RO- 194

**Shell Oil Products US**

April 19, 2005

Re: **Shell-branded Service Station**
**5251 Hopyard Road**
**Pleasanton, California**

Dear Mr. Bob Schultz:

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
Sr. Environmental Engineer

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

RO-194

**Delta**
**Environmental**
**Consultants, Inc.**

*Solving environment-related business problems worldwide*

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April 19, 2005
Project SJ5251-1.2005

Mr. Robert Schultz
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

**Re: First Quarter 2005 Groundwater Monitoring Report and Work Plan**
**Shell-branded Service Station**
**5251 Hopyard Road**
**Pleasanton, California**

Dear Mr. Schultz,

Delta Environmental Consultants, Inc. (Delta), on behalf of Shell Oil Products US (Shell), has prepared this first quarter 2005 groundwater monitoring report and work plan for a soil and groundwater investigation at the site referenced above (Figure 1). In a letter dated January 24, 2005, the Alameda County Health Care Services Agency (ACHCSA) requested that Shell provide a work plan for a soil and groundwater investigation.

## BACKGROUND

The subject property is located on the southeast corner of the intersection of Owens Drive and Hopyard Road in Pleasanton, California (Figure 2). The property is currently the site of an active Shell-branded service station.

The Shell service 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). The site is located in an area characterized as commercial.

## Groundwater Monitoring

Groundwater monitoring has been performed at the site since December 1988. Depth to groundwater in site groundwater monitoring wells has ranged between 5 to 11 feet below top of casing (TOC). Petroleum hydrocarbons have primarily been detected in Well S-1 located in the central portion of the site and Well S-3 located along in the western or down gradient portion of the site (Figure 2). Groundwater monitoring has been performed on an annual basis since May 1995 due to declining concentrations of petroleum hydrocarbons. Since May 1995, total petroleum hydrocarbons as gasoline (TPH-G) have been detected in Well S-1 at concentrations ranging from 500 micrograms per liter (ug/l) to 4,800 ug/l. TPH-G concentrations were initially as high as 13,000 ug/l (October 1992). Since 1995, TPH-G has been detected in Well S-3 at concentrations ranging from 61 ug/l to 2,200 ug/l.

Methyl tert butyl ether (MTBE) has been detected in monitoring wells across the site. The highest concentration of MTBE was detected in Well S-1 at 2,900 ug/l in May 1997. MTBE concentrations have declined by an order of magnitude since historic highs in 1997. Analyses for all five fuel oxygenates was performed in May 2004. Tert-butyl alcohol (TBA) was detected in the May 2004 sample from Well S-1 at 1,600 ug/l. Tert-amyl methyl ether (TAME) was detected in the sample from Well S-7 at 6.8 ug/l. Groundwater monitoring frequency has voluntarily been changed to quarterly starting in the first quarter 2005. Results of the first quarter 2005 monitoring event are described within this report.

## Dispenser and Piping Replacement Soil Sampling

In September 2004, Toxichem Management Systems, Inc. (Toxichem) performed soil sampling related to site fuel dispensers and product piping replacement. During the uncovering of product piping, the rupture of a line near the center of the site resulted in the release of a small quantity of gasoline. Free product was observed in the area of soil sample location DSV-9 (see Toxichem map in Attachment A). Toxichem reported that the gasoline release was contained within the bottom and sides of the product line trench excavated into clay soil. Groundwater was also encountered within the product line trench.

Soil from beneath the area of the gasoline release was subsequently removed. Soil along an approximately 50-foot length of the trench was removed to depths ranging from 4 feet to 10 feet below grade (bg) – see Figure 3. The soil encountered during the over excavation was described as gray clay. Toxichem reported that no groundwater entered the trench excavation during soil removal activities. The maximum concentration of MTBE and TBA detected in soil samples from the base of the over excavation were 0.20 milligrams per kilogram (mg/kg) and 0.22 mg/kg, respectively. A summary of soil analytical data is provided in Attachment A.

## Groundwater Extraction

During UST upgrades in October 2004, periodic dewatering was performed by pumping groundwater out of the 12-inch diameter tank backfill well. Approximately 33,749 gallons of groundwater was pumped from the tank backfill between October 1 and October 27, 2004. Extracted groundwater was transported to the Shell refinery in Martinez, California for disposal.

**UST Tightness Test Failure**

On November 20, 2004, one of the fuel UST's failed a tightness test. The fuel was removed from the tank to allow inspection and repairs. Shell submitted an Underground Storage Tank Unauthorized Release (Leak)/Contamination Site Report to the Livermore-Pleasanton Fire Department and California Regional Water Quality Control Board, San Francisco Bay Region dated November 22, 2004 (Attachment B). Release of gasoline was concluded to be averted due to high groundwater levels outside the UST.

## HYDROGEOLOGIC CONDITIONS

The ACHCSA, in its letter dated January 24, 2005, requested that Shell perform a study of the regional geologic and hydrogeologic setting of the site. The following specific items were requested:

- a concise narrative discussion of the regional geologic and hydrogeologic setting;
- figure(s) summarizing findings;
- synthesis and interpretation of regional data with the site-specific data;
- references for documents used and;
- photocopies of regional geologic maps, groundwater contour maps, cross-sections, etc.

**Geologic Setting**

The site is located in the western portion of the Livermore Valley Groundwater Basin (see Basin 2-10, Groundwater Basins in California Map, Attachment C). A description of the Livermore Valley Groundwater Basin (Basin) is provided in California Department of Water Resources (DWR) Bulletin 118. The following are excerpts from Bulletin 118:

> "The entire floor of Livermore Valley and portions of the upland areas on all sides of the valley overly groundwater-bearing materials. The materials are continental deposits from alluvial fans, outwash plains, and lakes. They include valley-fill materials, the Livermore Formation, and the Tassajara Formation."
>
> "The Holocene age surficial valley-fill materials range in thickness from a few tens of feet to nearly 400 feet. They occur as stream channel deposits, alluvial fan deposits, and terrace deposits, and are composed of unconsolidated sand, gravel, silt, and clay. In the central and southern portions of the valley, 50 to 80 percent of the valley-fill is comprised of aquifer material that yields significant quantities of water to wells. Clay deposits up to 40 feet thick cap the valley-fill in the western portion of the Basin; where deep wells draw groundwater from underlying aquifer material."

The site is located in the western portion of the Basin and thus surficial deposits consist primarily of clay. Toxichem performed a ½ -mile radius well survey through the the California Department of Water Resources (DWR) and Alameda County Flood Control and Water Conservation District, Zone 7 (Zone 7). Well survey map and tables are provided as Attachment D. A total of five water supply wells were reported within ½ -mile of the site. None of the five wells could be located during an inspection by Toxichem of the reported sites. Two wells listed as abandoned or destroyed were reported in the site area. The nearest destroyed well was reportedly located at a distance of between 100 feet to 300 feet west of the site (see map in Attachment D).

Toxichem was able to obtain the boring logs for two of the five wells identified in the site area. The more detailed of the two logs indicated the presence of clay to a depth of 64 feet bg underlain by sand from 64 to 72 feet bg. Interlayered clay, sand, and gravel were encountered below 72 feet bg.

Borings for site monitoring wells encountered clay to the 30-foot total depth explored. Borings for all wells, except S-2 through S-5, are provided as Attachment E. Delta/Shell are attempting to access archived files to obtain the report containing the boring logs for Wells S-2 through S-5. Selected borings encountered scattered thin layers of silty and clayey sand within the clay deposits. Toxichem described the soils encountered in site excavations in September 2004 as clay.

**Hydrogeologic Setting**

Delta obtained regional hydrogeologic from the Zone 7. A schematic hydrogeologic cross-section was obtained from the Zone 7 website showing the shape of the Livermore Valley groundwater basin and depth to groundwater (see cross-section in Attachment C). DWR Bulletin 118 describes hydrogeologic conditions as:

> "Under most conditions, the valley-fill and Livermore sediments yield adequate to large quantities of groundwater to all types of wells. The quality of water produced from these rocks range from poor to excellent, with most waters in the good to excellent range."

A groundwater elevation contour map prepared by Zone 7 for the fall of 2003, is provided in Attachment C. The groundwater elevation contour map indicates that the groundwater flow direction in the upper-most water supply aquifer beneath the site area is to the south.

Groundwater was encountered in site borings within clay deposits. Depth to groundwater in site groundwater monitoring wells has ranged between 5 to 11 feet below top of casing (TOC) since 1991. In January 2005, depth to groundwater in monitoring wells ranged from 5.44 feet to 11.18 feet below TOC. The primary groundwater flow of the first encountered groundwater has primarily been to the northwest. A rose diagram of historic groundwater flow directions is provided on Figure 2. Groundwater flow to the north and northeast have also been recorded. The highest concentrations of MTBE in groundwater are currently detected in Wells S-2 and S-5 located in the northern and eastern portion of the site.

**CONDUIT STUDY**

The ACHCSA, in its letter dated January 24, 2005, requested that Shell perform a conduit study to include a map showing the location and depths of all sewers, storm drains, and other subsurface utilities within and near the plume area. Delta obtained utility maps from the City of Pleasanton for the areas adjacent to the site. These utility maps are included in Attachment F. An on-site utility survey was also conducted by Delta. The site map presented in Figure 3 includes approximate locations of on-site utilities.

After reviewing the locations of utility trenches on-site and in the streets adjacent to the site, it seems unlikely that utility trenches act as migration pathways for contaminants. Highest concentrations of TPH-G, benzene and MTBE are currently located in Well S-1 found in the center of the site, and in Wells S-2 and S-5 located north of the UST's and east of the dispensers, respectively. The majority of utility trenches are located south and west of the UST's and dispensers. If groundwater flow carried contaminants off-site and into utility trenches, a significant change in concentrations would be expected

between wells on-site and wells off-site beyond the trenches. Since groundwater concentrations on site are relatively low, averaging on the order of 200 ug/l, the change in groundwater concentration over distance cannot be attributed to the redirection of contaminants into utility trenches. Since the groundwater flow direction is generally towards the north, and the current maximum concentrations of MTBE are contained in wells in locations at the north and east on-site, Delta will focus its investigation in the area north of the dispensers and off-site to the east.

## FIRST QUARTER 2005 GROUNDWATER MONITORING EVENT

Groundwater monitoring wells were gauged and sampled by Blaine on January 14, 2005. Depth to groundwater was measured in Wells S-1 through S-8. Depth to groundwater in wells ranged from 7.10 feet to 8.65 feet below TOC. Groundwater elevation data and contours are presented on Figure 2. The groundwater gradient on January 14, 2005 was towards the northwest at a magnitude of 0.02 ft/ft.

Groundwater samples were collected from Wells S-1 through S-8. Samples were submitted by Blaine to Severn Trent Laboratories, Inc. (STL) in Pleasanton, California for analysis for TPH-G, benzene, toluene, ethylbenzene, and xylene (BTEX compounds), and MTBE using EPA Method 8260B. Benzene and MTBE concentrations are presented on Figure 3.

Blaine's groundwater monitoring and sampling report, which includes historical and current groundwater elevation data, historical and current analytical results, and field data records for the current monitoring event, is included as Attachment G. Dissolved petroleum hydrocarbons (TPH-G and BTEX compounds) remained concentrated in Well S-1. TPH-G was detected in Well S-1 at 4,200 ug/l. In January 2005, the highest concentrations of MTBE were detected in Wells S-1 (100 ug/l), S-2 (270 ug/l), and S-5 (230 ug/l).

## SITE CONCEPTUAL MODEL

The ACHCSA, in its letter dated January 24, 2005, requested that Shell submit a site conceptual model (SCM) as part of its work plan. The following are the key elements of the SCM:

- based on regional data and site soil borings, the site is anticipated to be underlain to a depth approximately 60 feet by clay;
- groundwater is first encountered within the clay deposits in the 10- to 20-foot depth interval, stabilizing in wells at depths of 5 to 11 feet bg;
- the shallow groundwater moves through rootholes and thin seams of clayey and silty sand scattered within the clay deposits;
- the lateral migration flow rate of shallow groundwater is limited due to the predominance of clay and fluctuating flow directions in the central portion of the site;
- the ability of permeable utility trench backfill to act as horizontal conduits for groundwater flow is uncertain;
- vertical migration of shallow groundwater is anticipated to be very limited due to clay in the 0- to 60-foot depth interval and the discontinuous nature of thin silty and clayey sand seams within the clay;
- the vertical flow direction is anticipated to be downward from shallow groundwater contained in clay deposits to underlying sand and gravel deposits;
- the abandoned/destroyed irrigation well, approximately 300 feet southwest of the site, is not anticipated to be acting as vertical conduit for migration of dissolved petroleum hydrocarbons,

MTBE and TBA due to primary flow directions to the northwest beneath the site away from the well;

- no other wells that could act as vertical conduits have been identified within the anticipated lateral extent of the dissolved petroleum hydrocarbons, MTBE, and TBA plume;
- dissolved petroleum hydrocarbons, MTBE, and TBA are anticipated to be primarily contained on-site in shallow groundwater due to the above described hydrogeologic conditions;
- MTBE and TBA are not anticipated to have moved into underlying sand and gravel and;
- TPH-G, MTBE, and TBA dissolved in groundwater will biodegrade over time.

## WORK PLAN

The following tasks are proposed to 1) determine the deep hydrogeologic conditions beneath the site and 2) identify the lateral and vertical extent of petroleum hydrocarbons, MTBE, and TBA in soil and groundwater. All work will be performed at the direction and supervision of a California Certified Hydrogeologist.

### TASK 1 – PREFIELD ACTIVITIES

Prior to drilling, Delta will mark the locations of all borings, contact Underground Services Alert 48 hours prior to drilling, obtain all required drill permits, arrange the drilling schedule, and mobilize drilling equipment and materials. In addition, a utility locator contractor will be retained to perform a geophysical survey of the proposed boring locations. Each location will be air-knifed to a depth of approximately five feet to minimize the possibility of drilling equipment encountering underground utilities. Delta will prepare a site-specific health and safety plan prior to initiating field activities. ACHCSA will be notified a minimum 72 hours prior to any field work.

### TASK 2 – COLLECTION OF SOIL AND GROUNDWATER SAMPLES – PRODUCT PIPING AND DISPENSER AREA

Delta proposes to use direct push drilling equipment to sample soil and groundwater beneath the site at five locations (GP-1 through GP-5, Figure 3). The drilling equipment will be provided and operated by Gregg Drilling (License C57- 485165). GP-1 through GP-3 will be drilled along the alignment of the product piping trench exposed in September 2004 where a release of gasoline occurred during piping removal. Borings GP-4 and GP-5 will be located adjacent to dispensers D-1 and D-2, respectively. MTBE and TBA were detected in soil samples from beneath the two dispensers (see soil data, Attachment A).

Continuous soil samples will be collected from a depth of 5 feet to a total depth of 20 feet bg. Discrete soil samples will be retained in acetate liners at 5-foot intervals. Samples will be capped with Teflon tape and tight fitting end caps, and placed in a cooler with ice for transportation to STL in Pleasanton, California. A photo-ionization detector (PID) will be used to measure soil hydrocarbon concentrations at 5-foot intervals. The PID soil samples will be placed in a sealed plastic bag. After approximately 5-minutes, the PID probe will be inserted into the plastic bag and soil gas allowed to pass through the PID until readings stabilize. The resulting concentration reading will be recorded on the geologist's field log.

The field geologist will carefully examine the soil core samples as they are collected. Soils will be classified based on the Unified Soil Classification System using the American Society for Testing and Materials (ASTM) Method D-2487 published in May 2000. In addition to classifying the soils, the

geologist will examine the core for such features as root-holes, fractures, mineralization, and thin micro-bedding as well as petroleum hydrocarbon staining and odor.

Delta will attempt to obtain a water sample from each boring. Groundwater samples will be collected utilizing a stainless steel bailer lowered into the drill rods. Attempts will be made to collect a groundwater sample at the 10- , 15-, and 20-foot depths. If water can not be collected during the drilling process, temporary casings may be necessary to allow the borings to remain open long enough for water to enter the borehole and provide a sample sufficient for laboratory analysis. Groundwater samples will be collected from temporary casings using a stainless steel bailer. Groundwater will be decanted into laboratory provided 40-milliliter glass vials, and placed in a cooler with ice for transport to STL. Soil and groundwater samples will be logged on to a chain-of-custody form. Soil and groundwater samples will be analyzed for TPH-G, BTEX compounds, and fuel oxygenates MTBE, TBA, and TAME by EPA Method 8260B.

All down-hole drilling tools will be decontaminated between holes. The decontamination process will consist of multiple wash and rinse cycles. The first washing involves scrubbing all trace soil or contaminants from the drilling tools, then washing them with a non-phosphate detergent and water. Following the initial washing with detergent, the tools are then dip-rinsed and sprayed with water. A final rinse is performed using deionized water that is poured directly over the sampling tools, followed by placement into a clean container for air drying.

After collecting the soil and groundwater samples, each boring will be filled to the surface with a Portland cement/bentonite slurry mixture (5% bentonite).

**TASK 3 – CONE PENETRATION TEST BORING**

Delta proposes to collect depth discrete groundwater samples at three cone penetration test (CPT) locations (Figure 3). The CPT borings will define the types of soils underlying shallow groundwater currently being monitored beneath the site and to define the vertical of extent of petroleum hydrocarbons and fuel oxygenates detected in shallow groundwater. CPT-1 is located in the central portion of the site down gradient direction (west) of fuel USTs and dispensers. CPT-2 and CPT-3 are located north and east of the fuel USTs and dispensers. The highest concentrations of MTBE are detected in monitoring wells in the north and eastern portion of the site (Wells S-2 and S-5).

An initial CPT borehole (Figure 3) will used for stratigraphic profiling. Boreholes will be drilled through clay deposits and approximately 20 feet into underlying sand and gravel deposits anticipated at a depth of approximately 60 feet bg. Soil classification will be based on the cone penetration resistance, sleeve friction, and friction ratio. A soil classification graph will be generated during drilling of the CPT borehole. Grout will be pumped into the borehole through the drilling rods upon completion.

A second CPT borehole will be drilled at the same location for collection of groundwater samples. Sand layers throughout the stratigraphic profile will be targeted for sampling. A sealed PVC hydropunch screen will be pushed to the desired sampling depth. The push rod will then be retracted exposing the hydropunch screen. Groundwater will flow hydrostatically from the formation into the sampler. A small diameter stainless steel bailer will be lowered through the hollow push rods, into the screen section for sample collection. The groundwater samples will be transferred to 40-milliliter glass VOA bottles. The bottles will be placed on ice for transportation to the laboratory.

After sample collection, the push rods will be removed from the hole. The rods will be steam cleaned and a new hydropunch screen installed. The sealed screen will then be advanced to the next sampling depth and the above described process repeated. After collection of the final groundwater sample, grout will be pumped through the push rods as they are extracted from the borehole. Groundwater samples will be analyzed for TPH-G, BTEX compounds, MTBE, TBA, and TAME by US EPA Method 8260B.

**TASK 4 – SOIL AND GROUNDWATER INVESTIGATION REPORT**

Delta will prepare a report describing field methods and summarizing the results of chemical analyses of soil and groundwater. The report will contain a boring and CPT location map, boring logs, CPT logs, hydrogeologic cross-sections with analytical soil data, certified analytical reports, and chain of custody documentation.

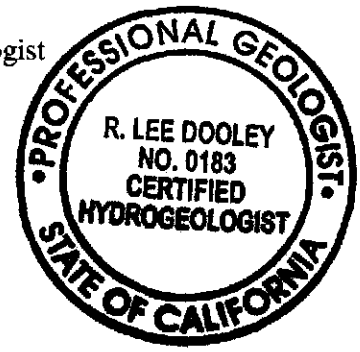
**SCHEDULE**

Delta is prepared to commence field activities within 30 days of the acceptance of this work plan by ACHCS

If you have any questions, please call me at (408) 224-4724.

