 | <1.0 | NA | 9.1 | <2.0 | <2.0 | <2.0 | <10 | <100 | 327.01 | 8.60 | 318.41 | NA |
| S-3 | 5/21/2008 | 430 | NA | 21 | <1.0 | 3.5 | 4.2 | NA | 17 | <2.0 | <2.0 | <2.0 | <10 | <100 | 327.01 | 8.81 | 318.20 | NA |
| S-3 | 8/6/2008 | 210 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 13 | <2.0 | <2.0 | <2.0 | 11 | NA | 327.01 | 8.71 | 318.30 | NA |
| S-3 | 11/18/2008 | 930 | NA | 130 | 3.5 | 15 | 19 | NA | 18 | <2.0 | <2.0 | <2.0 | 10 | NA | 327.01 | 8.79 | 318.22 | NA |
| S-3 | 1/20/2009 | 950 | NA | 100 | 1.2 | 1.8 | <1.0 | NA | 18 | <2.0 | <2.0 | <2.0 | 16 | NA | 327.01 | 9.10 | 317.91 | NA |
| S-3 | 5/6/2009 | 2,000 | NA | 490 | 5.9 | 14 | 4.8 | NA | 21 | <2.0 | <2.0 | <2.0 | 14 | NA | 327.01 | 8.51 | 318.50 | NA |
| S-3 | 7/6/2009 | 2,300 | NA | 500 | 10 | 30 | 13 | NA | 21 | <10 | <10 | <10 | <50 | NA | 327.01 | 8.80 | 318.21 | NA |
| **S-3** | **2/9/2010** | **1,400** | **NA** | **180** | **4.7** | **11** | **13** | **NA** | **12** | **NA** | **NA** | **NA** | **32** | **NA** | **327.01** | **8.36** | **318.65** | **NA** |
| S-4 | 1/25/1991 | <50 | <50 | <0.5 | 1.5 | <0.5 | 2.8 | NA | NA | NA | NA | NA | NA | NA | 327.38 | NA | NA | NA |
| S-4 | 4/16/1991 | <50 | 0.7 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 327.38 | NA | NA | NA |
| S-4 | 7/24/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 327.38 | NA | NA | NA |
| S-4 | 10/18/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 327.38 | 8.82 | 318.56 | NA |
| S-4 | 1/23/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 327.38 | NA | NA | NA |
| S-4 | 4/27/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 327.38 | NA | NA | NA |
| S-4 | 7/17/1992 | <500 | 74 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 327.38 | NA | NA | NA |
| S-4 | 10/16/1992 | <500 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 327.38 | NA | NA | NA |
| S-4 | 1/23/1993 | <500 | 94 b | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 327.38 | 8.32 | 319.06 | NA |
| S-4 | 4/28/1993 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 327.38 | 9.76 | 317.62 | NA |
| S-4 | 9/22/1993 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 327.38 | 9.30 | 318.08 | NA |
| S-4 | 12/8/1993 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 327.38 | 9.74 | 317.64 | NA |
| S-4 | 3/4/1994 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 327.38 | 9.60 | 317.78 | NA |
| S-4 | 6/16/1994 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 327.38 | 9.42 | 317.96 | NA |
| S-4 | 5/5/1995 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 327.38 | 9.02 | 318.36 | NA |
| S-4 | 5/21/1996 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 327.38 | 9.29 | 318.09 | NA |

# TABLE 1
# WELL CONCENTRATIONS
# Shell-branded Service Station
# 5251 Hopyard Road
# Pleasanton, CA

| Well ID | Date | TPPH (ug/L) | TEPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | DIPE (ug/L) | ETBE (ug/L) | TAME (ug/L) | TBA (ug/L) | Ethanol (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-4 | 5/12/1997 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | 140 | NA | NA | NA | NA | NA | NA | 327.38 | 7.95 | 319.43 | 2.5 |
| S-4 | 5/8/1998 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | 250 | NA | NA | NA | NA | NA | NA | 327.38 | 8.96 | 318.42 | 2.0 |
| S-4 | 6/27/1999 | 303 | NA | 35.8 | 24.8 | 12.4 | 69.8 | 106 | NA | NA | NA | NA | NA | NA | 327.38 | 8.90 | 318.48 | 2.6 |
| S-4 | 4/28/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | 40.2 | NA | NA | NA | NA | NA | NA | 327.38 | 8.37 | 319.01 | 1.9 |
| S-4 | 5/30/2001 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | 6.8 | NA | NA | NA | NA | NA | 327.38 | 8.83 | 318.55 | 1.8 |
| S-4 | 6/17/2002 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | 31 | NA | NA | NA | NA | NA | 327.38 | 9.37 | 318.01 | 4.8 |
| S-4 | 5/30/2003 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | 130 | NA | NA | NA | NA | NA | 327.24 | 8.46 | 318.78 | 1.4 |
| S-4 | 5/3/2004 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | 170 | NA | NA | NA | NA | NA | 327.24 | 8.70 | 318.54 | 1.1 |
| S-4 | 1/14/2005 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | 25 | NA | NA | NA | NA | NA | 327.24 | 8.17 | 319.07 | NA |
| S-4 | 5/5/2005 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | 15 | <0.50 | <0.50 | <0.50 | <5.0 | NA | 327.24 | 8.25 | 318.99 | NA |
| S-4 | 8/5/2005 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | 6.1 | <2.0 | <2.0 | <2.0 | <5.0 | NA | 327.24 | 8.14 | 319.10 | NA |
| S-4 | 11/8/2005 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | NA | 1.01 | <0.500 | <0.500 | <0.500 | <10.0 | NA | 327.24 | 8.33 | 318.91 | NA |
| S-4 | 1/31/2006 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <10.0 | NA | 327.24 | 8.29 | 318.95 | NA |
| S-4 | 5/16/2006 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <10.0 | NA | 327.24 | 8.46 | 318.78 | NA |
| S-4 | 8/23/2006 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <10.0 | NA | 327.24 | 8.34 | 318.90 | NA |
| S-4 | 11/13/2006 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <20 | NA | 327.24 | 8.23 | 319.01 | NA |
| S-4 | 2/1/2007 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | <0.50 | <2.0 | <2.0 | <2.0 | <5.0 | NA | 327.24 | 8.56 | 318.68 | NA |
| S-4 | 5/23/2007 | <50 n | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 0.60 o | <2.0 | <2.0 | <2.0 | <10 | NA | 327.24 | 7.92 | 319.32 | NA |
| S-4 | 8/7/2007 | <50 n | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 0.32 o | <2.0 | <2.0 | <2.0 | <10 | NA | 327.24 | 8.52 | 318.72 | NA |
| S-4 | 11/29/2007 | <50 n | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 327.24 | 8.58 | 318.66 | NA |
| S-4 | 2/8/2008 | <50 n | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 327.24 | 8.07 | 319.17 | NA |
| S-4 | 5/21/2008 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | <100 | 327.24 | 8.80 | 318.44 | NA |
| S-4 | 8/6/2008 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 327.24 | 8.73 | 318.51 | NA |
| S-4 | 11/18/2008 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 327.24 | 8.77 | 318.47 | NA |
| S-4 | 1/20/2009 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 327.24 | 9.32 | 317.92 | NA |
| S-4 | 5/6/2009 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 327.24 | 8.45 | 318.79 | NA |
| S-4 | 7/6/2009 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 327.24 | 8.79 | 318.45 | NA |
| **S-4** | **2/9/2010** | **<50** | **NA** | **<0.50** | **<1.0** | **<1.0** | **<1.0** | **NA** | **<1.0** | **NA** | **NA** | **NA** | **<10** | **NA** | **327.24** | **8.59** | **318.65** | **NA** |
| S-5 | 1/25/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | 0.7 | NA | NA | NA | NA | NA | NA | NA | 327.76 | NA | NA | NA |

# TABLE 1
# WELL CONCENTRATIONS
# Shell-branded Service Station
# 5251 Hopyard Road
# Pleasanton, CA

| Well ID | Date | TPPH (ug/L) | TEPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | DIPE (ug/L) | ETBE (ug/L) | TAME (ug/L) | TBA (ug/L) | Ethanol (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-5 | 4/16/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | 0.8 | NA | NA | NA | NA | NA | NA | NA | 327.76 | NA | NA | NA |
| S-5 | 7/24/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 327.76 | NA | NA | NA |
| S-5 | 10/18/1991 | 120 e | <50 | 4.3 | <0.5 | 1 | 0.7 | NA | NA | NA | NA | NA | NA | NA | 327.76 | 10.00 | 317.76 | NA |
| S-5 | 1/23/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 327.76 | NA | NA | NA |
| S-5 | 4/27/1992 | 50 | <50 | <0.5 | <0.5 | <0.5 | 0.6 | NA | NA | NA | NA | NA | NA | NA | 327.76 | NA | NA | NA |
| S-5 | 7/17/1992 | <50 | 70 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 327.76 | NA | NA | NA |
| S-5 | 10/16/1992 | 230 | 57 | 13 | <0.5 | 4.9 | 4.3 | NA | NA | NA | NA | NA | NA | NA | 327.76 | NA | NA | NA |
| S-5 | 1/23/1993 | <50 | 150 b | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 327.76 | 8.88 | 318.88 | NA |
| S-5 | 4/28/1993 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 327.76 | 10.20 | 317.56 | NA |
| S-5 | 9/22/1993 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 327.76 | 9.92 | 317.84 | NA |
| S-5 | 12/8/1993 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 327.76 | 10.19 | 317.57 | NA |
| S-5 | 3/4/1994 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 327.76 | 9.95 | 317.81 | NA |
| S-5 | 6/16/1994 | <50 | NA | 0.9 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 327.76 | 10.02 | 317.74 | NA |
| S-5 | 5/5/1995 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 327.76 | 9.58 | 318.18 | NA |
| S-5 | 5/21/1996 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 327.76 | 9.84 | 317.92 | NA |
| S-5 | 5/12/1997 | 360 | NA | 3.3 | <0.50 | 17 | 9.8 | 130 | NA | NA | NA | NA | NA | NA | 327.76 | 9.16 | 318.60 | 4.2 |
| S-5 | 5/8/1998 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | 92 | NA | NA | NA | NA | NA | NA | 327.76 | 9.25 | 318.51 | 3.8 |
| S-5 (D) | 5/8/1998 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | 100 | NA | NA | NA | NA | NA | NA | 327.76 | 9.25 | 318.51 | 3.8 |
| S-5 | 6/27/1999 | 223 | NA | 13.7 | 12.9 | 8.20 | 45.8 | 106 | NA | NA | NA | NA | NA | NA | 327.76 | 9.39 | 318.37 | 3.0 |
| S-5 | 4/28/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | 255 | NA | NA | NA | NA | NA | NA | 327.76 | 9.43 | 318.33 | 1.2 |
| S-5 | 5/30/2001 | <100 | NA | <1.0 | <1.0 | <1.0 | <1.0 | NA | 480 | NA | NA | NA | NA | NA | 327.76 | 9.47 | 318.29 | 1.1 |
| S-5 | 6/17/2002 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | 210 | NA | NA | NA | NA | NA | 327.76 | 9.74 | 318.02 | 0.2 |
| S-5 | 5/30/2003 | <250 | NA | <2.5 | <2.5 | <2.5 | <5.0 | NA | 450 | NA | NA | NA | NA | NA | 327.43 | 8.87 | 318.56 | 1.7 |
| S-5 | 5/3/2004 | <250 | NA | <2.5 | <2.5 | <2.5 | <5.0 | NA | 470 | NA | NA | NA | NA | NA | 327.43 | 9.10 | 318.33 | 0.7 |
| S-5 | 1/14/2005 | <100 | NA | <1.0 | <1.0 | <1.0 | <2.0 | NA | 230 | NA | NA | NA | NA | NA | 327.43 | 8.43 | 319.00 | NA |
| S-5 | 5/5/2005 | 76 | NA | 16 | <0.50 | <0.50 | <0.50 | NA | 120 | <0.50 | <0.50 | <0.50 | 630 | NA | 327.43 | 8.71 | 318.72 | NA |
| S-5 | 08/05/2005 l | 1,900 | NA | 57 | 7.5 | 22 | 17 | NA | 240 | <4 | <4 | <4 | 480 | NA | 327.43 | 8.90 | 318.53 | NA |
| S-5 | 9/16/2005 | 1,400 | NA | 87 | 2.0 | 7.8 | 5.8 | NA | 75 | <4.0 | <4.0 | <4.0 | 630 | NA | 327.43 | 8.84 | 318.59 | NA |
| S-5 | 11/8/2005 | 315 | NA | 35.8 | <0.500 | <0.500 | 1.07 | NA | 49.1 | <0.500 | <0.500 | <0.500 | <10.0 | NA | 327.43 | 8.86 | 318.57 | NA |
| S-5 | 1/31/2006 | 335 | NA | 7.74 | <0.500 | <0.500 | <0.500 | NA | 48.2 | <0.500 | <0.500 | <0.500 | 337 | NA | 327.43 | 8.66 | 318.77 | NA |

# TABLE 1
# WELL CONCENTRATIONS
# Shell-branded Service Station
# 5251 Hopyard Road
# Pleasanton, CA

| Well ID | Date | TPPH (ug/L) | TEPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | DIPE (ug/L) | ETBE (ug/L) | TAME (ug/L) | TBA (ug/L) | Ethanol (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-5 | 5/16/2006 | 349 | NA | 3.54 | <0.500 | <0.500 | <0.500 | NA | 24.7 | <0.500 | <0.500 | <0.500 | 182 | NA | 327.43 | 9.00 | 318.43 | NA |
| S-5 | 8/23/2006 | <50.0 | NA | 5.39 | <0.500 | <0.500 | <0.500 | NA | 17.0 | <0.500 | <0.500 | <0.500 | 91.0 | NA | 327.43 | 8.97 | 318.46 | NA |
| S-5 | 11/13/2006 | 420 | NA | 19 | 1.7 | <0.50 | 1.7 | NA | 19 | <0.50 | <0.50 | <0.50 | 80 | NA | 327.43 | 8.77 | 318.66 | NA |
| S-5 | 2/1/2007 | 280 | NA | 14 | 2.1 | <0.50 | 1.4 | NA | 13 | <2.0 | <2.0 | <2.0 | 42 | NA | 327.43 | 9.30 | 318.13 | NA |
| S-5 | 5/23/2007 | 590 n | NA | 19 | 2.0 | <1.0 | 0.92 o | NA | 11 | <2.0 | <2.0 | <2.0 | 24 | NA | 327.43 | 8.73 | 318.70 | NA |
| S-5 | 8/7/2007 | 450 n | NA | 10 | 1.0 | <1.0 | <1.0 | NA | 13 | <2.0 | <2.0 | <2.0 | 17 | NA | 327.43 | 9.00 | 318.43 | NA |
| S-5 | 11/29/2007 | 340 n | NA | 4.1 | 0.34 o | <1.0 | <1.0 | NA | 7.1 | <2.0 | <2.0 | <2.0 | <10 | NA | 327.43 | 9.06 | 318.37 | NA |
| S-5 | 2/8/2008 | 270 n | NA | 4.7 | <1.0 | <1.0 | <1.0 | NA | 6.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 327.43 | 8.75 | 318.68 | NA |
| S-5 | 2/20/2008 | 340 n | NA | 4.6 | <1.0 | <1.0 | <1.0 | NA | 5.5 | <2.0 | <2.0 | <2.0 | <10 | <100 | 327.43 | 9.03 | 318.40 | NA |
| S-5 | 3/7/2008 | 220 n | NA | 1.8 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | <100 | 327.43 | 9.20 | 318.23 | NA |
| S-5 | 3/21/2008 | 150 | NA | 0.71 | <1.0 | <1.0 | <1.0 | NA | 5.2 | <2.0 | <2.0 | <2.0 | <10 | <100 | 327.43 | 9.43 | 318.00 | NA |
| S-5 | 4/8/2008 | 120 | NA | 0.76 | <1.0 | <1.0 | <1.0 | NA | 5.2 | <2.0 | <2.0 | <2.0 | <10 | <100 | 327.43 | 9.11 | 318.32 | NA |
| S-5 | 4/21/2008 | 190 | NA | 0.63 | <1.0 | <1.0 | <1.0 | NA | 3.4 | <2.0 | <2.0 | <2.0 | <10 | <100 | 327.43 | 9.17 | 318.26 | NA |
| S-5 | 5/6/2008 | 150 | NA | 1.0 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | 190 | 327.43 | 8.80 | 318.63 | NA |
| S-5 | 5/21/2008 | 250 | NA | 1.6 | <1.0 | <1.0 | <1.0 | NA | 3.8 | <2.0 | <2.0 | <2.0 | <10 | <100 | 327.43 | 9.20 | 318.23 | NA |
| S-5 | 8/6/2008 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 6.2 | <2.0 | <2.0 | <2.0 | <10 | NA | 327.43 | 9.11 | 318.32 | NA |
| S-5 | 11/18/2008 | 93 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 3.5 | <2.0 | <2.0 | <2.0 | <10 | NA | 327.43 | 9.06 | 318.37 | NA |
| S-5 | 1/20/2009 | 59 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 2.7 | <2.0 | <2.0 | <2.0 | <10 | NA | 327.43 | 9.60 | 317.83 | NA |
| S-5 | 5/6/2009 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 2.5 | <2.0 | <2.0 | <2.0 | <10 | NA | 327.43 | 8.94 | 318.49 | NA |
| S-5 | 7/6/2009 | 62 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 2.5 | <2.0 | <2.0 | <2.0 | 11 | NA | 327.43 | 9.18 | 318.25 | NA |
| **S-5** | **2/9/2010** | **130** | **NA** | **2.3** | **<1.0** | **<1.0** | **<1.0** | **NA** | **2.4** | **NA** | **NA** | **NA** | **<10** | **NA** | **327.43** | **8.90** | **318.53** | **NA** |
| S-6 | 1/25/1991 | <50 | <50 | <0.5 | 1.7 | <0.5 | 2.8 | NA | NA | NA | NA | NA | NA | NA | 326.56 | NA | NA | NA |
| S-6 | 4/16/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | 0.6 | NA | NA | NA | NA | NA | NA | NA | 326.56 | NA | NA | NA |
| S-6 | 7/24/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | 0.5 | NA | NA | NA | NA | NA | NA | NA | 326.56 | NA | NA | NA |
| S-6 | 10/18/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | 0.5 | NA | NA | NA | NA | NA | NA | NA | 326.56 | 8.84 | 317.22 | NA |
| S-6 | 1/23/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | 0.5 | NA | NA | NA | NA | NA | NA | NA | 326.56 | NA | NA | NA |
| S-6 | 4/27/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.56 | NA | NA | NA |
| S-6 | 7/17/1992 | 400 | 130 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.56 | NA | NA | NA |
| S-6 | 10/16/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.56 | NA | NA | NA |

# TABLE 1
# WELL CONCENTRATIONS
# Shell-branded Service Station
# 5251 Hopyard Road
# Pleasanton, CA

| Well ID | Date | TPPH (ug/L) | TEPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | DIPE (ug/L) | ETBE (ug/L) | TAME (ug/L) | TBA (ug/L) | Ethanol (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-6 | 1/23/1993 | <50 | 230 b | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.56 | 7.82 | 318.74 | NA |
| S-6 | 4/28/1993 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.56 | 9.00 | 317.56 | NA |
| S-6 | 9/22/1993 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.56 | 8.61 | 317.96 | NA |
| S-6 | 12/8/1993 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.56 | 10.02 | 316.54 | NA |
| S-6 | 3/4/1994 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.56 | 8.88 | 317.68 | NA |
| S-6 | 6/16/1994 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.56 | 9.04 | 317.52 | NA |
| S-6 | 5/5/1995 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.56 | 8.54 | 318.02 | NA |
| S-6 | 5/21/1996 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.56 | 8.62 | 317.94 | NA |
| S-6 | 5/12/1997 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | NA | NA | NA | NA | NA | 326.56 | 8.60 | 317.96 | 2.6 |
| S-6 | 5/8/1998 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | NA | NA | NA | NA | NA | 326.56 | 7.90 | 318.66 | 2.2 |
| S-6 | 6/27/1999 | 430 | NA | 50.1 | 30.5 | 15.2 | 83.5 | 8.05 | NA | NA | NA | NA | NA | NA | 326.56 | 8.01 | 318.55 | 2.3 |
| S-6 | 4/28/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | NA | NA | NA | NA | NA | 326.56 | 8.84 | 317.72 | 2.0 |
| S-6 | 5/30/2001 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | <0.50 | NA | NA | NA | NA | NA | 326.56 | 8.54 | 318.02 | 1.9 |
| S-6 | 6/17/2002 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | <5.0 | NA | NA | NA | NA | NA | 326.56 | 8.48 | 318.08 | 1.3 |
| S-6 | 5/30/2003 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | 8.7 | NA | NA | NA | NA | NA | 326.35 | 7.36 | 318.99 | 1.0 |
| S-6 | 5/3/2004 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | <0.50 | NA | NA | NA | NA | NA | 326.35 | 8.08 | 318.27 | 0.9 |
| S-6 | 1/14/2005 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | <0.50 | NA | NA | NA | NA | NA | 326.35 | 7.38 | 318.97 | NA |
| S-6 | 5/5/2005 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <5.0 | NA | 326.35 | 7.55 | 318.80 | NA |
| S-6 | 8/5/2005 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | <0.50 | <2.0 | <2.0 | <2.0 | <5.0 | NA | 326.35 | 7.61 | 318.74 | NA |
| S-6 | 11/8/2005 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <10.0 | NA | 326.35 | 7.64 | 318.71 | NA |
| S-6 | 1/31/2006 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | NA | <0.500 | <0.500 | <0.500 | <0.500 | 30.5 | NA | 326.35 | 7.90 | 318.45 | NA |
| S-6 | 5/16/2006 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <10.0 | NA | 326.35 | 8.16 | 318.19 | NA |
| S-6 | 8/23/2006 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | NA | <0.500 | <0.500 | <0.500 | <0.500 | 10.9 | NA | 326.35 | 7.77 | 318.58 | NA |
| S-6 | 11/13/2006 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <20 | NA | 326.35 | 8.15 | 318.20 | NA |
| S-6 | 2/1/2007 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | 1.2 | <2.0 | <2.0 | <2.0 | <5.0 | NA | 326.35 | 8.36 | 317.99 | NA |
| S-6 | 5/23/2007 | <50 n | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 326.35 | 7.80 | 318.55 | NA |
| S-6 | 8/7/2007 | <50 n | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 0.39 o | <2.0 | <2.0 | <2.0 | <10 | NA | 326.35 | 8.07 | 318.28 | NA |
| S-6 | 11/29/2007 | <50 n | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 326.35 | 8.17 | 318.18 | NA |
| S-6 | 2/8/2008 | <50 n | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 326.35 | 7.67 | 318.68 | NA |
| S-6 | 5/21/2008 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | <100 | 326.35 | 8.17 | 318.18 | NA |

# TABLE 1
# WELL CONCENTRATIONS
# Shell-branded Service Station
# 5251 Hopyard Road
# Pleasanton, CA

| Well ID | Date | TPPH (ug/L) | TEPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | DIPE (ug/L) | ETBE (ug/L) | TAME (ug/L) | TBA (ug/L) | Ethanol (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-6 | 8/6/2008 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 326.35 | 7.89 | 318.46 | NA |
| S-6 | 11/18/2008 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 326.35 | 8.30 | 318.05 | NA |
| S-6 | 1/20/2009 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 326.35 | 8.01 | 318.34 | NA |
| S-6 | 5/6/2009 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 326.35 | 7.96 | 318.39 | NA |
| S-6 | 7/6/2009 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 326.35 | 8.32 | 318.03 | NA |
| **S-6** | **2/9/2010** | **<50** | **NA** | **<0.50** | **<1.0** | **<1.0** | **<1.0** | **NA** | **<1.0** | **NA** | **NA** | **NA** | **<10** | **NA** | **326.35** | **7.99** | **318.36** | **NA** |
| S-7 | 1/25/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.49 | NA | NA | NA |
| S-7 | 4/16/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.49 | NA | NA | NA |
| S-7 | 7/24/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.49 | NA | NA | NA |
| S-7 | 10/18/1991 | <50 | 140 f | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.49 | 8.92 | 317.57 | NA |
| S-7 | 1/23/1992 | <50 | 140 f | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.49 | NA | NA | NA |
| S-7 | 4/27/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.49 | NA | NA | NA |
| S-7 | 7/17/1992 | <50 | <50 | <0.5 | 1.8 | 0.6 | 4.1 | NA | NA | NA | NA | NA | NA | NA | 326.49 | NA | NA | NA |
| S-7 | 10/16/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.49 | NA | NA | NA |
| S-7 | 1/23/1993 | <50 | 110 b | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.49 | 8.06 | 318.43 | NA |
| S-7 | 4/28/1993 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.49 | 8.94 | 317.55 | NA |
| S-7 | 9/22/1993 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 326.49 | 8.57 | 317.92 | NA |
| S-7 | 12/8/1993 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 326.49 | 9.00 | 317.49 | NA |
| S-7 | 3/4/1994 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 326.49 | 8.96 | 317.53 | NA |
| S-7 | 6/16/1994 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 326.49 | 9.12 | 317.37 | NA |
| S-7 | 5/5/1995 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.49 | 8.58 | 317.91 | NA |
| S-7 | 5/21/1996 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 326.49 | 8.64 | 317.85 | NA |
| S-7 | 5/12/1997 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | NA | NA | NA | NA | NA | 326.49 | 8.74 | 317.75 | 2.3 |
| S-7 | 5/8/1998 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | NA | NA | NA | NA | NA | 326.49 | 8.00 | 318.49 | 2.5 |
| S-7 | 6/27/1999 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.00 | NA | NA | NA | NA | NA | NA | 326.49 | 8.75 | 317.74 | 2.9 |
| S-7 | 4/28/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | NA | NA | NA | NA | NA | 326.49 | 8.96 | 317.53 | 2.2 |
| S-7 | 5/30/2001 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | <0.50 | NA | NA | NA | NA | NA | 326.49 | 8.65 | 317.84 | 2.0 |
| S-7 | 6/17/2002 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | <5.0 | NA | NA | NA | NA | NA | 326.49 | 8.55 | 317.94 | 2.3 |
| S-7 | 5/30/2003 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | 12 | NA | NA | NA | NA | NA | 326.36 | 7.88 | 318.48 | 1.8 |

# TABLE 1
# WELL CONCENTRATIONS
# Shell-branded Service Station
# 5251 Hopyard Road
# Pleasanton, CA

| Well ID | Date | TPPH (ug/L) | TEPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | DIPE (ug/L) | ETBE (ug/L) | TAME (ug/L) | TBA (ug/L) | Ethanol (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-7 | 5/3/2004 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | 100 | NA | NA | NA | NA | NA | 326.36 | 8.30 | 318.06 | 1.2 |
| S-7 | 1/14/2005 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | 41 | NA | NA | NA | NA | NA | 326.36 | 7.70 | 318.66 | NA |
| S-7 | 5/5/2005 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | 91 | <0.50 | <0.50 | 6.8 | <5.0 | NA | 326.36 | 7.60 | 318.76 | NA |
| S-7 | 8/5/2005 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | 100 | <2.0 | <2.0 | 7.5 | <5.0 | NA | 326.36 | 8.42 | 317.94 | NA |
| S-7 | 11/8/2005 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | NA | 124 | <0.500 | <0.500 | 8.70 | <10.0 | NA | 326.36 | 7.61 | 318.75 | NA |
| S-7 | 1/31/2006 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | NA | 93.0 | <0.500 | <0.500 | 4.50 | <10.0 | NA | 326.36 | 7.85 | 318.51 | NA |
| S-7 | 5/16/2006 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | NA | 76.3 | <0.500 | <0.500 | 2.98 | <10.0 | NA | 326.36 | 8.08 | 318.28 | NA |
| S-7 | 8/23/2006 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | NA | 34.7 | <0.500 | <0.500 | 2.02 | <10.0 | NA | 326.36 | 7.93 | 318.43 | NA |
| S-7 | 11/13/2006 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | 27 | <0.50 | <0.50 | 1.6 | <20 | NA | 326.36 | 8.15 | 318.21 | NA |
| S-7 | 2/1/2007 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | 45 | <2.0 | <2.0 | 2.9 | 28 | NA | 326.36 | 8.35 | 318.01 | NA |
| S-7 | 5/23/2007 | <50 n | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 1.7 | <2.0 | <2.0 | <2.0 | <10 | NA | 326.36 | 8.11 | 318.25 | NA |
| S-7 | 8/7/2007 | <50 n | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 23 | <2.0 | <2.0 | <2.0 | <10 | NA | 326.36 | 8.36 | 318.00 | NA |
| S-7 | 11/29/2007 | <50 n | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 10 | <2.0 | <2.0 | <2.0 | <10 | NA | 326.36 | 8.19 | 318.17 | NA |
| S-7 | 2/8/2008 | <50 n | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 9.2 | <2.0 | <2.0 | <2.0 | <10 | NA | 326.36 | 7.73 | 318.63 | NA |
| S-7 | 5/21/2008 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 8.8 | <2.0 | <2.0 | <2.0 | <10 | <100 | 326.36 | 8.10 | 318.26 | NA |
| S-7 | 8/6/2008 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 1.2 | <2.0 | <2.0 | <2.0 | <10 | NA | 326.36 | 8.49 | 317.87 | NA |
| S-7 | 11/18/2008 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 7.6 | <2.0 | <2.0 | <2.0 | <10 | NA | 326.36 | 8.31 | 318.05 | NA |
| S-7 | 1/20/2009 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 7.7 | <2.0 | <2.0 | <2.0 | <10 | NA | 326.36 | 8.39 | 317.97 | NA |
| S-7 | 5/6/2009 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 6.4 | <2.0 | <2.0 | <2.0 | <10 | NA | 326.36 | 8.39 | 317.97 | NA |
| S-7 | 7/6/2009 | 58 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 4.3 | <2.0 | <2.0 | <2.0 | <10 | NA | 326.36 | 8.63 | 317.73 | NA |
| **S-7** | **2/9/2010** | **<50** | **NA** | **<0.50** | **<1.0** | **<1.0** | **<1.0** | **NA** | **8.4** | **NA** | **NA** | **NA** | **<10** | **NA** | **326.36** | **8.15** | **318.21** | **NA** |
| S-8 | 1/25/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 325.32 | NA | NA | NA |
| S-8 | 4/16/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 325.32 | NA | NA | NA |
| S-8 | 7/24/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 325.32 | NA | NA | NA |
| S-8 | 10/18/1991 | <50 | 360 f | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 325.32 | 7.62 | 317.70 | NA |
| S-8 | 1/23/1992 | <50 | 90 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 325.32 | NA | NA | NA |
| S-8 | 4/27/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 325.32 | NA | NA | NA |
| S-8 | 7/17/1992 | 53 | <50 | <0.5 | 1 | <0.5 | 1.8 | NA | NA | NA | NA | NA | NA | NA | 325.32 | NA | NA | NA |
| S-8 | 10/16/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 325.32 | NA | NA | NA |