Sincerely,
**Delta Environmental Management, Inc.**

R. Lee Dooley
Senior Hydrogeologist
CHG 183

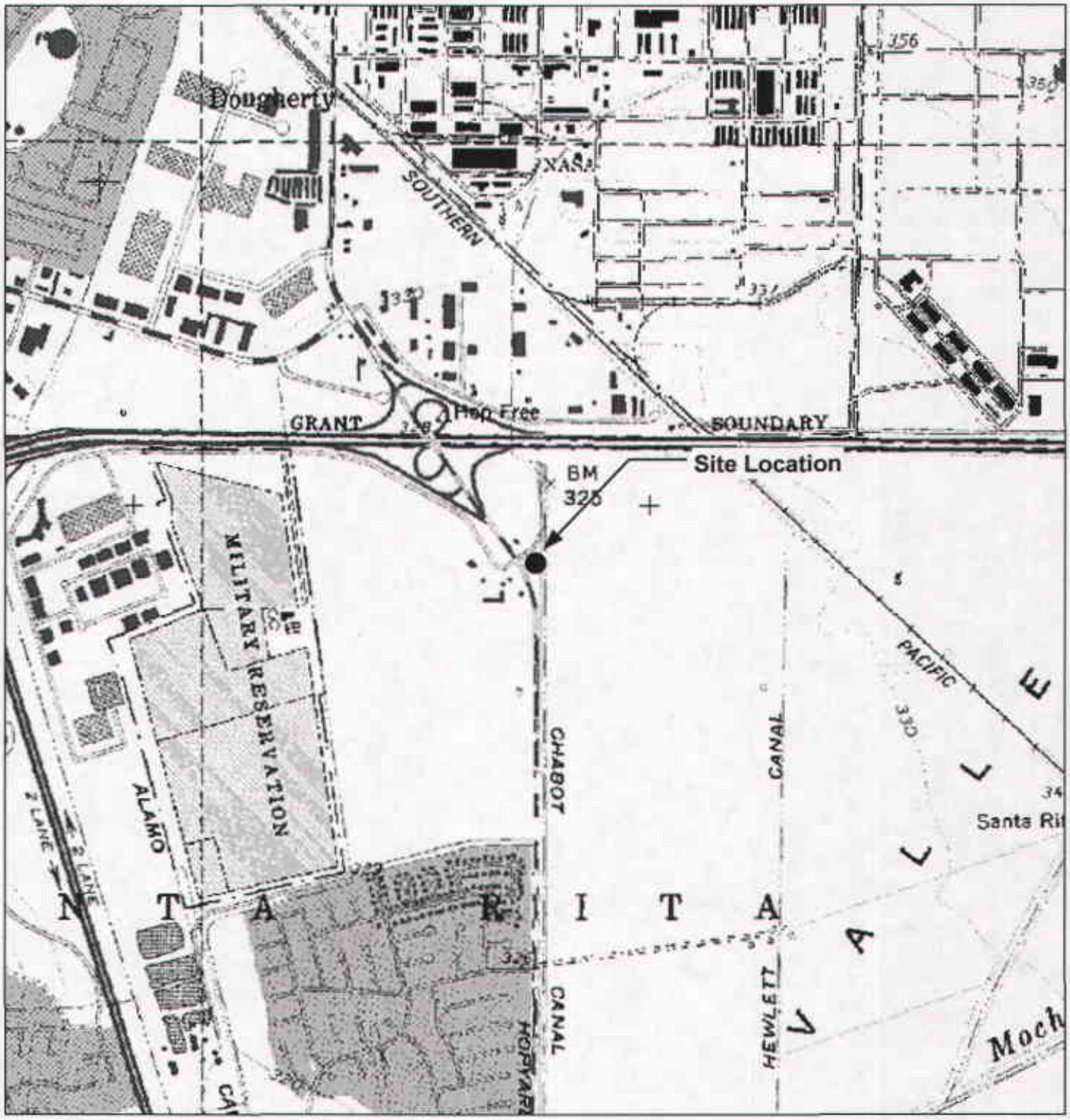



cc. Denis Brown, Shell Oil Products US
Matt Katen, Zone 7 Water District

Attachments:

Figure 1 – Site Location Map
Figure 2 – Groundwater Elevation Contour Map, January 14, 2005
Figure 3 – Benzene and MTBE Concentration Map, January 14, 2005

Attachment A – Dispenser and Piping Replacement Soil Sampling Map and Summary of Analytical Data – September 2004
Attachment B – Underground Storage Tank Unauthorized Release (Leak)/Contamination Site Report – November 22, 2004
Attachment C – Regional Hydrogeologic Information
Attachment D – Well Survey Information
Attachment E – Site Boring Logs
Attachment F – Underground Utility Maps
Attachment G – Blaine Tech Services Monitoring Report, First Quarter 2005




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

North

QUADRANGLE LOCATION

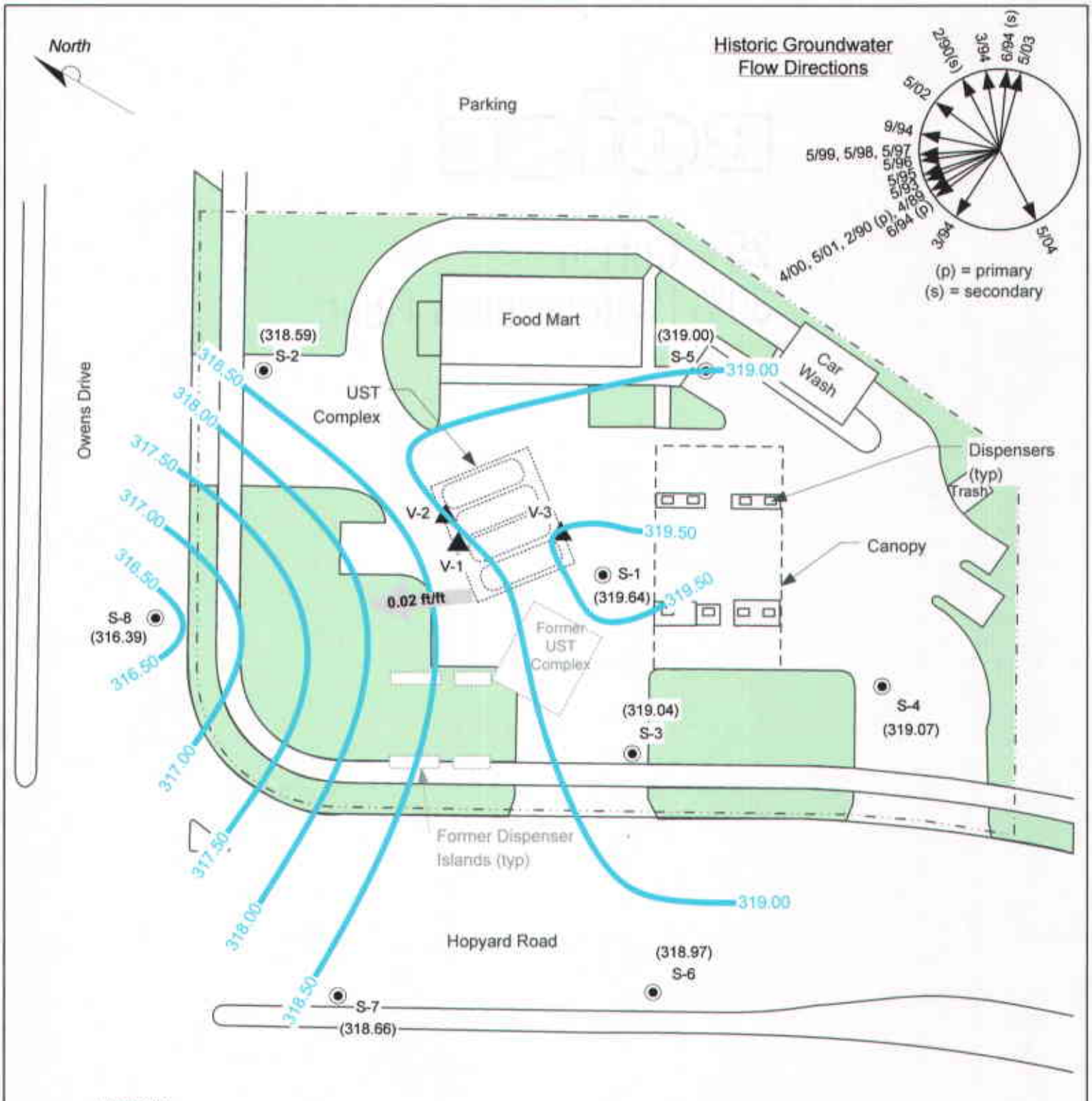
0 1,300 2,600
Scale, Feet

FIGURE 1
SITE LOCATION MAP

SHELL-BRANDED SERVICE STATION
5251 Hopyard Road
Pleasanton, California

| | |
|---|---|
| PROJECT NO. SJ52-51H-1.2005 | DRAWN BY V. F. 3/31/05 |
| FILE NO. SJ52-51H-1.2005 | PREPARED BY VF |
| REVISION NO. | REVIEWED BY |

Delta
Environmental
Consultants, Inc.




**LEGEND**

- ◉ **GROUNDWATER MONITORING WELL**
- ▲ **SOIL VAPOR EXTRACTION WELL**
- (318.66) **GROUNDWATER ELEVATION (FEET-MSL), 1/14/05**
- 319.00 **GROUNDWATER ELEVATION CONTOUR**
- 0.02 ft/ft **APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT**

0 50 FT

APPROX. SCALE

FIGURE 2

GROUNDWATER ELEVATION CONTOUR MAP, JANUARY 14, 2005

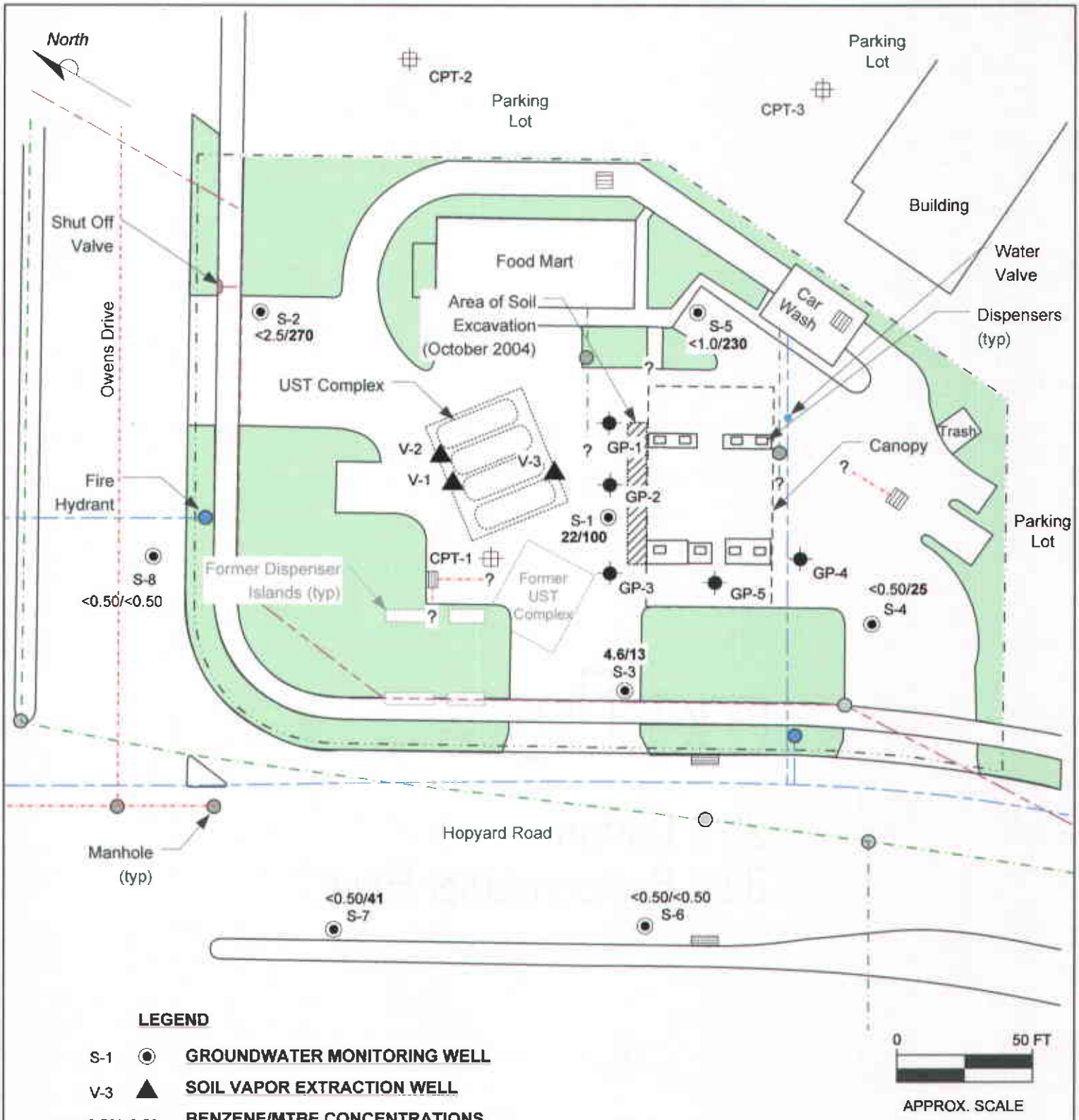
SHELL-BRANDED SERVICE STATION

5251 Hopyard Road

Pleasanton, California

| | |
|---|---|
| PROJECT NO. SJ52-51H-1.2005 | DRAWN BY V. F. 3/30/05 |
| FILE NO. SJ52-51H-1.2005 | PREPARED BY V.F. |
| REVISION NO. 2 | REVIEWED BY |

Delta Environmental Consultants, Inc.




**LEGEND**

| | |
|---|---|
| S-1 ◉ | GROUNDWATER MONITORING WELL |
| V-3 ▲ | SOIL VAPOR EXTRACTION WELL |
| <0.50/<0.50 | BENZENE/MTBE CONCENTRATIONS (UG/L), 1/14/05 |
| GP-2 ✦ | PROPOSED SOIL BORING |
| CPT-1 ⊕ | PROPOSED CPT BORING AND SAMPLING LOCATION |
| | ZONE 7 WATER LINE |
| | WATER MAIN |
| | SEWER MAIN |
| | STORM DRAIN |

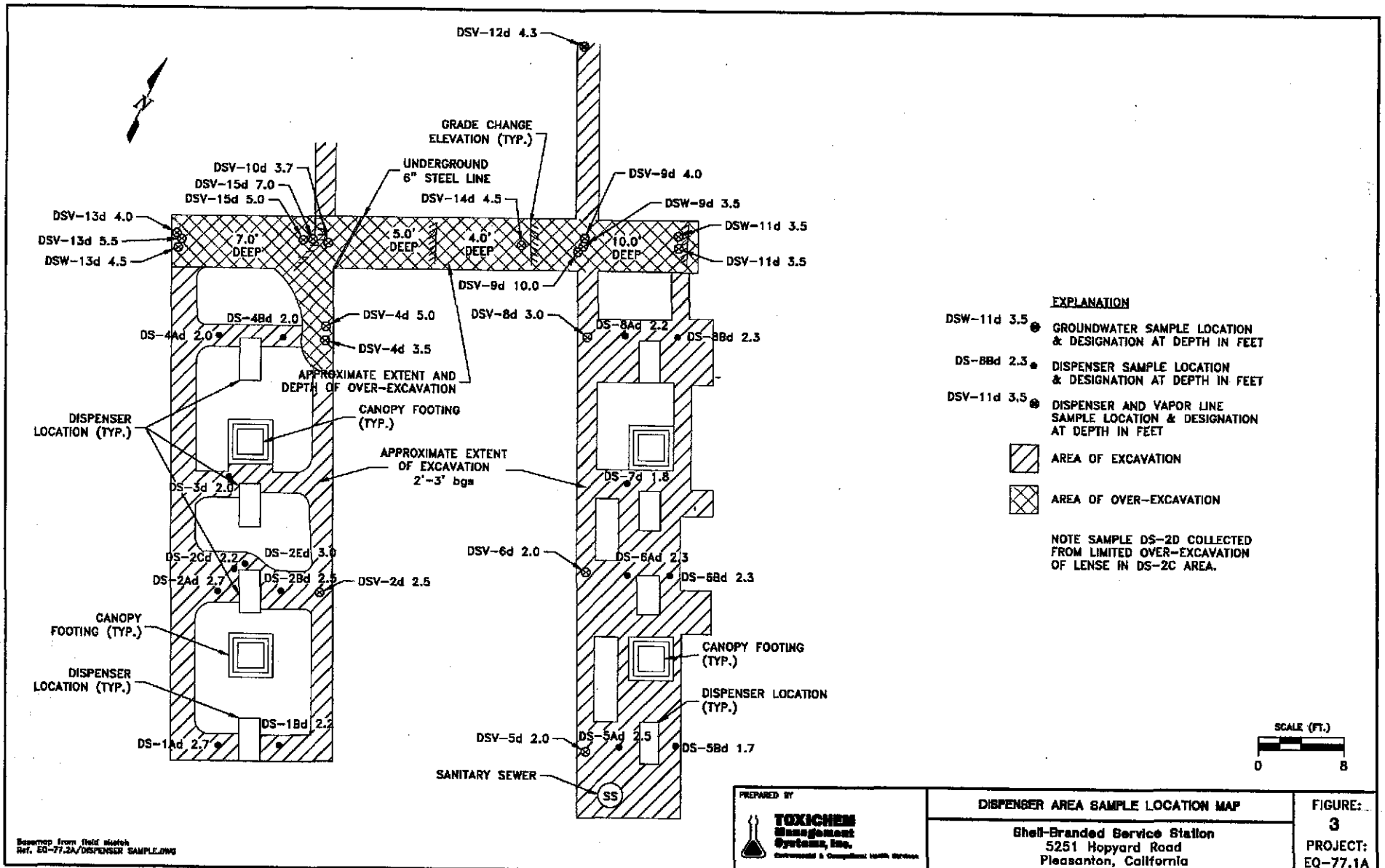
FIGURE 3
BENZENE AND MTBE CONCENTRATION MAP, JANUARY 14, 2005
SHELL-BRANDED SERVICE STATION
5251 Hopyard Road
Pleasanton, California

| | |
|---|---|
| PROJECT NO. SJ52-51H-1.2005 | DRAWN BY V. F. 3/30/05 |
| FILE NO. SJ52-51H-1.2005 | PREPARED BY V.F. |
| REVISION NO. 2 | REVIEWED BY |

Delta Environmental Consultants, Inc

**Attachment A**

**DISPENSER AND PIPING REPLACEMENT SOIL SAMPLING MAP AND SUMMARY OF ANALYTICAL DATA – SEPTEMBER 2004**




Basemap from field sketch
Ref. EQ-77.2A/DISPENSER SAMPLE.DWG

PREPARED BY
TOXICHEM Management Systems, Inc.
Environmental & Compliance Health Services

DISPENSER AREA SAMPLE LOCATION MAP

Shell-Branded Service Station
5251 Hopyard Road
Pleasanton, California

FIGURE: 3
PROJECT: EQ-77.1A

*Table 3*
Soil Analytical Data
Total Petroleum Hydrocarbons, BTEX Compounds, Oxygenates and Total Lead
by EPA Method 8260B and 6010B

Shell Branded Service Station
5251 Hopyard Road, Pleasanton

| Boring Number | Depth (feet bgs) | Date Sampled | TEPH (mg/kg) | TPPH (mg/kg) | Benzene (mg/kg) | Toluene (mg/kg) | Ethyl-benzene (mg/kg) | Xylenes (mg/kg) | MtBE (mg/kg) | TBA (mg/kg) | DIPE (mg/kg) | ETBE (mg/kg) | TAME (mg/kg) | 1,2-DCA (mg/kg) | EDB (mg/kg) | Ethanol (mg/kg) | Lead (mg/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **DISPENSER SAMPLE SOIL RESULTS** | | | | | | | | | | | | | | | | | |
| DS-1A | 2.7 | 09/20/04 | NA | <1.0 | <0.005 | **0.043** | **0.0071** | **0.18** | 0.009 | **0.017** | <0.01 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | 4.3 |
| DS-1B | 2.2 | 09/20/04 | NA | <1.0 | <0.005 | **0.011** | <0.005 | **0.064** | 0.0051 | <0.01 | <0.01 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | 5.4 |
| DS-2A | 2.7 | 09/20/04 | NA | **80** | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | <1.0 | <0.50 | <0.50 | <0.50 | <0.50 | <25 | 4.2 |
| DS-2B | 2.5 | 09/20/04 | NA | **3.2** | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.01 | <0.01 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | 3.4 |
| DS-2D | N/A | 09/20/04 | NA | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | <1.0 | <0.50 | <0.50 | <0.50 | <0.50 | <25 | 4.8 |
| DS-2E | 3.0 | 09/20/04 | NA | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | **0.012** | <0.01 | <0.01 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | 4.3 |
| DS-3 | 2.0 | 09/20/04 | **360** | NA | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.01 | <0.01 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | NA |
| DS-4A | 2.0 | 09/20/04 | NA | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.01 | <0.01 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | 4.1 |
| DS-4B | 2.0 | 09/20/04 | NA | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.01 | <0.01 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | 3.3 |
| DS-5A | 2.5 | 09/20/04 | NA | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.01 | <0.01 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | 3.0 |
| DS-5B | 1.7 | 09/20/04 | NA | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.01 | <0.01 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | 2.0 |
| DS-6A | 2.3 | 09/20/04 | NA | **470** | <0.50 | <0.50 | <0.50 | **1.4** | <0.50 | <2.5 | <1.0 | <0.50 | <0.50 | <0.50 | <0.50 | <25 | 3.1 |
| DS-6B | 2.3 | 09/20/04 | NA | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | <1.0 | <0.50 | <0.50 | <0.50 | <0.50 | <25 | 3.3 |
| DS-7 | 1.8 | 09/20/04 | **11** | NA | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.01 | <0.01 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | NA |
| DS-8A | 2.2 | 09/20/04 | NA | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.01 | <0.01 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | 4.1 |
| DS-8B | 2.3 | 09/20/04 | NA | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.01 | <0.01 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | 4.6 |
| **PRODUCT PIPING AND VAPOR RECOVERY PIPING SOIL RESULTS** | | | | | | | | | | | | | | | | | |
| DSV2 | 2.5 | 09/28/04 | NA | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | **0.027** | **0.010** | <0.010 | <0.005 | <0.005 | <0.005 | <0.005 | NA | 4.0 |
| DSV-4 | 3.5 | 09/28/04 | NA | <1.0 | **0.0057** | <0.005 | <0.005 | <0.005 | **0.12** | **0.085** | <0.010 | <0.005 | <0.005 | <0.005 | <0.005 | NA | 3.4 |
| | 5.0 | 10/06/04 | NA | <1.0 | **0.016** | <0.005 | <0.005 | <0.005 | **0.20** | **0.22** | <0.010 | <0.005 | <0.005 | <0.005 | <0.005 | NA | 11 |
| DSV-5 | 2.0 | 09/28/04 | NA | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.010 | <0.010 | <0.005 | <0.005 | <0.005 | <0.005 | NA | 5.2 |
| DSV-6 | 2.0 | 09/28/04 | NA | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | **0.0087** | <0.010 | <0.010 | <0.005 | <0.005 | <0.005 | <0.005 | NA | 4.3 |
| DSV-8 | 3.0 | 09/28/04 | NA | **1.5** | <0.005 | <0.005 | <0.005 | <0.005 | **0.043** | <0.010 | <0.010 | <0.005 | <0.005 | <0.005 | <0.005 | NA | 2.6 |
| DSV-9 | 4.0 | 09/28/04 | **640** | **24,000** | **65** | **1,300** | **350** | **2,300** | <13 | <63 | <25 | <13 | <13 | <13 | <13 | <630 | 5.4 |
| | 10 | 09/30/04 | NA | <2.0 | <0.010 | <0.010 | <0.010 | <0.010 | **0.053** | **0.083** | <0.020 | <0.010 | <0.010 | <0.010 | <0.010 | NA | 4.3 |
| DSV-10 | 3.7 | 09/28/04 | NA | <1.0 | **0.034** | <0.005 | <0.005 | <0.005 | **0.064** | **0.013** | <0.010 | <0.005 | <0.005 | <0.005 | <0.005 | NA | 5.5 |
| DSV-11 | 3.5 | 09/28/04 | NA | <1.0 | <0.005 | **0.018** | **0.0051** | **0.029** | **0.035** | **0.020** | <0.010 | <0.005 | <0.005 | <0.005 | <0.005 | NA | 5.0 |
| DSV-12 | 4.3 | 09/28/04 | NA | <4.8 | 0.026 | 0.26 | 0.037 | 0.16 | <0.024 | <0.048 | <0.048 | <0.024 | <0.024 | <0.024 | <0.024 | NA | 5.7 |

Table 3
Soil Analytical Data
Total Petroleum Hydrocarbons, BTEX Compounds, Oxygenates and Total Lead
by EPA Method 8260B and 6010B