# TABLE 1
# WELL CONCENTRATIONS
# Shell-branded Service Station
# 5251 Hopyard Road
# Pleasanton, CA

| Well ID | Date | TPPH (ug/L) | TEPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | DIPE (ug/L) | ETBE (ug/L) | TAME (ug/L) | TBA (ug/L) | Ethanol (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-8 | 1/23/1993 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 325.32 | 7.00 | 318.32 | NA |
| S-8 | 4/28/1993 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 325.32 | 7.77 | 317.55 | NA |
| S-8 | 9/22/1993 | <50 | 160 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 325.32 | 7.67 | 317.65 | NA |
| S-8 | 12/8/1993 | <50 | 210 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 325.32 | 7.76 | 317.56 | NA |
| S-8 | 3/4/1994 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 325.32 | 7.66 | 317.66 | NA |
| S-8 | 6/16/1994 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 325.32 | 7.78 | 317.54 | NA |
| S-8 | 5/5/1995 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 325.32 | 7.42 | 317.90 | NA |
| S-8 | 5/21/1996 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | NA | NA | NA | NA | NA | 325.32 | 7.50 | 317.82 | NA |
| S-8 | 5/12/1997 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | NA | NA | NA | NA | NA | 325.32 | 7.56 | 317.76 | 1.6 |
| S-8 | 5/8/1998 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | NA | NA | NA | NA | NA | 325.32 | 7.64 | 317.68 | 2.0 |
| S-8 | 6/27/1999 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.00 | NA | NA | NA | NA | NA | NA | 325.32 | 7.75 | 317.57 | 2.3 |
| S-8 | 4/28/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | NA | NA | NA | NA | NA | 325.32 | 8.02 | 317.30 | 1.8 |
| S-8 | 5/30/2001 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | <0.50 | NA | NA | NA | NA | NA | 325.32 | 7.34 | 317.98 | 1.8 |
| S-8 | 6/17/2002 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | <5.0 | NA | NA | NA | NA | NA | 325.32 | 7.45 | 317.87 | 1.8 |
| S-8 | 5/30/2003 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | 14 | NA | NA | NA | NA | NA | 325.03 | 7.39 | 317.64 | 3.0 |
| S-8 | 5/3/2004 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | <0.50 | NA | NA | NA | NA | NA | 325.03 | 7.00 | 318.03 | 1.0 |
| S-8 | 1/14/2005 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | <0.50 | NA | NA | NA | NA | NA | 325.03 | 8.65 | 316.39 | NA |
| S-8 | 5/5/2005 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <5.0 | NA | 325.03 | 6.73 | 318.30 | NA |
| S-8 | 8/5/2005 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | <0.50 | <2.0 | <2.0 | <2.0 | <5.0 | NA | 325.03 | 6.93 | 318.10 | NA |
| S-8 | 11/8/2005 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <10.0 | NA | 325.03 | 6.95 | 318.08 | NA |
| S-8 | 1/31/2006 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <10.0 | NA | 325.03 | 6.91 | 318.12 | NA |
| S-8 | 5/16/2006 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <10.0 | NA | 325.03 | 7.02 | 318.01 | NA |
| S-8 | 8/23/2006 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <10.0 | NA | 325.03 | 6.98 | 318.05 | NA |
| S-8 | 11/13/2006 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <20 | NA | 325.03 | 7.09 | 317.94 | NA |
| S-8 | 2/1/2007 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | <0.50 | <2.0 | <2.0 | <2.0 | <5.0 | NA | 325.03 | 7.27 | 317.76 | NA |
| S-8 | 5/23/2007 | <50 n | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 325.03 | 6.80 | 318.23 | NA |
| S-8 | 8/7/2007 | <50 n | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 325.03 | 7.04 | 317.99 | NA |
| S-8 | 11/29/2007 | <50 n | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 325.03 | 7.04 | 317.99 | NA |
| S-8 | 2/8/2008 | <50 n | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 325.03 | 6.77 | 318.26 | NA |
| S-8 | 5/21/2008 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | <100 | 325.03 | 7.10 | 317.93 | NA |

# TABLE 1
# WELL CONCENTRATIONS
# Shell-branded Service Station
# 5251 Hopyard Road
# Pleasanton, CA

| Well ID | Date | TPPH (ug/L) | TEPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | DIPE (ug/L) | ETBE (ug/L) | TAME (ug/L) | TBA (ug/L) | Ethanol (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-8 | 8/6/2008 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 325.03 | 6.94 | 318.09 | NA |
| S-8 | 11/18/2008 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 325.03 | 7.10 | 317.93 | NA |
| S-8 | 1/20/2009 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 325.03 | 7.18 | 317.85 | NA |
| S-8 | 1/20/2009 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 325.03 | 7.18 | 317.85 | NA |
| S-8 | 5/6/2009 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 325.03 | 7.01 | 318.02 | NA |
| S-8 | 7/6/2009 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 325.03 | 7.83 | 317.20 | NA |
| **S-8** | **2/9/2010** | **<50** | **NA** | **<0.50** | **<1.0** | **<1.0** | **<1.0** | **NA** | **<1.0** | **NA** | **NA** | **NA** | **<10** | **NA** | **325.03** | **6.91** | **318.12** | **NA** |
| S-9 | 11/22/2006 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 325.89 | 7.61 | 318.28 | NA |
| S-9 | 11/27/2006 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | <0.50 | <2.0 | <2.0 | <2.0 | <5.0 | NA | 325.89 | 7.77 | 318.12 | NA |
| S-9 | 2/1/2007 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | <0.50 | <2.0 | <2.0 | <2.0 | <5.0 | NA | 325.89 | 8.14 | 317.75 | NA |
| S-9 | 5/23/2007 | <50 n | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 325.89 | 7.85 | 318.04 | NA |
| S-9 | 8/7/2007 | <50 n | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 325.89 | 7.77 | 318.12 | NA |
| S-9 | 11/29/2007 | <50 n | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 325.89 | 7.99 | 317.90 | NA |
| S-9 | 2/8/2008 | <50 n | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 325.89 | 7.78 | 318.11 | NA |
| S-9 | 5/21/2008 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | <100 | 325.89 | 7.84 | 318.05 | NA |
| S-9 | 8/6/2008 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 325.89 | 7.69 | 318.20 | NA |
| S-9 | 11/18/2008 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 325.89 | 7.93 | 317.96 | NA |
| S-9 | 1/20/2009 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 325.89 | 8.13 | 317.76 | NA |
| S-9 | 5/6/2009 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 325.89 | 8.02 | 317.87 | NA |
| S-9 | 7/6/2009 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 325.89 | 8.06 | 317.83 | NA |
| **S-9** | **2/9/2010** | **<50** | **NA** | **<0.50** | **<1.0** | **<1.0** | **<1.0** | **NA** | **<1.0** | **NA** | **NA** | **NA** | **<10** | **NA** | **325.89** | **7.80** | **318.09** | **NA** |
| S-10 | 6/30/2009 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 326.24 | 8.04 | 318.20 | NA |
| S-10 | 7/6/2009 | 340 | NA | <1.0 | <2.0 | <2.0 | <2.0 | NA | <2.0 | <4.0 | <4.0 | <4.0 | 5,100 | NA | 326.24 | 8.11 | 318.13 | NA |
| **S-10** | **2/9/2010** | **65** | **NA** | **<0.50** | **<1.0** | **<1.0** | **<1.0** | **NA** | **1.7** | **NA** | **NA** | **NA** | **1,400** | **NA** | **326.24** | **7.90** | **318.34** | **NA** |
| S-11 | 6/30/2009 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 326.12 | 7.97 | 318.15 | NA |
| S-11 | 7/6/2009 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | <1.0 | <2.0 | <2.0 | <2.0 | <10 | NA | 326.12 | 7.98 | 318.14 | NA |
| **S-11** | **2/9/2010** | **<50** | **NA** | **<0.50** | **<1.0** | **<1.0** | **<1.0** | **NA** | **<1.0** | **NA** | **NA** | **NA** | **<10** | **NA** | **326.12** | **9.99** | **316.13** | **NA** |

# TABLE 1
# WELL CONCENTRATIONS
# Shell-branded Service Station
# 5251 Hopyard Road
# Pleasanton, CA

| Well ID | Date | TPPH (ug/L) | TEPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | DIPE (ug/L) | ETBE (ug/L) | TAME (ug/L) | TBA (ug/L) | Ethanol (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-12 | 6/30/2009 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 326.91 | 8.49 | 318.42 | NA |
| S-12 | 7/6/2009 | 83 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 37 | <2.0 | <2.0 | <2.0 | <10 | NA | 326.91 | 8.89 | 318.02 | NA |
| **S-12** | **2/9/2010** | **57** | **NA** | **<0.50** | **<1.0** | **<1.0** | **<1.0** | **NA** | **26** | **NA** | **NA** | **NA** | **11** | **NA** | **326.91** | **7.97** | **318.94** | **NA** |
| EW-1 | 2/20/2008 | 9,100 n | NA | 110 | 180 | 840 | 146.9 | NA | <5.0 | <10 | <10 | <10 | <50 | <500 | NA | 8.07 | NA | NA |
| EW-1 | 3/7/2008 | 11,000 n | NA | 380 | 200 | 370 | 317.0 | NA | <5.0 | <10 | <10 | <10 | <50 | <500 | NA | 17.80 | NA | NA |
| EW-1 | 3/21/2008 | 14,000 | NA | 690 | 430 | 750 | 614 | NA | <5.0 | <10 | <10 | <10 | <50 | <500 | NA | 8.61 | NA | NA |
| EW-1 | 4/8/2008 | 12,000 | NA | 430 | 200 | 430 | 302 | NA | <5.0 | <10 | <10 | <10 | <50 | <500 | NA | 8.40 | NA | NA |
| EW-1 | 4/21/2008 | 22,000 | NA | 430 | 510 | 1,100 | 747 | NA | <5.0 | <10 | <10 | <10 | 71 | <500 | NA | 8.33 | NA | NA |
| EW-1 | 5/6/2008 | 20,000 | NA | 280 | 620 | 1,000 | 616 | NA | <10 | <20 | <20 | <20 | <100 | <1,000 | NA | 8.30 | NA | NA |
| EW-1 | 5/21/2008 | 17,000 | NA | 180 | 440 | 830 | 484 | NA | <10 | <20 | <20 | <20 | <100 | <1,000 | NA | 8.60 | NA | NA |
| EW-1 | 8/6/2008 | 12,000 | NA | 140 | 79 | 720 | 110 | NA | <10 | <20 | <20 | <20 | <100 | NA | NA | 8.41 | NA | NA |
| EW-1 | 11/18/2008 | 16,000 | NA | 94 | 170 | 970 | 310 | NA | <20 | <40 | <40 | <40 | <200 | NA | NA | 8.03 | NA | NA |
| EW-1 | 1/20/2009 | 10,000 | NA | 110 | 58 | 440 | 61 | NA | <20 | <40 | <40 | <40 | <200 | NA | NA | 8.98 | NA | NA |
| EW-1 | 5/6/2009 | 14,000 | NA | 73 | 120 | 690 | 120 | NA | <20 | <40 | <40 | <40 | <200 | NA | NA | 7.92 | NA | NA |
| EW-1 | 7/6/2009 | 17,000 | NA | 18 | 82 | 750 | 140 | NA | <10 | <20 | <20 | <20 | <100 | NA | 326.98 | 8.21 | 318.77 | NA |
| **EW-1** | **2/9/2010** | **12,000** | **NA** | **13** | **41** | **490** | **120** | **NA** | **<5.0** | **NA** | **NA** | **NA** | **<50** | **NA** | **326.98** | **8.20** | **318.78** | **NA** |
| EW-2 | 12/14/2007 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 6.25 | NA | NA |
| EW-2 | 2/8/2008 | 70 n,p | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 8.9 | <2.0 | <2.0 | <2.0 | 940 | NA | NA | 8.42 | NA | NA |
| EW-2 | 2/20/2008 | 59 n,p | NA | <1.0 | <2.0 | <2.0 | <2.0 | NA | 10 | <4.0 | <4.0 | <4.0 | 1,300 | <200 | NA | 8.85 | NA | NA |
| EW-2 | 3/7/2008 | 850 n,p | NA | <1.0 | <2.0 | <2.0 | <2.0 | NA | 8.0 | <4.0 | <4.0 | <4.0 | 1,200 | <200 | NA | 9.75 | NA | NA |
| EW-2 | 3/21/2008 | 350 | NA | 5.3 | 4.6 | 6.2 | 18 | NA | <2.0 | <4.0 | <4.0 | <4.0 | 990 | <200 | NA | 9.51 | NA | NA |
| EW-2 | 4/8/2008 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 8.9 | <2.0 | <2.0 | <2.0 | 180 | <100 | NA | 9.12 | NA | NA |
| EW-2 | 4/21/2008 | 140 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 57 | <2.0 | <2.0 | <2.0 | 230 | <100 | NA | 8.86 | NA | NA |
| EW-2 | 5/6/2008 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 8.3 | <2.0 | <2.0 | <2.0 | 590 | <100 | NA | 8.87 | NA | NA |
| EW-2 | 5/21/2008 | 53 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 11 | <2.0 | <2.0 | <2.0 | 380 | <100 | NA | 9.00 | NA | NA |
| EW-2 | 8/6/2008 | 60 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 10 | <2.0 | <2.0 | <2.0 | 560 | NA | NA | 8.81 | NA | NA |
| EW-2 | 11/18/2008 | 140 | NA | 8.0 | <1.0 | 6.2 | 29 | NA | 7.4 | <2.0 | <2.0 | <2.0 | 410 | NA | NA | 8.92 | NA | NA |

# TABLE 1
# WELL CONCENTRATIONS
# Shell-branded Service Station
# 5251 Hopyard Road
# Pleasanton, CA

| Well ID | Date | TPPH (ug/L) | TEPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | DIPE (ug/L) | ETBE (ug/L) | TAME (ug/L) | TBA (ug/L) | Ethanol (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EW-2 | 1/20/2009 | <50 | NA | <0.50 | <1.0 | <1.0 | <1.0 | NA | 6.8 | <2.0 | <2.0 | <2.0 | 390 | NA | NA | 9.28 | NA | NA |
| EW-2 | 5/6/2009 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 327.21 | NA | NA | NA |

Abbreviations:
TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; prior to May 30, 2001 analyzed by EPA Method 8015.
TEPH = Total petroleum hydrocarbons as diesel by modified EPA Method 8015.
BTEX = Benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B; prior to May 30, 2001, analyzed by EPA Method 8020.
MTBE = Methyl tertiary butyl ether
DIPE = Di-isoproyl ether, analyzed by EPA Method 8260B
ETBE = Ethyl tertiary butyl ether, analyzed by EPA Method 8260B
TAME = Tertiary amyl methyl ether, analyzed by EPA Method 8260B
TBA = Tertiary butyl alcohol, analyzed by EPA Method 8260B
TOC = Top of Casing Elevation
TOB = Top of Wellbox Elevation
SPH = Separate-Phase Hydrocarbons
GW = Groundwater
DO = Dissolved Oxygen
ug/L = Parts per billion
ppm = Parts per million
MSL = Mean sea level
ft. = Feet
<n = Below detection limit
(D) = Duplicate sample

# TABLE 1
# WELL CONCENTRATIONS
# Shell-branded Service Station
# 5251 Hopyard Road
# Pleasanton, CA

| Well ID | Date | TPPH (ug/L) | TEPH (ug/L) | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE 8020 (ug/L) | MTBE 8260 (ug/L) | DIPE (ug/L) | ETBE (ug/L) | TAME (ug/L) | TBA (ug/L) | Ethanol (ug/L) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Notes:

Ethanol analyzed by EPA Method 8260B

a = Compounds detected as TEPH appear to be the less volatile constituents of gasoline.

b = The concentration reported as TEPH primarily due to the presence of a heavier petroleum product.

c = The concentration reported as TEPH due to the presence of a lighter petroleum product.

d = Concentrations reported as diesel includes a heavier petroleum product.

e = Compounds detected within the chromatographic range of TEPH but not characteristic of the standard gasoline pattern.

f = There was insufficient preservative to reduce the sample pH to less than 2.

g = Compounds detected within the chromatographic range of TEPH but not characteristic of the standard diesel pattern.

h = The chromatographic pattern of the purgeable hydrocarbons found in the sample is similar to the pattern of weathered gasoline.

i = DO reading not taken.

j = The results may be biased slightly high.

k = The hydrocarbon reported in the gasoline range does not match the laboratory standard.

l = Extracted out of holding time.

m = Analyte was detected in the associated Method Blank.

n = Analyzed by EPA Method 8015B (M).

o = Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.

p = The sample chromatographic pattern for TPH does not match the chromatographic pattern of the specified standard. Quantitation of the unknown hydrocarbon(s) in the sample was based upon the specified standard.

Site surveyed April 16, 2002 by Virgil Chavez Land Surveying of Vallejo, CA.

Beginning May 30, 2003, depth to water referenced to Top of Casing elevation.

Wells S-2, S-3 and S-9 were surveyed on November 22, 2006 by Mid Coast Engineers.

Wells S-10 through S-12 and EW-1 were surveyed on June 25, 2009 by Mid Coast Engineers.

# TABLE 2
# $MgSO_4$ FEASIBILITY EVALUATION
Shell-branded Service Station
5251 Hopyard Road
Pleasanton, California

| Well ID | Date Sampled | TPH-g (ug/L) | BTEX Compounds | | | | Fuel Oxygenates | | | | | Sulfate (mg/L) | Ferrous Iron (mg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE (ug/L) | DIPE (ug/L) | ETBE (ug/L) | TAME (ug/L) | TBA (ug/L) | | |
| S-2 | 10/30/2009 | <50 | <0.50 | <1.0 | <1.0 | <1.0 | 33 | <2.0 | <2.0 | <2.0 | 10 | 540 | <0.10 |
| S-10 | 10/30/2009 | <50 | <0.50 | <1.0 | <1.0 | <1.0 | 1.8 | <2.0 | <2.0 | <2.0 | 860 | 170 | <0.10 |
| S-3 | 10/30/2009 | 2,300 | 390 | 12 | 15 | 24 | 14 | <10 | <10 | <10 | <50 | 35 | <0.10 |
| EW-1 | 10/30/2009 | 8,400 | 14 | 21 | 360 | 84 | <2.0 | <4.0 | <4.0 | <4.0 | <20 | 3.1 | 2.1 |

**Abbreviations:**

TPH-g = Total petroleum hydrocarbons as gasoline, analyzed by EPA Method 8015

B = Benzene, analyzed by EPA Method 8260B

T = Toluene, analyzed by EPA Method 8260B

E = Ethylbenzene, analyzed by EPA Method 8260B

X = Total xylenes, analyzed by EPA Method 8260B

MTBE = Methyl tert-butyl ether, analyzed by EPA Method 8260B

DIPE = Diisopropyl ether, analyzed by EPA Method 8260B

ETBE = Ethyl tertiary butyl ether, analyzed by EPA Method 8260B

TAME = Tertiary amyl methyl ether, analyzed by EPA Method 8260B

TBA = Tertiary butyl alcohol, analyzed by EPA Method 8260B

Sulfate - Analyzed EPA Method 300.0

Ferrous Iron - Iron (II) analyzed by SM 3500-FeB

µg/L = Micrograms per liter, equivalent to parts per billion

mg/L = Milligrams per liter, equivalent to parts per million

< = Denotes no reported concentration above shown detection limit

# TABLE 3
# MgSO4 FEASIBILITY PILOT STUDY
Shell-branded Service Station
5251 Hopyard Road
Pleasanton, CA

| Well ID | Date | DTW (feet) | pH (pH units) | Sulfate (mg/L) | Ferrous Iron (Fe+2)† (mg/L) | Ferric Iron (Fe+3) (mg/L) | TPH-g (ug/L) | BTEX Compounds | | | | MTBE (ug/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | |
| **Observation Wells** | | | | | | | | | | | | |
| S-1 | 4/8/10 10:35 AM | 7.95 | 7.49 | 3.1 | ND(<0.10)[a] | 0.511 | 9,300 | 23 | 38 | 320 | 56 | 17 |
| S-2 | 4/8/10 11:35 AM | 8.14 | 7.52 | 600 | ND(<0.10)[a] | 0.120 | ND(<50) | ND(<0.50) | ND(<1.0) | ND(<1.0) | ND(<1.0) | 38 |
| S-10 | 4/8/10 11:15 AM | 7.68 | 7.71 | 170 | ND(<0.10)[a] | 0.915 | ND(<50) | ND(<0.50) | ND(<1.0) | ND(<1.0) | ND(<1.0) | 1.5 |
| **Application Points** | | | | | | | | | | | | |
| EW-1 | 4/8/10 9:45 AM | 7.81 | 7.05 | 2.7 | ND(<0.10)[a] | 10.2 | 7,100 | 16 | 25 | 95 | 29 | 3.7 |
| EW-1 | 4/8/10 5:10 PM | -- | -- | 90,000 | NS | NS | NS | NS | NS | NS | NS | NS |
| EW-1 | 4/21/10 12:00 PM | -- | | 7,800 | NS | NS | NS | NS | NS | NS | NS | NS |
| EW-1 | 5/11/10 9:45 AM | -- | 7.24 | NA | 2.4 | NA | NA | NA | NA | NA | NA | NA |
| S-3 | 4/8/10 10:15 AM | 8.45 | 7.46 | 19 | ND(<0.10)[a] | 1.82 | 2,400 | 270 | 6.0 | 4.0 | 3.6 | 11 |
| S-3 | 4/8/10 7:30 PM | -- | -- | 99,000 | NS | NS | NS | NS | NS | NS | NS | NS |
| S-3 | 4/21/10 11:45 AM | | | 7,700 | NS | NS | NS | NS | NS | NS | NS | NS |
| S-3 | 5/11/10 9:55 AM | -- | 7.11 | NA | 4.8 | NA | NA | NA | NA | NA | NA | NA |

**Abbreviations:**

DTW = Depth to water

TPH-g = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; prior to June 18, 2001, analyzed by EPA Method 8015.

BTEX = benzene, toluene, ethylbenzene, and total xylenes by EPA Method 8260B; prior to June 18, 2001, analyzed by EPA Method 8020.

MTBE = Methyl tertiary butyl ether, analyzed by EPA Method 8260

mg/L = Parts per million

ug/L = Parts per billion

ND(<n) = Not detected above shown detection limit n

NS = Not sampled

NA = Not available

**Notes:**

a = Ferrous Iron (Fe+2) samples collected and submitted for laboratory analysis; results were run out of hold time (24 hours) and not representative

† = Ferrous iron samples collected in field and measured using a field kit unless otherwise specified

# APPENDIX A

## AGENCY CORRESPONDENCE AND $MgSO_4$ FEASIBILITY STUDY AND WORK PLAN

ALAMEDA COUNTY
**HEALTH CARE SERVICES**
AGENCY
ALEX BRISCOE, Acting Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

January 12, 2010

Denis Brown
Shell Oil Products US
20945 S. Wilmington Ave.
Carson, CA 90810-1039

Carl Cox
CJC Hopyard LLC
4431 Stoneridge Drive, #100
Pleasanton, CA 94588-8412

Subject: Fuel Leak Case No. RO0000194 and Geotracker Global ID T0600101267, Shell#13-5785, 5251 Hopyard Road, Pleasanton, CA 94566

Dear Mr. Brown and Mr. Cox:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site including the most recent document entitled, "*Magnesium Sulfate Feasibility Study and Work Plan, Shell Branded Service Station, 5251 Hopyard Road, Pleasanton, California*," dated March 19, 2009. The Work Plan, which was prepared on Shell's behalf by Delta Environmental Consultants, Inc., proposes adding magnesium sulfate to groundwater through infiltration to enhance biodegradation processes in the source area.

The proposed scope of work is acceptable and may be implemented as proposed. We request that you perform the proposed work and present results from the feasibility study in the quarterly reports described below.

## TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Jerry Wickham), according to the following schedule:

- **45 days following the end of each quarter** – Quarterly Feasibility Study and Monitoring Reports

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

### ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program

FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

**UNDERGROUND STORAGE TANK CLEANUP FUND**

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

**AGENCY OVERSIGHT**

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

If you have any questions, please call me at (510) 567-6791 or send me an electronic mail message at jerry.wickham@acgov.org.

Sincerely,

Jerry Wickham, California PG 3766, CEG 1177, and CHG 297
Senior Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Danielle Stefani, Livermore Pleasanton Fire Department, 3560 Nevada St, Pleasanton, CA 94566 (*Sent via E-mail to: dstefani@lpfire.org*)

Cheryl Dizon (QIC 8021), Zone 7 Water Agency, 100 North Canyons Pkwy, Livermore, CA 94551 (*Sent via E-mail to: cdizon@zone7water.com*)

Suzanne McClurkin-Nelson, Delta Environmental Consultants, Inc., 312 Piercy Road, San Jose, CA 95138 (*Sent via E-mail to: SMcClurkin-Nelson@deltaenv.com*)

Donna Drogos, ACEH (*Sent via E-mail to: donna.drogos@acgov.org*)
Jerry Wickham, ACEH
Geotracker, File

| Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) | **ISSUE DATE:** July 5, 2005 |
|---|---|
| | **REVISION DATE:** March 27, 2009 |
| | **PREVIOUS REVISIONS:** December 16, 2005, October 31, 2005 |
| **SECTION:** Miscellaneous Administrative Topics & Procedures | **SUBJECT:** Electronic Report Upload (ftp) Instructions |

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

**REQUIREMENTS**

- Entire report including cover letter must be submitted to the ftp site as **a single portable document format (PDF) with no password protection**. (Please do not submit reports as attachments to electronic mail.)
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- Signature pages and perjury statements **must** be included and have either original or electronic signature.
- **Do not password protect the document**. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted**.
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:
  RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

**Additional Recommendations**

- A separate copy of the tables in the document should be submitted by e-mail to your Caseworker in **Excel** format. These are for use by assigned Caseworker only.

**Submission Instructions**

1) Obtain User Name and Password:
   a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
      i) Send an e-mail to dehloptoxic@acgov.org
         Or
      ii) Send a fax on company letterhead to (510) 337-9335, to the attention of My Le Huynh.
   b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for**.

2) Upload Files to the ftp Site
   a) Using Internet Explorer (IE4+), go to ftp://alcoftp1.acgov.org
      (i) Note: Netscape and Firefox browsers will not open the FTP site.
   b) Click on File, then on Login As.
   c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
   d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
   e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
   a) Send email to dehloptoxic@acgov.org notify us that you have placed a report on our ftp site.
   b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
   c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO# use the street address instead.
   d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.

December 11, 2009
Delta Project: SCA5251H1A
SAP #: 135785

Mr. Jerry Wickham, PG, CHG
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6540

DELTA

**Re: Magnesium Sulfate Feasibility Study and Work Plan**
Shell Branded Service Station
5251 Hopyard Road
Pleasanton, California

Dear Mr. Wickham:

Delta Consultants (Delta) has prepared this *Magnesium Sulfate Feasibility Study Work Plan* to (1) review and summarize historic remedial efforts and effectiveness at the site, (2) evaluate historic data for compounds of concern including total petroleum hydrocarbons as gasoline (TPH-g), benzene, toluene, ethylbenzene, and xylenes (BTEX compounds), and fuel oxygenates, (3) determine the feasibility of enhanced biodegradation and chemical degradation of TPH-g and BTEX compounds at the site through the introduction of magnesium sulfate ($MgSO_4$), and (4) establish a sampling and field monitoring plan following $MgSO_4$ application events.

Based on a review of current groundwater parameters, Delta proposes a feasibility study utilizing $MgSO_4$ enhancement for site remediation. This pilot study is designed to determine the optimal $MgSO_4$ infiltration volumes, solution concentrations and the application and monitoring frequencies that will be used in site remediation. Delta is providing this report to the Alameda County Health Care Services Agency and to the Zone 7 Water Agency for their review and approval of this work plan and the proposed monitoring scope and schedule.

a member of: Inogen Environmental Alliance

312 Piercy Road San Jose, California 95138 USA
Phone +1 408.224.4724 / USA Toll Free 800.477.7411
Fax +1 408.225.8506 www.deltaenv.com

## BACKGROUND

### Site Description

The site is an active Shell-branded service station located on the southeast corner of Owens Drive and Hopyard Road in Pleasanton, California (Figure 1). The site is surrounded primarily by commercial properties. The station has four 10,000-gallon gasoline underground storage tanks (USTs), four fuel dispenser islands under a single canopy, a carwash, and a food mart building. Figure 2 depicts recent groundwater elevation contours based on monitoring data collected during the July 2009 sampling event.

### Hydrogeologic Setting

The site is located in the western portion of the Livermore Valley Groundwater Basin where surficial deposits consist primarily of clay. Based on soil borings and cone penetration test (CPT) borings, the site is predominantly underlain by clay and silt with interbedded sand layers to depths of greater than 80 feet below ground surface (bgs). Sand, cemented sand, and silty sand were encountered in boring CPT-1 from 52 feet bgs to the total depth explored of 60 feet bgs and in boring CPT-2 from 36 to 43 feet bgs. Historic boring logs and monitoring wells are included as Attachment A; we were unable to obtain boring logs for wells S-2 through S-5.

The most recent monitoring and sampling event was conducted at the site on July 6, 2009. Groundwater levels ranged from 7.83 feet to 9.18 feet bgs; the groundwater flow direction was variable, but the site historically has had a gradient which varies between the north and west. The historical groundwater elevation and analytical data tables are provided as Attachment B.

### Site Investigation Summary

During an initial site investigation in December 1988, one groundwater monitoring well (S-1) and three vadose zone wells (V-1 through V-3) were installed. In May 1989, four additional groundwater monitoring wells were installed (S-2 through S-5). In October and November of 1989, three offsite monitoring wells were installed (S-6 through S-8). In August 2005 CPT Borings were completed to collect groundwater from the 40 foot and 80 foot groundwater zones. One additional offsite groundwater monitoring well (S-9) was installed in November 2006 to monitor shallow groundwater east of the site. In June 2009, three additional groundwater monitoring wells were installed in an effort to complete delineation of the dissolved-phase plume, two onsite (S-10 and S-12) and one offsite (S-11).

Groundwater has been monitored on a quarterly schedule since January 1991; approval to reduce monitoring to a semiannual schedule was granted in July 2009.

### Petroleum Hydrocarbon Distribution in Soil and Groundwater

The dissolved-phase petroleum hydrocarbon plume appears to be located primarily beneath the central portion of the site; the primary compounds of concern at the site are TPH-g, benzene, and fuel oxygenates methyl tert-butyl ether (MTBE) and tert-butyl alcohol (TBA). The majority of impacts to soil were excavated from beneath the dispensers in 2004 during piping and dispenser upgrades. Confirmation samples collected after the excavation reported the highest concentration of remaining soil impacts at 7 feet bgs with a concentration of 5.6 milligrams per kilogram (mg/kg) TPH-g and 0.88 mg/kg benzene.

Based on the most recent groundwater monitoring data, groundwater impacts are located primarily in the vicinity of the former UST complex, the current UST complex, and the product dispensers. The most recent monitoring event reported significant concentrations of TPH-g in wells EW-1, S-1, and S-3 at

concentrations of 17,000 micrograms per liter (µg/L), 5,800 µg/L, and 2,300 µg/L, respectively. Benzene was reported at concentrations of 500 µg/L, 25 µg/L and 18 µg/L in wells S-3, S-1, and EW-1, respectively. MTBE was reported at concentrations of 59 µg/L, 37 µg/L, 22 µg/L and 21 µg/L, respectively, in wells S-2, S-12, S-1 and S-3, and TBA was reported in wells S-10, S-1, and S-5 at concentrations of 5,100 µg/L, 180 µg/L, and 11 µg/L, respectively.

Wells S-4 and S-12 delineate the general upgradient extent of the impacted groundwater; offsite wells S-7 and S-8 delineate the general downgradient extent of impacted groundwater to the west and north, and offsite wells S-6 and S-11 define the crossgradient extent of impacts to groundwater. Current TPH-g, benzene, MTBE and TBA concentrations are detailed on Figure 3, and historic groundwater concentrations are included as Attachment B.

### Sensitive Receptors

A review of the sensitive receptor survey data generated from Department of Water records identified no municipal wells within a 1-mile radius of the site. The nearest surface water body is approximately 1,133 feet northeast of the site and Hewlett Canal is located approximately 1,156 feet east of the site. Based on utility survey results, utilities in the site vicinity are not expected to affect groundwater flow or to provide preferential groundwater migration pathways.

## REMEDIATION ASSESSMENT

### Historic Remediation Summary

In September 2004, product dispensers and product lines were removed to facilitate environmental sampling. A product line was ruptured during excavation of the pea gravel; free product was observed locally within the pea gravel area. Soils were sample beneath the dispenser and in the product trenching and over-excavation was performed along the trench, screening soils with a photoionization detector (PID). The total depth removed varied from 4 feet to 10 feet bgs. A total of approximately 75 cubic yards of petroleum hydrocarbon-impacted soil were removed from the piping trench with observed free product. Groundwater was extracted from the UST area during excavation activities, with a total volume of 33,749 gallons removed. An extraction well (EW-1) was installed in March 2006 for the purpose of batch extractions, but has never been utilized.

### Sulfate in the Hydrocarbon Biodegradation Process

Recent case studies show that in anaerobic conditions, microbes utilize sulfate as a terminal electron acceptor in the process of hydrocarbon biodegradation in groundwater. Although other terminal-electron accepting processes (TEAPs) may occur simultaneously during hydrocarbon degradation (with the utilization of nitrite/nitrate, manganese, iron, and oxygen), data suggests that sulfate reduction may be the most important TEAP in the active reduction of hydrocarbons (Dale R. Van Stempvoort, James Armstrong, and Bernhard Mayer, 2007).

Where dissolved BTEX compound plumes show significantly depleted concentrations of sulfate, typically less than 10 milligrams per liter (mg/L), within the plume core, as well as slightly depleted sulfate on the plume fringe and an elevated sulfate concentration consistent with background concentrations in uncontaminated areas just beyond the plume edge, suggest that anaerobic sulfate reduction is occurring (Lyle Bruce, Jim Cuthbertson, Arati Kolhatkar, J. Scott Ziegler, and Brent Graves, 2007).

A 2001 study conducted by Dale R. Van Stempvoort, et al., concluded that the periodic replenishment of sulfate, resulting from the infiltration of snowmelt carrying dissolved sulfate from soils through the vadose zone and into the aquifer, played a key role in the biodegradation of petroleum hydrocarbons.

**Site Sulfate and Iron Conditions**

The 2008 City of Pleasanton Water Quality Report indicates that local groundwater has an average sulfate concentration ranging from 32 to 111 mg/L with and average concentration of 54 mg/L. Groundwater samples collected at the site from wells S-2, S-3, S-10, and EW-1 on October 30, 2009 reported sulfate concentrations ranging from 3.1 mg/L to 540 mg/L, with the lowest concentrations at the core of the plume (EW-1) and the highest concentrations in a perimeter well (S-2). The plume has generally remained centered around well EW-1, with well S-3 presumed to be on the inner fringe of the source area, and wells S-10 and S-2 are on the outer edges of the plume. Groundwater data are summarized in Table 1 and the certified analytical report is included as Attachment C. A graph showing the correlation at each well of TPH-g and sulfate concentrations is provided on Graph 1.

Under anaerobic conditions, insoluble iron (ferric iron—Fe3+) can be reduced to its more soluble form, ferrous iron (Fe2+). Conversely, through oxidation ferrous iron is converted to ferric iron. The data for ferrous iron at the site appears to follow an inverse relationship to the sulfate concentrations—ferrous iron was detected in the plume core (EW-1) where sulfate levels are low; while ferrous iron was not detected where sulfate levels are high in well S-2 which is located outside of the TPH-g and BTEX plume.

The anaerobic sulfate reduction of hydrocarbons uses ferric (insoluble) iron as a co-metabolite. In this TEAP, as sulfate is utilized and depleted during the degradation of hydrocarbons, you typically see an increase in the concentrations of ferrous (soluble iron) in source areas. The concentration of ferrous iron in the center of the plume (EW-1) was 2.1 mg/L (2,100 µg/L) during this sampling event. This data point strongly suggests sulfate is being consumed in the process of anaerobic hydrocarbon biodegradation and the current low sulfate concentrations may be a limiting factor for continued bioremediation of the plume. Delta proposes that biodegradation may be accelerated by replenishing sulfate where depleted at the core of the plume (wells EW-1 and S-3).

**WORK PLAN FOR PROPOSED BIODEGRADATION ENHANCEMENT**

Delta has recently been awarded a patent for the application of sulfate for the purposes of accelerating the cleanup of soil and groundwater. With *in-situ* heterotrophic microbes and iron (ferric iron), the introduction of magnesium sulfate solution ($MgSO_4$ - dissolved Epsom salt), into hydrocarbon-impacted groundwater yields the following reaction:

*Petroleum Hydrocarbon + $MgSO_4$ + dissolved Iron → Iron Sulfide+H2O+MgCO3+ CO2*

Data show that conditions are favorable at the site for sulfate enrichment for the purpose of hydrocarbon remediation. Delta proposes a series of $MgSO_4$ applications and sampling for sulfate and ferrous iron to monitor the rate of breakdown of hydrocarbons in groundwater.

Prior to the first proposed magnesium sulfate introduction, wells EW-1, S-3, and S-2 will be analyzed for ferrous iron and sulfate, in addition to TPH-g, BTEX compounds, and fuel oxygenates. These three wells will be used as the source (EW-1 and S-3) and upgradient (S-2) data collection points. This information will be used to determine the remedial success of the $MgSO_4$ infiltration events, and will be used to make a determination for future infiltration events. Following the addition of magnesium sulfate, ferrous iron and sulfate will be added to the quarterly analytical suite for wells EW-1, S-3 and S-2.

For each infiltration event, Delta will introduce a pre-mixed solution of Epsom salt and tap water into wells EW-1 and S-3 by gravity feed. Well EW-1 is screened approximately between 10 and 20 feet bgs, providing a large vertical surface area for $MgSO_4$ infiltration into the contaminated area. The volume and concentration of the infiltration solution are determined by several factors: site layout conditions, contaminant concentrations, soil types encountered in the vicinity of EW-1 and S-3, estimated pore space volume, and a target source area 30 feet wide by 30 feet long by 10 feet thick. The goal of these infiltration events is to raise the starting sulfate concentration in groundwater to between 3,000 and 5,000 mg/L. It is estimated that the optimal initial application into each well is approximately 200 pounds of $MgSO_4$ with the appropriate amount of water required to be determined during application.

A baseline groundwater sample from wells EW-1 and S-3 will be collected prior to the first infiltration application of $MgSO_4$. The samples will be analyzed for pH, TPH-g, BTEX compounds, MTBE, sulfate, ferrous iron and ferric iron. The groundwater in wells EW-1 and S-3 will be sampled again 4 hours after the initial application of $MgSO_4$ (for sulfate only), and once every two weeks for the following month. During the second and third months, groundwater samples will be collected once a month. The samples will be analyzed for pH, TPH-g, BTEX compounds, MTBE, sulfate and ferrous iron.

Delta will perform an additional infiltration event when the concentration of sulfate in well EW-1 decreases to approximately 1,000 mg/L. These continued applications, anticipated to be successively smaller in concentration, are necessary to maintain elevated concentrations of sulfate in order to sustain the accumulated anaerobic heterotrophic biomass. The mass of Epson salt applied during the next application will be determined from the current TPH-g concentration at the time. Samples will be collected on the same schedule that followed the previous $MgSO_4$ application event. Based on the observed starting concentrations and typical sulfate degradation rates, an injection every two to three months is expected. Delta recommends continuing these infiltration events for two to four quarters to evaluate the remedial strategy and effectiveness of the application procedure.

## REPORTING

Delta will compile a quarterly report summarizing the remedial progress at the site, including a detailed assessment of the $MgSO_4$ applications, site contaminant reductions, and recommendations for future applications. In accordance with State of California requirements for the GeoTracker database, the report, including maps, graphs, and all analytical data will be uploaded to the GeoTracker system and to the Alameda county FTP website.

## LIMITATIONS

The contents of this document represent Delta's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. This document is based upon a specific scope of work requested by the client. The Contract between Delta and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined here will be performed. This document is intended only for the use of Delta's Client and anyone else specifically listed on this document. Delta will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Delta makes no express or implied warranty as to the contents of this document.

If you have any questions regarding this work plan, or need additional information about the Site, please do not hesitate to contact Suzanne McClurkin- Nelson at (408) 826-1875.

Sincerely,

**DELTA CONSULTANTS**

Cora Olson
Staff Engineer

Suzanne McClurkin- Nelson
Senior Project Manager

Doug Umland, P.G.
Senior Geologist


cc: Denis Brown, Shell Oil Products US, Carson
Carl Cox, C and J Cox Corporation, Pleasanton
Colleen Winey, Zone 7 Water Agency, Livermore
Danielle Stefani, Livermore-Pleasanton Fire Department, Pleasanton

**ATTACHMENTS**

| | |
|---|---|
| Figure 1 | Site Location Map |
| Figure 2 | Groundwater Elevation Contour Map – 7/6/2009 |
| Figure 3 | Groundwater Hydrocarbon Distribution Map – 7/6/2009 |
| Table 1 | $MgS0_4$ Application Feasibility Groundwater Testing Data |
| Graph 1 | TPH-g vs. Sulfate Concentrations |
| Attachment A: | Historic Boring Logs |
| Attachment C: | Historic Well Concentrations |
| Attachment C: | Certified Analytical Report with Chain-of-Custody Documentation |

**REFERENCES CITED**

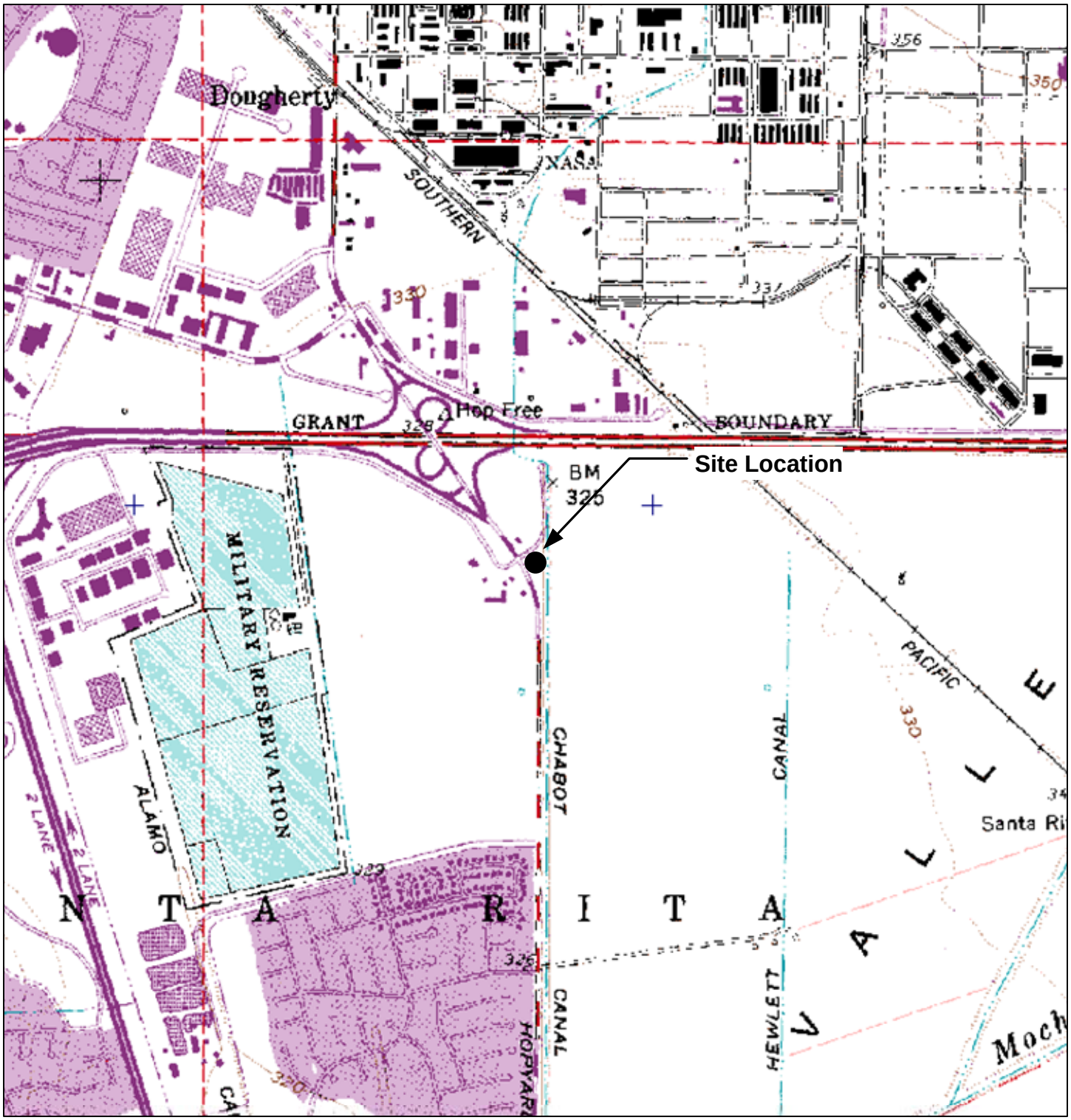
City of Pleasanton, 2008, Annual Water Quality Report.

Cunningham, J. A., et al., 2001, Enhanced In Situ Bioremediation of BTEX Contaminated Groundwater by Combined Injection of Nitrate and Sulfate, *Environ. Sci.Technol.*, 2001, 35, 1663-1670.

Lyle Bruce, Jim Cuthbertson, Arati Kolhatkar, J. Scott Ziegler, and Brent Graves Substantially Increasing the Hydrocarbon Degradation Rate at a Central Indiana Site., 2007

Van Stempvoort Dale R., et al., 2001, Seasonal Recharge and Replenishment of Sulfate Associated with Biodegradation of a Hydrocarbon Plume, Ground Water Monitoring & Remediation 27, no. 4: 110–121

# FIGURES




GENERAL NOTES:
Base Map from: DeLorme Yarmouth, ME 04096
Source Data: USGS

North

QUADRANGLE LOCATION

0 1,300 2,600
Scale, Feet

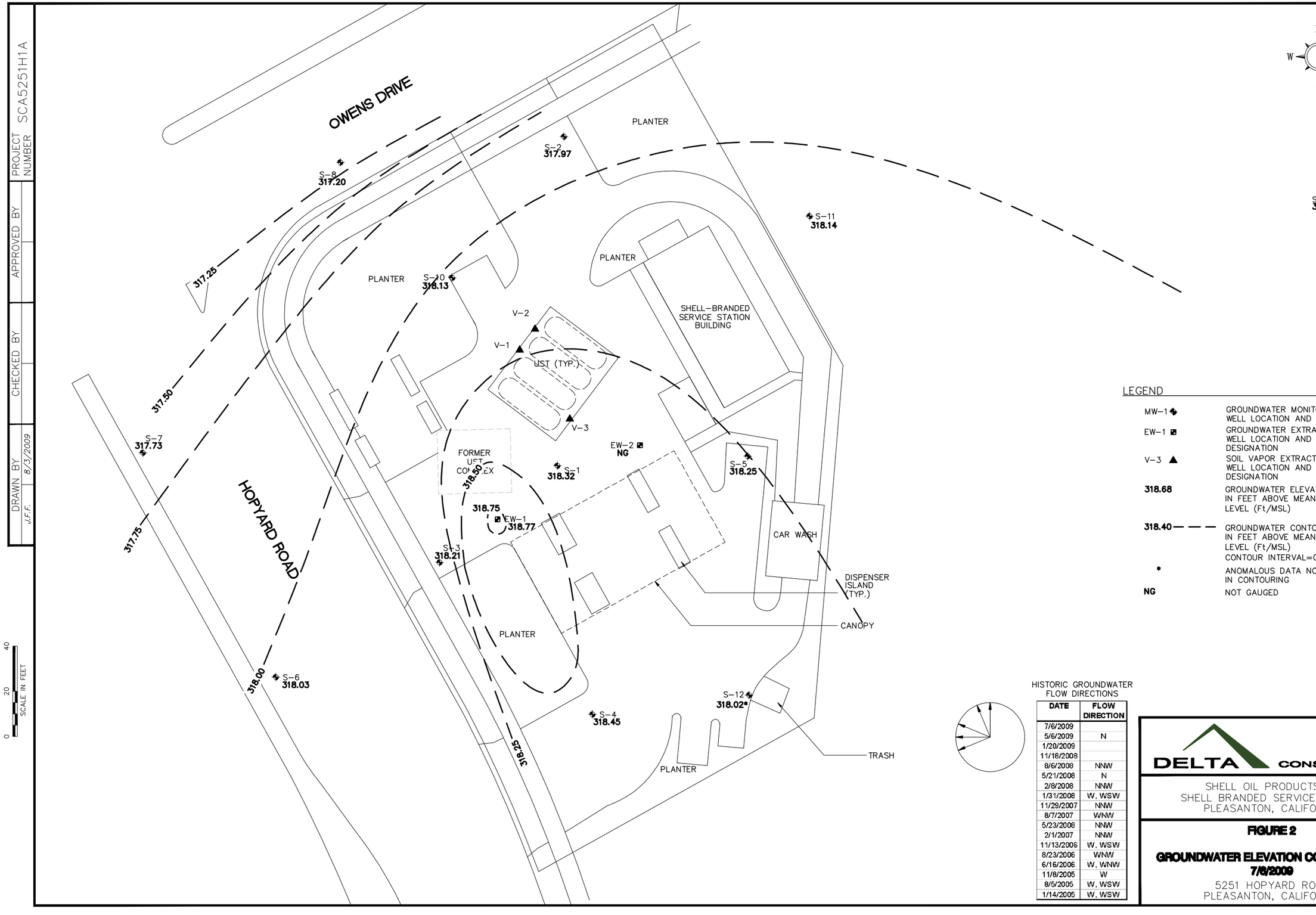
FIGURE 1
SITE LOCATION MAP

SHELL-BRANDED SERVICE STATION
5251 Hopyard Road
Pleasanton, California

| | |
|---|---|
| PROJECT NO. SCA5251H1A | DRAWN BY V. F. 3/31/05 |
| FILE NO. | PREPARED BY VF |
| REVISION NO. | REVIEWED BY |

DELTA CONSULTANTS

| PROJECT NUMBER | SCA5251H1A |
|---|---|
| APPROVED BY | |
| CHECKED BY | |
| DRAWN BY | J.F.F. 8/3/2009 |




LEGEND

| | |
|---|---|
| MW-1 ◆ | GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION |
| EW-1 ■ | GROUNDWATER EXTRACTION WELL LOCATION AND DESIGNATION |
| V-3 ▲ | SOIL VAPOR EXTRACTION WELL LOCATION AND DESIGNATION |
| 318.68 | GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (Ft/MSL) |
| 318.40 — — — | GROUNDWATER CONTOUR IN FEET ABOVE MEAN SEA LEVEL (Ft/MSL) CONTOUR INTERVAL=0.25 FEET |
| * | ANOMALOUS DATA NOT USED IN CONTOURING |
| NG | NOT GAUGED |

HISTORIC GROUNDWATER FLOW DIRECTIONS

| DATE | FLOW DIRECTION |
|---|---|
| 7/6/2009 | |
| 5/6/2009 | N |
| 1/20/2009 | |
| 11/18/2008 | |
| 8/6/2008 | NNW |
| 5/21/2008 | N |
| 2/8/2008 | NNW |
| 1/31/2008 | W, WSW |
| 11/29/2007 | NNW |
| 8/7/2007 | WNW |
| 5/23/2008 | NNW |
| 2/1/2007 | NNW |
| 11/13/2006 | W, WSW |
| 8/23/2006 | WNW |
| 6/16/2006 | W, WNW |
| 11/8/2005 | W |
| 8/5/2005 | W, WSW |
| 1/14/2005 | W, WSW |

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SHELL OIL PRODUCTS US
SHELL BRANDED SERVICE STATION
PLEASANTON, CALIFORNIA

**FIGURE 2**

**GROUNDWATER ELEVATION CONTOUR MAP**
**7/6/2009**

5251 HOPYARD ROAD
PLEASANTON, CALIFORNIA

PROJECT NUMBER SCA5251H1A

APPROVED BY

CHECKED BY

DRAWN BY J.F.F. 8/3/2009

OWENS DRIVE

HOPYARD ROAD

PLANTER

SHELL-BRANDED SERVICE STATION BUILDING

UST (TYP.)

FORMER UST COMPLEX

CAR WASH

DISPENSER ISLAND (TYP.)

CANOPY

TRASH

S-1

| S-1 | | | | |
|---|---|---|---|---|
| DATE | TPH-g (µg/L) | BENZENE (µg/L) | MTBE (µg/L) | TBA (µg/L) |
| 7/6/09 | **5,800** | **25** | **22** | **180** |

S-2

| S-2 | | | | |
|---|---|---|---|---|
| DATE | TPH-g (µg/L) | BENZENE (µg/L) | MTBE (µg/L) | TBA (µg/L) |
| 7/6/09 | **110** | ND<0.50 | **59** | ND<10 |

S-3

| S-3 | | | | |
|---|---|---|---|---|
| DATE | TPH-g (µg/L) | BENZENE (µg/L) | MTBE (µg/L) | TBA (µg/L) |
| 7/6/09 | **2,300** | **500** | **21** | ND<50 |

S-4

| S-4 | | | | |
|---|---|---|---|---|
| DATE | TPH-g (µg/L) | BENZENE (µg/L) | MTBE (µg/L) | TBA (µg/L) |
| 7/6/09 | ND<50 | ND<0.50 | ND<1.0 | ND<10 |

S-5

| S-5 | | | | |
|---|---|---|---|---|
| DATE | TPH-g (µg/L) | BENZENE (µg/L) | MTBE (µg/L) | TBA (µg/L) |
| 7/6/09 | **62** | ND<0.50 | **2.5** | **11** |

S-6

| S-6 | | | | |
|---|---|---|---|---|
| DATE | TPH-g (µg/L) | BENZENE (µg/L) | MTBE (µg/L) | TBA (µg/L) |
| 7/6/09 | ND<50 | ND<0.50 | ND<1.0 | ND<10 |

S-7

| S-7 | | | | |
|---|---|---|---|---|
| DATE | TPH-g (µg/L) | BENZENE (µg/L) | MTBE (µg/L) | TBA (µg/L) |
| 7/6/09 | **58** | ND<0.50 | **4.3** | ND<10 |

S-8

| S-8 | | | | |
|---|---|---|---|---|
| DATE | TPH-g (µg/L) | BENZENE (µg/L) | MTBE (µg/L) | TBA (µg/L) |
| 7/6/09 | ND<50 | ND<0.50 | ND<1.0 | ND<10 |

S-9

| S-9 | | | | |
|---|---|---|---|---|
| DATE | TPH-g (µg/L) | BENZENE (µg/L) | MTBE (µg/L) | TBA (µg/L) |
| 7/6/09 | ND<50 | ND<0.50 | ND<1.0 | ND<10 |

S-10

| S-10 | | | | |
|---|---|---|---|---|
| DATE | TPH-g (µg/L) | BENZENE (µg/L) | MTBE (µg/L) | TBA (µg/L) |
| 7/6/09 | **340** | ND<1.0 | ND<2.0 | **5,100** |

S-11

| S-11 | | | | |
|---|---|---|---|---|
| DATE | TPH-g (µg/L) | BENZENE (µg/L) | MTBE (µg/L) | TBA (µg/L) |
| 7/6/09 | ND<50 | ND<0.50 | ND<1.0 | ND<10 |

S-12

| S-12 | | | | |
|---|---|---|---|---|
| DATE | TPH-g (µg/L) | BENZENE (µg/L) | MTBE (µg/L) | TBA (µg/L) |
| 7/6/09 | **83** | ND<0.50 | **37** | ND<10 |

EW-1

| EW-1 | | | | |
|---|---|---|---|---|
| DATE | TPH-g (µg/L) | BENZENE (µg/L) | MTBE (µg/L) | TBA (µg/L) |
| 7/6/09 | **17,000** | **18** | ND<10 | ND<100 |

EW-2 NS

V-1

V-2

V-3

S-2 S-3 S-4 S-5 S-6 S-7 S-8 S-9 S-10 S-11 S-12

EW-1

N W E S

LEGEND

| | |
|---|---|
| MW-1 ◆ | GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION |
| EW-1 ■ | GROUNDWATER EXTRACTION WELL LOCATION AND DESIGNATION |
| V-3 ▲ | SOIL VAPOR EXTRACTION WELL LOCATION AND DESIGNATION |
| TPH-g | TOTAL PETROLEUM HYDROCARBONS AS GASOLINE |
| MTBE | METHYL TERT-BUTYL ETHER |
| TBA | TERT-BUTYL ALCOHOL |
| µg/L | MICROGRAMS PER LITER |
| ND< | NOT DETECTED ABOVE LIMIT NOTED |
| NS | NOT SAMPLED |