Shell Branded Service Station
5251 Hopyard Road, Pleasanton

| Boring Number | Depth (feet bgs) | Date Sampled | TEPH (mg/kg) | TPPH (mg/kg) | Benzene (mg/kg) | Toluene (mg/kg) | Ethyl-benzene (mg/kg) | Xylenes (mg/kg) | MtBE (mg/kg) | TBA (mg/kg) | DIPE (mg/kg) | ETBE (mg/kg) | TAME (mg/kg) | 1,2-DCA (mg/kg) | EDB (mg/kg) | Ethanol (mg/kg) | Lead (mg/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DSV-13 | 4.0 | 09/28/04 | NA | <1.0 | 0.025 | <0.005 | <0.005 | <0.005 | 0.085 | 0.047 | <0.010 | <0.005 | <0.005 | <0.005 | <0.005 | NA | 8.8 |
| | 5.5 | 09/30/04 | NA | <2.0 | 0.030 | 0.012 | <0.010 | 0.020 | 0.054 | 0.030 | <0.020 | <0.010 | <0.010 | <0.010 | <0.010 | NA | 7.3 |
| DSV-14 | 4.5 | 09/30/04 | NA | <2.0 | <0.010 | <0.010 | <0.010 | <0.010 | 0.092 | 0.12 | <0.020 | <0.010 | *<0.010* | *<0.010* | <0.010 | NA | 5.9 |
| DSV-15 | 5.0 | 09/30/04 | NA | <2.0 | 0.087 | <0.010 | <0.010 | <0.010 | 0.17 | 0.086 | <0.020 | <0.010 | <0.010 | <0.010 | <0.010 | NA | 6.2 |
| | 7.0 | 10/06/04 | NA | 5.6 | 0.088 | 0.0065 | 0.20 | 0.023 | 0.024 | <0.010 | <0.010 | <0.005 | <0.005 | <0.005 | <0.005 | NA | 5.8 |
| **SOIL STOCKPILE RESULTS** | | | | | | | | | | | | | | | | | |
| DS-2C | | 09/20/04 | NA | <50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | <1.0 | <0.50 | <0.50 | <0.50 | <0.50 | <25 | 3.8 |
| SP-1 (A-D) | | 09/30/04 | 23 | 7.4 | 0.043 | 0.89 | 0.20 | 1.4 | 0.030 | <0.035 | <0.035 | <0.018 | <0.018 | <0.018 | <0.018 | NA | 6.1 |
| **PEA GRAVEL STOCKPILE RESULTS** | | | | | | | | | | | | | | | | | |
| EX-1 | | 09/20/04 | NA | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.01 | <0.01 | <0.005 | <0.005 | <0.005 | <0.005 | <0.1 | 6.8 |
| PG-1 (A-D) | | 09/30/04 | 25 | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.010 | <0.010 | <0.005 | <0.005 | <0.005 | <0.005 | NA | 3.8 |
| PG-2 (A-D) | | 09/30/04 | 8.1 | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.010 | <0.010 | <0.005 | <0.005 | <0.005 | <0.005 | NA | 2.5 |
| PG-1.1 (A-D) | | 09/30/04 | 6.1 | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.010 | <0.010 | <0.005 | <0.005 | <0.005 | <0.005 | NA | 3.6 |
| PG-2.1 (A-D) | | 09/30/04 | 14 | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.010 | <0.010 | <0.005 | <0.005 | <0.005 | <0.005 | NA | 1.8 |
| PG-2.2 (A-D) | | 09/30/04 | 7.7 | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.010 | <0.010 | <0.005 | <0.005 | <0.005 | <0.005 | NA | 3.1 |
| PG-2.3 (A-D) | | 09/30/04 | 12 | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.010 | <0.010 | <0.005 | <0.005 | <0.005 | <0.005 | NA | 1.5 |
| PG-2.4 (A-D) | | 09/30/04 | 26 | <1.0 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.010 | <0.010 | <0.005 | <0.005 | <0.005 | <0.005 | NA | 2.7 |

TPEH = Total purgeable extractable hydrocarbons
TPPH = Total purgeable petroleum hydrocarbons
MtBE = Methyl tert-butyl ether
TBA = Tertiary butyl alcohol, or t-butanol
DIPE = Di-isopropyl ether
ETBE = Ethyl tertiary-butyl ether
TAME = Tertiary amyl methyl ether
1,2-DCA = 1,2-Dichloroethane, or ethylene dichloride (EDC)
EDB = Ethylene dibromide
mg/kg = Milligrams per kilogram
bgs = Below ground surface
NA = Not analyzed

**Attachment B**

**UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK)/CONTAMINATION REPORT – NOVEMBER 22, 2004**

# UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

EMERGENCY ☐ YES ☒ NO

HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED ? ☐ YES ☒ NO

FOR LOCAL AGENCY USE ONLY
I HEREBY CERTIFY THAT I HAVE DISTRIBUTED THIS INFORMATION ACCORDING TO THE DISTRIBUTION SHOWN ON THE INSTRUCTION SHEET ON THE BACK PAGE OF THIS FORM.
SIGNED ____ DATE ____

REPORT DATE: 11/12/04 | CASE #:

**REPORTED BY**
- NAME OF INDIVIDUAL FILING REPORT: Aura Sibley
- PHONE: ( 916) 240-1610
- SIGNATURE: Aura Sibley 4/23/04
- REPRESENTING: ☒ OWNER/OPERATOR ☐ REGIONAL BOARD ☐ LOCAL AGENCY ☐ OTHER
- COMPANY OR AGENCY NAME: Equilon Enterprises LLC dba Shell Oil Products US
- ADDRESS: 20945 S. Wilmington Avenue (STREET) Carson (CITY) CA (STATE) 90810 (ZIP)

**RESPONSIBLE PARTY**
- NAME: Equilon Enterprises LLC dba Shell Oil Products US ☐ UNKNOWN
- CONTACT PERSON: Karen Petryna
- PHONE: ( 559) 645-9306
- ADDRESS: 20945 S. Wilmington Avenue (STREET) Carson (CITY) CA (STATE) 90810 (ZIP)

**SITE LOCATION**
- FACILITY NAME (IF APPLICABLE): Shell-branded Service Station
- OPERATOR: CarlCox
- PHONE: ( 925) 463-0980
- ADDRESS: 5251 Hopyard Rd (STREET) Pleasanton (CITY) Alameda (COUNTY) 94588 (ZIP)
- CROSS STREET: Owens Drive

**IMPLEMENTING AGENCIES**
- LOCAL AGENCY (AGENCY NAME): Livermore-Pleasanton_Fire_Department
- CONTACT PERSON: Paul Smith.
- PHONE: ( 925) 454-2300
- REGIONAL BOARD: Regional Water Quality Control Board - Region II
- Steven Hill
- PHONE: ( 510) 622-2361

**SUBSTANCE INVOLVED**
- (1) NAME: Gasoline — QUANTITY LOST (GALLONS): 0 ☐ UNKNOWN
- (2) ☐ UNKNOWN

**DISCOVERY/ABATEMENT**
- DATE DISCOVERED: 11/20/04
- HOW DISCOVERED: ☐ INVENTORY CONTROL ☐ SUBSURFACE MONITORING ☐ NUISANCE CONDITIONS ☒ TANK TEST ☐ TANK REMOVAL ☐ OTHER
- DATE DISCHARGE BEGAN: 11/20/04 ☐ UNKNOWN
- HAS DISCHARGE BEEN STOPPED ? ☐ YES ☐ NO IF YES, DATE
- METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY): ☒ REMOVE CONTENTS ☐ CLOSE TANK & REMOVE ☒ REPAIR PIPING ☒ REPAIR TANK ☐ CLOSE TANK & FILL IN PLACE ☐ CHANGE PROCEDURE ☐ REPLACE TANK ☐ OTHER

**SOURCE/CAUSE**
- SOURCE OF DISCHARGE: ☒ TANK LEAK ☒ PIPING LEAK ☐ UNKNOWN ☐ OTHER
- CAUSE(S): ☐ OVERFILL ☐ RUPTURE/FAILURE ☐ SPILL ☐ CORROSION ☐ UNKNOWN ☐ OTHER

**CASE TYPE**
- CHECK ONE ONLY: ☐ UNDETERMINED ☐ SOIL ONLY ☒ GROUNDWATER ☐ DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)

**CURRENT STATUS**
- CHECK ONE ONLY: ☐ NO ACTION TAKEN ☐ PRELIMINARY SITE ASSESSMENT WORKPLAN SUBMITTED ☐ POLLUTION CHARACTERIZATION ☒ LEAK BEING CONFIRMED ☐ PRELIMINARY SITE ASSESSMENT UNDERWAY ☐ POST CLEANUP MONITORING IN PROGRESS ☐ REMEDIATION PLAN ☐ CASE CLOSED (CLEANUP COMPLETED OR UNNECESSARY) ☐ CLEANUP UNDERWAY

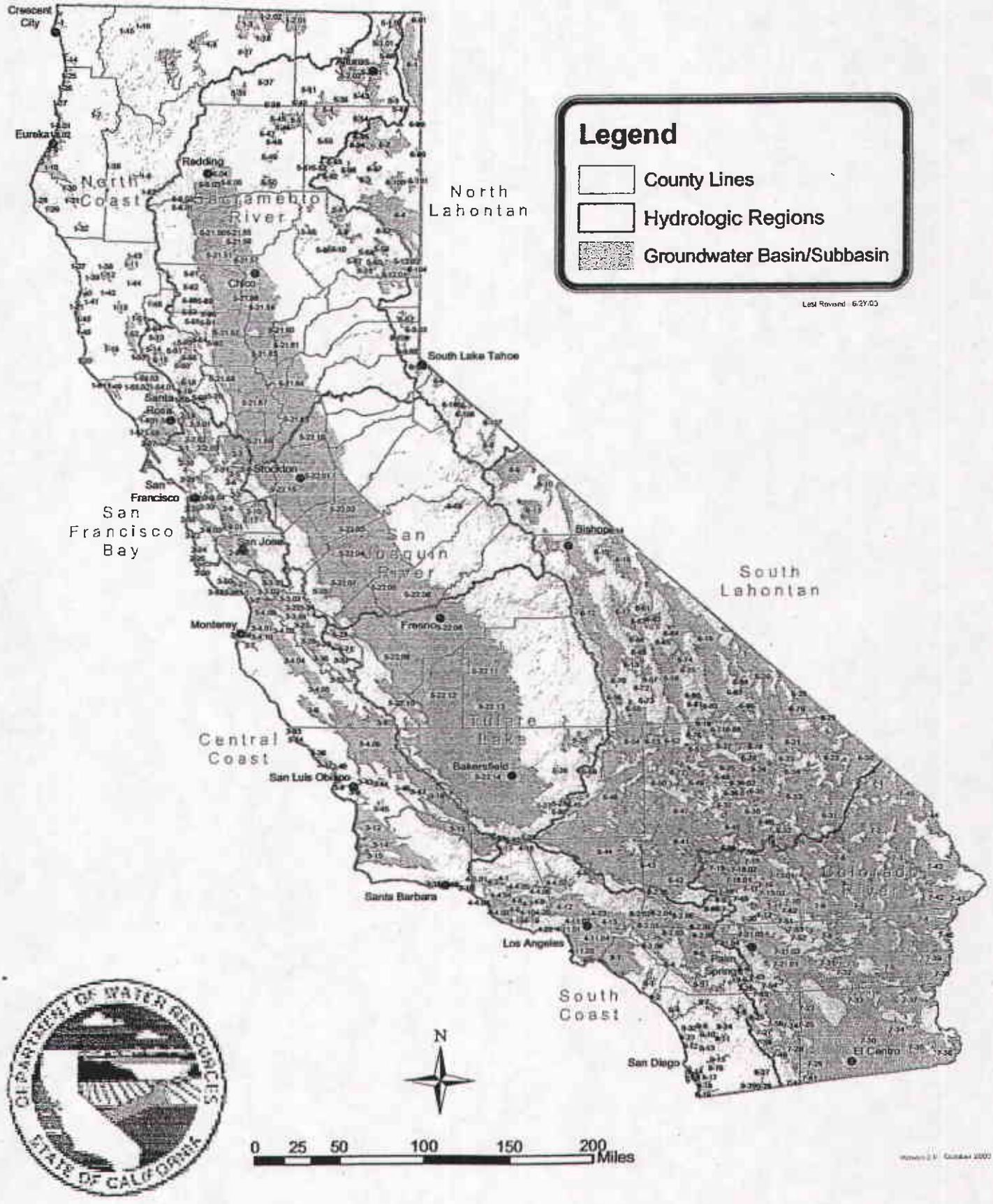
**REMEDIAL ACTION**
- CHECK APPROPRIATE ACTION(S): ☐ EXCAVATE & DISPOSE (ED) ☐ REMOVE FREE PRODUCT (FP) ☐ ENHANCED BIO DEGRADATION (ST) ☐ CAP SITE (CD) ☐ EXCAVATE & TREAT (ET) ☐ PUMP & TREAT GROUNDWATER (GT) ☐ REPLACE SUPPLY (RS) ☐ CONTAINMENT BARRIER (CB) ☐ NO ACTION REQUIRED (NA) ☐ TREATMENT AT HOOKUP (HU) ☐ VENT SOIL (VS) ☐ VACUUM EXTRACT (VE) ☒ OTHER (OT) extract and off-haul groundwater

**COMMENTS**
UST failed tightness test. Suspect crack at tank bottom. Inventory report showed ~300 gallon increase in volume, which is indicative of groundwater entering the tank. Pressure differential between water table and tank is preventing fuel from discharging from tank. Fuel has been removed from tank to allow tank inspection/repair. Site is an existing LOP case.

# Attachment C

# REGIONAL HYDROGEOLOGIC INFORMATION

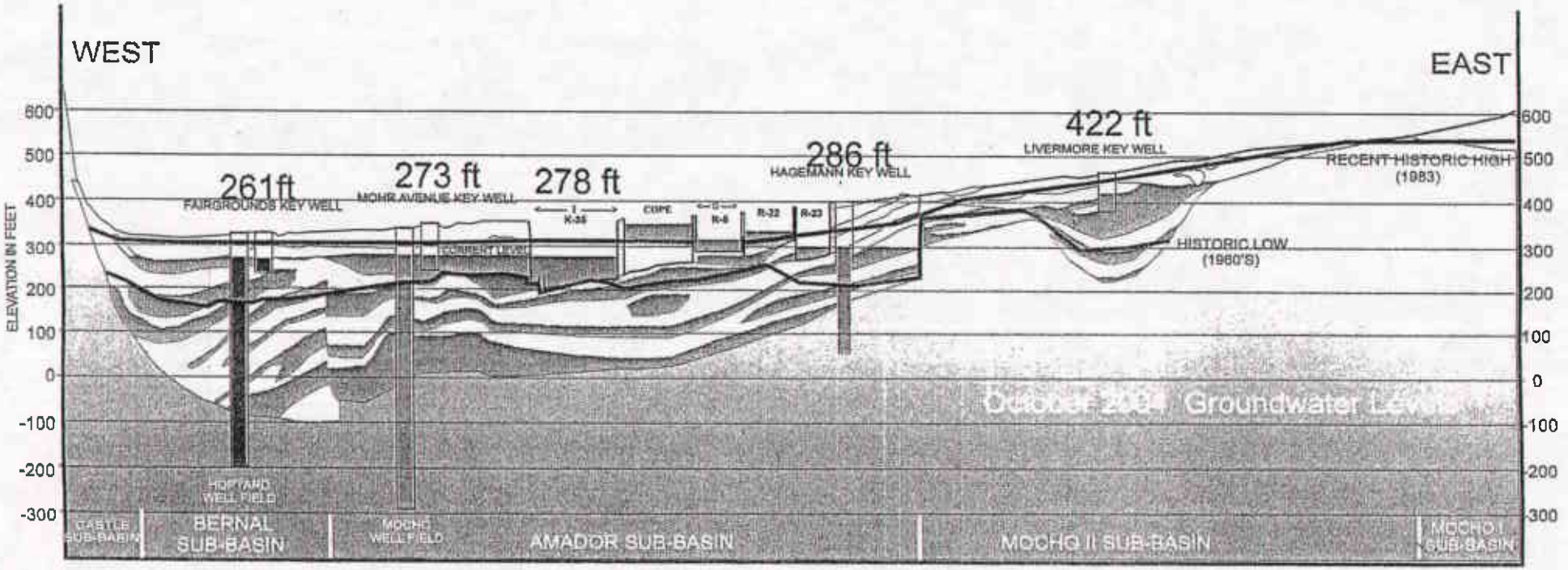
# Groundwater Basins in California



z7xsec_1004-Ltr.cdr
10/06/04

Fig 4

# LIVERMORE-AMADOR VALLEY GROUNDWATER BASIN
# WEST-EAST CROSS-SECTION

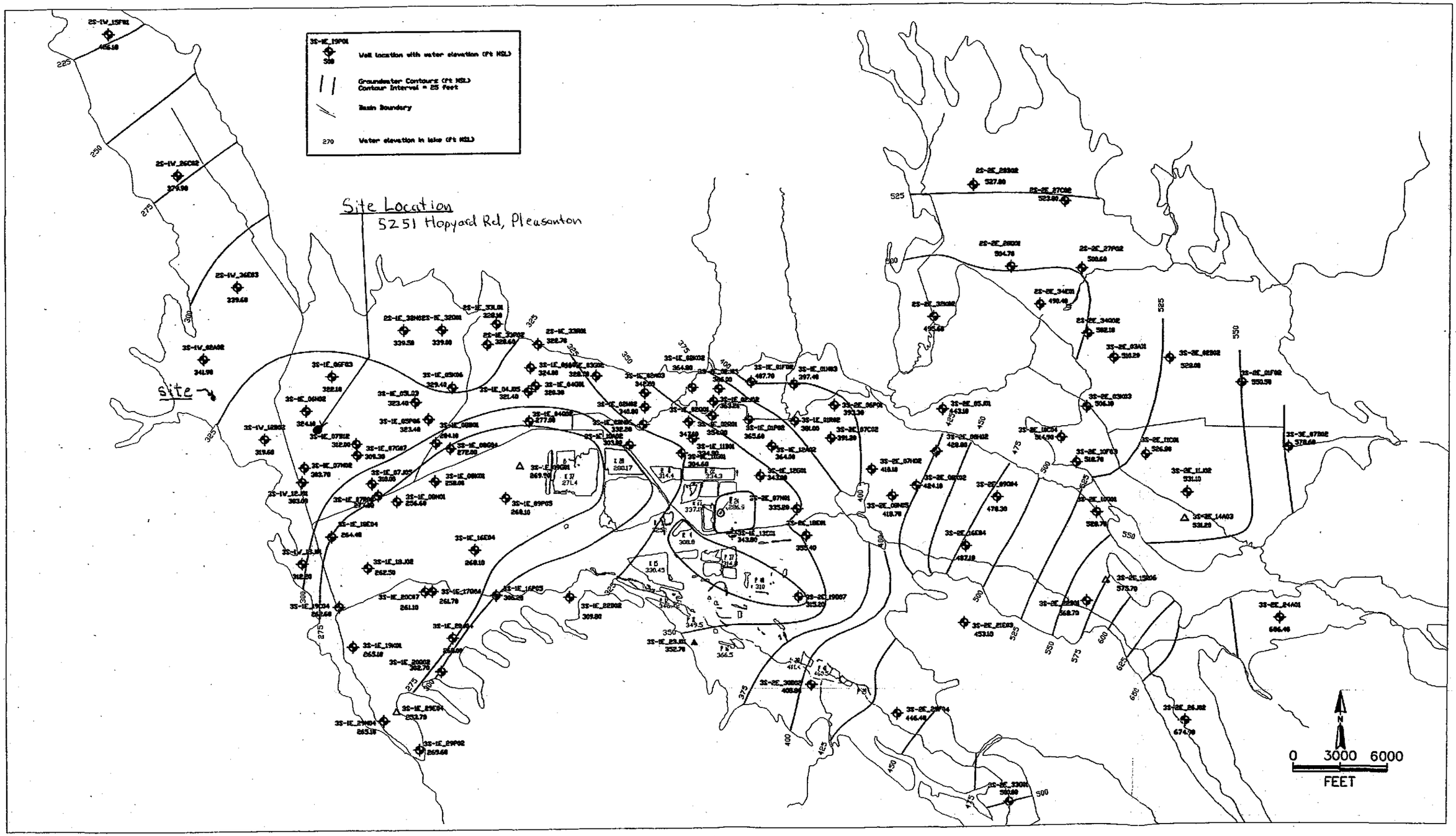



| | Bernal | Amador | Mocho II | Total |
|---|---|---|---|---|
| Area (Ac) | 3,100 | 9,900 | 4,300 | 17,300 |
| Saturated Thickness (ft) | 246 | 159 | 98 | 168 |
| Storage Coefficient | 0.07 | 0.08 | 0.06 | 0.07 |
| Groundwater Vol. (A-F) | 53,000 | 126,000 | 25,000 | 204,000 |
| Available Operational Storage | 12,000 | 43,000 | 22,000 | 77,000 |

FIGURE 4-1

E:projects\storage\xsect\z7xsec1004-Ltr

FIGURE 4-1




| | | | |
|---|---|---|---|
| **ZONE 7 WATER AGENCY**<br>5997 PARKSIDE DRIVE, PLEASANTON, CA 94588 | DWN: Tom Rooze<br>DES.: Gerry Gates<br>CHK:<br>APPD: | Semi Annual Groundwater Gradient Map<br>2003 Water Year, Fall 2003 (September)<br>Upper Aquifer, Livermore Valley Basin, California | FILE: 2003GWUpper.dwg<br>DATE: Aug 5, 2004<br>FIGURE NUMBER: 4 |

**Attachment D**

**WELL SURVEY INFORMATION**


| | | | |
|---|---|---|---|
| ZONE 7 WATER AGENCY<br>5997 PARKSIDE DRIVE<br>PLEASANTON, CA 94588 | WELL LOCATION MAP | SCALE: 1"= 800 ft<br>DATE: 5/17/04<br>Hopyard Rd & Owens Dr | |