0 20 40 SCALE IN FEET

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SHELL BRANDED SERVICE STATION
PLEASANTON, CALIFORNIA

**FIGURE 3**
**GROUNDWATER HYDROCARBON DISTRIBUTION MAP**
**7/6/2009**
5251 HOPYARD ROAD
PLEASANTON, CALIFORNIA

# TABLE

# TABLE 1
## $MgSO_4$ APPLICATION FEASIBILITY GROUNDWATER TESTING DATA

Shell-branded Service Station
3790 Hopyard Road
Pleasanton, California

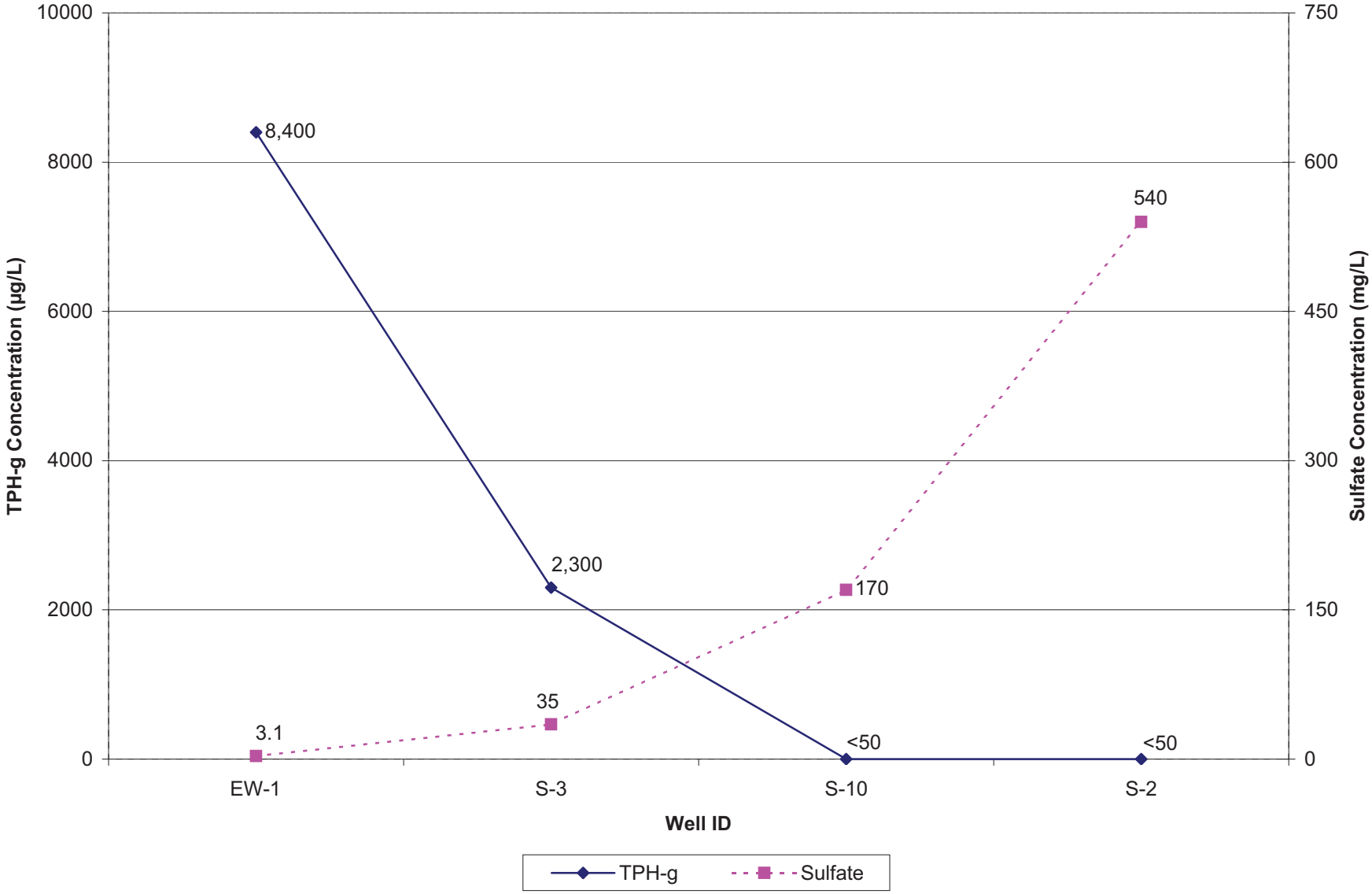
| Well ID | Date Sampled | TPH-g (ug/L) | BTEX Compounds | | | | Fuel Oxygenates | | | | | Sulfate (mg/L) | Ferrous Iron (mg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | B (ug/L) | T (ug/L) | E (ug/L) | X (ug/L) | MTBE (ug/L) | DIPE (ug/L) | ETBE (ug/L) | TAME (ug/L) | TBA (ug/L) | | |
| S-2 | 10/30/2009 | <50 | <0.50 | <1.0 | <1.0 | <1.0 | 33 | <2.0 | <2.0 | <2.0 | 10 | 540 | <0.10 |
| S-10 | 10/30/2009 | <50 | <0.50 | <1.0 | <1.0 | <1.0 | 1.8 | <2.0 | <2.0 | <2.0 | 860 | 170 | <0.10 |
| S-3 | 10/30/2009 | 2300 | 390 | 12 | 15 | 24 | 14 | <10 | <10 | <10 | <50 | 35 | <0.10 |
| EW-1 | 10/30/2009 | 8400 | 14 | 21 | 360 | 84 | <2.0 | <4.0 | <4.0 | <4.0 | <20 | 3.1 | 2.1 |

**Abbreviations:**

TPH-g = Total petroleum hydrocarbons as gasoline, analyzed by EPA Method 8015
B = Benzene, analyzed by EPA Method 8260B
T = Toluene, analyzed by EPA Method 8260B
E = Ethylbenzene, analyzed by EPA Method 8260B
X = Total xylenes, analyzed by EPA Method 8260B
MTBE = Methyl tert-butyl ether, analyzed by EPA Method 8260B
DIPE = Diisopropyl ether, analyzed by EPA Method 8260B
ETBE = Ethyl tertiary butyl ether, analyzed by EPA Method 8260B
TAME = Tertiary amyl methyl ether, analyzed by EPA Method 8260B
TBA = Tertiary butyl alcohol, analyzed by EPA Method 8260B
Sulfate - Analyzed EPA Method 300.0
Ferrous Iron - Iron (II) analyzed by SM 3500-FeB
µg/L = Micrograms per liter, equivalent to parts per billion
mg/L = Milligrams per liter, equivalent to parts per million
< = Denotes no reported concentration above shown detection limit

# GRAPH

**GRAPH 1**
**TPH-G VS. SULFATE CONCENTRATIONS**
Shell-Branded Service Station
5251 Hopyard Road
Pleasanton, California



# APPENDIX B

## BLAINE TECH SERVICES, INC. AND DELTA CONSULTANTS FIELD DATA SHEETS

# SHELL WELLHEAD INSPECTION FORM

(FOR SAMPLE TECHNICIAN)

Site Address 5251 HOPYARD RD. PLEASANTON, CA Date 2/9/10

Job Number 100209-JP1 Technician J.PARKER Page 1 of 1

| Well ID | Well Inspected - No Corrective Action Required | Well Box Meets Compliance Requirements *See Below | Water Bailed From Wellbox | Cap Replaced | Lock Replaced | Well Not Inspected (explain in notes) | New Deficiency Identified | Previously Identified Deficiency Persists | Notes |
|---|---|---|---|---|---|---|---|---|---|
| S-1 | | | X | | | | | X | NO TAG |
| S-2 | | | | | | | | X | NO TAG |
| S-3 | | | | | | | | X | NO TAG |
| S-4 | | | | | | | | X | NO TAG |
| S-5 | | | | | | | | X | NO TAG |
| S-6 | | | | | | | | X | NO TAG |
| S-7 | | | | | | | | X | NO TAG |
| S-8 | | | | | | | | X | CHRISTY BOX, NO TAG |
| S-9 | | | | | | | | X | NO TAG |
| S-10 | | | | | | | | X | NO TAG |
| S-11 | | | | | | | | X | NO TAG |
| S-12 | | | | | | | | X | NO TAG |
| EW-1 | X | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

***Well box must meet all three criteria to be compliant: 1) WELL IS SECURABLE BY DESIGN (12"or less) 2) WELL IS MARKED WITH THE WORDS "MONITORING WELL" (12"or less) 3) WELL TAG IS PRESENT, SECURE, AND CORRECT**

Notes:

# WELL GAUGING DATA

Project # 100209-JP1 Date 2/9/10 Client SHELL

Site 5257 HOPYARD RD. PLEASANTON, CA.

| Well ID | Time | Well Size (in.) | Sheen / Odor | Depth to Immiscible Liquid (ft.) | Thickness of Immiscible Liquid (ft.) | Volume of Immiscibles Removed (ml) | Depth to water (ft.) | Depth to well bottom (ft.) | Survey Point: TOB or TOC | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| S-1 | 0840 | 3 | — | — | — | — | 8.18 | 25.40 | | |
| S-2 | 0828 | 3 | — | — | — | — | 8.20 | 24.20 | | |
| S-3 | 0832 | 3 | — | — | — | — | 8.36 | 24.19 | | |
| S-4 | 0836 | 3 | — | — | — | — | 8.59 | 24.20 | | |
| S-5 | 0855 | 3 | — | — | — | — | 8.90 | 24.21 | | |
| S-6 | 1000 | 3 | — | — | — | — | 7.99 | 25.58 | | |
| S-7 | 1005 | 3 | — | — | — | — | 8.15 | 25.10 | | |
| S-8 | 1100 | 3 | — | — | — | — | 6.91 | 24.69 | | |
| S-9 | 0900 | 2 | — | — | — | — | 7.80 | 19.72 | | |
| S-10 | 0823 | 4 | — | — | — | — | 7.90 | 19.25 | | |
| S-11 | 0905 | 4 | — | — | — | — | 9.99 | 19.84 | | |
| S-12 | 0850 | 4 | — | — | — | — | 7.97 | 20.22 | | |
| EW-1 | 0845 | 4 | — | — | — | — | 8.20 | 19.71 | ▽ | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

# SHE WELL MONITORING DAT HEET

| | |
|---|---|
| BTS #: 100209-JP1 | Site: 5251 HOPYARD RD |
| Sampler: JP | Date: 2/9/10 |
| Well I.D.: S-1 | Well Diameter: 2 (3) 4 6 8 ___ |
| Total Well Depth (TD): 28.40 | Depth to Water (DTW): 8.18 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): YSI HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.22 | |

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; X Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other ____

Sampling Method: X Bailer; Disposable Bailer; Extraction Port; Dedicated Tubing; Other: ____

| 7.5 (Gals.) X | 3 | = | 22.5 Gals. |
|---|---|---|---|
| 1 Case Volume | Specified Volumes | | Calculated Volume |

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius$^2$ * 0.163 |

| Time | Temp (°F) | pH | Cond. (mS or (µS)) | Turbidity (NTUs) | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| 1502 | 66.0 | 7.34 | 1380 | 375 | 7.5 | |
| 1504 | 65.4 | 7.28 | 1411 | 222 | 15.0 | |
| 1506 | 65.8 | 7.27 | 1473 | 289 | 22.5 | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 22.5

Sampling Date: 2/9/10 Sampling Time: 1530 Depth to Water: 11.90

Sample I.D.: S-1 Laboratory: (CalScience) Columbia Other ____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: 3 FF COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

# SHE WELL MONITORING DAT HEET

| | |
|---|---|
| BTS #: 100209-JP1 | Site: 5251 HOPYARD RD. |
| Sampler: JP | Date: 2/9/10 |
| Well I.D.: S-2 | Well Diameter: 2 (3) 4 6 8 ___ |
| Total Well Depth (TD): 24.20 | Depth to Water (DTW): 8.20 |
| Depth to Free Product: — | Thickness of Free Product (feet): — |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): YSI HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.40 | |

Purge Method:
- Bailer
- Disposable Bailer
- Positive Air Displacement
- X Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other_____

Sampling Method:
- X Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: _____

5.9 (Gals.) X 3 = 17.7 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius² * 0.163 |

| Time | Temp (°F) | pH | Cond. (mS or (uS)) | Turbidity (NTUs) | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| 1321 | 62.7 | 6.93 | 3065 | 33 | 5.9 | |
| 1323 | 63.9 | 6.94 | 3077 | 38 | 11.8 | |
| 1325 | 64.4 | 7.05 | 3073 | 32 | 17.7 | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 17.7

Sampling Date: 2/9/10 Sampling Time: 1330 Depth to Water: 11.26

Sample I.D.: S-2 Laboratory: (CalScience) Columbia Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

# SHE WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 100209-JP1 | Site: 5251 HOPYARD RD. |
| Sampler: JP | Date: 2/9/10 |
| Well I.D.: S-3 | Well Diameter: 2 (3) 4 6 8 ___ |
| Total Well Depth (TD): 24.19 | Depth to Water (DTW): 8.36 |
| Depth to Free Product: — | Thickness of Free Product (feet): — |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): YSI HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.53 | |

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; (X) Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: (X) Bailer; Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

5.6 (Gals.) X 3 = 16.8 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius$^2$ * 0.163 |

| Time | Temp (°F) | pH | Cond. (mS or (µS)) | Turbidity (NTUs) | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| 1428 | 63.2 | 7.32 | 2728 | 89 | 5.6 | |
| 1430 | 64.1 | 7.20 | 2749 | 163 | 11.2 | |
| 1432 | 64.4 | 7.22 | 2762 | 271 | 16.8 | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 16.8

Sampling Date: 2/9/10 Sampling Time: 1515 Depth to Water: 9.55

Sample I.D.: S-3 Laboratory: (CalScience) Columbia Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: SEE COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

# SHE WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 100209-JP1 | Site: 5251 HOPYARD RD. |
| Sampler: JP | Date: 2/9/10 |
| Well I.D.: S-4 | Well Diameter: 2 (3) 4 6 8 ___ |
| Total Well Depth (TD): 24.20 | Depth to Water (DTW): 8.59 |
| Depth to Free Product: — | Thickness of Free Product (feet): — |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): YSI HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.71 | |

Purge Method:
- Bailer
- Disposable Bailer
- Positive Air Displacement
- X Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other ___

Sampling Method:
- X Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: ___

5.8 (Gals.) X 3 = 17.4 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius² * 0.163 |

| Time | Temp (°F) | pH | Cond. (mS or (µS)) | Turbidity (NTUs) | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| 1224 | 63.5 | 7.97 | 1197 | 53 | 5.8 | |
| 1226 | 64.1 | 7.73 | 1071 | 192 | 11.6 | |
| 1228 | 64.2 | 7.79 | 1091 | 173 | 17.4 | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 17.4

Sampling Date: 2/9/10 Sampling Time: 1251 Depth to Water: 9.56

Sample I.D.: S-4 Laboratory: (CalScience) Columbia Other ___

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: SEE COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

# SHE WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 100209-JP1 | Site: 5251 HOPYARD RD. |
| Sampler: JP | Date: 2/9/10 |
| Well I.D.: S-5 | Well Diameter: 2 (3) 4 6 8 ____ |
| Total Well Depth (TD): 24.21 | Depth to Water (DTW): 8.90 |
| Depth to Free Product: — | Thickness of Free Product (feet): — |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): YSI HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.96 | |

Purge Method:
- Bailer
- Disposable Bailer
- Positive Air Displacement
- X Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other_____

Sampling Method:
- X Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: _____

5.7 (Gals.) X 3 = 17.1 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius² * 0.163 |

| Time | Temp (°F) | pH | Cond. (mS or (µS)) | Turbidity (NTUs) | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| 1241 | 61.3 | 6.61 | 1447 | 49 | 5.7 | |
| 1243 | 62.2 | 6.40 | 1435 | 37 | 11.4 | |
| 1245 | 62.5 | 6.53 | 1437 | 23 | 17.1 | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 17.1

Sampling Date: 2/9/10 Sampling Time: 1305 Depth to Water: 9.35

Sample I.D.: S-5 Laboratory: (CalScience) Columbia Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: SEE COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

# SHE WELL MONITORING DAT HEET

| | |
|---|---|
| BTS #: 100209-JP1 | Site: 5251 HOPYARD RD. |
| Sampler: JP | Date: 2/9/10 |
| Well I.D.: S-6 | Well Diameter: 2 (3) 4 6 8 ____ |
| Total Well Depth (TD): 25.58 | Depth to Water (DTW): 7.99 |
| Depth to Free Product: — | Thickness of Free Product (feet): — |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): YSI HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: TRAFFIC | |

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; X Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other____

Sampling Method: Bailer; X Disposable Bailer; Extraction Port; Dedicated Tubing; Other: ____

| 6.5 (Gals.) X | 3 | = | 19.5 Gals. |
|---|---|---|---|
| 1 Case Volume | Specified Volumes | | Calculated Volume |

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius$^2$ * 0.163 |

| Time | Temp (°F) | pH | Cond. (mS or (µS)) | Turbidity (NTUs) | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| 1014 | 67.4 | 6.68 | 7562 | 91 | 6.5 | |
| 1016 | 68.1 | 8.36 | 8041 | 118 | 13.0 | |
| ~~1018~~ | WELL DEWATERED @ 15 GALLONS | | | | | |
| | | | | | | |
| 1020 | 65.8 | 7.47 | 6971 | 130 | — | |

Did well dewater? (Yes) No Gallons actually evacuated: 15

Sampling Date: 2/9/10 Sampling Time: 1020 Depth to Water: 16.31

Sample I.D.: ~~BK~~ S-6 Laboratory: (CalScience) Columbia Other____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: SEE COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

# SHE WELL MONITORING DAT HEET

| | |
|---|---|
| BTS #: 100209-JP1 | Site: 5251 HOPYARD RD. |
| Sampler: JP | Date: 2/9/10 |
| Well I.D.: S-7 | Well Diameter: 2 (3) 4 6 8 ____ |
| Total Well Depth (TD): 25.10 | Depth to Water (DTW): 8.15 |
| Depth to Free Product: — | Thickness of Free Product (feet): — |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): YSI HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: TRAFFIC. | |

Purge Method:
- Bailer
- Disposable Bailer
- Positive Air Displacement
- Y Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other_____

Sampling Method:
- Bailer
- X Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: _____

6.3 (Gals.) X 3 = 18.9 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius$^2$ * 0.163 |

| Time | Temp (°F) | pH | Cond. (mS or (µS)) | Turbidity (NTUs) | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| 1034 | 68.2 | 8.08 | 8131 | 89 | 6.3 | |
| 1036 | 69.0 | 7.96 | 8142 | 86 | 12.6 | |
| 1038 | 69.5 | 8.06 | 8250 | 93 | 18.9 | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 18.9

Sampling Date: 2/9/10 Sampling Time: 1040 Depth to Water: 12.20

Sample I.D.: S-7 Laboratory: (CalScience) Columbia Other____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: SEE COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

# SHE WELL MONITORING DAT HEET

| | |
|---|---|
| BTS #: 100209-JP1 | Site: 5251 HOPYARD RD. |
| Sampler: JP | Date: 2/9/10 |
| Well I.D.: S-8 | Well Diameter: 2 (3) 4 6 8 ___ |
| Total Well Depth (TD): 24.69 | Depth to Water (DTW): 6.91 |
| Depth to Free Product: — | Thickness of Free Product (feet): — |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): YSI HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: TRAFFIC | |

Purge Method:
- Bailer
- Disposable Bailer
- Positive Air Displacement
- X Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other_____

Sampling Method:
- Bailer
- X Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: _____

6.6 (Gals.) X 3 = 19.8 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius² * 0.163 |

| Time | Temp (°F) | pH | Cond. (mS or (µS)) | Turbidity (NTUs) | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| 1108 | 66.6 | 6.31 | 7963 | 211 | 6.6 | |
| 1110 | 66.2 | 7.15 | 8491 | 224 | 13.2 | |
| 1112 | 66.8 | 7.23 | 8977 | 88 | 19.8 | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 19.8

Sampling Date: 2/9/10 Sampling Time: 1115 Depth to Water: 13.91

Sample I.D.: S-8 Laboratory: (CalScience) Columbia Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: SEE COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

# SHE WELL MONITORING DAT HEET

| | |
|---|---|
| BTS #: 100209-JP1 | Site: 5251 HOPYARD RD. |
| Sampler: JP | Date: 2/9/10 |
| Well I.D.: S-9 | Well Diameter: (2) 3 4 6 8 ___ |
| Total Well Depth (TD): 19.72 | Depth to Water (DTW): 7.80 |
| Depth to Free Product: — | Thickness of Free Product (feet): — |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): YSI HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.16 | |

Purge Method: X Bailer; Disposable Bailer; Positive Air Displacement; X Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other ____

Sampling Method: \ Bailer; Disposable Bailer; Extraction Port; Dedicated Tubing; Other: ____

| 1.9 (Gals.) X | 3 | = 5.7 Gals. |
|---|---|---|
| 1 Case Volume | Specified Volumes | Calculated Volume |

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius$^2$ * 0.163 |

| Time | Temp (°F) | pH | Cond. (mS or (µS)) | Turbidity (NTUs) | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| 1132 | 64.0 | 7.23 | 4018 | 932 | 1.9 | |
| 1136 | 64.8 | 8.31 | 4082 | >1000 | 3.8 | |
| 1140 | 64.7 | 8.30 | 4095 | >1000 | 5.7 | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 5.7

Sampling Date: 2/9/10 Sampling Time: 1145 Depth to Water: 8.98

Sample I.D.: S-9 Laboratory: (CalScience) Columbia Other ____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: SEE COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

# SHE WELL MONITORING DAT HEET

| | |
|---|---|
| BTS #: 100209-JP1 | Site: 5251 HOPYARD RD. |
| Sampler: JP | Date: 2/9/10 |
| Well I.D.: S-10 | Well Diameter: 2 3 (4) 6 8 ___ |
| Total Well Depth (TD): 19.25 | Depth to Water (DTW): 7.90 |
| Depth to Free Product: — | Thickness of Free Product (feet): — |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): YSI HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.17 | |

Purge Method:
- Bailer
- Disposable Bailer
- Positive Air Displacement
- (X) Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other_____

Sampling Method:
- (X) Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: _____

7.4 (Gals.) X 3 = 22.2 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius$^2$ * 0.163 |

| Time | Temp (°F) | pH | Cond. (mS or µS) | Turbidity (NTUs) | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| 1406 | 63.6 | 7.38 | 2264 | 552 | 7.4 | |
| 1408 | 64.3 | 7.32 | 2209 | 309 | 14.8 | |
| 1410 | 64.8 | 7.40 | 2198 | >1000 | 22.2 | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 22.2

Sampling Date: 2/9/10 Sampling Time: 1420 Depth to Water: 9.93

Sample I.D.: S-10 Laboratory: (CalScience) Columbia Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

# SHEET WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 100209-JP1 | Site: 5251 HOPYARD RD. |
| Sampler: JP | Date: 2/9/10 |
| Well I.D.: S-11 | Well Diameter: 2 3 (4) 6 8 ____ |
| Total Well Depth (TD): 19.84 | Depth to Water (DTW): 9.99 |
| Depth to Free Product: — | Thickness of Free Product (feet): — |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): YSI HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.96 | |

Purge Method:
- Bailer
- Disposable Bailer
- Positive Air Displacement
- X Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other_____

Sampling Method:
- X Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: _____

6.4 (Gals.) X 3 = 19.2 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius² * 0.163 |

| Time | Temp (°F) | pH | Cond. (mS or (µS)) | Turbidity (NTUs) | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| 1159 | 64.8 | 7.07 | 6366 | 266 | 6.4 | |
| 1201 | 65.3 | 7.19 | 6167 | 198 | 12.8 | |
| 1203 | 65.6 | 7.21 | 6206 | 193 | 19.2 | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 19.2

Sampling Date: 2/9/10 Sampling Time: 1210 Depth to Water: 11.86

Sample I.D.: S-11 Laboratory: (CalScience) Columbia Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: SEE COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

# SHE WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 100209-JP1 | Site: 5251 HOPYARD RD. |
| Sampler: JP | Date: 2/9/10 |
| Well I.D.: S-12 | Well Diameter: 2 3 (4) 6 8 ___ |
| Total Well Depth (TD): 20.22 | Depth to Water (DTW): 7.97 |
| Depth to Free Product: — | Thickness of Free Product (feet): — |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): YSI HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.42 | |

Purge Method:
- Bailer
- Disposable Bailer
- Positive Air Displacement
- X Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other_____

Sampling Method:
- X Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: _____

| 3.0 (Gals.) X | 3 | = | 24.0 Gals. |
|---|---|---|---|
| 1 Case Volume | Specified Volumes | | Calculated Volume |

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius² * 0.163 |

| Time | Temp (°F) | pH | Cond. (mS or (µS)) | Turbidity (NTUs) | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| 1341 | 61.0 | 7.09 | 2082 | 171 | 8.0 | |
| 1343 | 61.7 | 7.14 | 1982 | 93 | 16.0 | |
| 1345 | 62.3 | 7.21 | 1953 | 166 | 24.0 | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 24.0

Sampling Date: 2/9/10 Sampling Time: 1355 Depth to Water: 10.16

Sample I.D.: S-12 Laboratory: (CalScience) Columbia Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See COC.

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

# SHE WELL MONITORING DAT HEET

| | |
|---|---|
| BTS #: 100209-JP1 | Site: 5251 HOPYARD RD. |
| Sampler: JP | Date: 2/9/10 |
| Well I.D.: EW-1 | Well Diameter: 2 3 (4) 6 8 ___ |
| Total Well Depth (TD): 19.71 | Depth to Water (DTW): 8.20 |
| Depth to Free Product: — | Thickness of Free Product (feet): — |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): YSI HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.50 | |

Purge Method:
- Bailer
- Disposable Bailer
- Positive Air Displacement
- (X) Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other_____

Sampling Method:
- (X) Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: _____

7.5 (Gals.) X 3 = 22.5 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius$^2$ * 0.163 |

| Time | Temp (°F) | pH | Cond. (mS or (µS)) | Turbidity (NTUs) | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| 1443 | 65.4 | 6.71 | 1148 | 32 | 7.5 | |
| 1445 | 65.9 | 6.94 | 1350 | 22 | 15.0 | |
| 1447 | 66.2 | 7.04 | 1327 | 51 | 22.5 | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 22.5

Sampling Date: 2/9/10 Sampling Time: 1520 Depth to Water: 9.61

Sample I.D.: EW-1 Laboratory: (CalScience) Columbia Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: SEE COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

DELTA

# FIELD WORK LOG

CLIENT: Shell JOB NO. SCA82511H1D

PERSONNEL: Matt Lambert DATE: 4/8/10

| TIME | NOTES/OBSERVATIONS |
|---|---|
| 9:00 | Arrived on site |
| | → H2S Meeting |
| | → signed JSA & checked in w/ station |
| 9:30 | Confirmed Samples + Application wells w/ PM (SM/N) |
| 9:45 | EW-1 sampled |
| 10:15 | S-3 samples |
| 10:35 | S-1 samples |
| | → moved truck to S-10 |
| 11:15 | S-10 samples |
| | → moved truck to S-2 |
| 11:35 | S-2 samples |
| 11:50 | → moved truck to EW-1 location, transferred $MgSO_4$ to application drum and set up tubing for $MgSO_4$ application to EW-1 |
| 12:25 | Began EW-1 $MgSO_4$ application. |
| 1:10 | Finished EW-1 $MgSO_4$ application |
| 1:20 | Began S-3 $MgSO_4$ application |
| 3:30 | ~~3:00~~ Finished S-3 $MgSO_4$ application |
| 5:10 | EW-1 B Sample |
| 7:30 | S-3 B Sample |
| 7:40 | Left Site. |

SIGNATURE: [signature] DATE: 4/8/10 PAGE 1 OF 1

Site Name Hayward Shell

Site # SEAS251

Date 4/8/10

Field Staff Matt Lambert

Samples Taken

| Well | Date | Time | ~~Analysis~~ | Notes |
|---|---|---|---|---|
| EW-1 | 4/8/10 | 9:45 | TPH-g, BTEX, MTBE, sulfate, ferrous iron, ferric iron | DTW = 7.81, pH = 7.05 |
| S-2 | 4/8/10 | 11:35 | " | DTW = 8.14, pH = 7.52 |
| S-3 | 4/8/10 | 10:15 | " | DTW = 8.45, pH = 7.46 |
| S-1 | 4/8/10 | 10:35 | " | DTW = 7.95, pH = 7.49 |
| S-10 | 4/8/10 | 11:15 | " | DTW = 7.68, pH = 7.71 |
| EW-1B | 4/8/10 | 17:10 | Sulfate Only | DTW = |
| S-3B | 4/8/10 | 19:00 | Sulfate Only | DTW = |

MgS04 Application

| Well | Date | Time | | EOS Amount | Notes |
|---|---|---|---|---|---|
| | | Start | End | (gal) | |
| EW-1 | 4/8/10 | 12:25 | 13:10 | 55 | 4" Well |
| S-3 | 4/8/10 | 13:20 | 15:30 | 55 | 3" well, slower... |
| | | | | | |
| | | | | | |

DELTA

# FIELD WORK LOG

CLIENT: SHELL JOB NO. 3C45251 H

PERSONNEL: M. Lambert DATE: 5/7/10

| TIME | NOTES/OBSERVATIONS |
|---|---|
| 19:30 | Arrived on site |
| | reviewed H&S. |
| | ~~sampled~~ EW-1 |
| | ↳ could not open EW-1 vault lid. → too late & too dark to buy tool. |
| 20:05 | sampled S-3 |
| 20:15 | left site |

SIGNATURE: [signature] DATE: 5/7/10 PAGE 1 OF 1

Site Name 5251 Hopyard

Site # ~~SCAS251H~~

Date 5/7/10

Field Staff M. Lambert

Samples Taken

| Well | Date | Time | Analysis | Notes |
|---|---|---|---|---|
| EW-1 | ~~5/7/10~~ | | pH, TRH-g, BTEX, MTBE, | ~~$Fe^{2+}$ = , pH =~~ unable to sample |
| ~~S-3~~ | 5/7/10 | ~~10~~:05 | Sulfate, ferrous iron, ferric iron | $Fe^{2+}$ = 2.0 mg/L, pH = 6.96 |
| | | | | |
| EW-1 | 5/11/10 | 9:45 | " | $Fe^{2+}$ = 2.4 mg/L pH = 7.24 |
| S-3 | 5/11/10 | 9:55 | " | $Fe^{2+}$ = ~~4~~.8 mg/L pH = 7.11 |
| | | | | ↑ Sulfate on separate COC w/ 48hr TAT. |
| | | | | |

MgS04 Application

| Well | Date | Time | | EOS Amount | Notes |
|---|---|---|---|---|---|
| | | Start | End | (gal) | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

# APPENDIX C

# BLAINE TECH SERVICES, INC.
# FIELD PROCEDURES

BLAINE
TECH SERVICES INC.

GROUNDWATER SAMPLING SPECIALISTS
SINCE 1985

February 26, 2010

Denis Brown
Shell Oil Products US
20945 South Wilmington Avenue
Carson, CA 90810

First Quarter 2010 Groundwater Monitoring at
Shell-branded Service Station
5251 Hopyard Road
Pleasanton, CA

Monitoring performed on February 9, 2010

Groundwater Monitoring Report **100209-JP-1**

This report covers the routine monitoring of groundwater wells at this Shell-branded facility. In accordance with standard procedures that conform to Regional Water Quality Control Board requirements, routine field data collection includes depth to water, total well depth, thickness of any separate immiscible layer, water column volume, calculated purge volume (if applicable), elapsed evacuation time (if applicable), total volume of water removed (if applicable), and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater (if applicable) is, likewise, collected and transported to the Martinez Refining Company.

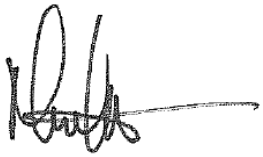
Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL CONCENTRATIONS**. The full analytical report for the most recent samples and the field data sheets are attached to this report.

At a minimum, Blaine Tech Services, Inc. field personnel are certified on completion of a forty-hour Hazardous Materials and Emergency Response training course per 29 CFR 1910.120. Field personnel are also enrolled in annual eight-hour refresher courses.

Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type as an independent third party. Our activities at this site consisted of objective data and sample collection only. No interpretation of analytical results, defining of hydrological conditions or formulation of recommendations was performed.

Please call if you have any questions.

Yours truly,



Mike Ninokata
Project Manager

MN/np

attachments: Cumulative Table of WELL CONCENTRATIONS
Certified Analytical Report
Field Data Sheets

cc: Suzanne McClurkin-Nelson
Delta Environmental
175 Bernal Rd., Suite 200
San Jose, CA 95119

# BLAINE TECH SERVICES, INC.
# METHODS AND PROCEDURES
# FOR THE ROUTINE MONITORING OF
# GROUNDWATER WELLS AT SHELL SITES

Blaine Tech Services, Inc. performs environmental sampling and documentation as an independent third party. We specialize in groundwater monitoring assignments and intentionally limit the scope of our services to those centered on the generation of objective information.

To avoid conflicts of interest, Blaine Tech Services, Inc. personnel do not evaluate or interpret the information we collect. As a state licensed contractor (C-57 well drilling –water – 746684 ) performing strictly technical services, we do not make any professional recommendations and perform no consulting of any kind.

## SAMPLING PROCEDURES OVERVIEW

### SAFETY

All groundwater monitoring assignments performed for Shell comply with Shell's safety guidelines, 29 CFR 1910.120 and SB-198 Injury and Illness Prevention Program (IIPP). All Field Technicians receive the full 40-hour 29CFR 1910.120 OSHA SARA HAZWOPER course, medical clearance and on-the-job training prior to commencing any work on any Shell site.

### INSPECTION AND GAUGING

Wells are inspected prior to evacuation and sampling. The condition of the wellhead is checked and noted according to a wellhead inspection checklist.

Standard measurements include the depth to water (DTW) and the total well depth (TD) obtained with industry standard electronic water level indicators that are graduated in increments of hundredths of a foot.

The water in each well is inspected for the presence of immiscibles. When free product is suspected, its presence is confirmed using an electronic interface probe (e.g. MMC). No samples are collected from a well containing over two-hundredths of a foot (0.02') of product.

### EVACUATION

Depth to water measurements are collected by our personnel prior to purging and minimum purge volumes are calculated anew for each well based on the height of the water column and the diameter of the well. Expected purge volumes are never less than three case volumes and are set at no less than four case volumes in some jurisdictions.

Well purging devices are selected on the basis of the well diameter and the total volume to be evacuated. In most cases the well will be purged using an electric submersible pump (i.e. Grundfos) suspended near (but not touching) the bottom of the well.

## PARAMETER STABILIZATION

Well purging completion standards include minimum purge volumes, but additionally require stabilization of specific groundwater parameters prior to sample collection. Typical groundwater parameters used to measure stability are electrical conductivity, pH, and temperature. Instrument readings are obtained at regular intervals during the evacuation process (no less than once per case volume).

Stabilization standards for routine quarterly monitoring of fuel sites include the following: Temperature is considered to have stabilized when successive readings do not fluctuate more than +/- 1 degree Celsius. Electrical conductivity is considered stable when successive readings are within 10%. pH is considered to be stable when successive readings remain constant or vary no more than 0.2 of a pH unit.

## DEWATERED WELLS

Normal evacuation removes no less than three case volumes of water from the well. However, less water may be removed in cases where the well dewaters and does not immediately recharge.

## MEASURING RECHARGE

Upon completion of well purging, a depth to water measurement is collected and notated to ensure that the well has recharged to within 80% of its static, pre-purge level prior to sampling.

Wells that do not immediately show 80% recharge or dewatered wells will be allowed a minimum of 2 hours to recharge prior to sampling. The water level at time of sampling will be noted.

## PURGEWATER CONTAINMENT

All non-hazardous purgewater evacuated from each groundwater monitoring well is captured and contained in on-board storage tanks on the Sampling Vehicle and/or special water hauling trailers. Effluent from the decontamination of reusable apparatus (sounders, electric pumps and hoses etc.), consisting of groundwater combined with deionized water and non-phosphate soap, is also captured and pumped into effluent tanks.

Non-hazardous purgewater is transported under standard Bill of Lading documentation to a Blaine Tech Services, Inc. facility before being transported to a Shell approved disposal facility.

## SAMPLE COLLECTION DEVICES

All samples are collected using a stainless steel, Teflon or disposable bailers.

## SAMPLE CONTAINERS

Sample material is decanted directly from the sampling bailer into sample containers provided by the laboratory that will analyze the samples. The transfer of sample material from the bailer to the sample container conforms to specifications contained in the USEPA T.E.G.D. The type of sample container, material of construction, method of closure and filling requirements are specific to the intended analysis. Chemicals needed to preserve the sample material are commonly placed inside the sample containers by the laboratory or glassware vendor prior to delivery of the bottle to our personnel. The laboratory sets the number of replicate containers.

## TRIP BLANKS

Trip Blanks, if requested, are taken to the site and kept inside the sample cooler for the duration of the event. They are turned over to the laboratory for analysis with the samples from that site.

## DUPLICATES

Duplicates, if requested, may be collected at a site. The Field Technician uses their discretion in choosing the well at which the Duplicate is collected, typically one suspected of containing measurable contaminants. The Duplicate sample is labeled "DUP" and the time of collection is omitted from the COC, thus rendering the sample blind.

## SAMPLE STORAGE

All sample containers are promptly placed in food grade ice chests for storage in the field and transport (direct or via our facility) to the designated analytical laboratory. These ice chests contain quantities of restaurant grade ice as a refrigerant material. The samples are maintained in either an ice chest or a refrigerator until relinquished into the custody of the laboratory or laboratory courier.

## DOCUMENTATION CONVENTIONS

A label must be affixed to all sample containers. In most cases these labels are generated by our office personnel and are partially preprinted. Labels can also be hand written by our field personnel. The site is identified with the store number and site address, as is the particular groundwater well from which the sample is drawn (e.g. MW-1, MW-2, S-1 etc.). The time and date of sample collection along with the initials of the person who collects the sample are handwritten onto the label.

Chain of Custody records are created using client specific preprinted forms following USEPA specifications.

Bill of Lading records are contemporaneous records created in the field at the site where the non-hazardous purgewater is generated. Field Technicians use preprinted Bill of Lading forms.

## DECONTAMINATION

All equipment is brought to the site in clean and serviceable condition and is cleaned after use in each well and before subsequent use in any other well. Equipment is decontaminated before leaving the site.

The primary decontamination device is a commercial steam cleaner. The steam cleaner is de-tuned to function as a hot pressure washer that is then operated with high quality deionized water that is produced at our facility and stored onboard our sampling vehicle. Cleaning is facilitated by the use of proprietary fixtures and devices included in the patented workstation (U.S. Patent 5,535,775) that is incorporated in each sampling vehicle. The steam cleaner is used to decon reels, pumps and bailers.

Any sensitive equipment or parts (i.e. Dissolved Oxygen sensor membrane, water level indicator, etc.) that cannot be washed using the high pressure water, will be sprayed with a non-phosphate soap and deionized water solution and rinsed with deionized water.

## DISSOLVED OXYGEN READINGS

Dissolved Oxygen readings are taken pre- and/or post-purge using YSI meters (e.g. YSI Model 54, 58 or 95) or HACH field test kits.

The YSI meters are equipped with a stirring device that enables them to collect accurate in-situ readings. The probe/stirring devices are modified to allow downhole measurements to be taken from wells with diameters as small as two inches. The probe and reel is decontaminated between wells as described above. The meter is calibrated between wells as per the instructions in the operating manual. The probe and stirrer is lowered into the water column. The reading is allowed to stabilize prior to collection.

## OXYIDATON REDUCTION POTENTIAL READINGS

All readings are obtained with either Corning or Myron-L meters (e.g. Corning ORP-65 or a Myron-L Ultrameter GP). The meter is cleaned between wells as described above. The meter is calibrated at the start of each day according to the instruction manual.

## FERROUS IRON MEASUREMENTS

All field measurements are collected at time of sampling with a HACH test kit.

# APPENDIX D

## CERTIFIED ANALYTICAL REPORTS WITH CHAIN-OF-CUSTODY DOCUMENTATION

Calscience Environmental Laboratories, Inc.

February 22, 2010

Michael Ninokata
Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

Subject: **Calscience Work Order No.: 10-02-1022**
**Client Reference: 5251 Hopyard Rd., Pleasanton, CA**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 2/11/2010 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,

Philip Hamelle for

Calscience Environmental
Laboratories, Inc.
Xuan H. Dang
Project Manager

Calscience Environmental Laboratories, Inc.

**Analytical Report**

| | | | |
|---|---|---|---|
| Blaine Tech Services, Inc. | | Date Received: | 02/11/10 |
| 1680 Rogers Avenue | | Work Order No: | 10-02-1022 |
| San Jose, CA 95112-1105 | | Preparation: | EPA 5030B |
| | | Method: | LUFT GC/MS / EPA 8260B |
| | | Units: | ug/L |

Project: 5251 Hopyard Rd., Pleasanton, CA



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **S-1** | **10-02-1022-1-A** | **02/09/10 15:30** | **Aqueous** | **GC/MS UU** | **02/13/10** | **02/14/10 07:41** | **100213L02** |

| Parameter | Result | RL | DF | Qual | Parameter | Result | RL | DF | Qual |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 18 | 2.5 | 5 | | Methyl-t-Butyl Ether (MTBE) | 13 | 5.0 | 5 | |
| Ethylbenzene | 340 | 5.0 | 5 | | Tert-Butyl Alcohol (TBA) | 66 | 50 | 5 | |
| Toluene | 33 | 5.0 | 5 | | TPPH | 8800 | 250 | 5 | |
| Xylenes (total) | 37 | 5.0 | 5 | | | | | | |

| Surrogates: | REC (%) | Control Limits | Qual | Surrogates: | REC (%) | Control Limits | Qual |
|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 93 | 80-132 | | 1,2-Dichloroethane-d4 | 112 | 80-141 | |
| Toluene-d8 | 104 | 80-120 | | Toluene-d8-TPPH | 104 | 88-112 | |
| 1,4-Bromofluorobenzene | 97 | 76-120 | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **S-2** | **10-02-1022-2-B** | **02/09/10 13:30** | **Aqueous** | **GC/MS PP** | **02/15/10** | **02/15/10 15:43** | **100215L01** |

| Parameter | Result | RL | DF | Qual | Parameter | Result | RL | DF | Qual |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | 0.50 | 1 | | Methyl-t-Butyl Ether (MTBE) | 42 | 1.0 | 1 | |
| Ethylbenzene | ND | 1.0 | 1 | | Tert-Butyl Alcohol (TBA) | ND | 10 | 1 | |
| Toluene | ND | 1.0 | 1 | | TPPH | 62 | 50 | 1 | |
| Xylenes (total) | ND | 1.0 | 1 | | | | | | |

| Surrogates: | REC (%) | Control Limits | Qual | Surrogates: | REC (%) | Control Limits | Qual |
|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 102 | 80-132 | | 1,2-Dichloroethane-d4 | 110 | 80-141 | |
| Toluene-d8 | 102 | 80-120 | | Toluene-d8-TPPH | 102 | 88-112 | |
| 1,4-Bromofluorobenzene | 99 | 76-120 | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **S-3** | **10-02-1022-3-B** | **02/09/10 15:15** | **Aqueous** | **GC/MS PP** | **02/15/10** | **02/15/10 16:10** | **100215L01** |

| Parameter | Result | RL | DF | Qual | Parameter | Result | RL | DF | Qual |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 180 | 0.50 | 1 | | Methyl-t-Butyl Ether (MTBE) | 12 | 1.0 | 1 | |
| Ethylbenzene | 11 | 1.0 | 1 | | Tert-Butyl Alcohol (TBA) | 32 | 10 | 1 | |
| Toluene | 4.7 | 1.0 | 1 | | TPPH | 1400 | 50 | 1 | |
| Xylenes (total) | 13 | 1.0 | 1 | | | | | | |

| Surrogates: | REC (%) | Control Limits | Qual | Surrogates: | REC (%) | Control Limits | Qual |
|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 91 | 80-132 | | 1,2-Dichloroethane-d4 | 101 | 80-141 | |
| Toluene-d8 | 103 | 80-120 | | Toluene-d8-TPPH | 103 | 88-112 | |
| 1,4-Bromofluorobenzene | 103 | 76-120 | | | | | |

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

Calscience Environmental Laboratories, Inc.

# Analytical Report



Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

Date Received: 02/11/10
Work Order No: 10-02-1022
Preparation: EPA 5030B
Method: LUFT GC/MS / EPA 8260B
Units: ug/L

Project: 5251 Hopyard Rd., Pleasanton, CA



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **S-4** | **10-02-1022-4-B** | **02/09/10 12:51** | **Aqueous** | **GC/MS PP** | **02/15/10** | **02/15/10 13:56** | **100215L01** |

| Parameter | Result | RL | DF | Qual | Parameter | Result | RL | DF | Qual |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | 0.50 | 1 | | Methyl-t-Butyl Ether (MTBE) | ND | 1.0 | 1 | |
| Ethylbenzene | ND | 1.0 | 1 | | Tert-Butyl Alcohol (TBA) | ND | 10 | 1 | |
| Toluene | ND | 1.0 | 1 | | TPPH | ND | 50 | 1 | |
| Xylenes (total) | ND | 1.0 | 1 | | | | | | |
| Surrogates: | REC (%) | Control Limits | | Qual | Surrogates: | REC (%) | Control Limits | | Qual |
| Dibromofluoromethane | 102 | 80-132 | | | 1,2-Dichloroethane-d4 | 103 | 80-141 | | |
| Toluene-d8 | 103 | 80-120 | | | Toluene-d8-TPPH | 103 | 88-112 | | |
| 1,4-Bromofluorobenzene | 97 | 76-120 | | | | | | | |

| **S-5** | **10-02-1022-5-B** | **02/09/10 13:05** | **Aqueous** | **GC/MS PP** | **02/15/10** | **02/15/10 16:37** | **100215L01** |
|---|---|---|---|---|---|---|---|

| Parameter | Result | RL | DF | Qual | Parameter | Result | RL | DF | Qual |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 2.3 | 0.50 | 1 | | Methyl-t-Butyl Ether (MTBE) | 2.4 | 1.0 | 1 | |
| Ethylbenzene | ND | 1.0 | 1 | | Tert-Butyl Alcohol (TBA) | ND | 10 | 1 | |
| Toluene | ND | 1.0 | 1 | | TPPH | 130 | 50 | 1 | |
| Xylenes (total) | ND | 1.0 | 1 | | | | | | |
| Surrogates: | REC (%) | Control Limits | | Qual | Surrogates: | REC (%) | Control Limits | | Qual |
| Dibromofluoromethane | 100 | 80-132 | | | 1,2-Dichloroethane-d4 | 106 | 80-141 | | |
| Toluene-d8 | 97 | 80-120 | | | Toluene-d8-TPPH | 97 | 88-112 | | |
| 1,4-Bromofluorobenzene | 97 | 76-120 | | | | | | | |

| **S-6** | **10-02-1022-6-B** | **02/09/10 10:20** | **Aqueous** | **GC/MS PP** | **02/15/10** | **02/15/10 17:04** | **100215L01** |
|---|---|---|---|---|---|---|---|

| Parameter | Result | RL | DF | Qual | Parameter | Result | RL | DF | Qual |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | 0.50 | 1 | | Methyl-t-Butyl Ether (MTBE) | ND | 1.0 | 1 | |
| Ethylbenzene | ND | 1.0 | 1 | | Tert-Butyl Alcohol (TBA) | ND | 10 | 1 | |
| Toluene | ND | 1.0 | 1 | | TPPH | ND | 50 | 1 | |
| Xylenes (total) | ND | 1.0 | 1 | | | | | | |
| Surrogates: | REC (%) | Control Limits | | Qual | Surrogates: | REC (%) | Control Limits | | Qual |
| Dibromofluoromethane | 98 | 80-132 | | | 1,2-Dichloroethane-d4 | 106 | 80-141 | | |
| Toluene-d8 | 103 | 80-120 | | | Toluene-d8-TPPH | 102 | 88-112 | | |
| 1,4-Bromofluorobenzene | 95 | 76-120 | | | | | | | |

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

Calscience Environmental Laboratories, Inc.

## Analytical Report



Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

Date Received: 02/11/10
Work Order No: 10-02-1022
Preparation: EPA 5030B
Method: LUFT GC/MS / EPA 8260B
Units: ug/L

Project: 5251 Hopyard Rd., Pleasanton, CA



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **S-7** | **10-02-1022-7-B** | **02/09/10 10:40** | **Aqueous** | **GC/MS PP** | **02/15/10** | **02/15/10 17:30** | **100215L01** |

| Parameter | Result | RL | DF | Qual | Parameter | Result | RL | DF | Qual |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | 0.50 | 1 | | Methyl-t-Butyl Ether (MTBE) | 8.4 | 1.0 | 1 | |
| Ethylbenzene | ND | 1.0 | 1 | | Tert-Butyl Alcohol (TBA) | ND | 10 | 1 | |
| Toluene | ND | 1.0 | 1 | | TPPH | ND | 50 | 1 | |
| Xylenes (total) | ND | 1.0 | 1 | | | | | | |
| Surrogates: | REC (%) | Control Limits | | Qual | Surrogates: | REC (%) | Control Limits | | Qual |
| Dibromofluoromethane | 107 | 80-132 | | | 1,2-Dichloroethane-d4 | 107 | 80-141 | | |
| Toluene-d8 | 103 | 80-120 | | | Toluene-d8-TPPH | 102 | 88-112 | | |
| 1,4-Bromofluorobenzene | 96 | 76-120 | | | | | | | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **S-8** | **10-02-1022-8-C** | **02/09/10 11:15** | **Aqueous** | **GC/MS PP** | **02/16/10** | **02/16/10 16:56** | **100216L01** |

| Parameter | Result | RL | DF | Qual | Parameter | Result | RL | DF | Qual |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | 0.50 | 1 | | Methyl-t-Butyl Ether (MTBE) | ND | 1.0 | 1 | |
| Ethylbenzene | ND | 1.0 | 1 | | Tert-Butyl Alcohol (TBA) | ND | 10 | 1 | |
| Toluene | ND | 1.0 | 1 | | TPPH | ND | 50 | 1 | |
| Xylenes (total) | ND | 1.0 | 1 | | | | | | |
| Surrogates: | REC (%) | Control Limits | | Qual | Surrogates: | REC (%) | Control Limits | | Qual |
| Dibromofluoromethane | 99 | 80-132 | | | 1,2-Dichloroethane-d4 | 108 | 80-141 | | |
| Toluene-d8 | 102 | 80-120 | | | Toluene-d8-TPPH | 101 | 88-112 | | |
| 1,4-Bromofluorobenzene | 99 | 76-120 | | | | | | | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **S-9** | **10-02-1022-9-B** | **02/09/10 11:45** | **Aqueous** | **GC/MS PP** | **02/15/10** | **02/15/10 18:24** | **100215L01** |

| Parameter | Result | RL | DF | Qual | Parameter | Result | RL | DF | Qual |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | 0.50 | 1 | | Methyl-t-Butyl Ether (MTBE) | ND | 1.0 | 1 | |
| Ethylbenzene | ND | 1.0 | 1 | | Tert-Butyl Alcohol (TBA) | ND | 10 | 1 | |
| Toluene | ND | 1.0 | 1 | | TPPH | ND | 50 | 1 | |
| Xylenes (total) | ND | 1.0 | 1 | | | | | | |
| Surrogates: | REC (%) | Control Limits | | Qual | Surrogates: | REC (%) | Control Limits | | Qual |
| Dibromofluoromethane | 103 | 80-132 | | | 1,2-Dichloroethane-d4 | 112 | 80-141 | | |
| Toluene-d8 | 98 | 80-120 | | | Toluene-d8-TPPH | 97 | 88-112 | | |
| 1,4-Bromofluorobenzene | 99 | 76-120 | | | | | | | |

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

Calscience Environmental Laboratories, Inc.

**Analytical Report**



Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

Date Received: 02/11/10
Work Order No: 10-02-1022
Preparation: EPA 5030B
Method: LUFT GC/MS / EPA 8260B
Units: ug/L

Project: 5251 Hopyard Rd., Pleasanton, CA



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **S-10** | **10-02-1022-10-C** | **02/09/10 14:20** | **Aqueous** | **GC/MS PP** | **02/16/10** | **02/16/10 17:22** | **100216L01** |

| Parameter | Result | RL | DF | Qual | Parameter | Result | RL | DF | Qual |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | 0.50 | 1 | | Methyl-t-Butyl Ether (MTBE) | 1.7 | 1.0 | 1 | |
| Ethylbenzene | ND | 1.0 | 1 | | Tert-Butyl Alcohol (TBA) | 1400 | 50 | 5 | |
| Toluene | ND | 1.0 | 1 | | TPPH | 65 | 50 | 1 | |
| Xylenes (total) | ND | 1.0 | 1 | | | | | | |
| Surrogates: | REC (%) | Control Limits | | Qual | Surrogates: | REC (%) | Control Limits | | Qual |
| Dibromofluoromethane | 106 | 80-132 | | | 1,2-Dichloroethane-d4 | 120 | 80-141 | | |
| Toluene-d8 | 100 | 80-120 | | | Toluene-d8-TPPH | 100 | 88-112 | | |
| 1,4-Bromofluorobenzene | 99 | 76-120 | | | | | | | |

| **S-11** | **10-02-1022-11-B** | **02/09/10 12:10** | **Aqueous** | **GC/MS PP** | **02/15/10** | **02/15/10 19:18** | **100215L01** |
|---|---|---|---|---|---|---|---|

| Parameter | Result | RL | DF | Qual | Parameter | Result | RL | DF | Qual |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | 0.50 | 1 | | Methyl-t-Butyl Ether (MTBE) | ND | 1.0 | 1 | |
| Ethylbenzene | ND | 1.0 | 1 | | Tert-Butyl Alcohol (TBA) | ND | 10 | 1 | |
| Toluene | ND | 1.0 | 1 | | TPPH | ND | 50 | 1 | |
| Xylenes (total) | ND | 1.0 | 1 | | | | | | |
| Surrogates: | REC (%) | Control Limits | | Qual | Surrogates: | REC (%) | Control Limits | | Qual |
| Dibromofluoromethane | 104 | 80-132 | | | 1,2-Dichloroethane-d4 | 112 | 80-141 | | |
| Toluene-d8 | 101 | 80-120 | | | Toluene-d8-TPPH | 100 | 88-112 | | |
| 1,4-Bromofluorobenzene | 98 | 76-120 | | | | | | | |

| **S-12** | **10-02-1022-12-B** | **02/09/10 13:55** | **Aqueous** | **GC/MS PP** | **02/15/10** | **02/15/10 19:45** | **100215L01** |
|---|---|---|---|---|---|---|---|

| Parameter | Result | RL | DF | Qual | Parameter | Result | RL | DF | Qual |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | 0.50 | 1 | | Methyl-t-Butyl Ether (MTBE) | 26 | 1.0 | 1 | |
| Ethylbenzene | ND | 1.0 | 1 | | Tert-Butyl Alcohol (TBA) | 11 | 10 | 1 | |
| Toluene | ND | 1.0 | 1 | | TPPH | 57 | 50 | 1 | |
| Xylenes (total) | ND | 1.0 | 1 | | | | | | |
| Surrogates: | REC (%) | Control Limits | | Qual | Surrogates: | REC (%) | Control Limits | | Qual |
| Dibromofluoromethane | 104 | 80-132 | | | 1,2-Dichloroethane-d4 | 116 | 80-141 | | |
| Toluene-d8 | 98 | 80-120 | | | Toluene-d8-TPPH | 97 | 88-112 | | |
| 1,4-Bromofluorobenzene | 98 | 76-120 | | | | | | | |

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

Calscience Environmental Laboratories, Inc.

**Analytical Report**

| | | | |
|---|---|---|---|
| Blaine Tech Services, Inc. | | Date Received: | 02/11/10 |
| 1680 Rogers Avenue | | Work Order No: | 10-02-1022 |
| San Jose, CA 95112-1105 | | Preparation: | EPA 5030B |
| | | Method: | LUFT GC/MS / EPA 8260B |
| | | Units: | ug/L |

Project: 5251 Hopyard Rd., Pleasanton, CA



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **EW-1** | **10-02-1022-13-C** | **02/09/10 15:20** | **Aqueous** | **GC/MS PP** | **02/16/10** | **02/16/10 17:49** | **100216L01** |

| Parameter | Result | RL | DF | Qual | Parameter | Result | RL | DF | Qual |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 13 | 2.5 | 5 | | Methyl-t-Butyl Ether (MTBE) | ND | 5.0 | 5 | |
| Ethylbenzene | 490 | 5.0 | 5 | | Tert-Butyl Alcohol (TBA) | ND | 50 | 5 | |
| Toluene | 41 | 5.0 | 5 | | TPPH | 12000 | 250 | 5 | |
| Xylenes (total) | 120 | 5.0 | 5 | | | | | | |
| Surrogates: | REC (%) | Control Limits | | Qual | Surrogates: | REC (%) | Control Limits | | Qual |
| Dibromofluoromethane | 100 | 80-132 | | | 1,2-Dichloroethane-d4 | 108 | 80-141 | | |
| Toluene-d8 | 101 | 80-120 | | | Toluene-d8-TPPH | 101 | 88-112 | | |
| 1,4-Bromofluorobenzene | 98 | 76-120 | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **099-12-767-3,408** | **N/A** | **Aqueous** | **GC/MS UU** | **02/13/10** | **02/14/10 00:55** | **100213L02** |

| Parameter | Result | RL | DF | Qual | Parameter | Result | RL | DF | Qual |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | 0.50 | 1 | | Methyl-t-Butyl Ether (MTBE) | ND | 1.0 | 1 | |
| Ethylbenzene | ND | 1.0 | 1 | | Tert-Butyl Alcohol (TBA) | ND | 10 | 1 | |
| Toluene | ND | 1.0 | 1 | | TPPH | ND | 50 | 1 | |
| Xylenes (total) | ND | 1.0 | 1 | | | | | | |
| Surrogates: | REC (%) | Control Limits | | Qual | Surrogates: | REC (%) | Control Limits | | Qual |
| Dibromofluoromethane | 110 | 80-132 | | | 1,2-Dichloroethane-d4 | 128 | 80-141 | | |
| Toluene-d8 | 101 | 80-120 | | | Toluene-d8-TPPH | 101 | 88-112 | | |
| 1,4-Bromofluorobenzene | 87 | 76-120 | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **099-12-767-3,410** | **N/A** | **Aqueous** | **GC/MS PP** | **02/15/10** | **02/15/10 13:30** | **100215L01** |

| Parameter | Result | RL | DF | Qual | Parameter | Result | RL | DF | Qual |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | 0.50 | 1 | | Methyl-t-Butyl Ether (MTBE) | ND | 1.0 | 1 | |
| Ethylbenzene | ND | 1.0 | 1 | | Tert-Butyl Alcohol (TBA) | ND | 10 | 1 | |
| Toluene | ND | 1.0 | 1 | | TPPH | ND | 50 | 1 | |
| Xylenes (total) | ND | 1.0 | 1 | | | | | | |
| Surrogates: | REC (%) | Control Limits | | Qual | Surrogates: | REC (%) | Control Limits | | Qual |
| Dibromofluoromethane | 98 | 80-132 | | | 1,2-Dichloroethane-d4 | 105 | 80-141 | | |
| Toluene-d8 | 100 | 80-120 | | | Toluene-d8-TPPH | 99 | 88-112 | | |
| 1,4-Bromofluorobenzene | 100 | 76-120 | | | | | | | |

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

Calscience Environmental Laboratories, Inc.

**Analytical Report**

| | | | |
|---|---|---|---|
| Blaine Tech Services, Inc. | | Date Received: | 02/11/10 |
| 1680 Rogers Avenue | | Work Order No: | 10-02-1022 |
| San Jose, CA 95112-1105 | | Preparation: | EPA 5030B |
| | | Method: | LUFT GC/MS / EPA 8260B |
| | | Units: | ug/L |

Project: 5251 Hopyard Rd., Pleasanton, CA



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **099-12-767-3,415** | **N/A** | **Aqueous** | **GC/MS PP** | **02/16/10** | **02/16/10 14:04** | **100216L01** |

| Parameter | Result | RL | DF | Qual | Parameter | Result | RL | DF | Qual |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | 0.50 | 1 | | Methyl-t-Butyl Ether (MTBE) | ND | 1.0 | 1 | |
| Ethylbenzene | ND | 1.0 | 1 | | Tert-Butyl Alcohol (TBA) | ND | 10 | 1 | |
| Toluene | ND | 1.0 | 1 | | TPPH | ND | 50 | 1 | |
| Xylenes (total) | ND | 1.0 | 1 | | | | | | |

| Surrogates: | REC (%) | Control Limits | Qual | Surrogates: | REC (%) | Control Limits | Qual |
|---|---|---|---|---|---|---|---|
| Dibromofluoromethane | 104 | 80-132 | | 1,2-Dichloroethane-d4 | 108 | 80-141 | |
| Toluene-d8 | 100 | 80-120 | | Toluene-d8-TPPH | 100 | 88-112 | |
| 1,4-Bromofluorobenzene | 95 | 76-120 | | | | | |

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

Calscience Environmental Laboratories, Inc.