Table 1

**Well Location Details**

Shell-branded Service Station

5251 Hopyard Road, Pleasanton

| Map Number | Well Number | Source of Information | Well Location | Approximate Distance and Direction from Site (Feet) | Total Depth ft. | Date Installed | Use |
|---|---|---|---|---|---|---|---|
| 6F1 | 3S/1E - 6F1 | Zone 7 | See Map | 2,400'NNW | NA | NA | Water Well |
| 6F2 | 3S/1E - 6F2 | Zone 7 | See Map | 2,400'NNW | NA | NA | Water Well |
| G1 | 3S/1E - 6G1 | Zone 7 | See Map | 1,550'N | NA | NA | Abandoned Water Well |
| G4 | 3S/1E - 6G4 | DWR/Zone 7 | See Map | 2,500'N | 192 | NA | Water Well |
| G5 | 3S/1E - 6G5 | DWR/Zone 7 | See Map | 2,000'NE | 200 | 1969 | Water Well |
| G6 | 3S/1E - 6G6 | Zone 7 | See Map | 2,200'NNE | NA | NA | Water Well |
| Q2 | 3S/1E - 6Q2 | Zone 7 | See Map | 100-300'W | NA | Recorded 1959 | Destroyed Irrigation Well |

NA = Information Not Available

Table 2
**Well Construction Details**
Shell-branded Service Station
5251 Hopyard Road, Pleasanton

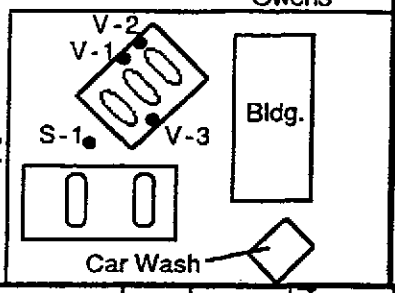
| Map Number | Total Depth | Depth to Water (ft. bgs) | Casing Type | Casing Diameter (in.) | Screen Interval (ft. bgs) | Gravel Pack Interval (ft. bgs) | Annular Seal Depth (ft. bgs) | Annular Seal Material | Well Construction Method | Driller's log Number | Pumping Test Rate (gpm) | Test Duration (hours) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F1 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| F2 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| G1 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| G4 | 192 | 33-72 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| G5 | 200 | 85 | NA | NA | 103-106 and 173-178 | NA | NA | NA | NA | 13095 | 70 | NA |
| G6 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Q2 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

NA = Information Not Available
ft. bgs = Feet below ground surface
gpm = Gallons per minute

**Attachment E**

**SITE BORING LOGS**

LOCATION MAP




# PACIFIC ENVIRONMENTAL GROUP, INC.

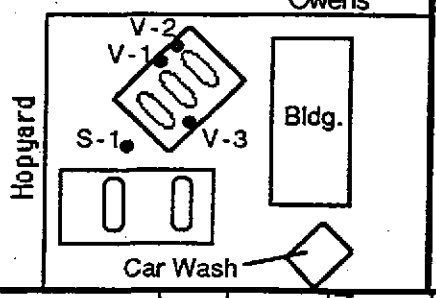
WELL / S-1
BORING NO.
PAGE 1 OF 1

PROJECT NO. 101-09.01
LOGGED BY: MD
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020
GRAVEL PACK: 12 X 20 SAND

CLIENT: G.R. Shell
DATE DRILLED: 1-5-88
LOCATION: Hopyard & Owens
HOLE DIAMETER: 8"
HOLE DEPTH: 30.5'
WELL DEPTH: 29'
WELL DIAMETER: 3"

| WELL COMPLETION | MOISTURE CONTENT | H-NU READING | PENETRATION RESISTANCE (BLOWS/FT) | DEPTH (FEET) | SAMPLE | GRAPHIC | SOIL TYPE | LITHOLOGY / REMARKS |
|---|---|---|---|---|---|---|---|---|
| CONCRETE | | | | 0 | | | | ASPHALT & GRAVEL - FILL. |
| BENTONITE | Dp | 1.0 | PUSH 400 | 2 | | | CL | CLAY; dark gray; moderate plasticity; silty; trace iron oxide stains. @3'; no product odor. |
| | Mst | 0.0 | 11 | 4 | | | | @9'; as above; tan mottled gray; gray around rootholes; abundant rootholes; trace-5% fine sand; stiff; no product odor. |
| 12 X 20 SAND | Wt | 5.5 | 11 | 6 | | | | @14'; as above; water in rootholes; stiff; no product odor. |
| | Wt | 0.0 | 17 | 8 | | | | @19'; as above; no sand; very stiff; no product odor. |
| | Wt | 0.8 | 16 | 10 | | | | @24'; as above; trace-5% fine to medium sand; stiff; no product odor. |
| | Wt | 0.0 | 34 | 12 | | | | |
| BENTONITE AND NATURAL CLAY | | | | 14 | | | SC | CLAYEY SAND; light to medium brown; 10-15% low plasticity fines; very fine grained; poorly graded; dense. @30'; no product odor. |
| | | | | 16 | | | | BOTTOM OF BORING AT 30.5' |
| | | | | 18 | | | | |
| | | | | 20 | | | | |
| | | | | 22 | | | | |
| | | | | 24 | | | | |
| | | | | 26 | | | | |
| | | | | 28 | | | | |
| | | | | 30 | | | | |
| | | | | 32 | | | | |
| | | | | 34 | | | | |
| | | | | 36 | | | | |
| | | | | 38 | | | | |
| | | | | 40 | | | | |
| | | | | 42 | | | | |
| | | | | 44 | | | | |

LOCATION MAP




# PACIFIC ENVIRONMENTAL GROUP, INC.

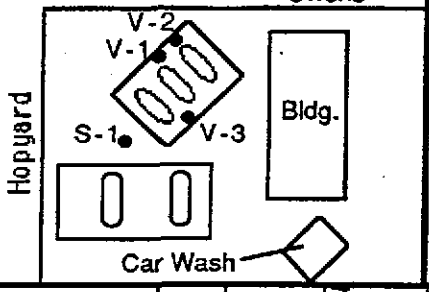
WELL / V-1
BORING NO.
PAGE 1 OF 1

PROJECT NO. 101-09.01
LOGGED BY: MD
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020
GRAVEL PACK: Pea Gravel

CLIENT: G.R. Shell
DATE DRILLED: 1-5-88
LOCATION: Hopyard & Owens
HOLE DIAMETER: 8"
HOLE DEPTH: 14.5'
WELL DEPTH: 14.5'
WELL DIAMETER: 3"

| WELL COMPLETION | MOISTURE CONTENT | H-NU READING | PENETRATION RESISTANCE (BLOWS/FT) | DEPTH (FEET) | SAMPLE | GRAPHIC | SOIL TYPE | LITHOLOGY / REMARKS |
|---|---|---|---|---|---|---|---|---|
| CONCRETE; BENTONITE | | | | 2 | | | GP | GRAVEL; light gray; fine grained; pea gravel tank backfill; no samples taken in fill. |
| | | | | 4 | | | | |
| | | | | 6 | | | | moderate product odor in gravel brought up in augers. |
| | | | | 8 | | | | |
| | | | | 10 | | | | |
| | | | | 12 | | | | |
| | Wt | 18 | 21 | 14 | | | CL | CLAY; tan to medium brown; gray mottle at rootholes; abundant rootholes; water in rootholes; trace fine to medium sand; very stiff. @14'; faint product odor. |
| | | | | 16 | | | | |
| | | | | 18 | | | | BOTTOM OF BORING AT 14.5' |
| | | | | 20 | | | | |
| | | | | 22 | | | | |
| | | | | 24 | | | | |
| | | | | 26 | | | | |
| | | | | 28 | | | | |
| | | | | 30 | | | | |
| | | | | 32 | | | | |
| | | | | 34 | | | | |
| | | | | 36 | | | | |
| | | | | 38 | | | | |
| | | | | 40 | | | | |
| | | | | 42 | | | | |
| | | | | 44 | | | | |

LOCATION MAP




# PACIFIC ENVIRONMENTAL GROUP, INC.

WELL / V-2
BORING NO.
PAGE 1 OF 1

PROJECT NO. 101-09.01
LOGGED BY: MD
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020
GRAVEL PACK: Pea Gravel

CLIENT: G.R. Shell
DATE DRILLED: 1-5-88
LOCATION: Hopyard & Owens
HOLE DIAMETER: 8"
HOLE DEPTH: 14.5'
WELL DEPTH: 14.5'
WELL DIAMETER: 3"

| WELL COMPLETION | MOISTURE CONTENT | H-NU READING | PENETRATION RESISTANCE (BLOWS/FT) | DEPTH (FEET) | SAMPLE | GRAPHIC | SOIL TYPE | LITHOLOGY / REMARKS |
|---|---|---|---|---|---|---|---|---|
| CONCRETE / BENTONITE | | | | 2 | | | GP | GRAVEL; light gray; tank backfill; fine grained pea gravel; no samples taken in fill. |
| | | | | 4 | | | | |
| | | | | 6 | | | | faint product odor in gravel brought up in augers. |
| | | | | 8 | | | | |
| | | | | 10 | | | | |
| | | | | 12 | | | | |
| | Wt | 0.3 | 16 | 14 | | | CL | CLAY; tan; gray mottle around rootholes; silty; trace fine sand; roots; stiff. @13'; faint product odor. |
| | | | | 16 | | | | BOTTOM OF BORING AT 14.5' |
| | | | | 18 | | | | |
| | | | | 20 | | | | |
| | | | | 22 | | | | |
| | | | | 24 | | | | |
| | | | | 26 | | | | |
| | | | | 28 | | | | |
| | | | | 30 | | | | |
| | | | | 32 | | | | |
| | | | | 34 | | | | |
| | | | | 36 | | | | |
| | | | | 38 | | | | |
| | | | | 40 | | | | |
| | | | | 42 | | | | |
| | | | | 44 | | | | |

| | | | |
|---|---|---|---|
| Field location of boring: (See Plate 2) | Project No.: 7633 | Date: 10/30/89 | Boring No: S-6 |
| | Client: Shell Oil Company | | |
| | Location: 5251 Hopyard Road | | |
| | City: Pleasanton, California | | Sheet 1 of 2 |
| | Logged by: R.S.Y. | Driller: Bayland | |
| Drilling method: Hollow-Stem Auger | Casing installation data: | | |
| Hole diameter: 8-Inch | Top of Box Elevation: 326.56 | Datum: MSL | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Water Level | | | | | | | | |
| Time | | | | | | | | |
| Date | | | | | | | | |

| PID (ppm) | Blows/ft. or Pressure (psi) | Type of Sample | Sample Number | Depth (ft.) | Sample | Well Detail | Soil Group Symbol (USCS) | Description |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | PAVEMENT SECTION - 2.5 feet |
| | | | | 1 | | | | |
| | | | | 2 | | | | |
| | | | | 3 | | | | |
| 0 | 4 | S&H | | | | | | CLAY (CH) - black (7.5YR 2/0), very stiff, damp, trace fine |
| | 12 | | S-6 | 4 | | | | sand, high plasticity; rootlets; no chemical odor. |
| | 13 | | 4.5 | | | | | |
| | | | | 5 | | | | |
| | | | | 6 | | | | |
| | | | | 7 | | | | |
| | | | | 8 | | | | soft drilling at 8.0 feet. |
| | | | | 9 | | | | |
| | | | | | | | | SANDY CLAY (CL) - dark grayish brown (10YR 4/2), very |
| 0 | 350 | S&H | | 10 | | | | stiff, damp, low plasticity; 35% very fine sand; trace |
| | 350 | push | S-6 | | | | | gravels; no chemical odor. |
| | 350 | | 11.0 | 11 | | | | |
| | | | | 12 | | | | |
| | | | | | | | | |
| 0 | 4 | S&H | | 13 | | | | |
| | 7 | | S-6 | | | | | same as above; rootholes; voids. |
| | 7 | | 14.0 | 14 | | | | |
| | 3 | | | | | | | |
| | 4 | | S-6 | 15 | | | | sand lense at 15.0 feet - 2.0 inches thick; no chemical |
| | 5 | | 15.5 | | | | | odor. |
| | | | | 16 | | | | |
| | | | | | | | | |
| | | | | 17 | | | | |
| | | | | | | | | |
| | | | | 18 | | | | |
| | | | | | | ▽ | | Sample rods wet at 18.5 feet |
| | | | | 19 | | | | |

Remarks:

GeoStrategies Inc.

Log of Boring

BORING NO. S-6

| JOB NUMBER | REVIEWED BY RG/CEG | DATE | REVISED DATE | REVISED DATE |
|---|---|---|---|---|
| 7633 | CWP CEG 1262 | 11/89 | | |

Field location of boring:

(See Plate 2)

| | | | |
|---|---|---|---|
| Project No.: | 7633 | Date: 10/30/89 | Boring No: S-6 |
| Client: | Shell Oil Company | | |
| Location: | 5251 Hopyard Road | | |
| City: | Pleasanton, California | | Sheet 2 of 2 |
| Logged by: | R.S.Y. | Driller: Bayland | |

Casing installation data:

Drilling method: Hollow-Stem Auger

Hole diameter: 8-Inch

Top of Box Elevation: Datum:

| | | | | |
|---|---|---|---|---|
| Water Level | | | | |
| Time | | | | |
| Date | | | | |

| PID (ppm) | Blows/ft. or Pressure (psi) | Type of Sample | Sample Number | Depth (ft.) | Sample | Well Detail | Soil Group Symbol (USCS) | Description |
|---|---|---|---|---|---|---|---|---|
| 0 | 4 | S&H | | 20 | | | | |
| | 5 | | S-6 | | | | | same as above; trace well rounded gravel. |
| | 6 | | 21.0 | 21 | | | | |
| | | | | 22 | | | | |
| | | | | 23 | | | | |
| | | | | 24 | | | | |
| 0 | 4 | S&H | | 25 | | | | CLAY (CH) - black (7.5YR 2/0), medium stiff, saturated, high plasticity; trace fine gravel; no chemical odor. |
| | 3 | | S-6 | | | | | |
| | 2 | | 26.0 | 26 | | | | Bottom of boring at 26.0 feet. |
| | | | | 27 | | | | Bottom of sample at 26.0 feet. |
| | | | | 28 | | | | |
| | | | | 29 | | | | |
| | | | | 30 | | | | |
| | | | | 31 | | | | |
| | | | | 32 | | | | |
| | | | | 33 | | | | |
| | | | | 34 | | | | |
| | | | | 35 | | | | |
| | | | | 36 | | | | |
| | | | | 37 | | | | |
| | | | | 38 | | | | |
| | | | | 39 | | | | |

Remarks:

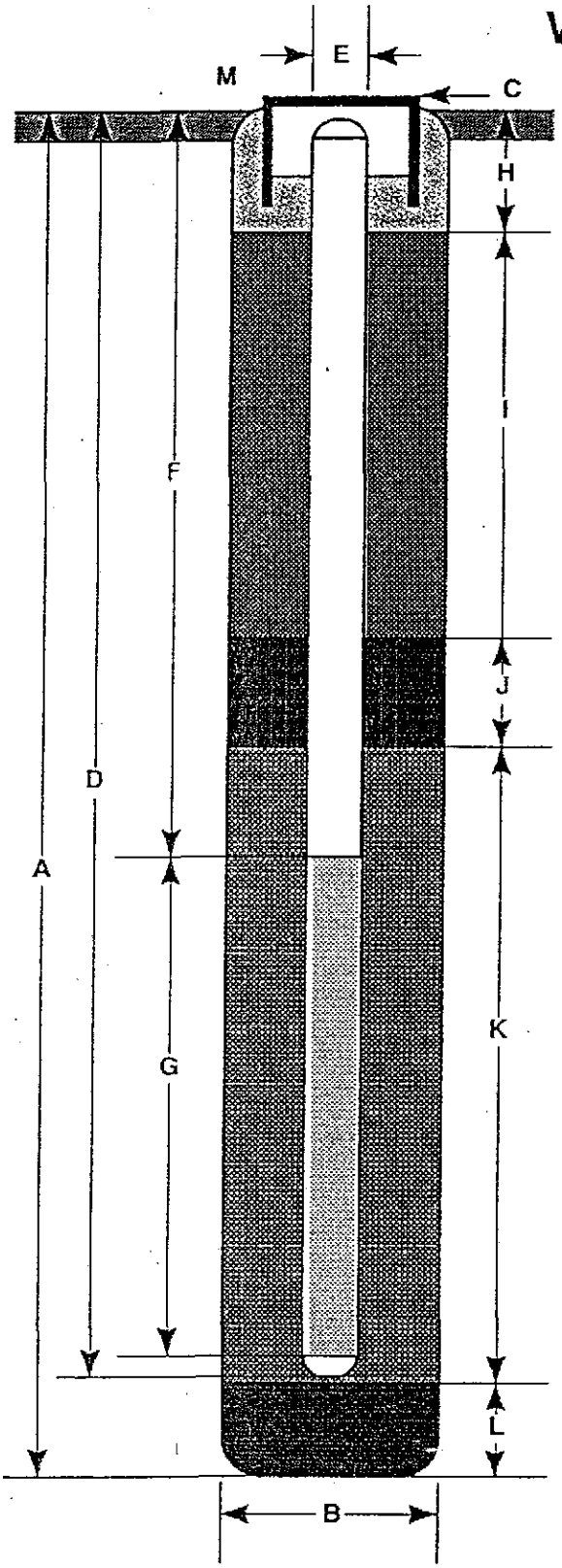
GeoStrategies Inc.

Log of Boring

BORING NO. S-6

| JOB NUMBER | REVIEWED BY RG/CEG | DATE | REVISED DATE | REVISED DATE |
|---|---|---|---|---|
| 7633 | CMP CEG 1262 | 11/89 | | |

# WELL CONSTRUCTION DETAIL




A Total Depth of Boring 26.0 ft.

B Diameter of Boring 8 in.
Drilling Method Hollow-Stem Auger

C Top of Box Elevation 326.56 ft.
[X] Referenced to Mean Sea Level
[ ] Referenced to Project Datum

D Casing Length 25.5 ft.
Material Schedule 40 PVC

E Casing Diameter 3 in.

F Depth to Top Perforations 6.0 ft.

G Perforated Length 20 ft.
Perforated Interval from 6 to 26 ft.
Perforation Type Schedule 40 PVC
Perforation Size 0.020 in.

H Surface Seal from 0 to 1.5 ft.
Seal Material concrete grout

I Backfill from 1.5 to 4.0 ft.
Backfill Material cement grout

J Seal from 4.0 to 5.0 ft.
Seal Material Bentonite Pellets

K Gravel Pack from 5.0 to 26.0 ft.
Pack Material Lonestar #2/12 sand

L Bottom Seal ft.
Seal Material

M

GeoStrategies Inc.

Well Construction Detail

WELL NO.
S-6

| JOB NUMBER | REVIEWED BY PG/CEG | DATE | REVISED DATE | REVISED DATE |
|---|---|---|---|---|
| 7633 | CMP CEG 1262 | 11/89 | | |

Field location of boring:

(See Plate 2)

| | | | |
|---|---|---|---|
| Project No.: 7633 | Date: 10/30/89 | Boring No: S-7 | |
| Client: Shell Oil Company | | | |
| Location: 5251 Hopyard Road | | | |
| City: Pleasanton, California | | Sheet 1 of 2 | |
| Logged by: R.S.Y. | Driller: Bayland | | |

Casing installation data:

Drilling method: Hollow-Stem Auger

Hole diameter: 8-Inch

Top of Box Elevation: 326.49 Datum: MSL

| | | | | |
|---|---|---|---|---|
| Water Level | | | | |
| Time | | | | |
| Date | | | | |

| PID (ppm) | Blows/ft or Pressure (psi) | Type of Sample | Sample Number | Depth (ft.) | Sample | Well Detail | Soil Group Symbol (USCS) | Description |
|---|---|---|---|---|---|---|---|---|
| | | | | 1 | | | | PAVEMENT SECTION - 2.5 feet |
| | | | | 2 | | | | |
| | | | | 3 | | | | |
| | | | | 4 | | | | CLAY with SAND (CH) - black (2.5Y 2/0), very stiff, moist, high plasticity; 20% very fine sand; trace well rounded fine gravel; 30% peat from 4.5 to 6.0 feet; no chemical odor. |
| 0 | 450 | S&H | | 5 | | | | |
| | 450 | push | S-7 | | | | | |
| | 450 | | 6.0 | 6 | | | | |
| | | | | 7 | | | | |
| | | | | 8 | | | | soft at 8.5 feet |
| | | | | 9 | | | | |
| 0 | 200 | S&H | | 10 | | | | SANDY CLAY (CL) - very dark grayish brown (7.5YR 3/2), stiff, mosit, low plasticity; 35% very fine sand; no chemical odor. |
| | 200 | push | S-7 | | | | | |
| | 200 | | 11.0 | 11 | | | | |
| | | | | 12 | | | | |
| | | | | 13 | | | | |
| | | | | 14 | | | | |
| 0 | 4 | S&H | | 15 | | | | CLAY (CH) - very dark gray (7.5YR 3/0), medium stiff, very moist, open voids, high plasticity; calcareous stringers; no chemical odor. |
| | 5 | | S-7 | | | | | |
| | 6 | | 16.0 | 16 | | | | |
| | | | | 17 | | | | |
| | | | | 18 | | | | |
| | | | | 19 | | ▽ | | Sample rods wet at 18.5 feet |

Remarks:

GeoStrategies Inc.

Log of Boring

BORING NO. S-7

| JOB NUMBER | REVIEWED BY RG/CEG | DATE | REVISED DATE | REVISED DATE |
|---|---|---|---|---|
| 7633 | CMP CEG 12/92 | 11/89 | | |

Field location of boring:

(See Plate 2)

| | | | |
|---|---|---|---|
| Project No.: | 7633 | Date: 10/30/89 | Boring No: S-7 |
| Client: | Shell Oil Company | | |
| Location: | 5251 Hopyard Road | | |
| City: | Pleasanton, California | | Sheet 2 of 2 |
| Logged by: | R.S.Y. | Driller: Bayland | |

Drilling method: Hollow-Stem Auger

Hole diameter: 8-Inch

Casing installation data:

Top of Box Elevation: Datum:

| | | | | |
|---|---|---|---|---|
| Water Level | | | | |
| Time | | | | |
| Date | | | | |

| FID (ppm) | Blows/ft. or Pressure (psi) | Type of Sample | Sample Number | Depth (ft.) | Sample | Well Detail | Soil Group Symbol (USCS) | Description |
|---|---|---|---|---|---|---|---|---|
| | | | | 20 | | | | |
| 0 | 4 | S&H | | | | | | |
| | 5 | | S-7 | 21 | | | | COLOR CHANGE to gray (2.5Y 5/0); 10% very fine sand; no chemical odor. |
| | 6 | | 21.0 | | | | | |
| | | | | 22 | | | | |
| | | | | 23 | | | | |
| | | | | 24 | | | | |
| 0 | 3 | S&H | | 25 | | | | |
| | 4 | | S-7 | | | | | |
| | 5 | | 26.0 | 26 | | | | CLAYEY SAND (SC) - olive gray (5Y 4/2), loose, saturated; 70% very fine sand; 30% clay; no chemical odor. |
| | 2 | S&H | | | | | | |
| | 3 | | | 27 | | | | CLAY (CL) - dark gray (2.5Y 4/0), medium stiff, moist, low plasticity; no chemical odor. |
| | 4 | | | | | | | |
| | | | | 28 | | | | |
| | | | | 29 | | | | |
| | | | | 30 | | | | Bottom of boring at 27.5 feet. |
| | | | | | | | | Bottom of sample at 27.5 feet. |
| | | | | 31 | | | | |
| | | | | 32 | | | | |
| | | | | 33 | | | | |
| | | | | 34 | | | | |
| | | | | 35 | | | | |
| | | | | 36 | | | | |
| | | | | 37 | | | | |
| | | | | 38 | | | | |
| | | | | 39 | | | | |

Remarks:

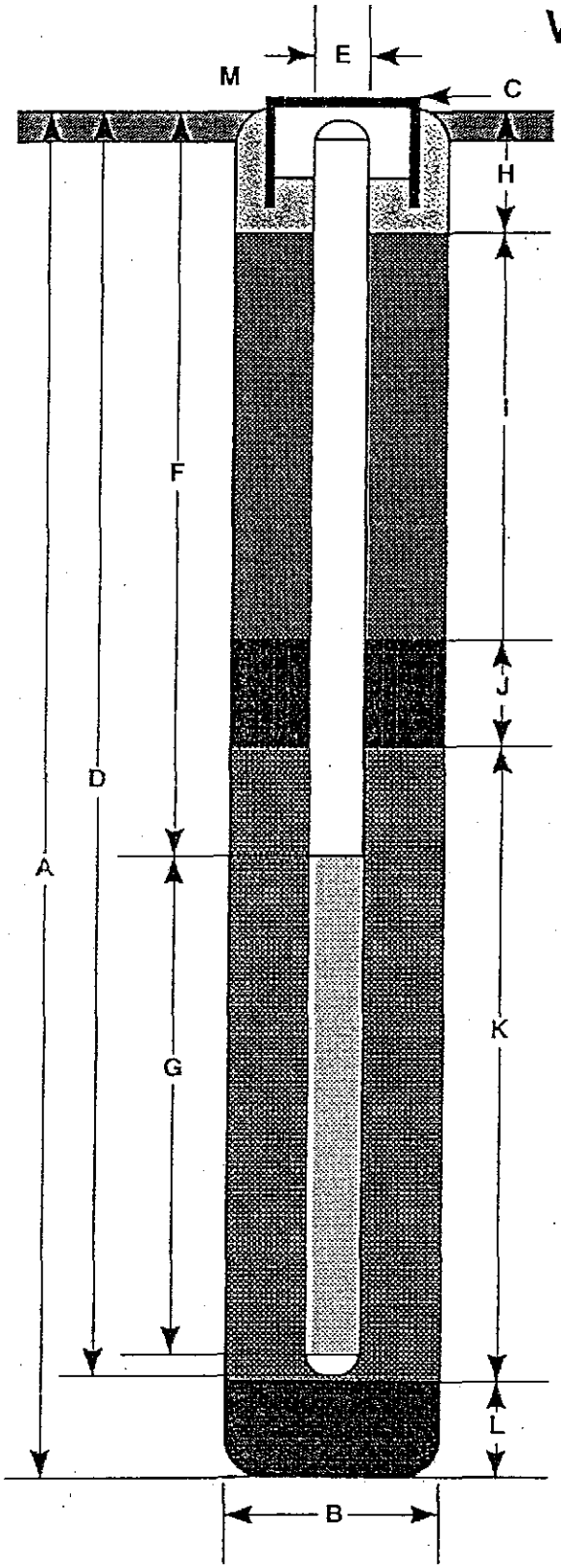
GSI GeoStrategies Inc.

Log of Boring

BORING NO. S-7

| JOB NUMBER | REVIEWED BY RG/CEG | DATE | REVISED DATE | REVISED DATE |
|---|---|---|---|---|
| 7633 | RMP CEG 1262 | 11/89 | | |

# WELL CONSTRUCTION DETAIL




A Total Depth of Boring 27.5 ft.

B Diameter of Boring 8 in.
Drilling Method Hollow-Stem Auger

C Top of Box Elevation 326.49 ft.
[X] Referenced to Mean Sea Level
[ ] Referenced to Project Datum

D Casing Length 25.5 ft.
Material Schedule 40 PVC

E Casing Diameter 3 in.

F Depth to Top Perforations 4.5 ft.

G Perforated Length 20 ft.
Perforated Interval from 5.5 to 25.5 ft.
Perforation Type Schdule 40 PVC
Perforation Size 0.020 in.

H Surface Seal from 0 to 1.5 ft.
Seal Material concrete grout

I Backfill from 1.5 to 3.5 ft.
Backfill Material cement grout

J Seal from 3.5 to 4.5 ft.
Seal Material Bentonite Pellets

K Gravel Pack from 4.5 to 27.5 ft.
Pack Material Lonestar #2/12 sand

L Bottom Seal ft.
Seal Material

M

GeoStrategies Inc.

Well Construction Detail

WELL NO. S-7

| JOB NUMBER | REVIEWED BY RG/CEG | DATE | REVISED DATE | REVISED DATE |
|---|---|---|---|---|
| 7633 | CWP CEG 1262 | 11/89 | | |

Field location of boring:

(See Plate 2)

| | | | |
|---|---|---|---|
| Project No.: | 7633 | Date: 11/06/89 | Boring No. S-8 |
| Client: | Shell Oil Company | | |
| Location: | 5251 Hopyard Road | | |
| City: | Pleasanton, California | | Sheet 1 of 2 |
| Logged by: | R.S.Y. | Driller: Bayland | |

Casing installation data:

Drilling method: Hollow-Stem Auger

Hole diameter: 8-Inch

Top of Box Elevation: 325.32 Datum: MSL

| | | | | |
|---|---|---|---|---|
| Water Level | | | | |
| Time | | | | |
| Date | | | | |

| PID (ppm) | Blows/ft. or Pressure (psi) | Type of Sample | Sample Number | Depth (ft.) | Sample | Well Detail | Soil Group Symbol (USCS) | Description |
|---|---|---|---|---|---|---|---|---|
| | | | | 1 | | | | PAVEMENT SECTION - 2.5 feet |
| | | | | 2 | | | | |
| | | | | 3 | | | | |
| | | | | 4 | | | | CLAY (CL) - black (2.5YR 5/6), medium stiff, damp, medium plasticity; trace coarse sand; no chemical odor. |
| 0 | 100 | S&H | | 5 | | | | |
| | 100 | push | S-8 | | | | | |
| | 100 | | 5.5 | 6 | | | | SILT (ML) - dark gray (7.5YR 4/0), medium stiff, moist; 20% very fine sand; voids; no chemical odor. |
| | | | | 7 | | | | |
| | | | | 8 | | | | |
| | | | | 9 | | | | |
| 0 | 100 | S&H | | 10 | | | | SILTY SAND (SM) - brown (10YR 5/3), loose, very damp; 70% very fine sand; 30% silt; no chemical odor. |
| | 100 | push | S-8 | | | | | |
| | 100 | | 10.5 | 11 | | | | |
| | | | | 12 | | | | |
| | | | | 13 | | | | |
| | | | | 14 | | | | |
| 0 | 2 | S&H | | 15 | | | | SILTY CLAY (CL) - dark brownish gray (2.5Y 4/2), medium stiff, moist; 60% clay; 40% silt; no chemical odor. |
| | 2 | | S-8 | | | | | |
| | 5 | | 15.5 | 16 | | | | |
| | | | | 17 | | | | |
| | | | | 18 | | | | |
| | | | | 19 | | ▽ | | Sample rods wet at 18.5 feet |

Remarks:

Log of Boring

BORING NO. S-8

GeoStrategies Inc.

| JOB NUMBER | REVIEWED BY RG/CEG | DATE | REVISED DATE | REVISED DATE |
|---|---|---|---|---|
| 7633 | CEG 1262 | 11/89 | | |

Field location of boring:

(See Plate 2)

| | | | |
|---|---|---|---|
| Project No.: | 7633 | Date: 11/06/89 | Boring No: S-8 |
| Client: | Shell Oil Company | | |
| Location: | 5251 Hopyard Road | | Sheet 2 of 2 |
| City: | Pleasanton, California | | |
| Logged by: | R.S.Y. | Driller: Bayland | |

Casing installation data:

Drilling method: Hollow-Stem Auger

Hole diameter: 8-Inch

Top of Box Elevation: Datum:

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Water Level | | | | | | | | |
| Time | | | | | | | | |
| Date | | | | | | | | |

| PID (ppm) | Blows/ft. or Pressure (psi) | Type of Sample | Sample Number | Depth (ft.) | Sample | Well Detail | Soil Group Symbol (USCS) | Description |
|---|---|---|---|---|---|---|---|---|
| 0 | 2 | S&H | | 20 | | | | |
| | 2 | | S-8 | | | | | same as above; caliche nodules. |
| | 5 | | 20.5 | 21 | | | | |
| | | | | 22 | | | | |
| | | | | 23 | | | | |
| | | | | 24 | | | | |
| | 4 | S&H | | 25 | | | | COLOR CHANGE to olive gray (5Y 4/2), increasing density. |
| | 5 | | S-8 | | | | | |
| | 6 | | 26.0 | 26 | | | | Bottom of boring at 26.0 feet. Bottom of sample at 26.0 feet. |
| | | | | 27 | | | | |
| | | | | 28 | | | | |
| | | | | 29 | | | | |
| | | | | 30 | | | | |
| | | | | 31 | | | | |
| | | | | 32 | | | | |
| | | | | 33 | | | | |
| | | | | 34 | | | | |
| | | | | 35 | | | | |
| | | | | 36 | | | | |
| | | | | 37 | | | | |
| | | | | 38 | | | | |
| | | | | 39 | | | | |

Remarks:

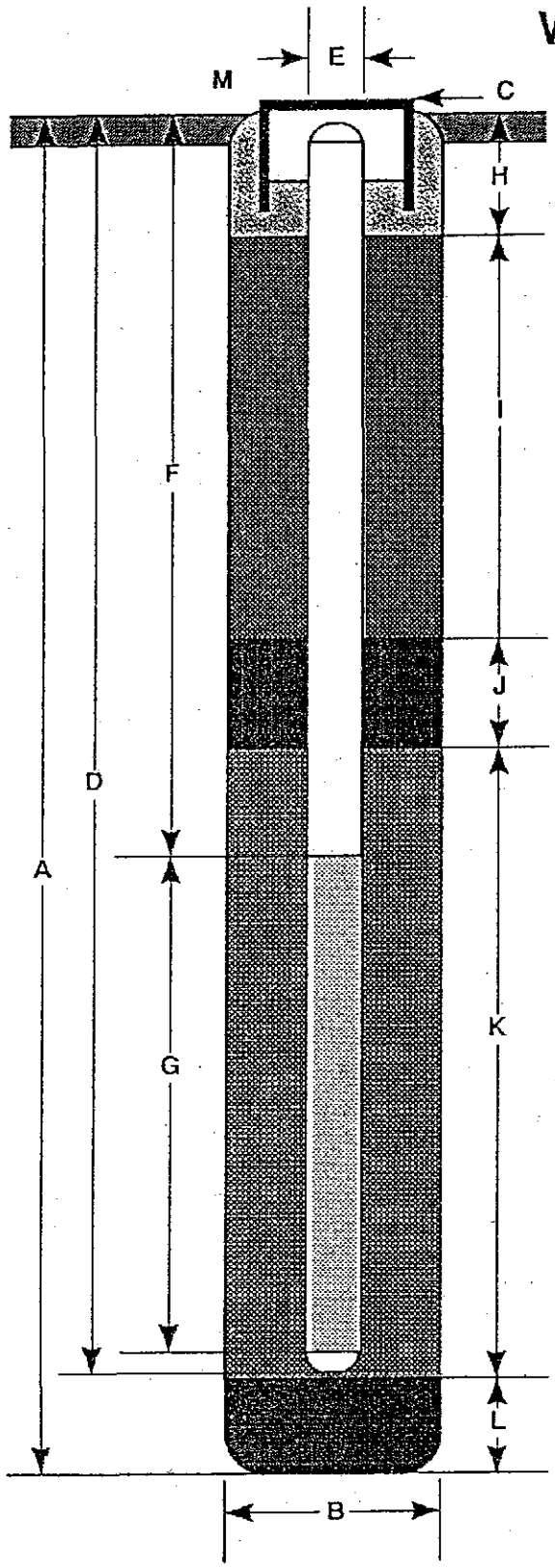
GeoStrategies Inc.

Log of Boring

BORING NO. S-8

| JOB NUMBER | REVIEWED BY RG/CEG | DATE | REVISED DATE | REVISED DATE |
|---|---|---|---|---|
| 7633 | CWP CEG 1262 | 11/89 | | |

# WELL CONSTRUCTION DETAIL




A Total Depth of Boring 26 ft.

B Diameter of Boring 8 in.
Drilling Method Hollow-Stem Auger

C Top of Box Elevation 325.32 ft.
[X] Referenced to Mean Sea Level
[ ] Referenced to Project Datum

D Casing Length 25 ft.
Material Schedule 40 PVC

E Casing Diameter 3 in.

F Depth to Top Perforations 5 ft.

G Perforated Length 20 ft.
Perforated Interval from 5 to 25 ft.
Perforation Type Schedule 40 PVC
Perforation Size 0.020 in.

H Surface Seal from 0.0 to 1.5 ft.
Seal Material concrete grout

I Backfill from 1.5 to 3.0 ft.
Backfill Material cement grout

J Seal from 3 to 4 ft.
Seal Material Bentonite Pellets

K Gravel Pack from 4 to 26 ft.
Pack Material Lonestar #2/12 sand

L Bottom Seal ft.
Seal Material

M

GeoStrategies Inc.

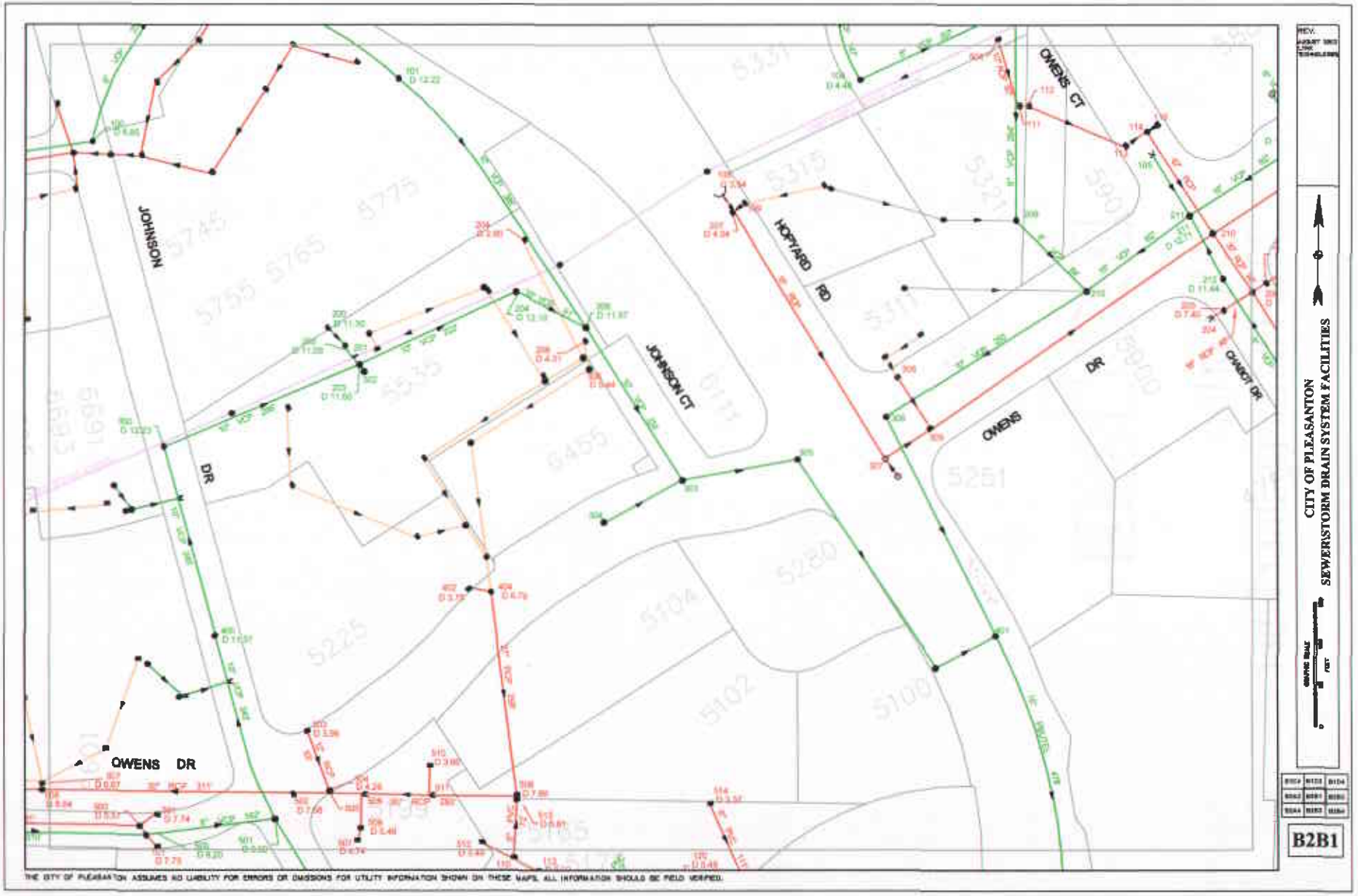
Well Construction Detail

WELL NO.
S-8

| JOB NUMBER | REVIEWED BY RG/CEG | DATE | REVISED DATE | REVISED DATE |
|---|---|---|---|---|
| 7633 | Cmp CEG 1262 | 11/89 | | |

**Attachment F**

**UNDERGROUND UTILITY MAPS**


JOHNSON DR
JOHNSON CT
HOPYARD RD
OWENS CT
OWENS DR
OWENS DR
CHANCY DR
OWENS DR
CITY OF PLEASANTON
SEWER/STORM DRAIN SYSTEM FACILITIES
B2B1
THE CITY OF PLEASANTON ASSUMES NO LIABILITY FOR ERRORS OR OMISSIONS FOR UTILITY INFORMATION SHOWN ON THESE MAPS. ALL INFORMATION SHOULD BE FIELD VERIFIED.

JOHNSON DR
JOHNSON CT
HOPYARD RD
OWENS CT
OWENS DR
CHABOT DR
12" ACP
15" ACP
8" ACP
8" PVC
16" DIP
17" ACP
ZONE 1
CITY OF PLEASANTON
WATER SYSTEM FACILITIES
B2B1
THE CITY OF PLEASANTON ASSUMES NO LIABILITY FOR ERRORS OR OMISSIONS FOR UTILITY INFORMATION SHOWN ON THESE MAPS. ALL INFORMATION SHOULD BE FIELD VERIFIED.

**Attachment G**

# BLAINE TECH SERVICES MONITORING REPORT
# FIRST QUARTER 2005

BLAINE
TECH SERVICES INC.