## Quality Control - Spike/Spike Duplicate

Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

Date Received: 02/11/10
Work Order No: 10-02-1022
Preparation: EPA 5030B
Method: LUFT GC/MS / EPA 8260B

Project 5251 Hopyard Rd., Pleasanton, CA

| Quality Control Sample ID | Matrix | Instrument | Date Prepared | Date Analyzed | MS/MSD Batch Number |
|---|---|---|---|---|---|
| **10-02-1096-6** | **Aqueous** | **GC/MS UU** | **02/13/10** | **02/14/10** | **100213S02** |

| Parameter | MS %REC | MSD %REC | %REC CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|
| Benzene | 98 | 99 | 72-120 | 1 | 0-20 | |
| Carbon Tetrachloride | 101 | 104 | 63-135 | 4 | 0-20 | |
| Chlorobenzene | 98 | 98 | 80-120 | 1 | 0-20 | |
| 1,2-Dibromoethane | 99 | 100 | 80-120 | 1 | 0-20 | |
| 1,2-Dichlorobenzene | 92 | 90 | 80-120 | 3 | 0-20 | |
| 1,1-Dichloroethene | 96 | 96 | 60-132 | 0 | 0-24 | |
| Ethylbenzene | 99 | 98 | 78-120 | 1 | 0-20 | |
| Toluene | 96 | 97 | 74-122 | 1 | 0-20 | |
| Trichloroethene | 103 | 103 | 69-120 | 0 | 0-20 | |
| Vinyl Chloride | 88 | 90 | 58-130 | 2 | 0-20 | |
| Methyl-t-Butyl Ether (MTBE) | 94 | 97 | 72-126 | 3 | 0-21 | |
| Tert-Butyl Alcohol (TBA) | 112 | 108 | 72-126 | 4 | 0-20 | |
| Diisopropyl Ether (DIPE) | 107 | 109 | 71-137 | 2 | 0-23 | |
| Ethyl-t-Butyl Ether (ETBE) | 95 | 98 | 74-128 | 3 | 0-20 | |
| Tert-Amyl-Methyl Ether (TAME) | 91 | 93 | 76-124 | 3 | 0-20 | |
| Ethanol | 136 | 103 | 35-167 | 28 | 0-48 | |

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

## Quality Control - Spike/Spike Duplicate

Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

Date Received: 02/11/10
Work Order No: 10-02-1022
Preparation: EPA 5030B
Method: LUFT GC/MS / EPA 8260B

Project 5251 Hopyard Rd., Pleasanton, CA

| Quality Control Sample ID | Matrix | Instrument | Date Prepared | Date Analyzed | MS/MSD Batch Number |
|---|---|---|---|---|---|
| **S-4** | **Aqueous** | **GC/MS PP** | **02/15/10** | **02/15/10** | **100215S01** |

| Parameter | MS %REC | MSD %REC | %REC CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|
| Benzene | 105 | 110 | 72-120 | 4 | 0-20 | |
| Carbon Tetrachloride | 102 | 105 | 63-135 | 2 | 0-20 | |
| Chlorobenzene | 104 | 108 | 80-120 | 3 | 0-20 | |
| 1,2-Dibromoethane | 103 | 101 | 80-120 | 1 | 0-20 | |
| 1,2-Dichlorobenzene | 102 | 107 | 80-120 | 4 | 0-20 | |
| 1,1-Dichloroethene | 105 | 109 | 60-132 | 4 | 0-24 | |
| Ethylbenzene | 111 | 111 | 78-120 | 1 | 0-20 | |
| Toluene | 107 | 112 | 74-122 | 5 | 0-20 | |
| Trichloroethene | 107 | 110 | 69-120 | 3 | 0-20 | |
| Vinyl Chloride | 101 | 105 | 58-130 | 4 | 0-20 | |
| Methyl-t-Butyl Ether (MTBE) | 103 | 107 | 72-126 | 4 | 0-21 | |
| Tert-Butyl Alcohol (TBA) | 103 | 106 | 72-126 | 3 | 0-20 | |
| Diisopropyl Ether (DIPE) | 102 | 106 | 71-137 | 4 | 0-23 | |
| Ethyl-t-Butyl Ether (ETBE) | 101 | 104 | 74-128 | 3 | 0-20 | |
| Tert-Amyl-Methyl Ether (TAME) | 104 | 110 | 76-124 | 6 | 0-20 | |
| Ethanol | 104 | 119 | 35-167 | 14 | 0-48 | |

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

## Quality Control - Spike/Spike Duplicate

Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

Date Received: 02/11/10
Work Order No: 10-02-1022
Preparation: EPA 5030B
Method: LUFT GC/MS / EPA 8260B

Project 5251 Hopyard Rd., Pleasanton, CA

| Quality Control Sample ID | Matrix | Instrument | Date Prepared | Date Analyzed | MS/MSD Batch Number |
|---|---|---|---|---|---|
| **10-02-1108-24** | **Aqueous** | **GC/MS PP** | **02/16/10** | **02/16/10** | **100216S01** |

| Parameter | MS %REC | MSD %REC | %REC CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|
| Benzene | 104 | 99 | 72-120 | 5 | 0-20 | |
| Carbon Tetrachloride | 105 | 106 | 63-135 | 1 | 0-20 | |
| Chlorobenzene | 101 | 100 | 80-120 | 2 | 0-20 | |
| 1,2-Dibromoethane | 94 | 95 | 80-120 | 1 | 0-20 | |
| 1,2-Dichlorobenzene | 101 | 101 | 80-120 | 0 | 0-20 | |
| 1,1-Dichloroethene | 103 | 99 | 60-132 | 4 | 0-24 | |
| Ethylbenzene | 107 | 104 | 78-120 | 3 | 0-20 | |
| Toluene | 106 | 102 | 74-122 | 4 | 0-20 | |
| Trichloroethene | 109 | 103 | 69-120 | 6 | 0-20 | |
| Vinyl Chloride | 97 | 95 | 58-130 | 3 | 0-20 | |
| Methyl-t-Butyl Ether (MTBE) | 99 | 93 | 72-126 | 4 | 0-21 | |
| Tert-Butyl Alcohol (TBA) | 98 | 99 | 72-126 | 1 | 0-20 | |
| Diisopropyl Ether (DIPE) | 98 | 96 | 71-137 | 3 | 0-23 | |
| Ethyl-t-Butyl Ether (ETBE) | 100 | 95 | 74-128 | 5 | 0-20 | |
| Tert-Amyl-Methyl Ether (TAME) | 108 | 99 | 76-124 | 9 | 0-20 | |
| Ethanol | 114 | 108 | 35-167 | 6 | 0-48 | |

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

## Quality Control - LCS/LCS Duplicate

Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

Date Received: N/A
Work Order No: 10-02-1022
Preparation: EPA 5030B
Method: LUFT GC/MS / EPA 8260B

Project: 5251 Hopyard Rd., Pleasanton, CA

| Quality Control Sample ID | Matrix | Instrument | Date Prepared | Date Analyzed | LCS/LCSD Batch Number |
|---|---|---|---|---|---|
| **099-12-767-3,408** | **Aqueous** | **GC/MS UU** | **02/13/10** | **02/13/10** | **100213L02** |

| Parameter | LCS %REC | LCSD %REC | %REC CL | ME_CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|---|
| Benzene | 100 | 98 | 80-122 | 73-129 | 2 | 0-20 | |
| Carbon Tetrachloride | 100 | 99 | 68-140 | 56-152 | 1 | 0-20 | |
| Chlorobenzene | 100 | 98 | 80-120 | 73-127 | 1 | 0-20 | |
| 1,2-Dibromoethane | 101 | 103 | 80-121 | 73-128 | 1 | 0-20 | |
| 1,2-Dichlorobenzene | 97 | 96 | 80-120 | 73-127 | 1 | 0-20 | |
| 1,1-Dichloroethene | 100 | 96 | 72-132 | 62-142 | 4 | 0-25 | |
| Ethylbenzene | 102 | 101 | 80-126 | 72-134 | 1 | 0-20 | |
| Toluene | 100 | 99 | 80-121 | 73-128 | 1 | 0-20 | |
| Trichloroethene | 106 | 105 | 80-123 | 73-130 | 1 | 0-20 | |
| Vinyl Chloride | 89 | 85 | 67-133 | 56-144 | 5 | 0-20 | |
| Methyl-t-Butyl Ether (MTBE) | 99 | 97 | 75-123 | 67-131 | 2 | 0-20 | |
| Tert-Butyl Alcohol (TBA) | 99 | 105 | 75-123 | 67-131 | 6 | 0-20 | |
| Diisopropyl Ether (DIPE) | 110 | 107 | 71-131 | 61-141 | 3 | 0-20 | |
| Ethyl-t-Butyl Ether (ETBE) | 101 | 99 | 76-124 | 68-132 | 2 | 0-20 | |
| Tert-Amyl-Methyl Ether (TAME) | 97 | 98 | 80-123 | 73-130 | 1 | 0-20 | |
| Ethanol | 100 | 96 | 61-139 | 48-152 | 3 | 0-27 | |
| TPPH | 97 | 99 | 65-135 | 53-147 | 3 | 0-30 | |

Total number of LCS compounds : 17
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

Calscience Environmental Laboratories, Inc.

## Quality Control - LCS/LCS Duplicate

Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

Date Received: N/A
Work Order No: 10-02-1022
Preparation: EPA 5030B
Method: LUFT GC/MS / EPA 8260B

Project: 5251 Hopyard Rd., Pleasanton, CA

| Quality Control Sample ID | Matrix | Instrument | Date Prepared | Date Analyzed | LCS/LCSD Batch Number |
|---|---|---|---|---|---|
| **099-12-767-3,410** | **Aqueous** | **GC/MS PP** | **02/15/10** | **02/15/10** | **100215L01** |

| Parameter | LCS %REC | LCSD %REC | %REC CL | ME_CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|---|
| Benzene | 99 | 104 | 80-122 | 73-129 | 6 | 0-20 | |
| Carbon Tetrachloride | 93 | 104 | 68-140 | 56-152 | 11 | 0-20 | |
| Chlorobenzene | 99 | 103 | 80-120 | 73-127 | 4 | 0-20 | |
| 1,2-Dibromoethane | 95 | 97 | 80-121 | 73-128 | 1 | 0-20 | |
| 1,2-Dichlorobenzene | 96 | 106 | 80-120 | 73-127 | 10 | 0-20 | |
| 1,1-Dichloroethene | 100 | 109 | 72-132 | 62-142 | 8 | 0-25 | |
| Ethylbenzene | 103 | 106 | 80-126 | 72-134 | 3 | 0-20 | |
| Toluene | 102 | 107 | 80-121 | 73-128 | 5 | 0-20 | |
| Trichloroethene | 105 | 105 | 80-123 | 73-130 | 0 | 0-20 | |
| Vinyl Chloride | 96 | 99 | 67-133 | 56-144 | 3 | 0-20 | |
| Methyl-t-Butyl Ether (MTBE) | 97 | 109 | 75-123 | 67-131 | 11 | 0-20 | |
| Tert-Butyl Alcohol (TBA) | 98 | 98 | 75-123 | 67-131 | 0 | 0-20 | |
| Diisopropyl Ether (DIPE) | 98 | 106 | 71-131 | 61-141 | 8 | 0-20 | |
| Ethyl-t-Butyl Ether (ETBE) | 98 | 105 | 76-124 | 68-132 | 7 | 0-20 | |
| Tert-Amyl-Methyl Ether (TAME) | 101 | 110 | 80-123 | 73-130 | 8 | 0-20 | |
| Ethanol | 101 | 98 | 61-139 | 48-152 | 3 | 0-27 | |
| TPPH | 94 | 92 | 65-135 | 53-147 | 2 | 0-30 | |

Total number of LCS compounds : 17
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

Calscience Environmental Laboratories, Inc.

## Quality Control - LCS/LCS Duplicate



Blaine Tech Services, Inc.
1680 Rogers Avenue
San Jose, CA 95112-1105

Date Received: N/A
Work Order No: 10-02-1022
Preparation: EPA 5030B
Method: LUFT GC/MS / EPA 8260B

Project: 5251 Hopyard Rd., Pleasanton, CA

| Quality Control Sample ID | Matrix | Instrument | Date Prepared | Date Analyzed | LCS/LCSD Batch Number |
|---|---|---|---|---|---|
| **099-12-767-3,415** | **Aqueous** | **GC/MS PP** | **02/16/10** | **02/16/10** | **100216L01** |

| Parameter | LCS %REC | LCSD %REC | %REC CL | ME_CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|---|
| Benzene | 97 | 94 | 80-122 | 73-129 | 3 | 0-20 | |
| Carbon Tetrachloride | 98 | 95 | 68-140 | 56-152 | 3 | 0-20 | |
| Chlorobenzene | 102 | 98 | 80-120 | 73-127 | 4 | 0-20 | |
| 1,2-Dibromoethane | 96 | 94 | 80-121 | 73-128 | 3 | 0-20 | |
| 1,2-Dichlorobenzene | 96 | 99 | 80-120 | 73-127 | 3 | 0-20 | |
| 1,1-Dichloroethene | 101 | 93 | 72-132 | 62-142 | 8 | 0-25 | |
| Ethylbenzene | 108 | 97 | 80-126 | 72-134 | 10 | 0-20 | |
| Toluene | 100 | 98 | 80-121 | 73-128 | 3 | 0-20 | |
| Trichloroethene | 99 | 96 | 80-123 | 73-130 | 4 | 0-20 | |
| Vinyl Chloride | 91 | 88 | 67-133 | 56-144 | 4 | 0-20 | |
| Methyl-t-Butyl Ether (MTBE) | 93 | 98 | 75-123 | 67-131 | 5 | 0-20 | |
| Tert-Butyl Alcohol (TBA) | 94 | 91 | 75-123 | 67-131 | 3 | 0-20 | |
| Diisopropyl Ether (DIPE) | 92 | 93 | 71-131 | 61-141 | 0 | 0-20 | |
| Ethyl-t-Butyl Ether (ETBE) | 92 | 93 | 76-124 | 68-132 | 2 | 0-20 | |
| Tert-Amyl-Methyl Ether (TAME) | 97 | 100 | 80-123 | 73-130 | 2 | 0-20 | |
| Ethanol | 129 | 105 | 61-139 | 48-152 | 20 | 0-27 | |
| TPPH | 93 | 90 | 65-135 | 53-147 | 3 | 0-30 | |

Total number of LCS compounds : 17
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

Calscience Environmental Laboratories, Inc.

## Glossary of Terms and Qualifiers

Work Order Number: 10-02-1022

| Qualifier | Definition |
|---|---|
| * | See applicable analysis comment. |
| 1 | Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification. |
| 2 | Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification. |
| 3 | Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification. |
| 4 | The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification. |
| 5 | The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification. |
| A | Result is the average of all dilutions, as defined by the method. |
| B | Analyte was present in the associated method blank. |
| C | Analyte presence was not confirmed on primary column. |
| E | Concentration exceeds the calibration range. |
| J | Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated. |
| ME | LCS Recovery Percentage is within LCS ME Control Limit range. |
| N | Nontarget Analyte. |
| ND | Parameter not detected at the indicated reporting limit. |
| Q | Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater. |
| U | Undetected at the laboratory method detection limit. |
| X | % Recovery and/or RPD out-of-range. |
| Z | Analyte presence was not confirmed by second column or GC/MS analysis. |
| | Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. |

# Shell Oil Products Chain Of Custody Record

**LAB (LOCATION)**

- ☑ CALSCIENCE (_____)
- ☐ SPL (_____)
- ☐ XENCO (_____)
- ☐ TEST AMERICA (_____)
- ☐ OTHER (_____)

**Please Check Appropriate Box:**

| | | |
|---|---|---|
| ☑ ~~ENV. SERVICES~~ → W | ☐ MOTIVA RETAIL | ☐ SHELL RETAIL |
| ☐ MOTIVA SD&CM | ☑ CONSULTANT | ☐ LUBES |
| ☐ SHELL PIPELINE | ☐ OTHER _____ | |

Print Bill To Contact Name: ~~Denis Brown~~ Suzanne McClurkin-Nelson

PO #:

INCIDENT # (ENV SERVICES): 9 8 9 9 5 8 4 3

SAP #:

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 2/9/10

PAGE: 1 of 2

| | | | |
|---|---|---|---|
| SAMPLING COMPANY: Blaine Tech Services | LOG CODE: BTSS | SITE ADDRESS: Street and City: 5251 Hopyard Rd., Pleasanton | State: CA |
| ADDRESS: 1680 Rogers Ave, San Jose, CA 95112 | | GLOBAL ID NO: T0600101267 | |
| PROJECT CONTACT (Hardcopy or PDF Report to): Michael Ninokata | | EDF DELIVERABLE TO (Name, Company, Office Location): Angela Pico, Delta, San Jose Office | PHONE NO: 408.826.1862 |
| TELEPHONE: (408)573-0555 | FAX: (408)573-7771 | E-MAIL: mninokata@blainetech.com | E-MAIL: apico@deltaenv.com |
| SAMPLER NAME(S) (Print): J. PARKER | | CONSULTANT PROJECT NO: BTS# 100209-JP1 | |

LAB USE ONLY: 02-1022

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

**SPECIAL INSTRUCTIONS OR NOTES :**

CC Suzanne McClurkin-Nelson w/final report
smcclurkin-nelson@deltaenv.com

☐ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED

**REQUESTED ANALYSIS**

| LAB USE ONLY | Field Sample Identification | SAMPLING DATE | SAMPLING TIME | MATRIX | PRESERVATIVE HCL | HNO3 | H2SO4 | NONE | OTHER | NO. OF CONT. | TPH - Purgeable (8260B) | TPH - Extractable (8015M) | BTEX (8260B) | 5 Oxygenates (8260B) | MTBE (8260B) | TBA (8260B) | DIPE (8260B) | TAME (8260B) | ETBE (8260B) | 1,2 DCA (8260B) | EDB (8260B) | Ethanol (8260B) | Methanol (8015M) | TEMPERATURE ON RECEIPT C° / Container PID Readings or Laboratory Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | S-1 | 2/9 | 1530 | W | 3 | | | | | 3 | X | | X | | X | X | | | | | | | | |
| 2 | S-2 | | 1330 | | | | | | | | X | | X | | X | X | | | | | | | | |
| 3 | S-3 | | 1515 | | | | | | | | X | | X | | X | X | | | | | | | | |
| 4 | S-4 | | ~~1305~~ 1251 | | | | | | | | X | | X | | X | X | | | | | | | | |
| 5 | S-5 | | 1305 | | | | | | | | X | | X | | X | X | | | | | | | | |
| 6 | S-6 | | 1020 | | | | | | | | X | | X | | X | X | | | | | | | | |
| 7 | S-7 | | 1040 | | | | | | | | X | | X | | X | X | | | | | | | | |
| 8 | S-8 | | 1115 | | | | | | | | X | | X | | X | X | | | | | | | | |
| 9 | S-9 | | 1145 | | | | | | | | X | | X | | X | X | | | | | | | | |
| 10 | S-10 | | 1420 | | | | | | | | X | | X | | X | X | | | | | | | | |

| | | | |
|---|---|---|---|
| Relinquished by: (Signature) | Received by: (Signature) (SAMPLE CUSTODIAN) | Date: 2/9/10 | Time: 1645 |
| Relinquished by: (Signature) (Sample Custodian) | Received by: (Signature) CEL | Date: 2/10/10 | Time: 1110 |
| Relinquished by: (Signature) TO USD 2-10-10 1730 | Received by: (Signature) | Date: 2/11/10 | Time: 1030 |

05/2/06 Revision

# Shell Oil Products Chain Of Custody Record

**LAB (LOCATION)**
- ☑ CALSCIENCE (_____)
- ☐ SPL (_____)
- ☐ XENCO (_____)
- ☐ TEST AMERICA (_____)
- ☐ OTHER (_____)

**Please Check Appropriate Box:**
- ☑ ~~ENV. SERVICES~~
- ☐ MOTIVA RETAIL
- ☐ SHELL RETAIL
- ☐ MOTIVA SD&CM
- ☑ CONSULTANT
- ☐ LUBES
- ☐ SHELL PIPELINE
- ☐ OTHER _____

Print Bill To Contact Name: ~~Denis Brown~~ Suzanne McClurkin-Nelson

INCIDENT # (ENV SERVICES): 9 8 9 9 5 8 4 3 ☐ CHECK IF NO INCIDENT # APPLIES

PO # | SAP #

DATE: 2/9/10

PAGE: 2 of 2

| | |
|---|---|
| SAMPLING COMPANY | Blaine Tech Services |
| LOG CODE | BTSS |
| ADDRESS | 1680 Rogers Ave, San Jose, CA 95112 |
| PROJECT CONTACT (Hardcopy or PDF Report to) | Michael Ninokata |
| TELEPHONE | (408)573-0555 |
| FAX | (408)573-7771 |
| E-MAIL | mninokata@blainetech.com |
| SITE ADDRESS: Street and City | 5251 Hopyard Rd., Pleasanton |
| State | CA |
| GLOBAL ID NO | T0600101267 |
| EDF DELIVERABLE TO (Name, Company, Office Location) | Angela Pico, Delta, San Jose Office |
| PHONE NO | 408.826.1862 |
| E-MAIL | apico@deltaenv.com |
| CONSULTANT PROJECT NO | BTS# 100209-JP1 |
| SAMPLER NAME(S) (Print) | J. PARKER |
| LAB USE ONLY | 02-1022 |

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

**SPECIAL INSTRUCTIONS OR NOTES :**

CC Suzanne McClurkin-Nelson w/final report
smcclurkin-nelson@deltaenv.com

- ☐ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED

**REQUESTED ANALYSIS**

| LAB USE ONLY | Field Sample Identification | SAMPLING DATE | SAMPLING TIME | MATRIX | PRESERVATIVE HCL | HNO3 | H2SO4 | NONE | OTHER | NO. OF CONT. | TPH - Purgeable (8260B) | TPH - Extractable (8015M) | BTEX (8260B) | 5 Oxygenates (8260B) | MTBE (8260B) | TBA (8260B) | DIPE (8260B) | TAME (8260B) | ETBE (8260B) | 1,2 DCA (8260B) | EDB (8260B) | Ethanol (8260B) | Methanol (8015M) | TEMPERATURE ON RECEIPT C° / Container PID Readings or Laboratory Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | S-11 | 2/9 | 1210 | W | 3 | | | | | 3 | X | | X | | X | X | | | | | | | | |
| 12 | S-12 | ↓ | 1355 | ↓ | ↓ | | | | | ↓ | X | | X | | X | X | | | | | | | | |
| 13 | EW-1 | ↓ | 1520 | ↓ | ↓ | | | | | ↓ | X | | X | | X | X | | | | | | | | |

| | | | |
|---|---|---|---|
| Relinquished by: (Signature) | Received by: (Signature) (SAMPLE CUSTODIAN) | Date: 2/9/10 | Time: 1645 |
| Relinquished by: (Signature) (Sample Custody) | Received by: (Signature) CEL | Date: 2/10/10 | Time: 1110 |
| Relinquished by: (Signature) TO 2-10-10 GSO 1730 | Received by: (Signature) | Date: 2/11/10 | Time: 1030 |

05/2/06 Revision

(1072)

GSO

WebShip > > > > >

800-322-5555 www.gso.com

*Ship From:*
ALAN KEMP
CAL SCIENCE- CONCORD
5063 COMMERCIAL CIRCLE #H
CONCORD, CA 94520

*Ship To:*
SAMPLE RECEIVING
CEL
7440 LINCOLN WAY
GARDEN GROVE, CA 92841

**COD:**
$0.00

**Reference:**
ETIC, BTS, CONOCO PHILLIPS

**Delivery Instructions:**

**Signature Type:**
SIGNATURE REQUIRED

Tracking #: 513549106

**NPS**

# ORC

**D**

## GARDEN GROVE

## D92843A

79232566

Print Date : 02/10/10 15:37 PM

**Package 1 of 1**

Send Label To Printer | ☑ Print All | Edit Shipment | Finish

## LABEL INSTRUCTIONS:

**Do not copy or reprint this label for additional shipments - each package must have a unique barcode.**

STEP 1 - Use the "Send Label to Printer" button on this page to print the shipping label on a laser or inkjet printer.

STEP 2 - Fold this page in half.

STEP 3 - Securely attach this label to your package, do not cover the barcode.

STEP 4 - Request an on-call pickup for your package, if you do not have scheduled daily pickup service or Drop-off your package at the nearest GSO drop box. Locate nearest GSO dropbox locations using this link.

## ADDITIONAL OPTIONS:

Send Label Via Email | Create Return Label

## TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all the service terms and conditions described in this section.
Our liability for loss or damage to any package is limited to your actual damages or $100 whichever is less, unless you pay for and declare a higher authorized value. If you declare a higher value and pay the additional charge, our liability will be the lesser of your declared value or the actual value of your loss or damage. In any event, we will not be liable for any damage, whether direct, incidental, special or consequential, in excess of the declared value of a shipment whether or not we had knowledge that such damage might be incurred including but not limited to loss of income or profit. We will not be liable for your acts or omissions, including but not limited to improper or insufficient packaging, securing, marking or addressing. Also, we will not be liable if you or the recipient violates any of the terms of our agreement. We will not be liable for loss, damage or delay caused by events we cannot control, including but not limited to acts of God, perils of the air, weather conditions, act of public enemies, war, strikes, or civil commotion. The highest declared value for our GSO Priority Letter or GSO Priority Package is $500. For other shipments the highest declared value is $10,000 unless your package contains items of "extraordinary value", in which case the highest declared value we allow is $500. Items of "extraordinary value" include, but or not limited to, artwork, jewelry, furs, precious metals, tickets, negotiable instruments and other items with intrinsic value.

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 10-02-1021

# SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Blaine Tech

DATE: 02/11/10

**TEMPERATURE:** Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 3.1 °C + 0.5 °C (CF) = 3.6 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

**Ambient Temperature**: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only Initial: JP

**CUSTODY SEALS INTACT:**

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: JP

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: pL

| SAMPLE CONDITION: | Yes | No | N/A |
|---|---|---|---|
| Chain-Of-Custody (COC) document(s) received with samples | ☑ | ☐ | ☐ |
| COC document(s) received complete | ☑ | ☐ | ☐ |
| ☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels. | | | |
| ☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished. | | | |
| Sampler's name indicated on COC | ☑ | ☐ | ☐ |
| Sample container label(s) consistent with COC | ☑ | ☐ | ☐ |
| Sample container(s) intact and good condition | ☑ | ☐ | ☐ |
| Proper containers and sufficient volume for analyses requested | ☑ | ☐ | ☐ |
| Analyses received within holding time | ☑ | ☐ | ☐ |
| Proper preservation noted on COC or sample container | ☑ | ☐ | ☐ |
| ☐ Unpreserved vials received for Volatiles analysis | | | |
| Volatile analysis container(s) free of headspace | ☑ | ☐ | ☐ |
| Tedlar bag(s) free of condensation | ☐ | ☐ | ☑ |

**CONTAINER TYPE:**

**Solid:** ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

**Water:** ☐VOA ☑VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐500PB ☐500PB**na**

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

**Air:** ☐Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ Checked by: (1) pkv

**Container:** **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope Reviewed by: pL

**Preservative:** **h:** HCL **n:** HNO3 **na$_2$:**$Na_2S_2O_3$ **Na:** NaOH **p:** $H_3PO_4$ **s:** $H_2SO_4$ **znna:** $ZnAc_2$+NaOH **f:** Field-filtered Scanned by: pL

Calscience Environmental Laboratories, Inc.

April 23, 2010

Suzanne McClurkin
Delta Environmental Consultants, Inc.
312 Piercy Rd.
San Jose, CA 95138-1401

Subject: **Calscience Work Order No.: 10-04-0776**
**Client Reference: 5251 Hopyard Rd., Pleasanton, CA**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 4/10/2010 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,

Philip Hamelle for

Calscience Environmental
Laboratories, Inc.
Xuan H. Dang
Project Manager

Calscience Environmental Laboratories, Inc.

**Analytical Report**

Delta Environmental Consultants, Inc.
312 Piercy Rd.
San Jose, CA 95138-1401

Date Received: 04/10/10
Work Order No: 10-04-0776
Preparation: EPA 3010A Total
Method: EPA 6010B

Project: 5251 Hopyard Rd., Pleasanton, CA



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **EW-1** | **10-04-0776-1-E** | **04/08/10 09:45** | **Aqueous** | **ICP 5300** | **04/12/10** | **04/12/10 20:54** | **100412LA4** |

| Parameter | Result | RL | DF | Qual | Units |
|---|---|---|---|---|---|
| Iron | 10.2 | 0.100 | 1 | | mg/L |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **S-3** | **10-04-0776-2-E** | **04/08/10 10:15** | **Aqueous** | **ICP 5300** | **04/12/10** | **04/12/10 21:00** | **100412LA4** |

| Parameter | Result | RL | DF | Qual | Units |
|---|---|---|---|---|---|
| Iron | 1.82 | 0.100 | 1 | | mg/L |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **S-1** | **10-04-0776-3-E** | **04/08/10 10:35** | **Aqueous** | **ICP 5300** | **04/12/10** | **04/12/10 21:01** | **100412LA4** |

| Parameter | Result | RL | DF | Qual | Units |
|---|---|---|---|---|---|
| Iron | 0.511 | 0.100 | 1 | | mg/L |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **S-10** | **10-04-0776-4-E** | **04/08/10 11:15** | **Aqueous** | **ICP 5300** | **04/12/10** | **04/12/10 21:03** | **100412LA4** |

| Parameter | Result | RL | DF | Qual | Units |
|---|---|---|---|---|---|
| Iron | 0.915 | 0.100 | 1 | | mg/L |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **S-2** | **10-04-0776-5-E** | **04/08/10 11:35** | **Aqueous** | **ICP 5300** | **04/12/10** | **04/12/10 21:05** | **100412LA4** |

| Parameter | Result | RL | DF | Qual | Units |
|---|---|---|---|---|---|
| Iron | 0.120 | 0.100 | 1 | | mg/L |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **097-01-003-10,432** | **N/A** | **Aqueous** | **ICP 5300** | **04/12/10** | **04/12/10 20:02** | **100412LA4** |

| Parameter | Result | RL | DF | Qual | Units |
|---|---|---|---|---|---|
| Iron | ND | 0.100 | 1 | | mg/L |

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

Calscience Environmental Laboratories, Inc.

# Analytical Report

Delta Environmental Consultants, Inc.
312 Piercy Rd.
San Jose, CA 95138-1401

Date Received: 04/10/10
Work Order No: 10-04-0776
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: 5251 Hopyard Rd., Pleasanton, CA



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **EW-1** | **10-04-0776-1-C** | **04/08/10 09:45** | **Aqueous** | **GC 25** | **04/15/10** | **04/15/10 20:31** | **100415B01** |

| Parameter | Result | RL | DF | Qual | Units |
|---|---|---|---|---|---|
| TPH as Gasoline | 7100 | 50 | 1 | | ug/L |

| Surrogates: | REC (%) | Control Limits | Qual |
|---|---|---|---|
| 1,4-Bromofluorobenzene | 114 | 38-134 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **S-3** | **10-04-0776-2-C** | **04/08/10 10:15** | **Aqueous** | **GC 25** | **04/15/10** | **04/15/10 21:05** | **100415B01** |

| Parameter | Result | RL | DF | Qual | Units |
|---|---|---|---|---|---|
| TPH as Gasoline | 2400 | 50 | 1 | | ug/L |

| Surrogates: | REC (%) | Control Limits | Qual |
|---|---|---|---|
| 1,4-Bromofluorobenzene | 109 | 38-134 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **S-1** | **10-04-0776-3-C** | **04/08/10 10:35** | **Aqueous** | **GC 25** | **04/20/10** | **04/20/10 14:06** | **100420B01** |

| Parameter | Result | RL | DF | Qual | Units |
|---|---|---|---|---|---|
| TPH as Gasoline | 9300 | 1200 | 25 | | ug/L |

| Surrogates: | REC (%) | Control Limits | Qual |
|---|---|---|---|
| 1,4-Bromofluorobenzene | 93 | 38-134 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **S-10** | **10-04-0776-4-C** | **04/08/10 11:15** | **Aqueous** | **GC 25** | **04/15/10** | **04/15/10 22:12** | **100415B01** |

| Parameter | Result | RL | DF | Qual | Units |
|---|---|---|---|---|---|
| TPH as Gasoline | ND | 50 | 1 | | ug/L |

| Surrogates: | REC (%) | Control Limits | Qual |
|---|---|---|---|
| 1,4-Bromofluorobenzene | 86 | 38-134 | |

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

Calscience Environmental Laboratories, Inc.

**Analytical Report**

Delta Environmental Consultants, Inc.
312 Piercy Rd.
San Jose, CA 95138-1401

Date Received: 04/10/10
Work Order No: 10-04-0776
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: 5251 Hopyard Rd., Pleasanton, CA



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **S-2** | **10-04-0776-5-C** | **04/08/10 11:35** | **Aqueous** | **GC 25** | **04/15/10** | **04/15/10 23:19** | **100415B01** |

| Parameter | Result | RL | DF | Qual | Units |
|---|---|---|---|---|---|
| TPH as Gasoline | ND | 50 | 1 | | ug/L |

| Surrogates: | REC (%) | Control Limits | Qual |
|---|---|---|---|
| 1,4-Bromofluorobenzene | 85 | 38-134 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **099-12-436-4,625** | **N/A** | **Aqueous** | **GC 25** | **04/15/10** | **04/15/10 14:22** | **100415B01** |

| Parameter | Result | RL | DF | Qual | Units |
|---|---|---|---|---|---|
| TPH as Gasoline | ND | 50 | 1 | | ug/L |

| Surrogates: | REC (%) | Control Limits | Qual |
|---|---|---|---|
| 1,4-Bromofluorobenzene | 82 | 38-134 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **099-12-436-4,641** | **N/A** | **Aqueous** | **GC 25** | **04/20/10** | **04/20/10 05:07** | **100420B01** |

| Parameter | Result | RL | DF | Qual | Units |
|---|---|---|---|---|---|
| TPH as Gasoline | ND | 50 | 1 | | ug/L |

| Surrogates: | REC (%) | Control Limits | Qual |
|---|---|---|---|
| 1,4-Bromofluorobenzene | 85 | 38-134 | |

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

Calscience Environmental Laboratories, Inc.

**Analytical Report**

ACCREDITED IN ACCORDANCE WITH nelac

Delta Environmental Consultants, Inc.
312 Piercy Rd.
San Jose, CA 95138-1401

Date Received: 04/10/10
Work Order No: 10-04-0776
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: 5251 Hopyard Rd., Pleasanton, CA



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **EW-1** | **10-04-0776-1-B** | **04/08/10 09:45** | **Aqueous** | **GC/MS WW** | **04/15/10** | **04/15/10 20:33** | **100415L01** |

| Parameter | Result | RL | DF | Qual | Parameter | Result | RL | DF | Qual |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 16 | 0.50 | 1 | | Xylenes (total) | 29 | 1.0 | 1 | |
| Ethylbenzene | 95 | 1.0 | 1 | | Methyl-t-Butyl Ether (MTBE) | 3.7 | 1.0 | 1 | |
| Toluene | 25 | 1.0 | 1 | | | | | | |
| Surrogates: | REC (%) | Control Limits | | Qual | Surrogates: | REC (%) | Control Limits | | Qual |
| Dibromofluoromethane | 101 | 80-132 | | | 1,2-Dichloroethane-d4 | 101 | 80-141 | | |
| Toluene-d8 | 101 | 80-120 | | | 1,4-Bromofluorobenzene | 99 | 76-120 | | |

| **S-3** | **10-04-0776-2-B** | **04/08/10 10:15** | **Aqueous** | **GC/MS WW** | **04/14/10** | **04/14/10 16:48** | **100414L01** |
|---|---|---|---|---|---|---|---|

| Parameter | Result | RL | DF | Qual | Parameter | Result | RL | DF | Qual |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 270 | 1.0 | 2 | | Xylenes (total) | 3.6 | 1.0 | 1 | |
| Ethylbenzene | 4.0 | 1.0 | 1 | | Methyl-t-Butyl Ether (MTBE) | 11 | 1.0 | 1 | |
| Toluene | 6.0 | 1.0 | 1 | | | | | | |
| Surrogates: | REC (%) | Control Limits | | Qual | Surrogates: | REC (%) | Control Limits | | Qual |
| Dibromofluoromethane | 102 | 80-132 | | | 1,2-Dichloroethane-d4 | 99 | 80-141 | | |
| Toluene-d8 | 102 | 80-120 | | | 1,4-Bromofluorobenzene | 100 | 76-120 | | |

| **S-1** | **10-04-0776-3-B** | **04/08/10 10:35** | **Aqueous** | **GC/MS WW** | **04/14/10** | **04/14/10 17:15** | **100414L01** |
|---|---|---|---|---|---|---|---|

| Parameter | Result | RL | DF | Qual | Parameter | Result | RL | DF | Qual |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 23 | 2.5 | 5 | | Xylenes (total) | 56 | 5.0 | 5 | |
| Ethylbenzene | 320 | 5.0 | 5 | | Methyl-t-Butyl Ether (MTBE) | 17 | 5.0 | 5 | |
| Toluene | 38 | 5.0 | 5 | | | | | | |
| Surrogates: | REC (%) | Control Limits | | Qual | Surrogates: | REC (%) | Control Limits | | Qual |
| Dibromofluoromethane | 101 | 80-132 | | | 1,2-Dichloroethane-d4 | 98 | 80-141 | | |
| Toluene-d8 | 102 | 80-120 | | | 1,4-Bromofluorobenzene | 99 | 76-120 | | |

| **S-10** | **10-04-0776-4-B** | **04/08/10 11:15** | **Aqueous** | **GC/MS WW** | **04/15/10** | **04/15/10 20:05** | **100415L01** |
|---|---|---|---|---|---|---|---|

| Parameter | Result | RL | DF | Qual | Parameter | Result | RL | DF | Qual |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | 0.50 | 1 | | Xylenes (total) | ND | 1.0 | 1 | |
| Ethylbenzene | ND | 1.0 | 1 | | Methyl-t-Butyl Ether (MTBE) | 1.5 | 1.0 | 1 | |
| Toluene | ND | 1.0 | 1 | | | | | | |
| Surrogates: | REC (%) | Control Limits | | Qual | Surrogates: | REC (%) | Control Limits | | Qual |
| Dibromofluoromethane | 102 | 80-132 | | | 1,2-Dichloroethane-d4 | 101 | 80-141 | | |
| Toluene-d8 | 99 | 80-120 | | | 1,4-Bromofluorobenzene | 95 | 76-120 | | |

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

Calscience Environmental Laboratories, Inc.

**Analytical Report**

| | | | |
|---|---|---|---|
| Delta Environmental Consultants, Inc. | Date Received: | 04/10/10 |
| 312 Piercy Rd. | Work Order No: | 10-04-0776 |
| San Jose, CA 95138-1401 | Preparation: | EPA 5030B |
| | Method: | EPA 8260B |
| | Units: | ug/L |

Project: 5251 Hopyard Rd., Pleasanton, CA



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **S-2** | **10-04-0776-5-B** | **04/08/10 11:35** | **Aqueous** | **GC/MS WW** | **04/14/10** | **04/14/10 18:10** | **100414L01** |

| Parameter | Result | RL | DF | Qual | Parameter | Result | RL | DF | Qual |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | 0.50 | 1 | | Xylenes (total) | ND | 1.0 | 1 | |
| Ethylbenzene | ND | 1.0 | 1 | | Methyl-t-Butyl Ether (MTBE) | 38 | 1.0 | 1 | |
| Toluene | ND | 1.0 | 1 | | | | | | |
| Surrogates: | REC (%) | Control Limits | | Qual | Surrogates: | REC (%) | Control Limits | | Qual |
| Dibromofluoromethane | 103 | 80-132 | | | 1,2-Dichloroethane-d4 | 102 | 80-141 | | |
| Toluene-d8 | 100 | 80-120 | | | 1,4-Bromofluorobenzene | 98 | 76-120 | | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **099-14-001-424** | **N/A** | **Aqueous** | **GC/MS WW** | **04/14/10** | **04/14/10 12:14** | **100414L01** |

| Parameter | Result | RL | DF | Qual | Parameter | Result | RL | DF | Qual |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | 0.50 | 1 | | Xylenes (total) | ND | 1.0 | 1 | |
| Ethylbenzene | ND | 1.0 | 1 | | Methyl-t-Butyl Ether (MTBE) | ND | 1.0 | 1 | |
| Toluene | ND | 1.0 | 1 | | | | | | |
| Surrogates: | REC (%) | Control Limits | | Qual | Surrogates: | REC (%) | Control Limits | | Qual |
| Dibromofluoromethane | 102 | 80-132 | | | 1,2-Dichloroethane-d4 | 101 | 80-141 | | |
| Toluene-d8 | 100 | 80-120 | | | 1,4-Bromofluorobenzene | 98 | 76-120 | | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **099-14-001-450** | **N/A** | **Aqueous** | **GC/MS WW** | **04/15/10** | **04/15/10 19:38** | **100415L01** |

| Parameter | Result | RL | DF | Qual | Parameter | Result | RL | DF | Qual |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | 0.50 | 1 | | Xylenes (total) | ND | 1.0 | 1 | |
| Ethylbenzene | ND | 1.0 | 1 | | Methyl-t-Butyl Ether (MTBE) | ND | 1.0 | 1 | |
| Toluene | ND | 1.0 | 1 | | | | | | |
| Surrogates: | REC (%) | Control Limits | | Qual | Surrogates: | REC (%) | Control Limits | | Qual |
| Dibromofluoromethane | 103 | 80-132 | | | 1,2-Dichloroethane-d4 | 105 | 80-141 | | |
| Toluene-d8 | 100 | 80-120 | | | 1,4-Bromofluorobenzene | 97 | 76-120 | | |

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

Calscience Environmental Laboratories, Inc.

**Analytical Report**

Delta Environmental Consultants, Inc.
312 Piercy Rd.
San Jose, CA 95138-1401

Date Received: 04/10/10
Work Order No: 10-04-0776

Project: 5251 Hopyard Rd., Pleasanton, CA



| Client Sample Number | Lab Sample Number | Date Collected | Matrix |
|---|---|---|---|
| **EW-1** | **10-04-0776-1** | **04/08/10** | **Aqueous** |

Comment(s): (19) Sample was not received within recommended holding time.

| Parameter | Result | RL | DF | Qual | Units | Date Prepared | Date Analyzed | Method |
|---|---|---|---|---|---|---|---|---|
| Sulfate | 2.7 | 1.0 | 1 | | mg/L | N/A | 04/14/10 | EPA 300.0 |
| Iron (II) (19) | ND | 0.10 | 1 | | mg/L | 04/10/10 | 04/10/10 | SM 3500-FeB |

| Client Sample Number | Lab Sample Number | Date Collected | Matrix |
|---|---|---|---|
| **S-3** | **10-04-0776-2** | **04/08/10** | **Aqueous** |

Comment(s): (19) Sample was not received within recommended holding time.

| Parameter | Result | RL | DF | Qual | Units | Date Prepared | Date Analyzed | Method |
|---|---|---|---|---|---|---|---|---|
| Sulfate | 19 | 1.0 | 1 | | mg/L | N/A | 04/15/10 | EPA 300.0 |
| Iron (II) (19) | ND | 0.10 | 1 | | mg/L | 04/10/10 | 04/10/10 | SM 3500-FeB |

| Client Sample Number | Lab Sample Number | Date Collected | Matrix |
|---|---|---|---|
| **S-1** | **10-04-0776-3** | **04/08/10** | **Aqueous** |

Comment(s): (19) Sample was not received within recommended holding time.

| Parameter | Result | RL | DF | Qual | Units | Date Prepared | Date Analyzed | Method |
|---|---|---|---|---|---|---|---|---|
| Sulfate | 3.1 | 1.0 | 1 | | mg/L | N/A | 04/15/10 | EPA 300.0 |
| Iron (II) (19) | ND | 0.10 | 1 | | mg/L | 04/10/10 | 04/10/10 | SM 3500-FeB |

| Client Sample Number | Lab Sample Number | Date Collected | Matrix |
|---|---|---|---|
| **S-10** | **10-04-0776-4** | **04/08/10** | **Aqueous** |

Comment(s): (19) Sample was not received within recommended holding time.

| Parameter | Result | RL | DF | Qual | Units | Date Prepared | Date Analyzed | Method |
|---|---|---|---|---|---|---|---|---|
| Sulfate | 170 | 5.0 | 5 | | mg/L | N/A | 04/15/10 | EPA 300.0 |
| Iron (II) (19) | ND | 0.10 | 1 | | mg/L | 04/10/10 | 04/10/10 | SM 3500-FeB |

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

Calscience Environmental Laboratories, Inc.

**Analytical Report**

Delta Environmental Consultants, Inc.
312 Piercy Rd.
San Jose, CA 95138-1401

Date Received: 04/10/10
Work Order No: 10-04-0776

Project: 5251 Hopyard Rd., Pleasanton, CA



| Client Sample Number | Lab Sample Number | Date Collected | Matrix |
|---|---|---|---|
| **S-2** | **10-04-0776-5** | **04/08/10** | **Aqueous** |

Comment(s): (19) Sample was not received within recommended holding time.

| Parameter | Result | RL | DF | Qual | Units | Date Prepared | Date Analyzed | Method |
|---|---|---|---|---|---|---|---|---|
| Sulfate | 600 | 10 | 10 | | mg/L | N/A | 04/15/10 | EPA 300.0 |
| Iron (II) (19) | ND | 0.10 | 1 | | mg/L | 04/10/10 | 04/10/10 | SM 3500-FeB |

| **EW-1B** | **10-04-0776-6** | **04/08/10** | **Aqueous** |
|---|---|---|---|

| Parameter | Result | RL | DF | Qual | Units | Date Prepared | Date Analyzed | Method |
|---|---|---|---|---|---|---|---|---|
| Sulfate | 90000 | 1000 | 1000 | | mg/L | N/A | 04/15/10 | EPA 300.0 |

| **S-3** | **10-04-0776-7** | **04/08/10** | **Aqueous** |
|---|---|---|---|

| Parameter | Result | RL | DF | Qual | Units | Date Prepared | Date Analyzed | Method |
|---|---|---|---|---|---|---|---|---|
| Sulfate | 99000 | 2000 | 2000 | | mg/L | N/A | 04/15/10 | EPA 300.0 |

| **Method Blank** | **N/A** | **Aqueous** |
|---|---|---|

| Parameter | Result | RL | DF | Qual | Units | Date Prepared | Date Analyzed | Method |
|---|---|---|---|---|---|---|---|---|
| Sulfate | ND | 1.0 | 1 | | mg/L | N/A | 04/14/10 | EPA 300.0 |
| Iron (II) | ND | 0.10 | 1 | | mg/L | 04/10/10 | 04/10/10 | SM 3500-FeB |

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

Calscience Environmental Laboratories, Inc.

# Analytical Report

## LABORATORY ID: 10-04-0776

**Method: EPA 6010B/SM 3500-FeD (Calculation)**
**Matrix: Water/Aqueous**

**CLIENT:** Delta Environmental Consultants, Inc.
**PROJECT:** 5251 Hopyard Rd., Pleasanton, CA

## Results

| Sample ID | Ferric Iron (Fe+3) mg/L | Dilution Factor | Reporting Limit | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|
| EW-1 | 10.2 | 1 | 0.10 | 04/12/10 | 04/12/10 |
| S-3 | 1.82 | 1 | 0.10 | 04/12/10 | 04/12/10 |
| S-1 | 0.511 | 1 | 0.10 | 04/12/10 | 04/12/10 |
| S-10 | 0.915 | 1 | 0.10 | 04/12/10 | 04/12/10 |
| S-2 | 0.120 | 1 | 0.10 | 04/12/10 | 04/12/10 |

Reporting Limit: 0.10

## Laboratory Notes

Key: ND=Not Detected at the reporting level, NA=Not applicable

Calscience Environmental Laboratories, Inc.

## Quality Control - Spike/Spike Duplicate

Delta Environmental Consultants, Inc.
312 Piercy Rd.
San Jose, CA 95138-1401

Date Received: 04/10/10
Work Order No: 10-04-0776
Preparation: EPA 3010A Total
Method: EPA 6010B

Project 5251 Hopyard Rd., Pleasanton, CA

| Quality Control Sample ID | Matrix | Instrument | Date Prepared | Date Analyzed | MS/MSD Batch Number |
|---|---|---|---|---|---|
| **10-04-0754-1** | **Aqueous** | **ICP 5300** | **04/12/10** | **04/12/10** | **100412SA4** |

| Parameter | MS %REC | MSD %REC | %REC CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|
| Iron | 4X | 4X | 65-149 | 4X | 0-21 | Q |

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

## Quality Control - Spike/Spike Duplicate

| | | | |
|---|---|---|---|
| Delta Environmental Consultants, Inc. | | Date Received: | 04/10/10 |
| 312 Piercy Rd. | | Work Order No: | 10-04-0776 |
| San Jose, CA 95138-1401 | | Preparation: | EPA 5030B |
| | | Method: | EPA 8015B (M) |

Project 5251 Hopyard Rd., Pleasanton, CA

| Quality Control Sample ID | Matrix | Instrument | Date Prepared | Date Analyzed | MS/MSD Batch Number |
|---|---|---|---|---|---|
| **10-04-0607-1** | **Aqueous** | **GC 25** | **04/15/10** | **04/15/10** | **100415S01** |

| Parameter | MS %REC | MSD %REC | %REC CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|
| TPH as Gasoline | 93 | 92 | 68-122 | 2 | 0-18 | |

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

## Quality Control - Spike/Spike Duplicate

Delta Environmental Consultants, Inc.
312 Piercy Rd.
San Jose, CA 95138-1401

Date Received: 04/10/10
Work Order No: 10-04-0776
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project 5251 Hopyard Rd., Pleasanton, CA

| Quality Control Sample ID | Matrix | Instrument | Date Prepared | Date Analyzed | MS/MSD Batch Number |
|---|---|---|---|---|---|
| **10-04-1199-1** | **Aqueous** | **GC 25** | **04/20/10** | **04/20/10** | **100420S01** |

| Parameter | MS %REC | MSD %REC | %REC CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|
| TPH as Gasoline | 80 | 84 | 68-122 | 5 | 0-18 | |

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

## Quality Control - Spike/Spike Duplicate

Delta Environmental Consultants, Inc.
312 Piercy Rd.
San Jose, CA 95138-1401

Date Received: 04/10/10
Work Order No: 10-04-0776
Preparation: EPA 5030B
Method: EPA 8260B

Project 5251 Hopyard Rd., Pleasanton, CA

| Quality Control Sample ID | Matrix | Instrument | Date Prepared | Date Analyzed | MS/MSD Batch Number |
|---|---|---|---|---|---|
| **10-04-0769-7** | **Aqueous** | **GC/MS WW** | **04/14/10** | **04/14/10** | **100414S01** |

| Parameter | MS %REC | MSD %REC | %REC CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|
| Benzene | 105 | 104 | 72-120 | 0 | 0-20 | |
| Carbon Tetrachloride | 109 | 108 | 63-135 | 1 | 0-20 | |
| Chlorobenzene | 98 | 97 | 80-120 | 1 | 0-20 | |
| 1,2-Dibromoethane | 101 | 98 | 80-120 | 4 | 0-20 | |
| 1,2-Dichlorobenzene | 96 | 95 | 80-120 | 1 | 0-20 | |
| 1,1-Dichloroethene | 109 | 109 | 60-132 | 0 | 0-24 | |
| Ethylbenzene | 101 | 100 | 78-120 | 1 | 0-20 | |
| Toluene | 103 | 102 | 74-122 | 1 | 0-20 | |
| Trichloroethene | 99 | 97 | 69-120 | 1 | 0-20 | |
| Vinyl Chloride | 106 | 109 | 58-130 | 2 | 0-20 | |
| Methyl-t-Butyl Ether (MTBE) | 106 | 104 | 72-126 | 1 | 0-21 | |
| Tert-Butyl Alcohol (TBA) | 99 | 105 | 72-126 | 6 | 0-20 | |
| Diisopropyl Ether (DIPE) | 107 | 106 | 71-137 | 1 | 0-23 | |
| Ethyl-t-Butyl Ether (ETBE) | 106 | 105 | 74-128 | 0 | 0-20 | |
| Tert-Amyl-Methyl Ether (TAME) | 101 | 100 | 76-124 | 1 | 0-20 | |
| Ethanol | 80 | 86 | 35-167 | 8 | 0-48 | |

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

## Quality Control - Spike/Spike Duplicate



Delta Environmental Consultants, Inc.
312 Piercy Rd.
San Jose, CA 95138-1401

Date Received: 04/10/10
Work Order No: 10-04-0776
Preparation: EPA 5030B
Method: EPA 8260B

Project 5251 Hopyard Rd., Pleasanton, CA

| Quality Control Sample ID | Matrix | Instrument | Date Prepared | Date Analyzed | MS/MSD Batch Number |
|---|---|---|---|---|---|
| **S-10** | **Aqueous** | **GC/MS WW** | **04/15/10** | **04/15/10** | **100415S01** |

| Parameter | MS %REC | MSD %REC | %REC CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|
| Benzene | 102 | 103 | 72-120 | 1 | 0-20 | |
| Carbon Tetrachloride | 108 | 110 | 63-135 | 1 | 0-20 | |
| Chlorobenzene | 99 | 99 | 80-120 | 0 | 0-20 | |
| 1,2-Dibromoethane | 98 | 99 | 80-120 | 1 | 0-20 | |
| 1,2-Dichlorobenzene | 94 | 96 | 80-120 | 2 | 0-20 | |
| 1,1-Dichloroethene | 105 | 105 | 60-132 | 0 | 0-24 | |
| Ethylbenzene | 102 | 103 | 78-120 | 1 | 0-20 | |
| Toluene | 100 | 100 | 74-122 | 1 | 0-20 | |
| Trichloroethene | 102 | 104 | 69-120 | 2 | 0-20 | |
| Vinyl Chloride | 99 | 99 | 58-130 | 0 | 0-20 | |
| Methyl-t-Butyl Ether (MTBE) | 103 | 103 | 72-126 | 0 | 0-21 | |
| Tert-Butyl Alcohol (TBA) | 103 | 105 | 72-126 | 2 | 0-20 | |
| Diisopropyl Ether (DIPE) | 107 | 106 | 71-137 | 1 | 0-23 | |
| Ethyl-t-Butyl Ether (ETBE) | 105 | 104 | 74-128 | 1 | 0-20 | |
| Tert-Amyl-Methyl Ether (TAME) | 102 | 102 | 76-124 | 1 | 0-20 | |
| Ethanol | 81 | 74 | 35-167 | 8 | 0-48 | |

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

## Quality Control - Spike/Spike Duplicate

Delta Environmental Consultants, Inc.
312 Piercy Rd.
San Jose, CA 95138-1401

Date Received: N/A
Work Order No: 10-04-0776

Project: 5251 Hopyard Rd., Pleasanton, CA

**Matrix: Aqueous or Solid**

| Parameter | Method | Quality Control Sample ID | Date Analyzed | Date Extracted | MS% REC | MSD % REC | %REC CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|---|---|---|---|
| Sulfate | EPA 300.0 | 10-04-0954-1 | 04/15/10 | N/A | 103 | 103 | 80-120 | 0 | 0-20 | |
| Iron (II) | SM 3500-FeB | 10-04-0780-2 | 04/10/10 | 4/10/10 | 98 | 99 | 70-130 | 1 | 0-25 | |

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

## Quality Control - LCS/LCS Duplicate



| | | | |
|---|---|---|---|
| Delta Environmental Consultants, Inc. | Date Received: | N/A |
| 312 Piercy Rd. | Work Order No: | 10-04-0776 |
| San Jose, CA 95138-1401 | Preparation: | EPA 3010A Total |
| | Method: | EPA 6010B |

Project: 5251 Hopyard Rd., Pleasanton, CA

| Quality Control Sample ID | Matrix | Instrument | Date Prepared | Date Analyzed | LCS/LCSD Batch Number |
|---|---|---|---|---|---|
| **097-01-003-10,432** | **Aqueous** | **ICP 5300** | **04/12/10** | **04/12/10** | **100412LA4** |

| Parameter | LCS %REC | LCSD %REC | %REC CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|
| Iron | 99 | 97 | 80-120 | 2 | 0-20 | |

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

## Quality Control - LCS/LCS Duplicate



| | | | |
|---|---|---|---|
| Delta Environmental Consultants, Inc. | Date Received: | N/A |
| 312 Piercy Rd. | Work Order No: | 10-04-0776 |
| San Jose, CA 95138-1401 | Preparation: | EPA 5030B |
| | Method: | EPA 8015B (M) |

Project: 5251 Hopyard Rd., Pleasanton, CA

| Quality Control Sample ID | Matrix | Instrument | Date Prepared | Date Analyzed | LCS/LCSD Batch Number |
|---|---|---|---|---|---|
| **099-12-436-4,625** | **Aqueous** | **GC 25** | **04/15/10** | **04/15/10** | **100415B01** |

| Parameter | LCS %REC | LCSD %REC | %REC CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|
| TPH as Gasoline | 91 | 89 | 78-120 | 2 | 0-10 | |

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

## Quality Control - LCS/LCS Duplicate

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| | | | |
|---|---|---|---|
| Delta Environmental Consultants, Inc. | Date Received: | N/A |
| 312 Piercy Rd. | Work Order No: | 10-04-0776 |
| San Jose, CA 95138-1401 | Preparation: | EPA 5030B |
| | Method: | EPA 8015B (M) |

Project: 5251 Hopyard Rd., Pleasanton, CA

| Quality Control Sample ID | Matrix | Instrument | Date Prepared | Date Analyzed | LCS/LCSD Batch Number |
|---|---|---|---|---|---|
| **099-12-436-4,641** | **Aqueous** | **GC 25** | **04/20/10** | **04/20/10** | **100420B01** |

| Parameter | LCS %REC | LCSD %REC | %REC CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|
| TPH as Gasoline | 88 | 89 | 78-120 | 1 | 0-10 | |

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

## Quality Control - LCS/LCS Duplicate

Delta Environmental Consultants, Inc.
312 Piercy Rd.
San Jose, CA 95138-1401

Date Received: N/A
Work Order No: 10-04-0776
Preparation: EPA 5030B
Method: EPA 8260B

Project: 5251 Hopyard Rd., Pleasanton, CA

| Quality Control Sample ID | Matrix | Instrument | Date Prepared | Date Analyzed | LCS/LCSD Batch Number |
|---|---|---|---|---|---|
| **099-14-001-424** | **Aqueous** | **GC/MS WW** | **04/14/10** | **04/14/10** | **100414L01** |

| Parameter | LCS %REC | LCSD %REC | %REC CL | ME_CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|---|
| Benzene | 104 | 105 | 80-122 | 73-129 | 1 | 0-20 | |
| Carbon Tetrachloride | 110 | 110 | 68-140 | 56-152 | 1 | 0-20 | |
| Chlorobenzene | 99 | 99 | 80-120 | 73-127 | 1 | 0-20 | |
| 1,2-Dibromoethane | 99 | 98 | 80-121 | 73-128 | 1 | 0-20 | |
| 1,2-Dichlorobenzene | 96 | 97 | 80-120 | 73-127 | 1 | 0-20 | |
| 1,1-Dichloroethene | 111 | 112 | 72-132 | 62-142 | 1 | 0-25 | |
| Ethylbenzene | 103 | 103 | 80-126 | 72-134 | 0 | 0-20 | |
| Toluene | 102 | 104 | 80-121 | 73-128 | 1 | 0-20 | |
| Trichloroethene | 106 | 106 | 80-123 | 73-130 | 0 | 0-20 | |
| Vinyl Chloride | 109 | 108 | 67-133 | 56-144 | 1 | 0-20 | |
| Methyl-t-Butyl Ether (MTBE) | 105 | 105 | 75-123 | 67-131 | 0 | 0-20 | |
| Tert-Butyl Alcohol (TBA) | 99 | 98 | 75-123 | 67-131 | 1 | 0-20 | |
| Diisopropyl Ether (DIPE) | 106 | 107 | 71-131 | 61-141 | 1 | 0-20 | |
| Ethyl-t-Butyl Ether (ETBE) | 108 | 108 | 76-124 | 68-132 | 0 | 0-20 | |
| Tert-Amyl-Methyl Ether (TAME) | 105 | 106 | 80-123 | 73-130 | 1 | 0-20 | |
| Ethanol | 95 | 96 | 61-139 | 48-152 | 1 | 0-27 | |

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

Calscience Environmental Laboratories, Inc.