GROUNDWATER SAMPLING SPECIALISTS
SINCE 1985

March 7, 2005

Karen Petryna
Shell Oil Products US
20945 South Wilmington Avenue
Carson, CA 90810

First Quarter 2005 Groundwater Monitoring at
Shell-branded Service Station
5251 Hopyard Road
Pleasanton, CA

Monitoring performed on January 14, 2005

Groundwater Monitoring Report **050114-WC-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,

Leon Gearhart
Project Coordinator

LG/ks

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

cc: Ross Tinline
Toxichem Management Systems
11 Kenton Ave.
San Carlos, CA 94070

# 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) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-1 | 01/25/1991 | 2,500 | 1,500 | 460 | <25 | 130 | 36 | NA | NA | 326.73 | NA | NA | NA |
| S-1 | 04/06/1991 | 6,700 | 2,600a | 2,600 | 14 | 580 | 250 | NA | NA | 326.73 | NA | NA | NA |
| S-1 | 07/24/1991 | 8,800 | 3,800a | 2,300 | 30 | 640 | 220 | NA | NA | 326.73 | NA | NA | NA |
| S-1 | 10/18/1991 | 12,000 | 3,300a | 3,600 | 380 | 990 | 580 | NA | NA | 326.73 | 8.85 | 317.88 | NA |
| S-1 | 01/23/1992 | 1,600 | 890 | 450 | 3 | 120 | 17 | NA | NA | 326.73 | NA | NA | NA |
| S-1 | 04/27/1992 | 1,100g | 500a | 610 | <10 | 110 | 10 | NA | NA | 326.73 | NA | NA | NA |
| S-1 | 07/21/1992 | 5,100 | 290c | 1,900 | 54 | 460 | 140 | NA | NA | 326.73 | NA | NA | NA |
| S-1 | 10/16/1992 | 13,000 | 390c | 3,200 | 310 | 780 | 360 | NA | NA | 326.73 | NA | NA | NA |
| S-1 | 01/23/1993 | 2,300 | 30d | 640 | <5 | 110 | 13 | NA | NA | 326.73 | 7.96 | 318.77 | NA |
| S-1 | 04/28/1993 | 4,600 | 390 | 780 | <0.5 | 250 | <0.5 | NA | NA | 326.73 | 9.07 | 317.66 | NA |
| S-1 | 09/22/1993 | 3,000 | 610a | 660 | 28 | 160 | 17 | NA | NA | 326.73 | 8.68 | 318.05 | NA |
| S-1 | 12/08/1993 | 520 | 280 | 210 | <2.5 | 49 | <2.5 | NA | NA | 326.73 | 8.23 | 318.50 | NA |
| S-1 | 03/04/1994 | 640 | NA | 190 | 1.4 | 18 | 1.3 | NA | NA | 326.73 | 8.81 | 317.92 | NA |
| S-1 (D) | 03/04/1994 | 640 | NA | 180 | 1.7 | 17 | 1.3 | NA | NA | 326.73 | 8.81 | 317.92 | NA |
| S-1 | 06/16/1994 | 2,500 | NA | 390 | 9.5 | 31 | 7.5 | NA | NA | 326.73 | 8.80 | 317.93 | NA |
| S-1 (D) | 06/16/1994 | 2,000 | NA | 410 | 7.8 | 120 | 20 | NA | NA | 326.73 | 8.80 | 317.93 | NA |
| S-1 | 09/13/1994 | 1,400 | NA | 310 | 7.7 | 29 | 8.5 | NA | NA | 326.73 | 8.62 | 318.11 | NA |
| S-1 (D) | 09/13/1994 | 1,400 | NA | 240 | 7.9 | 44 | 6.3 | NA | NA | 326.73 | 8.62 | 318.11 | NA |
| S-1 | 05/05/1995 | 800 | NA | 120 | 3.6 | 26 | 2.7 | NA | NA | 326.73 | 11.54 | 315.19 | NA |
| S-1 (D) | 05/05/1995 | 710 | NA | 110 | 3.4 | 19 | 2.7 | NA | NA | 326.73 | 11.54 | 315.19 | NA |
| S-1 | 05/21/1996 | 1,500 | NA | 170 | 8.5 | 120 | 6.7 | NA | NA | 326.73 | 8.88 | 317.85 | NA |
| S-1 | 05/12/1997 | 4,700 | NA | 200 | 15 | 210 | 20 | 2,300 | NA | 326.73 | 11.19 | 315.54 | 2.4 |
| S-1 (D) | 05/12/1997 | 4,800 | NA | 210 | 16 | 190 | 16 | 3,200 | 2,900 | 326.73 | 11.19 | 315.54 | 2.4 |
| S-1 | 05/08/1998 | 500 | NA | 18 | 2.1 | 2.3 | 2 | 1,000 | NA | 326.73 | 8.38 | 318.35 | 2.1 |
| S-1 | 06/27/1999 | 2,970 | NA | 117 | 32.0 | 69.1 | 17.5 | 374 | NA | 326.73 | 8.79 | 317.94 | 2.4 |
| S-1 | 04/28/2000 | 1,920 | NA | 50.5 | 15.0 | 67.2 | 46.7 | 276 | NA | 326.73 | 8.50 | 318.23 | 2.8 |

## 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) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-1 | 05/30/2001 | 3,900 | NA | 27 | 12 | 140 | 28 | NA | 140 | 326.73 | 8.18 | 318.55 | 2.6 |
| S-1 | 06/17/2002 | 2,700 | NA | 25 | 11 | 51 | 14 | NA | 140 | 326.73 | 8.39 | 318.34 | 3.2 |
| S-1 | 05/30/2003 | 3,900 | NA | 12 | 8.2 | 47 | 12 | NA | 270 | 326.74 | 7.41 | 319.33 | 1.2 |
| S-1 | 05/03/2004 | 3,700 | NA | 32 | 21 | 170 | 34 | NA | 410 | 326.74 | 11.18 | 315.56 | 2.4 |
| **S-1** | **01/14/2005** | **4,200** | **NA** | **22** | **34** | **380** | **33** | **NA** | **100** | **326.74** | **7.10** | **319.64** | **0.58** |
| S-2 | 01/25/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.59 | NA | NA | NA |
| S-2 | 04/16/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.59 | NA | NA | NA |
| S-2 | 07/24/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.59 | NA | NA | NA |
| S-2 | 10/18/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.59 | 8.83 | 317.76 | NA |
| S-2 | 01/23/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.59 | NA | NA | NA |
| S-2 | 04/27/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.59 | NA | NA | NA |
| S-2 | 07/17/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.59 | NA | NA | NA |
| S-2 | 10/16/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.59 | NA | NA | NA |
| S-2 | 01/23/1993 | <50 | 140b | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.59 | 8.10 | 318.49 | NA |
| S-2 | 04/28/1993 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.59 | 9.06 | 317.53 | NA |
| S-2 | 09/22/1993 | NA | NA | NA | NA | NA | NA | NA | NA | 326.59 | 8.91 | 317.68 | NA |
| S-2 | 12/08/1993 | NA | NA | NA | NA | NA | NA | NA | NA | 326.59 | 9.07 | 317.52 | NA |
| S-2 | 03/04/1994 | NA | NA | NA | NA | NA | NA | NA | NA | 326.59 | 8.90 | 317.69 | NA |
| S-2 | 06/16/1994 | NA | NA | NA | NA | NA | NA | NA | NA | 326.59 | 8.98 | 317.61 | NA |
| S-2 | 09/13/1994 | <50 | NA | <0.5 | 2.5 | <0.5 | <0.5 | NA | NA | 326.59 | 8.78 | 317.81 | NA |
| S-2 | 05/05/1995 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.59 | 8.60 | 317.99 | NA |
| S-2 | 05/21/1996 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.59 | 8.75 | 317.84 | NA |
| S-2 | 05/12/1997 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 | NA | 326.59 | 8.72 | 317.87 | 3.4 |
| S-2 | 05/08/1998 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 326.59 | 8.63 | 317.96 | 3.1 |
| S-2 | 06/27/1999 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.00 | NA | 326.59 | 8.79 | 317.80 | 2.6 |

## 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) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-2 | 04/28/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | 326.59 | 8.33 | 318.26 | 2.0 |
| S-2 | 05/30/2001 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | <0.50 | 326.59 | 8.56 | 318.03 | 1.8 |
| S-2 | 06/17/2002 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | <5.0 | 326.59 | 8.87 | 317.72 | i |
| S-2 | 05/30/2003 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | 18 | 326.47 | 7.89 | 318.58 | 1.7 |
| S-2 | 05/03/2004 | <250 | NA | <2.5 | <2.5 | <2.5 | <5.0 | NA | 510 | 326.47 | 5.44 | 321.03 | 0.1 |
| **S-2** | **01/14/2005** | **<250** | **NA** | **<2.5** | **<2.5** | **<2.5** | **<5.0** | **NA** | **270** | **326.47** | **7.88** | **318.59** | **NA** |
| S-3 | 01/25/1991 | 870 | 330 | 230 | <2.5 | 130 | <2.5 | NA | NA | 327.38 | NA | NA | NA |
| S-3 | 04/16/1991 | 190 | 140a | 12 | 0.8 | 6.2 | 1.5 | NA | NA | 327.38 | NA | NA | NA |
| S-3 | 07/24/1991 | 1,700 | 1,200a | 450 | 4.4 | 150 | 2.9 | NA | NA | 327.38 | NA | NA | NA |
| S-3 | 10/18/1991 | 1,900 | 500 | 370 | 3.1 | 120 | 220 | NA | NA | 327.38 | 9.64 | 317.74 | NA |
| S-3 | 01/23/1992 | 2,000 | 650a | 580 | 3 | 200 | <0.5 | NA | NA | 327.38 | NA | NA | NA |
| S-3 | 04/27/1992 | 1,100 | 230a | 150 | <3 | 76 | 14 | NA | NA | 327.38 | NA | NA | NA |
| S-3 | 07/17/1992 | 810 | 58 | 200 | <2.5 | 57 | 3.8 | NA | NA | 327.38 | NA | NA | NA |
| S-3 | 10/16/1992 | 440 | 190c | 79 | 1.8 | 18 | 4.6 | NA | NA | 327.38 | NA | NA | NA |
| S-3 | 01/23/1993 | 670 | 170d | 79 | 1.5 | 46 | 15 | NA | NA | 327.38 | 8.81 | 318.57 | NA |
| S-3 | 04/28/1993 | 2,000 | <50 | 300 | 3.4 | 210 | 38 | NA | NA | 327.38 | 9.87 | 317.51 | NA |
| S-3 | 09/22/1993 | 4,800 | 670a | 2,000 | 34 | 150 | 51 | NA | NA | 327.38 | 9.65 | 317.73 | NA |
| S-3 | 12/08/1993 | 1,200 | 11 | 440 | <5.0 | 120 | 29 | NA | NA | 327.38 | 9.26 | 318.12 | NA |
| S-3 | 03/04/1994 | 630 | NA | 130 | <0.5 | 17 | 0.8 | NA | NA | 327.38 | 9.64 | 317.74 | NA |
| S-3 | 06/16/1994 | 1,800 | NA | 430 | 19 | 35 | 21 | NA | NA | 327.38 | 9.78 | 317.60 | NA |
| S-3 | 05/05/1995 | 160 | NA | 50 | 0.9 | 7.2 | 4.1 | NA | NA | 327.38 | 9.38 | 318.00 | NA |
| S-3 | 05/21/1996 | 270 | NA | 45 | <0.5 | 1.4 | <0.5 | NA | NA | 327.38 | 9.41 | 317.97 | NA |
| S-3 (D) | 05/21/1996 | 210 | NA | <0.5 | <0.5 | 0.95 | <0.5 | NA | NA | 327.38 | 9.41 | 317.97 | NA |
| S-3 | 05/12/1997 | 420 | NA | <1.0 | <1.0 | <1.0 | <1.0 | 57 | NA | 327.38 | 9.30 | 318.08 | 2.5 |
| S-3 | 05/08/1998 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 327.38 | 9.12 | 318.26 | 2.2 |

## 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) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-3 | 06/27/1999 | 106 | NA | 8.51 | <0.500 | <0.500 | <0.500 | 31.0 | NA | 327.38 | 9.39 | 317.99 | 2.1 |
| S-3 | 04/28/2000 | 139 | NA | 7.58 | <0.500 | <0.500 | <0.500 | 42.6 | NA | 327.38 | 9.04 | 318.34 | 1.8 |
| S-3 | 05/30/2001 | 2,200 | NA | 510 | 6.9 | 100 | 21 | NA | 33 | 327.38 | 9.19 | 318.19 | 2.0 |
| S-3 | 06/17/2002 | 600 | NA | 150 | 2.1 | 30 | 11 | NA | 36 | 327.38 | 9.35 | 318.03 | 0.1 |
| S-3 | 05/30/2003 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | 9.0 | 327.04 | 8.39 | 318.65 | 1.2 |
| S-3 | 05/03/2004 | 61 k | NA | 0.90 | <0.50 | <0.50 | <1.0 | NA | 9.8 | 327.04 | 8.73 | 318.31 | 1.2 |
| **S-3** | **01/14/2005** | **94** | **NA** | **4.6** | **<0.50** | **3.1** | **1.0** | **NA** | **13** | **327.04** | **8.00** | **319.04** | **NA** |
| S-4 | 01/25/1991 | <50 | <50 | <0.5 | 1.5 | <0.5 | 2.8 | NA | NA | 327.38 | NA | NA | NA |
| S-4 | 04/16/1991 | <50 | 0.7 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 327.38 | NA | NA | NA |
| S-4 | 07/24/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 327.38 | NA | NA | NA |
| S-4 | 10/18/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 327.38 | 8.82 | 318.56 | NA |
| S-4 | 01/23/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 327.38 | NA | NA | NA |
| S-4 | 04/27/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 327.38 | NA | NA | NA |
| S-4 | 07/17/1992 | <500 | 74 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 327.38 | NA | NA | NA |
| S-4 | 10/16/1992 | <500 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 327.38 | NA | NA | NA |
| S-4 | 01/23/1993 | <500 | 94b | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 327.38 | 8.32 | 319.06 | NA |
| S-4 | 04/28/1993 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 327.38 | 9.76 | 317.62 | NA |
| S-4 | 09/22/1993 | NA | NA | NA | NA | NA | NA | NA | NA | 327.38 | 9.30 | 318.08 | NA |
| S-4 | 12/08/1993 | NA | NA | NA | NA | NA | NA | NA | NA | 327.38 | 9.74 | 317.64 | NA |
| S-4 | 03/04/1994 | NA | NA | NA | NA | NA | NA | NA | NA | 327.38 | 9.60 | 317.78 | NA |
| S-4 | 06/16/1994 | NA | NA | NA | NA | NA | NA | NA | NA | 327.38 | 9.42 | 317.96 | NA |
| S-4 | 05/05/1995 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 327.38 | 9.02 | 318.36 | NA |
| S-4 | 05/21/1996 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 327.38 | 9.29 | 318.09 | NA |
| S-4 | 05/12/1997 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | 140 | NA | 327.38 | 7.95 | 319.43 | 2.5 |
| S-4 | 05/08/1998 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | 250 | NA | 327.38 | 8.96 | 318.42 | 2.0 |

## 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) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-4 | 06/27/1999 | 303 | NA | 35.8 | 24.8 | 12.4 | 69.8 | 106 | NA | 327.38 | 8.90 | 318.48 | 2.6 |
| S-4 | 04/28/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | 40.2 | NA | 327.38 | 8.37 | 319.01 | 1.9 |
| S-4 | 05/30/2001 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | 6.8 | 327.38 | 8.83 | 318.55 | 1.8 |
| S-4 | 06/17/2002 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | 31 | 327.38 | 9.37 | 318.01 | 4.8 |
| S-4 | 05/30/2003 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | 130 | 327.24 | 8.46 | 318.78 | 1.4 |
| S-4 | 05/03/2004 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | 170 | 327.24 | 8.70 | 318.54 | 1.1 |
| **S-4** | **01/14/2005** | **<50** | **NA** | **<0.50** | **<0.50** | **<0.50** | **<1.0** | **NA** | **25** | **327.24** | **8.17** | **319.07** | **NA** |
| S-5 | 01/25/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | 0.7 | NA | NA | 327.76 | NA | NA | NA |
| S-5 | 04/16/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | 0.8 | NA | NA | 327.76 | NA | NA | NA |
| S-5 | 07/24/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 327.76 | NA | NA | NA |
| S-5 | 10/18/1991 | 120e | <50 | 4.3 | <0.5 | 1 | 0.7 | NA | NA | 327.76 | 10.00 | 317.76 | NA |
| S-5 | 01/23/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 327.76 | NA | NA | NA |
| S-5 | 04/27/1992 | 50 | <50 | <0.5 | <0.5 | <0.5 | 0.6 | NA | NA | 327.76 | NA | NA | NA |
| S-5 | 07/17/1992 | <50 | 70 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 327.76 | NA | NA | NA |
| S-5 | 10/16/1992 | 230 | 57 | 13 | <0.5 | 4.9 | 4.3 | NA | NA | 327.76 | NA | NA | NA |
| S-5 | 01/23/1993 | <50 | 150b | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 327.76 | 8.88 | 318.88 | NA |
| S-5 | 04/28/1993 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 327.76 | 10.20 | 317.56 | NA |
| S-5 | 09/22/1993 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 327.76 | 9.92 | 317.84 | NA |
| S-5 | 12/08/1993 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 327.76 | 10.19 | 317.57 | NA |
| S-5 | 03/04/1994 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 327.76 | 9.95 | 317.81 | NA |
| S-5 | 06/16/1994 | <50 | NA | 0.9 | <0.5 | <0.5 | <0.5 | NA | NA | 327.76 | 10.02 | 317.74 | NA |
| S-5 | 05/05/1995 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 327.76 | 9.58 | 318.18 | NA |
| S-5 | 05/21/1996 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 327.76 | 9.84 | 317.92 | NA |
| S-5 | 05/12/1997 | 360 | NA | 3.3 | <0.50 | 17 | 9.8 | 130 | NA | 327.76 | 9.16 | 318.60 | 4.2 |
| S-5 | 05/08/1998 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | 92 | NA | 327.76 | 9.25 | 318.51 | 3.8 |

## 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) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-5 (D) | 05/08/1998 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | 100 | NA | 327.76 | 9.25 | 318.51 | 3.8 |
| S-5 | 06/27/1999 | 223 | NA | 13.7 | 12.9 | 8.20 | 45.8 | 106 | NA | 327.76 | 9.39 | 318.37 | 3.0 |
| S-5 | 04/28/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | 255 | NA | 327.76 | 9.43 | 318.33 | 1.2 |
| S-5 | 05/30/2001 | <100 | NA | <1.0 | <1.0 | <1.0 | <1.0 | NA | 480 | 327.76 | 9.47 | 318.29 | 1.1 |
| S-5 | 06/17/2002 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | 210 | 327.76 | 9.74 | 318.02 | 0.2 |
| S-5 | 05/30/2003 | <250 | NA | <2.5 | <2.5 | <2.5 | <5.0 | NA | 450 | 327.43 | 8.87 | 318.56 | 1.7 |
| S-5 | 05/03/2004 | <250 | NA | <2.5 | <2.5 | <2.5 | <5.0 | NA | 470 | 327.43 | 9.10 | 318.33 | 0.7 |
| **S-5** | **01/14/2005** | **<100** | **NA** | **<1.0** | **<1.0** | **<1.0** | **<2.0** | **NA** | **230** | **327.43** | **8.43** | **319.00** | **NA** |
| S-6 | 01/25/1991 | <50 | <50 | <0.5 | 1.7 | <0.5 | 2.8 | NA | NA | 326.56 | NA | NA | NA |
| S-6 | 04/16/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | 0.6 | NA | NA | 326.56 | NA | NA | NA |
| S-6 | 07/24/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | 0.5 | NA | NA | 326.56 | NA | NA | NA |
| S-6 | 10/18/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | 0.5 | NA | NA | 326.56 | 8.84 | 317.22 | NA |
| S-6 | 01/23/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | 0.5 | NA | NA | 326.56 | NA | NA | NA |
| S-6 | 04/27/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.56 | NA | NA | NA |
| S-6 | 07/17/1992 | 400 | 130 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.56 | NA | NA | NA |
| S-6 | 10/16/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.56 | NA | NA | NA |
| S-6 | 01/23/1993 | <50 | 230b | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.56 | 7.82 | 318.74 | NA |
| S-6 | 04/28/1993 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.56 | 9.00 | 317.56 | NA |
| S-6 | 09/22/1993 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.56 | 8.61 | 317.96 | NA |
| S-6 | 12/08/1993 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.56 | 10.02 | 316.54 | NA |
| S-6 | 03/04/1994 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.56 | 8.88 | 317.68 | NA |
| S-6 | 06/16/1994 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.56 | 9.04 | 317.52 | NA |
| S-6 | 05/05/1995 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.56 | 8.54 | 318.02 | NA |
| S-6 | 05/21/1996 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.56 | 8.62 | 317.94 | NA |
| S-6 | 05/12/1997 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 326.56 | 8.60 | 317.96 | 2.6 |

## 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) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-6 | 05/08/1998 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 326.56 | 7.90 | 318.66 | 2.2 |
| S-6 | 06/27/1999 | 430 | NA | 50.1 | 30.5 | 15.2 | 83.5 | 8.05 | NA | 326.56 | 8.01 | 318.55 | 2.3 |
| S-6 | 04/28/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | 326.56 | 8.84 | 317.72 | 2.0 |
| S-6 | 05/30/2001 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | <0.50 | 326.56 | 8.54 | 318.02 | 1.9 |
| S-6 | 06/17/2002 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | <5.0 | 326.56 | 8.48 | 318.08 | 1.3 |
| S-6 | 05/30/2003 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | 8.7 | 326.35 | 7.36 | 318.99 | 1.0 |
| S-6 | 05/03/2004 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | <0.50 | 326.35 | 8.08 | 318.27 | 0.9 |
| **S-6** | **01/14/2005** | **<50** | **NA** | **<0.50** | **<0.50** | **<0.50** | **<1.0** | **NA** | **<0.50** | **326.35** | **7.38** | **318.97** | **NA** |
| S-7 | 01/25/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.49 | NA | NA | NA |
| S-7 | 04/16/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.49 | NA | NA | NA |
| S-7 | 07/24/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.49 | NA | NA | NA |
| S-7 | 10/18/1991 | <50 | 140f | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.49 | 8.92 | 317.57 | NA |
| S-7 | 01/23/1992 | <50 | 140f | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.49 | NA | NA | NA |
| S-7 | 04/27/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.49 | NA | NA | NA |
| S-7 | 07/17/1992 | <50 | <50 | <0.5 | 1.8 | 0.6 | 4.1 | NA | NA | 326.49 | NA | NA | NA |
| S-7 | 10/16/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.49 | NA | NA | NA |
| S-7 | 01/23/1993 | <50 | 110b | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.49 | 8.06 | 318.43 | NA |
| S-7 | 04/28/1993 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.49 | 8.94 | 317.55 | NA |
| S-7 | 09/22/1993 | NA | NA | NA | NA | NA | NA | NA | NA | 326.49 | 8.57 | 317.92 | NA |
| S-7 | 12/08/1993 | NA | NA | NA | NA | NA | NA | NA | NA | 326.49 | 9.00 | 317.49 | NA |
| S-7 | 03/04/1994 | NA | NA | NA | NA | NA | NA | NA | NA | 326.49 | 8.96 | 317.53 | NA |
| S-7 | 06/16/1994 | NA | NA | NA | NA | NA | NA | NA | NA | 326.49 | 9.12 | 317.37 | NA |
| S-7 | 05/05/1995 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.49 | 8.58 | 317.91 | NA |
| S-7 | 05/21/1996 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 326.49 | 8.64 | 317.85 | NA |
| S-7 | 05/12/1997 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 326.49 | 8.74 | 317.75 | 2.3 |

## 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) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-7 | 05/08/1998 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 326.49 | 8.00 | 318.49 | 2.5 |
| S-7 | 06/27/1999 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.00 | NA | 326.49 | 8.75 | 317.74 | 2.9 |
| S-7 | 04/28/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | 326.49 | 8.96 | 317.53 | 2.2 |
| S-7 | 05/30/2001 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | <0.50 | 326.49 | 8.65 | 317.84 | 2.0 |
| S-7 | 06/17/2002 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | <5.0 | 326.49 | 8.55 | 317.94 | 2.3 |
| S-7 | 05/30/2003 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | 12 | 326.36 | 7.88 | 318.48 | 1.8 |
| S-7 | 05/03/2004 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | 100 | 326.36 | 8.30 | 318.06 | 1.2 |
| **S-7** | **01/14/2005** | **<50** | **NA** | **<0.50** | **<0.50** | **<0.50** | **<1.0** | **NA** | **41** | **326.36** | **7.70** | **318.66** | **NA** |
| S-8 | 01/25/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 325.32 | NA | NA | NA |
| S-8 | 04/16/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 325.32 | NA | NA | NA |
| S-8 | 07/24/1991 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 325.32 | NA | NA | NA |
| S-8 | 10/18/1991 | <50 | 360f | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 325.32 | 7.62 | 317.70 | NA |
| S-8 | 01/23/1992 | <50 | 90 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 325.32 | NA | NA | NA |
| S-8 | 04/27/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 325.32 | NA | NA | NA |
| S-8 | 07/17/1992 | 53 | <50 | <0.5 | 1 | <0.5 | 1.8 | NA | NA | 325.32 | NA | NA | NA |
| S-8 | 10/16/1992 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 325.32 | NA | NA | NA |
| S-8 | 01/23/1993 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 325.32 | 7.00 | 318.32 | NA |
| S-8 | 04/28/1993 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 325.32 | 7.77 | 317.55 | NA |
| S-8 | 09/22/1993 | <50 | 160 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 325.32 | 7.67 | 317.65 | NA |
| S-8 | 12/08/1993 | <50 | 210 | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 325.32 | 7.76 | 317.56 | NA |
| S-8 | 03/04/1994 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 325.32 | 7.66 | 317.66 | NA |
| S-8 | 06/16/1994 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 325.32 | 7.78 | 317.54 | NA |
| S-8 | 05/05/1995 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 325.32 | 7.42 | 317.90 | NA |
| S-8 | 05/21/1996 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA | NA | 325.32 | 7.50 | 317.82 | NA |
| S-8 | 05/12/1997 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 325.32 | 7.56 | 317.76 | 1.6 |

## 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) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S-8 | 05/08/1998 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | <2.5 | NA | 325.32 | 7.64 | 317.68 | 2.0 |
| S-8 | 06/27/1999 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.00 | NA | 325.32 | 7.75 | 317.57 | 2.3 |
| S-8 | 04/28/2000 | <50.0 | NA | <0.500 | <0.500 | <0.500 | <0.500 | <2.50 | NA | 325.32 | 8.02 | 317.30 | 1.8 |
| S-8 | 05/30/2001 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | <0.50 | 325.32 | 7.34 | 317.98 | 1.8 |
| S-8 | 06/17/2002 | <50 | NA | <0.50 | <0.50 | <0.50 | <0.50 | NA | <5.0 | 325.32 | 7.45 | 317.87 | 1.8 |
| S-8 | 05/30/2003 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | 14 | 325.03 | 7.39 | 317.64 | 3.0 |
| S-8 | 05/03/2004 | <50 | NA | <0.50 | <0.50 | <0.50 | <1.0 | NA | <0.50 | 325.03 | 7.00 | 318.03 | 1.0 |
| **S-8** | **01/14/2005** | **<50** | **NA** | **<0.50** | **<0.50** | **<0.50** | **<1.0** | **NA** | **<0.50** | **325.03** | **8.65** | **316.39** | **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
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

## 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) | TOC (MSL) | Depth to Water (ft.) | GW Elevation (MSL) | DO Reading (ppm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Notes:

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.

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.

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

SEVERN TRENT STL

**Submission#: 2005-01-0438**

**Blaine Tech Services, Inc.**

January 31, 2005

1680 Rogers Avenue
San Jose, CA 95112-1105

Attn.: Leon Gearhart

Project#: 050114-WC1
Project: 98995843
Site: 5251 Hopyard Rd., Pleasanton

Dear Mr.Gearhart,

Attached is our report for your samples received on 01/17/2005 11:14
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 03/03/2005 unless you have requested otherwise.
We appreciate the opportunity to be of service to you. If you have any questions,

You can also contact me via email. My email address is: mbrewer@stl-inc.com

Sincerely,

Melissa Brewer

Melissa Brewer
Project Manager

SEVERN TRENT STL

**Submission: 2005-01-0438**

## Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050114-WC1
98995843

Received: 01/17/2005 11:14

Site: 5251 Hopyard Rd., Pleasanton

### Samples Reported

| Sample Name | Date Sampled | Matrix | Lab # |
|---|---|---|---|
| S-1 | 01/14/2005 13:09 | Water | 1 |
| S-2 | 01/14/2005 12:40 | Water | 2 |
| S-3 | 01/14/2005 12:00 | Water | 3 |
| S-4 | 01/14/2005 11:42 | Water | 4 |
| S-5 | 01/14/2005 12:21 | Water | 5 |
| S-6 | 01/14/2005 09:28 | Water | 6 |
| S-7 | 01/14/2005 11:17 | Water | 7 |
| S-8 | 01/14/2005 10:52 | Water | 8 |

## Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050114-WC1
98995843

Received: 01/17/2005 11:14

Site: 5251 Hopyard Rd., Pleasanton

Prep(s): 5030B
Sample ID: **S-1**
Sampled: 01/14/2005 13:09
Matrix: Water
Analysis Flag: L2 ( See Legend and Note Section )

Test(s): 8260B
Lab ID: 2005-01-0438 - 1
Extracted: 1/21/2005 15:22
QC Batch#: 2005/01/21-1C.68

| Compound | Conc. | RL | Unit | Dilution | Analyzed | Flag |
|---|---|---|---|---|---|---|
| Gasoline [Shell] | 4200 | 250 | ug/L | 5.00 | 01/21/2005 15:22 | |
| Benzene | 22 | 2.5 | ug/L | 5.00 | 01/21/2005 15:22 | |
| Toluene | 34 | 2.5 | ug/L | 5.00 | 01/21/2005 15:22 | |
| Ethylbenzene | 380 | 2.5 | ug/L | 5.00 | 01/21/2005 15:22 | |
| Total xylenes | 33 | 5.0 | ug/L | 5.00 | 01/21/2005 15:22 | |
| Methyl tert-butyl ether (MTBE) | 100 | 2.5 | ug/L | 5.00 | 01/21/2005 15:22 | |
| ***Surrogate(s)*** | | | | | | |
| 1,2-Dichloroethane-d4 | 101.8 | 73-130 | % | 5.00 | 01/21/2005 15:22 | |
| Toluene-d8 | 102.5 | 81-114 | % | 5.00 | 01/21/2005 15:22 | |

## Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050114-WC1
98995843

Received: 01/17/2005 11:14

Site: 5251 Hopyard Rd., Pleasanton

Prep(s): 5030B
Sample ID: **S-2**
Sampled: 01/14/2005 12:40
Matrix: Water
Analysis Flag: L2 ( See Legend and Note Section )

Test(s): 8260B
Lab ID: 2005-01-0438 - 2
Extracted: 1/21/2005 15:39
QC Batch#: 2005/01/21-1C.68

| Compound | Conc. | RL | Unit | Dilution | Analyzed | Flag |
|---|---|---|---|---|---|---|
| Gasoline [Shell] | ND | 250 | ug/L | 5.00 | 01/21/2005 15:39 | |
| Benzene | ND | 2.5 | ug/L | 5.00 | 01/21/2005 15:39 | |
| Toluene | ND | 2.5 | ug/L | 5.00 | 01/21/2005 15:39 | |
| Ethylbenzene | ND | 2.5 | ug/L | 5.00 | 01/21/2005 15:39 | |
| Total xylenes | ND | 5.0 | ug/L | 5.00 | 01/21/2005 15:39 | |
| Methyl tert-butyl ether (MTBE) | 270 | 2.5 | ug/L | 5.00 | 01/21/2005 15:39 | |
| ***Surrogate(s)*** | | | | | | |
| 1,2-Dichloroethane-d4 | 108.5 | 73-130 | % | 5.00 | 01/21/2005 15:39 | |
| Toluene-d8 | 101.4 | 81-114 | % | 5.00 | 01/21/2005 15:39 | |

SEVERN TRENT STL

**Submission: 2005-01-0438**

## Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050114-WC1
98995843

Received: 01/17/2005 11:14

Site: 5251 Hopyard Rd., Pleasanton

Prep(s): 5030B
Sample ID: **S-3**
Sampled: 01/14/2005 12:00
Matrix: Water

Test(s): 8260B
Lab ID: 2005-01-0438 - 3
Extracted: 1/21/2005 15:57
QC Batch#: 2005/01/21-1C.68

| Compound | Conc. | RL | Unit | Dilution | Analyzed | Flag |
|---|---|---|---|---|---|---|
| Gasoline [Shell] | 94 | 50 | ug/L | 1.00 | 01/21/2005 15:57 | |
| Benzene | 4.6 | 0.50 | ug/L | 1.00 | 01/21/2005 15:57 | |
| Toluene | ND | 0.50 | ug/L | 1.00 | 01/21/2005 15:57 | |
| Ethylbenzene | 3.1 | 0.50 | ug/L | 1.00 | 01/21/2005 15:57 | |
| Total xylenes | 1.0 | 1.0 | ug/L | 1.00 | 01/21/2005 15:57 | |
| Methyl tert-butyl ether (MTBE) | 13 | 0.50 | ug/L | 1.00 | 01/21/2005 15:57 | |
| ***Surrogate(s)*** | | | | | | |
| 1,2-Dichloroethane-d4 | 106.4 | 73-130 | % | 1.00 | 01/21/2005 15:57 | |
| Toluene-d8 | 101.8 | 81-114 | % | 1.00 | 01/21/2005 15:57 | |

SEVERN TRENT STL

**Submission: 2005-01-0438**

## Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050114-WC1
98995843

Received: 01/17/2005 11:14

Site: 5251 Hopyard Rd., Pleasanton

Prep(s): 5030B
Sample ID: **S-4**
Sampled: 01/14/2005 11:42
Matrix: Water

Test(s): 8260B
Lab ID: 2005-01-0438 - 4
Extracted: 1/21/2005 16:14
QC Batch#: 2005/01/21-1C.68

| Compound | Conc. | RL | Unit | Dilution | Analyzed | Flag |
|---|---|---|---|---|---|---|
| Gasoline [Shell] | ND | 50 | ug/L | 1.00 | 01/21/2005 16:14 | |
| Benzene | ND | 0.50 | ug/L | 1.00 | 01/21/2005 16:14 | |
| Toluene | ND | 0.50 | ug/L | 1.00 | 01/21/2005 16:14 | |
| Ethylbenzene | ND | 0.50 | ug/L | 1.00 | 01/21/2005 16:14 | |
| Total xylenes | ND | 1.0 | ug/L | 1.00 | 01/21/2005 16:14 | |
| Methyl tert-butyl ether (MTBE) | 25 | 0.50 | ug/L | 1.00 | 01/21/2005 16:14 | |
| ***Surrogate(s)*** | | | | | | |
| 1,2-Dichloroethane-d4 | 110.8 | 73-130 | % | 1.00 | 01/21/2005 16:14 | |
| Toluene-d8 | 99.9 | 81-114 | % | 1.00 | 01/21/2005 16:14 | |

## Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050114-WC1
98995843

Received: 01/17/2005 11:14

Site: 5251 Hopyard Rd., Pleasanton

Prep(s): 5030B
Sample ID: **S-5**
Sampled: 01/14/2005 12:21
Matrix: Water

Test(s): 8260B
Lab ID: 2005-01-0438 - 5
Extracted: 1/24/2005 15:36
QC Batch#: 2005/01/24-1D.69

Analysis Flag: L2 ( See Legend and Note Section )

| Compound | Conc. | RL | Unit | Dilution | Analyzed | Flag |
|---|---|---|---|---|---|---|
| Gasoline [Shell] | ND | 100 | ug/L | 2.00 | 01/24/2005 15:36 | |
| Benzene | ND | 1.0 | ug/L | 2.00 | 01/24/2005 15:36 | |
| Toluene | ND | 1.0 | ug/L | 2.00 | 01/24/2005 15:36 | |
| Ethylbenzene | ND | 1.0 | ug/L | 2.00 | 01/24/2005 15:36 | |
| Total xylenes | ND | 2.0 | ug/L | 2.00 | 01/24/2005 15:36 | |
| Methyl tert-butyl ether (MTBE) | 230 | 1.0 | ug/L | 2.00 | 01/24/2005 15:36 | |
| ***Surrogate(s)*** | | | | | | |
| 1,2-Dichloroethane-d4 | 109.8 | 73-130 | % | 2.00 | 01/24/2005 15:36 | |
| Toluene-d8 | 102.6 | 81-114 | % | 2.00 | 01/24/2005 15:36 | |

## Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050114-WC1
98995843

Received: 01/17/2005 11:14

Site: 5251 Hopyard Rd., Pleasanton

Prep(s): 5030B
Sample ID: **S-6**
Sampled: 01/14/2005 09:28
Matrix: Water

Test(s): 8260B
Lab ID: 2005-01-0438 - 6
Extracted: 1/21/2005 21:42
QC Batch#: 2005/01/21-2C.64

| Compound | Conc. | RL | Unit | Dilution | Analyzed | Flag |
|---|---|---|---|---|---|---|
| Gasoline [Shell] | ND | 50 | ug/L | 1.00 | 01/21/2005 21:42 | |
| Benzene | ND | 0.50 | ug/L | 1.00 | 01/21/2005 21:42 | |
| Toluene | ND | 0.50 | ug/L | 1.00 | 01/21/2005 21:42 | |
| Ethylbenzene | ND | 0.50 | ug/L | 1.00 | 01/21/2005 21:42 | |
| Total xylenes | ND | 1.0 | ug/L | 1.00 | 01/21/2005 21:42 | |
| Methyl tert-butyl ether (MTBE) | ND | 0.50 | ug/L | 1.00 | 01/21/2005 21:42 | |
| ***Surrogate(s)*** | | | | | | |
| 1,2-Dichloroethane-d4 | 109.8 | 73-130 | % | 1.00 | 01/21/2005 21:42 | |
| Toluene-d8 | 102.4 | 81-114 | % | 1.00 | 01/21/2005 21:42 | |

## Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050114-WC1
98995843

Received: 01/17/2005 11:14

Site: 5251 Hopyard Rd., Pleasanton

Prep(s): 5030B
Sample ID: **S-7**
Sampled: 01/14/2005 11:17
Matrix: Water

Test(s): 8260B
Lab ID: 2005-01-0438 - 7
Extracted: 1/21/2005 22:03
QC Batch#: 2005/01/21-2C.64

| Compound | Conc. | RL | Unit | Dilution | Analyzed | Flag |
|---|---|---|---|---|---|---|
| Gasoline [Shell] | ND | 50 | ug/L | 1.00 | 01/21/2005 22:03 | |
| Benzene | ND | 0.50 | ug/L | 1.00 | 01/21/2005 22:03 | |
| Toluene | ND | 0.50 | ug/L | 1.00 | 01/21/2005 22:03 | |
| Ethylbenzene | ND | 0.50 | ug/L | 1.00 | 01/21/2005 22:03 | |
| Total xylenes | ND | 1.0 | ug/L | 1.00 | 01/21/2005 22:03 | |
| Methyl tert-butyl ether (MTBE) | 41 | 0.50 | ug/L | 1.00 | 01/21/2005 22:03 | |
| ***Surrogate(s)*** | | | | | | |
| 1,2-Dichloroethane-d4 | 109.1 | 73-130 | % | 1.00 | 01/21/2005 22:03 | |
| Toluene-d8 | 101.0 | 81-114 | % | 1.00 | 01/21/2005 22:03 | |

## Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050114-WC1
98995843

Received: 01/17/2005 11:14

Site: 5251 Hopyard Rd., Pleasanton

Prep(s): 5030B
Sample ID: **S-8**
Sampled: 01/14/2005 10:52
Matrix: Water

Test(s): 8260B
Lab ID: 2005-01-0438 - 8
Extracted: 1/21/2005 22:25
QC Batch#: 2005/01/21-2C.64

| Compound | Conc. | RL | Unit | Dilution | Analyzed | Flag |
|---|---|---|---|---|---|---|
| Gasoline [Shell] | ND | 50 | ug/L | 1.00 | 01/21/2005 22:25 | |
| Benzene | ND | 0.50 | ug/L | 1.00 | 01/21/2005 22:25 | |
| Toluene | ND | 0.50 | ug/L | 1.00 | 01/21/2005 22:25 | |
| Ethylbenzene | ND | 0.50 | ug/L | 1.00 | 01/21/2005 22:25 | |
| Total xylenes | ND | 1.0 | ug/L | 1.00 | 01/21/2005 22:25 | |
| Methyl tert-butyl ether (MTBE) | ND | 0.50 | ug/L | 1.00 | 01/21/2005 22:25 | |
| ***Surrogate(s)*** | | | | | | |
| 1,2-Dichloroethane-d4 | 110.1 | 73-130 | % | 1.00 | 01/21/2005 22:25 | |
| Toluene-d8 | 99.4 | 81-114 | % | 1.00 | 01/21/2005 22:25 | |

# Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050114-WC1
98995843

Received: 01/17/2005 11:14

Site: 5251 Hopyard Rd., Pleasanton

## Batch QC Report

Prep(s): 5030B — Test(s): 8260B

**Method Blank** — **Water** — **QC Batch # 2005/01/21-1C.68**

MB: 2005/01/21-1C.68-047 — Date Extracted: 01/21/2005 09:47

| Compound | Conc. | RL | Unit | Analyzed | Flag |
|---|---|---|---|---|---|
| Gasoline [Shell] | ND | 50 | ug/L | 01/21/2005 09:47 | |
| Methyl tert-butyl ether (MTBE) | ND | 0.5 | ug/L | 01/21/2005 09:47 | |
| Benzene | ND | 0.5 | ug/L | 01/21/2005 09:47 | |
| Toluene | ND | 0.5 | ug/L | 01/21/2005 09:47 | |
| Ethylbenzene | ND | 0.5 | ug/L | 01/21/2005 09:47 | |
| Total xylenes | ND | 1.0 | ug/L | 01/21/2005 09:47 | |
| ***Surrogates(s)*** | | | | | |
| 1,2-Dichloroethane-d4 | 101.8 | 73-130 | % | 01/21/2005 09:47 | |
| Toluene-d8 | 101.2 | 81-114 | % | 01/21/2005 09:47 | |

# Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050114-WC1
98995843

Received: 01/17/2005 11:14

Site: 5251 Hopyard Rd., Pleasanton

## Batch QC Report

Prep(s): 5030B — Test(s): 8260B

**Method Blank** — **Water** — **QC Batch # 2005/01/21-2C.64**

MB: 2005/01/21-2C.64-041 — Date Extracted: 01/21/2005 18:41

| Compound | Conc. | RL | Unit | Analyzed | Flag |
|---|---|---|---|---|---|
| Gasoline [Shell] | ND | 50 | ug/L | 01/21/2005 18:41 | |
| Methyl tert-butyl ether (MTBE) | ND | 0.5 | ug/L | 01/21/2005 18:41 | |
| Benzene | ND | 0.5 | ug/L | 01/21/2005 18:41 | |
| Toluene | ND | 0.5 | ug/L | 01/21/2005 18:41 | |
| Ethylbenzene | ND | 0.5 | ug/L | 01/21/2005 18:41 | |
| Total xylenes | ND | 1.0 | ug/L | 01/21/2005 18:41 | |
| ***Surrogates(s)*** | | | | | |
| 1,2-Dichloroethane-d4 | 102.4 | 73-130 | % | 01/21/2005 18:41 | |
| Toluene-d8 | 99.0 | 81-114 | % | 01/21/2005 18:41 | |

## Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050114-WC1
98995843

Received: 01/17/2005 11:14

Site: 5251 Hopyard Rd., Pleasanton

### Batch QC Report

Prep(s): 5030B — Test(s): 8260B

**Method Blank** — **Water** — **QC Batch # 2005/01/24-1D.69**

MB: 2005/01/24-1D.69-002 — Date Extracted: 01/24/2005 11:02

| Compound | Conc. | RL | Unit | Analyzed | Flag |
|---|---|---|---|---|---|
| Gasoline [Shell] | ND | 50 | ug/L | 01/24/2005 11:02 | |
| Methyl tert-butyl ether (MTBE) | ND | 0.5 | ug/L | 01/24/2005 11:02 | |
| Benzene | ND | 0.5 | ug/L | 01/24/2005 11:02 | |
| Toluene | ND | 0.5 | ug/L | 01/24/2005 11:02 | |
| Ethylbenzene | ND | 0.5 | ug/L | 01/24/2005 11:02 | |
| Total xylenes | ND | 1.0 | ug/L | 01/24/2005 11:02 | |
| ***Surrogates(s)*** | | | | | |
| 1,2-Dichloroethane-d4 | 108.8 | 73-130 | % | 01/24/2005 11:02 | |
| Toluene-d8 | 107.8 | 81-114 | % | 01/24/2005 11:02 | |

# Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050114-WC1
98995843

Received: 01/17/2005 11:14

Site: 5251 Hopyard Rd., Pleasanton

## Batch QC Report

Prep(s): 5030B

Test(s): 8260B

**Laboratory Control Spike** | **Water** | **QC Batch # 2005/01/21-1C.68**

LCS 2005/01/21-1C.68-030 | Extracted: 01/21/2005 | Analyzed: 01/21/2005 09:30

LCSD

| Compound | Conc. ug/L | | Exp.Conc. | Recovery % | | RPD | Ctrl.Limits % | | Flags | |
|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | | LCS | LCSD | % | Rec. | RPD | LCS | LCSD |
| Methyl tert-butyl ether (MTBE) | 21.0 | | 25 | 84.0 | | | 65-165 | 20 | | |
| Benzene | 23.2 | | 25 | 92.8 | | | 69-129 | 20 | | |
| Toluene | 24.6 | | 25 | 98.4 | | | 70-130 | 20 | | |
| ***Surrogates(s)*** | | | | | | | | | | |
| 1,2-Dichloroethane-d4 | 424 | | 500 | 84.8 | | | 73-130 | | | |
| Toluene-d8 | 511 | | 500 | 102.2 | | | 81-114 | | | |

# Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050114-WC1
98995843

Received: 01/17/2005 11:14

Site: 5251 Hopyard Rd., Pleasanton

## Batch QC Report

Prep(s): 5030B

Test(s): 8260B

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/01/21-2C.64**

LCS 2005/01/21-2C.64-019

Extracted: 01/21/2005

Analyzed: 01/21/2005 18:19

LCSD

| Compound | Conc. ug/L | | Exp.Conc. | Recovery % | | RPD | Ctrl.Limits % | | Flags | |
|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | | LCS | LCSD | % | Rec. | RPD | LCS | LCSD |
| Methyl tert-butyl ether (MTBE) | 25.4 | | 25 | 101.6 | | | 65-165 | 20 | | |
| Benzene | 28.2 | | 25 | 112.8 | | | 69-129 | 20 | | |
| Toluene | 29.8 | | 25 | 119.2 | | | 70-130 | 20 | | |
| ***Surrogates(s)*** | | | | | | | | | | |
| 1,2-Dichloroethane-d4 | 477 | | 500 | 95.4 | | | 73-130 | | | |
| Toluene-d8 | 539 | | 500 | 107.8 | | | 81-114 | | | |

# Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050114-WC1
98995843

Received: 01/17/2005 11:14

Site: 5251 Hopyard Rd., Pleasanton

## Batch QC Report

Prep(s): 5030B

Test(s): 8260B

**Laboratory Control Spike** | **Water** | **QC Batch # 2005/01/24-1D.69**

LCS 2005/01/24-1D.69-043 | Extracted: 01/24/2005 | Analyzed: 01/24/2005 10:43
LCSD

| Compound | Conc. ug/L | | Exp.Conc. | Recovery % | | RPD | Ctrl.Limits % | | Flags | |
|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | | LCS | LCSD | % | Rec. | RPD | LCS | LCSD |
| Methyl tert-butyl ether (MTBE) | 27.5 | | 25 | 110.0 | | | 65-165 | 20 | | |
| Benzene | 26.1 | | 25 | 104.4 | | | 69-129 | 20 | | |
| Toluene | 27.1 | | 25 | 108.4 | | | 70-130 | 20 | | |
| ***Surrogates(s)*** | | | | | | | | | | |
| 1,2-Dichloroethane-d4 | 495 | | 500 | 99.0 | | | 73-130 | | | |
| Toluene-d8 | 540 | | 500 | 108.0 | | | 81-114 | | | |

# Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050114-WC1
98995843

Received: 01/17/2005 11:14

Site: 5251 Hopyard Rd., Pleasanton

## Batch QC Report

Prep(s): 5030B

Test(s): 8260B

**Matrix Spike ( MS / MSD )** **Water** **QC Batch # 2005/01/21-1C.68**

MS/MSD

Lab ID: 2005-01-0439 - 001

MS: 2005/01/21-1C.68-045 Extracted: 01/21/2005 Analyzed: 01/21/2005 12:45

Dilution: 1.00

MSD: 2005/01/21-1C.68-003 Extracted: 01/21/2005 Analyzed: 01/21/2005 13:03

Dilution: 1.00

| Compound | Conc. ug/L | | | Spk.Level | Recovery % | | | Limits % | | Flags | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | MS | MSD | Sample | ug/L | MS | MSD | RPD | Rec. | RPD | MS | MSD |
| Methyl tert-butyl ether | 25.8 | 25.6 | ND | 25 | 103.2 | 102.4 | 0.8 | 65-165 | 20 | | |
| Benzene | 26.1 | 26.7 | ND | 25 | 104.4 | 106.8 | 2.3 | 69-129 | 20 | | |
| Toluene | 26.6 | 26.7 | ND | 25 | 106.4 | 106.8 | 0.4 | 70-130 | 20 | | |
| ***Surrogate(s)*** | | | | | | | | | | | |
| 1,2-Dichloroethane-d4 | 444 | 420 | | 500 | 88.8 | 84.0 | | 73-130 | | | |
| Toluene-d8 | 504 | 509 | | 500 | 100.8 | 101.8 | | 81-114 | | | |

# Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050114-WC1
98995843

Received: 01/17/2005 11:14

Site: 5251 Hopyard Rd., Pleasanton

## Batch QC Report

Prep(s): 5030B

Test(s): 8260B

**Matrix Spike ( MS / MSD )** **Water** **QC Batch # 2005/01/21-2C.64**

MS/MSD

Lab ID: 2005-01-0477 - 001

MS: 2005/01/21-2C.64-014 Extracted: 01/21/2005 Analyzed: 01/21/2005 20:14

Dilution: 1.00

MSD: 2005/01/21-2C.64-036 Extracted: 01/21/2005 Analyzed: 01/21/2005 20:36

Dilution: 1.00

| Compound | Conc. ug/L | | | Spk.Level | Recovery % | | | Limits % | | Flags | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | MS | MSD | Sample | ug/L | MS | MSD | RPD | Rec. | RPD | MS | MSD |
| Methyl tert-butyl ether | 32.6 | 37.4 | 1.54 | 25 | 124.2 | 143.4 | 14.3 | 65-165 | 20 | | |
| Benzene | 28.6 | 24.3 | ND | 25 | 114.4 | 97.2 | 16.3 | 69-129 | 20 | | |
| Toluene | 29.0 | 28.0 | ND | 25 | 116.0 | 112.0 | 3.5 | 70-130 | 20 | | |
| ***Surrogate(s)*** | | | | | | | | | | | |
| 1,2-Dichloroethane-d4 | 506 | 557 | | 500 | 101.2 | 111.4 | | 73-130 | | | |
| Toluene-d8 | 503 | 533 | | 500 | 100.6 | 106.6 | | 81-114 | | | |

# Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050114-WC1
98995843

Received: 01/17/2005 11:14

Site: 5251 Hopyard Rd., Pleasanton

## Batch QC Report

Prep(s): 5030B

Test(s): 8260B

**Matrix Spike ( MS / MSD )** **Water** **QC Batch # 2005/01/24-1D.69**

MS/MSD

Lab ID: 2005-01-0427 - 001

MS: 2005/01/24-1D.69-052 Extracted: 01/24/2005 Analyzed: 01/24/2005 11:52

Dilution: 1.00

MSD: 2005/01/24-1D.69-011 Extracted: 01/24/2005 Analyzed: 01/24/2005 12:11

Dilution: 1.00

| Compound | Conc. ug/L | | | Spk.Level | Recovery % | | | Limits % | | Flags | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | MS | MSD | Sample | ug/L | MS | MSD | RPD | Rec. | RPD | MS | MSD |
| Methyl tert-butyl ether | 27.9 | 30.2 | 0.903 | 25 | 108.0 | 117.2 | 8.2 | 65-165 | 20 | | |
| Benzene | 28.0 | 27.8 | ND | 25 | 112.0 | 111.2 | 0.7 | 69-129 | 20 | | |
| Toluene | 28.9 | 30.1 | ND | 25 | 115.6 | 120.4 | 4.1 | 70-130 | 20 | | |
| ***Surrogate(s)*** | | | | | | | | | | | |
| 1,2-Dichloroethane-d4 | 481 | 510 | | 500 | 96.2 | 102.0 | | 73-130 | | | |
| Toluene-d8 | 539 | 531 | | 500 | 107.8 | 106.2 | | 81-114 | | | |

## Gas/BTEX/MTBE by 8260B (C6-C12)

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

1680 Rogers Avenue
San Jose, CA 95112-1105
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 050114-WC1
98995843

Received: 01/17/2005 11:14

Site: 5251 Hopyard Rd., Pleasanton

### Legend and Notes

**Analysis Flag**

L2

Reporting limits were raised due to high level of analyte present in the sample.

LAB: PIL

Lab Identification (if necessary)

Address:

City, State, Zip

# SHELL Chain Of Custody Record

99590

Shell Project Manager to be Invoiced:

Karen Petryna

☑ SCIENCE & ENGINEERING ☐ TECHNICAL SERVICES ☐ CRMT HOUSTON

2005-01-0438

INCIDENT NUMBER (S&E ONLY): 9 8 9 9 5 8 4 3

SAP or CRMT NUMBER (TBACRMT):

DATE: 1/14/05

PAGE: 1 of 1

| | | | |
|---|---|---|---|
| Blaine Tech Services | BTSS | 5251 Hopyard Rd., Pleasanton | T0600101267 |
| 1680 Rogers Avenue, San Jose, CA 95112 | | | |
| Leon Gearhart | | | |
| 408-573-0555 | 408-573-7771 | lgearhart@blainetech.com | |
| Ross Tiulina | (650) 561-8112 | rosst@toxichem.com | 050114-WC1 |
| Will Crow | | | |

PURGE/ACCEPTABLE TIME (BUSINESS DAYS): ☑ 10 DAYS ☐ 5 DAYS ☐ 72 HOURS ☐ 48 HOURS ☐ 24 HOURS ☐ LESS THAN 24 HOURS

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

GC/MS MTBE CONFIRMATION: HIGHEST ____ HIGHEST per BORING ____ ALL ____

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDD IS NOT NEEDED ☐

REQUESTED ANALYSIS

| LAB USE ONLY | Field Sample Identification | SAMPLING DATE | SAMPLING TIME | MATRIX | NO. OF CONT. | TPH - Gas, Purgeable | BTEX | MTBE (8021B - 5ppb RL) | MTBE (8260B - 0.5ppb RL) | Oxygenates (5) by (8260B) | Ethanol (8260B) | Methanol | EDB & 1,2-DCA (8260B) | FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | S-1 | 1/14 | 1309 | $H_2O$ | 3HCl | X | X | | X | | | | | |
| | S-2 | | 1240 | | | X | X | | X | | | | | |
| | S-3 | | 1200 | | | X | X | | X | | | | | |
| | S-4 | | 1142 | | | X | X | | X | | | | | |
| | S-5 | | 1221 | | | X | X | | X | | | | | |
| | S-6 | | 0928 | | | X | X | | X | | | | | |
| | S-7 | | 1117 | | | X | X | | X | | | | | |
| | S-8 | | 1052 | ↓ | ↓ | X | X | | X | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

2 - C

TEMPERATURE ON RECEIPT C°

| | | | |
|---|---|---|---|
| Relinquished By (Signature): Will Crow | Received By (Signature): | Date: 1/17/05 | Time: 1654 |
| Relinquished By (Signature): 1/17/05 1654 | Received By (Signature): | Date: 01/17/05 | Time: 1658 |
| Relinquished By: (Signature) | Received By: (Signature) | Date: | Time: |

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client

BTEX 8260 Previous

# WELLHEAD INSPECTION CHECKLIST



Date 1/14/05 Client Shell

Site Address 5251 Hopyard Rd., Pleasanton

Job Number 050114-WC1 Technician Will

| Well ID | Well Inspected - No Corrective Action Required | Water Bailed From Wellbox | Wellbox Components Cleaned | Cap Replaced | Debris Removed From Wellbox | Lock Replaced | Other Action Taken (explain below) | Well Not Inspected (explain below) |
|---|---|---|---|---|---|---|---|---|
| S-1 | X | | | | | | | |
| S-2 | X | | | | | | | |
| S-3 | X | | | | | | | |
| S-4 | X | | | | | | | |
| S-5 | X | | | | | | | |
| S-6 | X | | | | | | | |
| S-7 | | X | | | | X | | |
| S-8 | X | | | | | | | |
| V-1 | X | | | | | | | |
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NOTES:

# REPAIR DATA SHEET



Client Shell Date 12/30/04

Site Address 5251 Hopyard Rd., Pleasanton

Job Number 041230-M61 Technician MK

| | |
|---|---|
| Repair Location V-1 | Repair Location ~~MW-2~~ |
| Deficiencies Corrected Threaded PVC fitting @ TOC, threaded cap w/ sensor. Cut off sensor, added modified 3" pvc fitting new 3" cap, lock. Installed "ORC's | Deficiencies Corrected |
| Materials Used modified 3" pvc fitting, 3" cap, lock | Materials Used |
| Repair Location S-1 | Repair Location |
| Deficiencies Corrected No cap or lock, casing damaged @ top. Covered casing 0.3', added new 3" cap + lock. | Deficiencies Corrected |
| Materials Used 3" cap, lock | Materials Used |
| Repair Location | Repair Location |
| Deficiencies Corrected | Deficiencies Corrected |
| Materials Used | Materials Used |

# WELLHEAD INSPECTION CHECKLIST



Client Shell Date 12/30/04

Site Address 5251 Hopyard Rd., Pleasanton

Job Number 041230-M61 Technician MG

| Well ID | Well Inspected - No Corrective Action Required | Water Bailed From Wellbox | Wellbox Components Cleaned | Cap Replaced | Lock Replaced | Other Action Taken (explain below) | Well Not Inspected (explain below) | Repair Order Submitted |
|---|---|---|---|---|---|---|---|---|
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NOTES: New ORC's installed in V-1.

# SITE INSPECTION CHECKLIST

Client Shell Date 12/30/04

Site Address 5251 Hopyard Rd., Pleasanton

Job Number 041230-M-1 Technician MC

**Site Status** Shell Branded Station Vacant Lot Other _____

| | | |
|---|---|---|
| **Inspected / ~~Labeled~~ / Cleaned - All Wells on Scope Of Work** (raising) | ☒ | |
| **Inspected / Cleaned Components - All Other Identifiable Wells** | ☒ | N/A |
| **Inspected Site for Investigation Related Trip Hazards** | ☒ | |
| **Addressed All Outstanding Wellhead Repair Order(s)** | ☐ | (N/A) |
| **Completed Repair Data Sheets(s)** | ☒ | N/A |
| **Inspected Treatment / Remediation System Compound For Security, Cleanliness and Appearance** | ☐ | (N/A) |
| **Inspected Vacant Lot for Signs of Habitation, Hazardous Materials or Terrain, Overgrown Vegetation and Security** | ☐ | (N/A) |

PLEASE BE ADVISED THAT, UNLESS OTHERWISE INSTRUCTED, NO REPAIRS ARE PLANNED FOR THE ISSUES DESCRIBED BELOW

**Outstanding Problems / Comments** (In addition to other issues, note all SOW wellboxes that, by design, are not securable)

Not securable by design - S-1, S-3, S-2, S-4, S-6, S-7, S-8

PROJECT COORDINATOR ONLY

**Checklist Reviewed** MC 1/5/05 Initial/Date Notes

# WELL GAUGING DATA

Project # 050114-WC1 Date 1/14/06 Client Shell

Site 5251 Hopyard Rd., Pleasanton

| Well ID | 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 | |
|---|---|---|---|---|---|---|---|---|---|
| S-1 | 3 | | | | | 7.10 | 29.78 | | |
| S-2 | 3 | | | | | 7.88 | 24.19 | | |
| S-3 | 3 | | | | | 8.00 | 25.01 | | |
| S-4 | 3 | | | | | 8.17 | 24.32 | | |
| S-5 | 3 | | | | | 8.43 | 24.60 | | |
| S-6 | 3 | | | | | 7.38 | 26.17 | | |
| S-7 | 3 | | | | | 7.70 | 23.28 | | |
| S-8 | 3 | | | | | 8.65 | 23.35 | | |
| V-1 | 3 | gauged w/ ORC in well | | | | 5.88 | — | V | |
| | | | | | | | | | |
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# SHELL WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 050114-WC1 | Site: 5251 Hopyard Rd, Pleasanton |
| Sampler: WC | Date: 1/14/05 |
| Well I.D.: S-1 | Well Diameter: 2 (3) 4 6 8 ___ |
| Total Well Depth (TD): 29.78 | Depth to Water (DTW): 7.10 |
| 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]: 11.64 | |

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, (Electric Submersible), Waterra, Peristaltic, Extraction Pump, Other____

Sampling Method: (Bailer), Disposable Bailer, Extraction Port, Dedicated Tubing, Other: ____

| 1 Case Volume | Specified Volumes | Calculated Volume |
|---|---|---|
| 8.4 (Gals.) X | 3 | = 25.2 Gals. |

| 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 |
|---|---|---|---|---|---|---|
| 1300 | 61.5 | 7.8 | 1613 | 475 | 9 | odor/clear |
| 1302 | 65.2 | 7.8 | 1561 | 520 | 18 | 11/cloudy |
| 1304 | 65.7 | 7.7 | 1564 | 728 | 26 | 11/11 |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 26

Sampling Date: 1/14/05 Sampling Time: 1309 Depth to Water: 11.04

Sample I.D.: S-1 Laboratory: (STL) Other____

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

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

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

| | | | | | |
|---|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | | mg/L | Post-purge: | 0.58 mg/L |
| O.R.P. (if req'd): | Pre-purge: | | mV | Post-purge: | mV |

# SHELL WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 050114-WC1 | Site: 5251 Hopyard Rd, Pleasanton |
| Sampler: WC | Date: 1/14/05 |
| Well I.D.: S-2 | Well Diameter: 2 (3) 4 6 8 ____ |
| Total Well Depth (TD): 24.19 | Depth to Water (DTW): 7.88 |
| 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]: 11.14 | |

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

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

| 6 (Gals.) X | 3 | = | 18 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 |
|---|---|---|---|---|---|---|
| 1233 | 61.0 | 7.6 | 2869 | 157 | 6 | clear |
| 1234 | 62.9 | 7.6 | 3051 | 121 | 12 | clear |
| 1235 | 63.6 | 7.6 | 3164 | 97 | 18 | Clear |
| | | | | | | |
| | | | | | | |

| | | | |
|---|---|---|---|
| Did well dewater? Yes (No) | | Gallons actually evacuated: | 18 |
| Sampling Date: 1/14/05 | Sampling Time: 1240 | Depth to Water: | 8.32 |
| Sample I.D.: S-2 | Laboratory: (STL) Other_____ | | |
| Analyzed for: (TPH-G) (BTEX) MTBE TPH-D | Other: | | |
| EB I.D. (if applicable): | @ Time | Duplicate I.D. (if applicable): | |
| Analyzed for: TPH-G BTEX MTBE TPH-D | 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 |

# SHELL WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 050114-WC1 | Site: 5251 Hopyard Rd, Pleasanton |
| Sampler: WC | Date: 1/14/05 |
| Well I.D.: S-3 | Well Diameter: 2 (3) 4 6 8 ___ |
| Total Well Depth (TD): 25.01 | Depth to Water (DTW): 8.00 |
| 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, Electric Submersible (circled), Waterra, Peristaltic, Extraction Pump, Other_____

Sampling Method: (Bailer) (circled), 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 |
|---|---|---|---|---|---|---|
| 1154 | 62.6 | 7.2 | 2583 | 69 | 7 | clear |
| 1155 | 63.4 | 7.2 | 2560 | 76 | 13 | " |
| 1156 | 63.6 | 7.1 | 2541 | 82 | 19 | " |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 19

Sampling Date: 1/14/05 Sampling Time: 1200 Depth to Water: 10.78

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

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

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

Analyzed for: TPH-G BTEX MTBE TPH-D 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 |

# SHELL WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 050114-WC1 | Site: 5251 Hopyard Rd., Pleasanton |
| Sampler: WC | Date: 1/14/05 |
| Well I.D.: S-4 | Well Diameter: 2 (3) 4 6 8 ___ |
| Total Well Depth (TD): 24.32 | Depth to Water (DTW): 8.17 |
| 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, Electric Submersible, Waterra, Peristaltic, Extraction Pump, Other_____

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

6.0 (Gals.) X 3 = 18.0 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 |
|---|---|---|---|---|---|---|
| 1135 | 61.2 | 7.4 | 2134 | 91 | 6 | clear |
| 1136 | 64.4 | 7.5 | 1474 | 147 | 12 | " |
| 1137 | 65.7 | 7.5 | 1406 | 52 | 18 | " |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 18

Sampling Date: 1/14/05 Sampling Time: 1142 Depth to Water: 11.21

Sample I.D.: S-4 Laboratory: (STL) Other_____

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

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

Analyzed for: TPH-G BTEX MTBE TPH-D 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 |

# SHELL WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 050114-WC-1 | Site: 3251 Hopyard Rd, Pleasanton |
| Sampler: JC | Date: 1/14/05 |
| Well I.D.: S-5 | Well Diameter: 2 (3) 4 6 8 ___ |
| Total Well Depth (TD): 24.60 | Depth to Water (DTW): 8.43 |
| 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]: 11.66 | |

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

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

6 (Gals.) X 3 = 18 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 |
|---|---|---|---|---|---|---|
| 1214 | 60.5 | 7.2 | 1466 | 175 | 6 | clear |
| 1215 | 62.1 | 7.2 | 1367 | 209 | 12 | " |
| 1216 | 62.8 | 7.2 | 1326 | 263 | 18 | " |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 18

Sampling Date: 1/14/05 Sampling Time: 1221 Depth to Water: 10.89

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

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

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

Analyzed for: TPH-G BTEX MTBE TPH-D 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 |

# SHELL WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 050114-WC1 | Site: 5251 Hopyard Rd., Pleasanton |
| Sampler: WC | Date: 1/14/05 |
| Well I.D.: MW2 S-6 | Well Diameter: 2 (3) 4 6 8 ___ |
| Total Well Depth (TD): 26.17 | Depth to Water (DTW): 7.38 |
| 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]: 11.14 | |

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

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

7.0 (Gals.) X 3 (Specified Volumes) = 21 Gals. (Calculated Volume)

1 Case 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 |
|---|---|---|---|---|---|---|
| 0905 | 56.3 | 7.0 | N/A | 72 | 7 | clear |
| 0913 | METER | MALFUNCTION | | 42 | 14 | clear |
| 0920 | N/A | 7.0 | N/A | 40 | 21 | " |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 21

Sampling Date: 1/14/05 Sampling Time: 0928 Depth to Water: 7.49

Sample I.D.: S-6 Laboratory: (STL) Other ____

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

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

Analyzed for: TPH-G BTEX MTBE TPH-D 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 |

# SHELL WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 050114-WC1 | Site: 5251 Hayward Rd., Pleasanton |
| Sampler: WC | Date: 1/14/05 |
| Well I.D.: S-7 | Well Diameter: 2 3 4 6 8 |
| Total Well Depth (TD): 23.28 | Depth to Water (DTW): 7.70 |
| 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]: 10.82 | |

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, Electric Submersible, Waterra, Peristaltic, Extraction Pump, Other

Sampling Method: ~~Bailer~~, Disposable Bailer, Extraction Port, Dedicated Tubing, Other:

5.8 (1 Case Volume) (Gals.) X 3 (Specified Volumes) = 17.6 (Calculated Volume) Gals.

| 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 |
|---|---|---|---|---|---|---|
| 1110 | 61.8 | 7.1 | 10.26 mS | 40 | 6 | clear |
| 1111 | 62.4 | 7.1 | 10.24 mS | 42 | ~~18~~ 12 | " |
| 1112 | 66.2 | 7.0 | 9488 µS | 105 | ~~24~~ 18 | " |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 18

Sampling Date: 1/14/05 Sampling Time: 1117 Depth to Water:

Sample I.D.: S-7 Laboratory: (STL) Other

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

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

Analyzed for: TPH-G BTEX MTBE TPH-D 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 |

# SHELL WELL MONITORING DATA SHEET

| | |
|---|---|
| BTS #: 050114-WC1 | Site: 5251 Hopyard Rd, Pleasanton |
| Sampler: WC | Date: |
| Well I.D.: S-8 | Well Diameter: 2 (3) 4 6 8 ___ |
| Total Well Depth (TD): 23.35 | Depth to Water (DTW): ~~with~~ 8.65 |
| 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]: 11.59 | |

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

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

5.4 (Gals.) X 3 = 16.2 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 |
|---|---|---|---|---|---|---|
| 1046 | 62.8 | 6.6 | 10.17 | 86 | 6 | clear |
| 1047 | 64.3 | 6.7 | 10.06 | 43 | 11 | " |
| 1048 | 65.7 | 6.8 | 13.57 | 39 | 17 | " |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 17

Sampling Date: 1/14/05 Sampling Time: 1052 Depth to Water: 9.43

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

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

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

Analyzed for: TPH-G BTEX MTBE TPH-D 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 |