## Quality Control - LCS/LCS Duplicate

Delta Environmental Consultants, Inc.
312 Piercy Rd.
San Jose, CA 95138-1401

Date Received: N/A
Work Order No: 10-04-0776
Preparation: EPA 5030B
Method: EPA 8260B

Project: 5251 Hopyard Rd., Pleasanton, CA

| Quality Control Sample ID | Matrix | Instrument | Date Prepared | Date Analyzed | LCS/LCSD Batch Number |
|---|---|---|---|---|---|
| **099-14-001-450** | **Aqueous** | **GC/MS WW** | **04/15/10** | **04/15/10** | **100415L01** |

| Parameter | LCS %REC | LCSD %REC | %REC CL | ME_CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|---|
| Benzene | 98 | 100 | 80-122 | 73-129 | 2 | 0-20 | |
| Carbon Tetrachloride | 104 | 106 | 68-140 | 56-152 | 2 | 0-20 | |
| Chlorobenzene | 97 | 98 | 80-120 | 73-127 | 1 | 0-20 | |
| 1,2-Dibromoethane | 97 | 98 | 80-121 | 73-128 | 0 | 0-20 | |
| 1,2-Dichlorobenzene | 93 | 95 | 80-120 | 73-127 | 1 | 0-20 | |
| 1,1-Dichloroethene | 101 | 102 | 72-132 | 62-142 | 2 | 0-25 | |
| Ethylbenzene | 99 | 101 | 80-126 | 72-134 | 1 | 0-20 | |
| Toluene | 96 | 98 | 80-121 | 73-128 | 3 | 0-20 | |
| Trichloroethene | 99 | 100 | 80-123 | 73-130 | 1 | 0-20 | |
| Vinyl Chloride | 112 | 111 | 67-133 | 56-144 | 2 | 0-20 | |
| Methyl-t-Butyl Ether (MTBE) | 98 | 100 | 75-123 | 67-131 | 3 | 0-20 | |
| Tert-Butyl Alcohol (TBA) | 99 | 99 | 75-123 | 67-131 | 0 | 0-20 | |
| Diisopropyl Ether (DIPE) | 99 | 102 | 71-131 | 61-141 | 3 | 0-20 | |
| Ethyl-t-Butyl Ether (ETBE) | 98 | 102 | 76-124 | 68-132 | 3 | 0-20 | |
| Tert-Amyl-Methyl Ether (TAME) | 98 | 102 | 80-123 | 73-130 | 4 | 0-20 | |
| Ethanol | 100 | 92 | 61-139 | 48-152 | 8 | 0-27 | |

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

Calscience Environmental Laboratories, Inc.

## Quality Control - LCS/LCS Duplicate

Delta Environmental Consultants, Inc.
312 Piercy Rd.
San Jose, CA 95138-1401

Date Received: N/A
Work Order No: 10-04-0776

Project: 5251 Hopyard Rd., Pleasanton, CA

**Matrix: Aqueous or Solid**

| Parameter | Method | Quality Control Sample ID | Date Extracted | Date Analyzed | LCS % REC | LCSD % REC | %REC CL | RPD | RPD CL | Qual |
|---|---|---|---|---|---|---|---|---|---|---|
| Sulfate | EPA 300.0 | 099-12-906-919 | N/A | 04/14/10 | 100 | 100 | 90-110 | 0 | 0-15 | |

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

## Quality Control - Laboratory Control Sample

ACCREDITED IN ACCORDANCE WITH nelac

Delta Environmental Consultants, Inc.
312 Piercy Rd.
San Jose, CA 95138-1401

Date Received: N/A
Work Order No: 10-04-0776

Project: 5251 Hopyard Rd., Pleasanton, CA

**Matrix: Aqueous or Solid**

| Parameter | Method | Quality Control Sample ID | Date Analyzed | Date Extracted | Conc Added | Conc Recovered | LCS %Rec | %Rec CL | Qualifiers |
|---|---|---|---|---|---|---|---|---|---|
| Iron (II) | SM 3500-FeB | 099-05-111-3,674 | 04/10/10 | 04/10/10 | 1.00 | 0.970 | 97 | 80-120 | |

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

## Glossary of Terms and Qualifiers

Work Order Number: 10-04-0776

| Qualifier | Definition |
|---|---|
| * | See applicable analysis comment. |
| < | Less than the indicated value. |
| > | Greater than the indicated value. |
| 1 | Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification. |
| 2 | Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification. |
| 3 | Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification. |
| 4 | The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification. |
| 5 | The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification. |
| B | Analyte was present in the associated method blank. |
| E | Concentration exceeds the calibration range. |
| J | Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated. |
| ME | LCS Recovery Percentage is within LCS ME Control Limit range. |
| ND | Parameter not detected at the indicated reporting limit. |
| Q | Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater. |
| X | % Recovery and/or RPD out-of-range. |
| Z | Analyte presence was not confirmed by second column or GC/MS analysis. |
| | Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. |

# Shell Oil Products Chain Of Custody Record

**LAB (LOCATION)**
- ☑ CALSCIENCE (_____)
- ☐ SPL (_____)
- ☐ XENCO (_____)
- ☐ TEST AMERICA (_____)
- ☐ OTHER (_____)

**Please Check Appropriate Box:**
☐ ENV. SERVICES | ☐ MOTIVA RETAIL | ☐ SHELL RETAIL
☐ MOTIVA SD&CM | ☑ CONSULTANT | ☐ LUBES
☐ SHELL PIPELINE | ☐ OTHER _____

**Print Bill To Contact Name:** Suzanne McClurkin Nelson

**INCIDENT # (ENV SERVICES):** 98995834 ☐ CHECK IF NO INCIDENT # APPLIES

DATE: 4/8/10

PAGE: 1 of 1

**PO #:**

**SAP #:** 1357858

SAMPLING COMPANY: Delta Consultants | LOG CODE:

ADDRESS: 312 Piercy Road, San Jose, CA 95138

PROJECT CONTACT (Hardcopy or PDF Report to): Suzanne McClurkin- Nelson

TELEPHONE: 408-826-1875 | FAX: 408-225-8506 | E-MAIL: SMcClurkin-Nelson@deltaenv.com

SITE ADDRESS: Street and City: 5251 Hopyard Road; Pleasanton | State: CA | GLOBAL ID NO.:

EDF DELIVERABLE TO (Name, Company, Office Location): Cora Olson | PHONE NO.: 408-826-1877 | E-MAIL: colson@deltaenv.com | CONSULTANT PROJECT NO.: SCA5251H1D

LAB USE ONLY: 10-04-0776

TURNAROUND TIME (CALENDAR DAYS): ☐ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

**SPECIAL INSTRUCTIONS OR NOTES :**

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☐ RECEIPT VERIFICATION REQUESTED

**REQUESTED ANALYSIS**

| LAB USE ONLY | Field Sample Identification | SAMPLING DATE | SAMPLING TIME | MATRIX | PRESERVATIVE HCL | HNO3 | H2SO4 | NONE | OTHER | NO. OF CONT. | Gasoline Hydrocarbons: TPH-Gasoline (8015M) | BTEX (8260B) | 5 Shell Oxygenates (8260B) | MTBE | pH | Sulfate Indicators: Sulfate | Ferrous Iron | Ferric Iron | Waste Characterization: CAM 17 Metals (6010) | Run STLC/TCLP Metals/Org Pb if needed | Run Bioassay if TRPH >5000 ppm. | TEMPERATURE ON RECEIPT C° / Container PID Readings or Laboratory Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EW-1 | 4/8/10 | 9:45 | liquid | 4 | 1 | | 2 | | 7 | X | X | | X | | X | X | X | | | | |
| 2 | S-3 | " | 10:15 | " | 4 | 1 | | 2 | | 7 | X | X | | X | | X | X | X | | | | |
| 3 | S-1 | " | 10:35 | " | 4 | 1 | | 2 | | 7 | X | X | | X | | X | X | X | | | | |
| 4 | S-10 | " | 11:15 | " | 4 | 1 | | 2 | | 7 | X | X | | X | | X | X | X | | | | |
| 5 | S-2 | " | 11:35 | " | 4 | 1 | | 2 | | 7 | X | X | | X | | X | X | X | | | | |
| 6 | EW-1B | " | 17:10 | " | | | | 1 | | 1 | | | | | | X | | | | | | |
| 7 | S-3 | " | 19:30 | " | | | | 1 | | 1 | | | | | | X | | | | | | |

| Relinquished by: (Signature) | Received by: (Signature) | Date: | Time: |
|---|---|---|---|
| | (GSO) | 4/9/10 | |
| Relinquished by: (Signature) | Received by: (Signature) | Date: | Time: |
| | CEL | 4/10/10 | 1000 |
| Relinquished by: (Signature) | Received by: (Signature) | Date: | Time: |
| | | | |

05/2/06 Revision

SHIPPERS GSO ACCOUNT NO. 9255

STE/ ROOM

ZIP CODE 75138

PHONE NUMBER 469 826 1876

IPANY
AL SCIENCE

IE

PHONE NUMBER 714-895-6494

RESS
0 LINCOLN WAY

RESS -

STE/ ROOM -

ZIP CODE 92841

ARDEN GROVE

INTERNAL BILLING
RENCE WILL APPEAR
OUR INVOICE

TIONS

GSO
GOLDEN STATE OVERNIGHT

1-800-322-5555

WWW.GSO.COM

**SHIPPING AIR BILL**

GSO COPY

4 PACKAGE INFORMATION
- ☐ LETTER (MAX 8 OZ)
- ☐ PACKAGE (WT) _____
- ☐ DECLARED VALUE $ _____
- ☐ COD AMOUNT $ _____ (CASH NOT ACCEPTED)

5 DELIVERY SERVICE
- ☐ PRIORITY OVERNIGHT BY 10:30 AM
- ☐ EARLY PRIORITY BY 8:00 AM
- ☐ SATURDAY DELIVERY

*DELIVERY TIMES MAY BE LATER IN SOME AREAS • CONSULT YOUR SERVICE GUIDE OR CALL GOLDEN STATE OVERNIGHT.

6 RELEASE SIGNATURE _____
SIGN TO AUTHORIZE DELIVERY WITHOUT OBTAINING SIGNATURE

7 CREDIT CARD ☐ M/C ☐ VISA ☐ AM EX — CREDIT CARD NUMBER — EXP. DATE

8 PICK UP INFORMATION _____ TIME _____ DRIVER # _____ ROUTE #

106087646

9 GSO TRACKING NUMBER

106087646

0776

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 10-04-0776

# SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Delta DATE: 04/10/10

**TEMPERATURE:** Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 3.5 °C + 0.5 °C (CF) = 4.0 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

**Ambient Temperature**: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only Initial: YL

**CUSTODY SEALS INTACT:**

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: YL

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: WSL

| SAMPLE CONDITION: | Yes | No | N/A |
|---|---|---|---|
| Chain-Of-Custody (COC) document(s) received with samples | ☑ | ☐ | ☐ |
| COC document(s) received complete | ☐ | ☑ | ☐ |
| ☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels. | | | |
| ☐ No analysis requested. ☐ Not relinquished. ☑ No date/time relinquished. | | | |
| Sampler's name indicated on COC | ☐ | ☐ | ☑ |
| Sample container label(s) consistent with COC | ☑ | ☐ | ☐ |
| Sample container(s) intact and good condition | ☐ | ☑ | ☐ |
| Proper containers and sufficient volume for analyses requested | ☑ | ☐ | ☐ |
| Analyses received within holding time | ☐ | ☑ | ☐ |
| Proper preservation noted on COC or sample container | ☑ | ☐ | ☐ |
| ☐ Unpreserved vials received for Volatiles analysis | | | |
| Volatile analysis container(s) free of headspace | ☑ | ☐ | ☐ |
| Tedlar bag(s) free of condensation | ☐ | ☐ | ☑ |

**CONTAINER TYPE:**

**Solid:** ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

**Water:** ☐VOA ☑4 VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☑500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐500PB ☐500PB**na**

☑250PB ☑250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

**Air:** ☐Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** WSL

**Container:** **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** YL

**Preservative:** **h:** HCL **n:** $HNO_3$ **na$_2$:**$Na_2S_2O_3$ **na:** NaOH **p:** $H_3PO_4$ **s:** $H_2SO_4$ **znna:** $ZnAc_2$+NaOH **f:** Field-filtered **Scanned by:** WSL

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 10-04-0776

# SAMPLE ANOMALY FORM

**SAMPLES - CONTAINERS & LABELS:**

- ☐ **Sample(s)/Container(s) NOT RECEIVED but listed on COC**
- ☐ **Sample(s)/Container(s) received but NOT LISTED on COC**
- ☑ **Holding time expired** – list sample ID(s) and test
- ☐ **Insufficient quantities for analysis** – list test
- ☐ **Improper container(s) used** – list test
- ☐ **Improper preservative used** – list test
- ☐ **No preservative noted on COC or label** – list test & notify lab
- ☐ **Sample labels illegible** – note test/container type
- ☐ **Sample label(s) do not match COC** – Note in comments
  - ☐ **Sample ID**
  - ☐ **Date and/or Time Collected**
  - ☐ **Project Information**
  - ☐ **# of Container(s)**
  - ☐ **Analysis**
- ☑ **Sample container(s) compromised** – Note in comments
  - ☐ **Water present in sample container**
  - ☑ **Broken**
  - ☐ **Without Label(s)**
- ☐ **Air sample container(s) compromised** – Note in comments
  - ☐ **Flat**
  - ☐ **Very low in volume**
  - ☐ **Leaking (Not transferred - duplicate bag submitted)**
  - ☐ **Leaking (transferred into Calscience Tedlar® Bag*)**
  - ☐ **Leaking (transferred into Client's Tedlar® Bag*)**
- ☐ **Other:** _____

**Comments:**

(-3) 500Ab1 received broken.

(-1) to (-5) Ferrous Iron. expired.

**HEADSPACE – Containers with Bubble > 6mm or ¼ inch:**

| Sample # | Container ID(s) | # of Vials Received | Sample # | Container ID(s) | # of Vials Received | Sample # | Container ID(s) | # of Cont. received | Analysis |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

**Comments:** _____

*Transferred at Client's request.

Initial / Date: WSC 04/1910

## Philip Sanelle

**From:** Suzanne McClurkin-Nelson [SMcClurkin-Nelson@deltaenv.com]
**Sent:** Tuesday, April 13, 2010 12:20 PM
**To:** Philip Sanelle
**Cc:** Suzanne McClurkin-Nelson; Matt Lambert; Cora Olson; Regina Bussard
**Subject:** RE: 5251 Hopyard Rd., Pleasanton, CA (10-04-0776)
**Attachments:** ole1.bmp

Yes, please - sorry not to get back to you yesterday. Just note that they were run out of hold.

Regina et al - please note that there is a 24-hr hold time for ferrous iron, when we submit for lab analysis we must expedite delivery and notify them in advance that it is coming.

Thanks!

**Suzanne McClurkin-Nelson | Senior Project Manager | North American Operations**
**Delta Consultants, an Oranjewoud N.V. Company**
Direct +1 408 826 1875 | Mobile +1 408 796 8889 | Alternate +1 408 582 4422
smcclurkin-nelson@deltaenv.com | www.deltaenv.com



---

**From:** Philip Sanelle [mailto:PSanelle@calscience.com]
**Sent:** Monday, April 12, 2010 9:08 AM
**To:** Suzanne McClurkin-Nelson
**Subject:** 5251 Hopyard Rd., Pleasanton, CA (10-04-0776)

Suzanne,

We received the samples for Ferrous Iron past holding time. Ferrous iron has a holding time of 24hr. Do you still want us to proceed with analysis of ferrous iron?

Attached is the COC in question.

<<10-04-0776.PDF>>

Thank you,

Philip Sanelle
Project Manager Assistant
Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, CA 92841-1427
Phone: 714-895-5494 x210
Fax: 714-894-7501
PSanelle@calscience.com

Calscience
Environmental
Laboratories, Inc.

April 30, 2010

Suzanne McClurkin-Nelson
Delta Environmental Consultants, Inc.
312 Piercy Rd.
San Jose, CA 95138-1401

Subject: **Calscience Work Order No.: 10-04-1598**
**Client Reference: 5251 Hopyard Rd., Pleasanton, CA**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 4/22/2010 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,

Philip Hamelle for

Calscience Environmental
Laboratories, Inc.
Xuan H. Dang
Project Manager

Calscience Environmental Laboratories, Inc.

## Analytical Report

| | | | |
|---|---|---|---|
| Delta Environmental Consultants, Inc. | | Date Received: | 04/22/10 |
| 312 Piercy Rd. | | Work Order No: | 10-04-1598 |
| San Jose, CA 95138-1401 | | Preparation: | N/A |
| | | Method: | EPA 300.0 |

Project: 5251 Hopyard Rd., Pleasanton, CA



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **EW-1** | **10-04-1598-1-A** | **04/21/10 12:00** | **Aqueous** | **IC 7** | **N/A** | **04/23/10 20:04** | **100423L01** |

| Parameter | Result | RL | DF | Qual | Units |
|---|---|---|---|---|---|
| Sulfate | 7800 | 200 | 200 | | mg/L |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **S-3** | **10-04-1598-2-A** | **04/21/10 11:45** | **Aqueous** | **IC 7** | **N/A** | **04/23/10 20:21** | **100423L01** |

| Parameter | Result | RL | DF | Qual | Units |
|---|---|---|---|---|---|
| Sulfate | 7700 | 200 | 200 | | mg/L |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **099-12-906-943** | **N/A** | **Aqueous** | **IC 7** | **N/A** | **04/23/10 09:59** | **100423L01** |

| Parameter | Result | RL | DF | Qual | Units |
|---|---|---|---|---|---|
| Sulfate | ND | 1.0 | 1 | | mg/L |

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

Calscience Environmental Laboratories, Inc.

## Quality Control - Spike/Spike Duplicate

Delta Environmental Consultants, Inc.
312 Piercy Rd.
San Jose, CA 95138-1401

Date Received: 04/22/10
Work Order No: 10-04-1598
Preparation: N/A
Method: EPA 300.0

Project 5251 Hopyard Rd., Pleasanton, CA

| Quality Control Sample ID | Matrix | Instrument | Date Prepared | Date Analyzed | MS/MSD Batch Number |
|---|---|---|---|---|---|
| **10-04-1736-13** | **Aqueous** | **IC 7** | **N/A** | **04/23/10** | **100423S01** |

| Parameter | MS %REC | MSD %REC | %REC CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|
| Sulfate | 103 | 102 | 80-120 | 1 | 0-20 | |

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

## Quality Control - LCS/LCS Duplicate



| | |
|---|---|
| Delta Environmental Consultants, Inc. | Date Received: N/A |
| 312 Piercy Rd. | Work Order No: 10-04-1598 |
| San Jose, CA 95138-1401 | Preparation: N/A |
| | Method: EPA 300.0 |

Project: 5251 Hopyard Rd., Pleasanton, CA

| Quality Control Sample ID | Matrix | Instrument | Date Prepared | Date Analyzed | LCS/LCSD Batch Number |
|---|---|---|---|---|---|
| **099-12-906-943** | **Aqueous** | **IC 7** | **N/A** | **04/23/10** | **100423L01** |

| Parameter | LCS %REC | LCSD %REC | %REC CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|
| Sulfate | 102 | 103 | 90-110 | 1 | 0-15 | |

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

## Glossary of Terms and Qualifiers

Work Order Number: 10-04-1598

| Qualifier | Definition |
|---|---|
| * | See applicable analysis comment. |
| < | Less than the indicated value. |
| > | Greater than the indicated value. |
| 1 | Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification. |
| 2 | Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification. |
| 3 | Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification. |
| 4 | The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification. |
| 5 | The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification. |
| B | Analyte was present in the associated method blank. |
| E | Concentration exceeds the calibration range. |
| J | Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated. |
| ME | LCS Recovery Percentage is within LCS ME Control Limit range. |
| ND | Parameter not detected at the indicated reporting limit. |
| Q | Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater. |
| X | % Recovery and/or RPD out-of-range. |
| Z | Analyte presence was not confirmed by second column or GC/MS analysis. |
| | Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. |

# Shell Oil Products Chain Of Custody Record

**LAB (LOCATION)**
- ☑ CALSCIENCE (_____)
- ☐ SPL (_____)
- ☐ XENCO (_____)
- ☐ TEST AMERICA (_____)
- ☐ OTHER (_____)

**Please Check Appropriate Box:**
☐ ENV. SERVICES ☐ MOTIVA RETAIL ☐ SHELL RETAIL
☐ MOTIVA SD&CM ☐ CONSULTANT ☐ LUBES
☐ SHELL PIPELINE ☐ OTHER _____

**Print Bill To Contact Name:**

**INCIDENT # (ENV SERVICES):** 9 8 9 9 5 8 4 3 ☐ CHECK IF NO INCIDENT # APPLIES

DATE: 4/21/2010

PAGE: 1 of 1

**PO #:**

**SAP #:** [redacted] 1 3 5 7 8 5

SAMPLING COMPANY: Delta Consultants

LOG CODE:

SITE ADDRESS: Street and City: 5251 Hopyard Road; Pleasanton

State: CA

GLOBAL ID NO.:

ADDRESS: 312 Piercy Road, San Jose, CA 95138

EDF DELIVERABLE TO (Name, Company, Office Location): Cora Olson

PHONE NO.: 408-826-1877

E-MAIL: colson@deltaenv.com

CONSULTANT PROJECT NO.: SCA5251H1D

PROJECT CONTACT (Hardcopy or PDF Report to): Suzanne McClurkin- Nelson

TELEPHONE: 408-826-1875

FAX: 408-225-8506

E-MAIL: SMcClurkin-Nelson@deltaenv.com

LAB USE ONLY: 04-1598

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

**SPECIAL INSTRUCTIONS OR NOTES :**

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☐ RECEIPT VERIFICATION REQUESTED

**REQUESTED ANALYSIS**

| LAB USE ONLY | Field Sample Identification | SAMPLING DATE | SAMPLING TIME | MATRIX | PRESERVATIVE HCL | HNO3 | H2SO4 | NONE | OTHER | NO. OF CONT. | Gasoline Hydrocarbons: TPH-Gasoline (8260B) | BTEX (8260B) | MTBE (8260B) | pH | Sulfate Indicators: Sulfate | Ferrous Iron | Ferric Iron | Waste Characterization | TEMPERATURE ON RECEIPT C° / Container PID Readings or Laboratory Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EW-1 | 4/21/2010 | 12:00 | Water | | | | | | 1 | | | | | X | | | | |
| 2 | S-3 | 4/21/2010 | 11:45 | Water | | | | | | 1 | | | | | X | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
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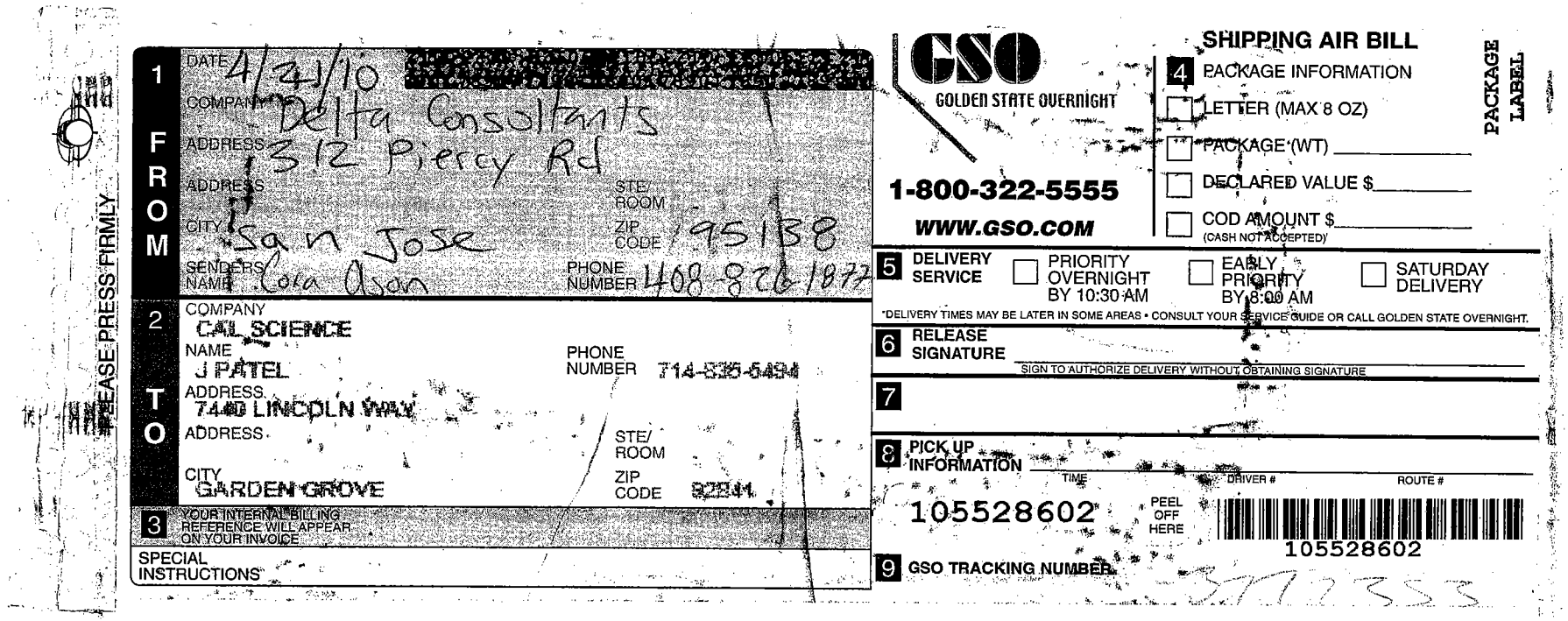
| | | | | | | | | | | | | | | | | | | | |

| | | | |
|---|---|---|---|
| Relinquished by: (Signature) Cora Olson | Received by: (Signature) | Date: 4/21/10 | Time: |
| Relinquished by: (Signature) | Received by: (Signature) | Date: 4/22/10 | Time: 1030 |
| Relinquished by: (Signature) | Received by: (Signature) | Date: | Time: |

05/2/06 Revision

1598



PLEASE PRESS FIRMLY

**GSO** GOLDEN STATE OVERNIGHT

**SHIPPING AIR BILL**

PACKAGE LABEL

1 FROM

DATE 4/21/10

COMPANY Delta Consultants

ADDRESS 312 Piercy Rd

ADDRESS

STE/ ROOM

CITY San Jose

ZIP CODE 95138

SENDER'S NAME Lora Olson

PHONE NUMBER 408-826-1872

2 TO

COMPANY CAL SCIENCE

NAME J PATEL

PHONE NUMBER 714-895-5494

ADDRESS 7440 LINCOLN WAY

ADDRESS

STE/ ROOM

CITY GARDEN GROVE

ZIP CODE 92841

3 YOUR INTERNAL BILLING REFERENCE WILL APPEAR ON YOUR INVOICE

SPECIAL INSTRUCTIONS

1-800-322-5555

WWW.GSO.COM

4 PACKAGE INFORMATION

☐ LETTER (MAX 8 OZ)

☐ PACKAGE (WT) _____

☐ DECLARED VALUE $_____

☐ COD AMOUNT $_____ (CASH NOT ACCEPTED)

5 DELIVERY SERVICE ☐ PRIORITY OVERNIGHT BY 10:30 AM ☐ EARLY PRIORITY BY 8:00 AM ☐ SATURDAY DELIVERY

*DELIVERY TIMES MAY BE LATER IN SOME AREAS • CONSULT YOUR SERVICE GUIDE OR CALL GOLDEN STATE OVERNIGHT.

6 RELEASE SIGNATURE _____

SIGN TO AUTHORIZE DELIVERY WITHOUT OBTAINING SIGNATURE

7

8 PICK UP INFORMATION _____ TIME _____ DRIVER # _____ ROUTE #

105528602 PEEL OFF HERE

105528602

9 GSO TRACKING NUMBER

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 10-04- 1 5 9 8

# SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Delta

DATE: 04/22/10

**TEMPERATURE:** Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

**Temperature** 3.4 °C + 0.5 °C (CF) = 3.9 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

**Ambient Temperature:** ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** JP

**CUSTODY SEALS INTACT:**

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Initial:** JP

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** YC

| **SAMPLE CONDITION:** | Yes | No | N/A |
|---|---|---|---|
| Chain-Of-Custody (COC) document(s) received with samples | ☑ | ☐ | ☐ |
| COC document(s) received complete | ☐ | ☑ | ☐ |
| ☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels. | | | |
| ☐ No analysis requested. ☐ Not relinquished. ☑ No date/time relinquished. | | | |
| Sampler's name indicated on COC | ☐ 4/22/10 | ☐ | ☑ |
| Sample container label(s) consistent with COC | ☑ | ☐ | ☐ |
| Sample container(s) intact and good condition | ☑ | ☐ | ☐ |
| Proper containers and sufficient volume for analyses requested | ☑ | ☐ | ☐ |
| Analyses received within holding time | ☑ | ☐ | ☐ |
| Proper preservation noted on COC or sample container | ☑ | ☐ | ☐ |
| ☐ Unpreserved vials received for Volatiles analysis | | | |
| Volatile analysis container(s) free of headspace | ☐ | ☐ | ☑ |
| Tedlar bag(s) free of condensation | ☐ | ☐ | ☑ |

**CONTAINER TYPE:**

**Solid:** ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

**Water:** ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐500PB ☐500PB**na**

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☑ 250 PJ ☐_____ ☐_____

**Air:** ☐Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** YC

**Container:** **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** WSC

**Preservative:** **h:** HCL **n:** $HNO_3$ **na$_2$:**$Na_2S_2O_3$ **na:** NaOH **p:** $H_3PO_4$ **s:** $H_2SO_4$ **znna:** $ZnAc_2$+NaOH **f:** Field-filtered **Scanned by:** YC