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By lopprojectop at 8:58 am, Feb 27, 2006

February 6, 2006

Re: Initial Site Conceptual Model (September 2005)

Shell-branded Service Station

4226 First Street Pleasanton, California

Dear Mr. Jerry Wickham:

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

Sincerely, Shell Oil Products US

Denis L. Brown Project Manager

Shell Oil Products US Initial Site Conceptual Model (September 2005) Shell-branded Service Station 4226 First Street, Pleasanton, California

Explanation of abbreviations at bottom of table.

Explanation of	DESCRIPTION		Graphics	Reference	Data Gaps	Work Necessary to fill data gap	Comments
Professional Certification	Dated, signed and stamped certification by Lee Dooley, California Certified Hydrogeologist.		Certification				
Regional Setting	Geology/Stratigraphy The site located is located near the southwestern edge of the Livermore Valley. The site area slopes to the north from the base of nearby hills (See topographic map). Arroyo Valle stream is located approximately 1,100 feet north of the site. A geologic map and geologic cross section (J-J) are provided from California Department of Water Resources (DWR) Bulletin 118-2. The site is mapped as being underlain by Younger Alluvial Fan Deposits (Qyf). These deposits are described in DWR Bulletin 118-2 as consisting of "unconsolidated, moderately sorted, permeable fine sand and silt, with gravel becoming more abundant toward fan heads and within canyons." The northwest trending Pleasanton Fault is located west of the site (See geologic cross section J-J) and may impact local stratigraphy. The alluvial fan deposits are underlain by northward dipping sand and gravel deposits of the Livermore Formation.		Surficial geology map Geologic cross section J-J USGS topographic map	DWR Bulletin 118-2	Depth to subsurface contact between Qyf and underlying Livermore Formation in site area	Additional boring(s) downgradient (northeast) of the site	See map and aerial photo in Site Geology
	Additional geologic cross sections are provided from the Zone 7 Well Master Plan. Section locations are shown on Figure 1.1-1. The site is located at the southern end of Section E-E'. The section shows a contact in the site area between flat lying alluvium (A-Zone) and underlying northerly dipping Livermore Formation (D-Zone). Water Well Drillers Reports obtained from DWR indicate that the site area is underlain by interlayered clay, sand, and gravel to depths		Well field map and series of geologic cross sections	Zone 7 Well Field Plan (10/03)			
	greater than 250 feet bg (below grade). Hydrogeology The site located on the western edge of the Amador subbasin of the Livermore Valley Groundwater Basin. The Amador subbasin is bounded on the east by the middle zone of the Livermore Fault and on the west by the Pleasanton Fault (See Regional Geologic Section J-J). Much of the groundwater of the Amador subbasin is derived from sandy gravel and sandy clayey gravel deposits that are up to 150 feet in thickness. Gravel pits occur throughout the central portion of the subbasin.		Zone 7 Groundwater Contour Map Subbasin map	Zone 7 DWR Bulletin 118-2	Location of Pleasanton Fault; impact on groundwater occurrence in site area	Perform additional literature survey; collect additional subsurface data both west and east of site.	See attached work plan and site area map
	Groundwater in the Amador subbasin occurs in both unconfined and confined conditions. In the shallower, unconfined aquifers, groundwater is first encountered generally about 30 to 50 feet bg. Deeper aquifers are encountered within sand and gravel deposits at a depth of approximately 90 to 100 feet bg (See Zone 7 Groundwater Contour Map). The Zone 7 contour map shows groundwater flow in both confined and unconfined aquifers toward the gravel pits in the center of the subbasin (See Zone 7 Groundwater Contour Map). A contour map from the Zone 7 Well Master Plan (Figure ES.2-2) shows a flow within the "deeper aquifer" to the west.		Figure ES.2-2 - Historic Composite Low Water Levels in the Deeper Aquifer	Zone 7 Well Field Plan (10/03)			

DESCRIPTION	Data Tables	Graphics	Reference	Data Gaps	Work Necessary to fill data gap	Comments
Groundwater Pumping The site is located on the southwestern edge of the Amador subbasin. Sand and gravel pit groundwater extraction areas are located greater than 1 mile north of the site in the central portion of the subbasin. The site appears to be outside the area of influence of any groundwater extraction wells (See well survey discussion below).		Zone 7 Groundwater Contour Map	Zone 7	None		Site not within influence of any pumping wells.
Preferential Pathways Well Survey - In May 2004, Toxichem Management Systems, Inc. (Toxichem) obtain information from the Zone 7 Water District (Zone 7) and the DWR. A copy of Toxichem's well survey map and summary table are attached. The nearest wells identified were a well of "unknown" use (3S/1E-21B) and a municipal well (3S/1E-21B1) both located approximately 900 feet northeast of the site. Toxichem was unable to locate either well in the field and concluded that they were likely abandoned. In November 2005, Delta Environmental Consultants, Inc. (Delta) observed an old water tower building near the location of the two wells. A municipal well (3S/1E-16P1) was identified to be located >1,200 feet north of the site. Again, Toxichem could not field locate the well.	Well survey data tables	Well survey map	Toxichem (2004)	None		
In September 2005, Delta performed an additional well survey for the site area. A well location map was obtained from Zone 7. The map identified three wells approximately 1,000 feet northwest of the site (3S/1E-21C1, -21C3, and -21C4.) Well -21C1 was classified as a "supply well", -21C3 as "abandoned or unlocatable", and -21C4 as "other designated well." Delta was only able to field located Well -21C4. The well provides irrigation water for a small city park. Delta also located a similar well in Kottinger Park located approximately 800 feet east of the site.	Sensitive receptor data table	Well location aerial photograph Sensitive receptor location map	Zone 7 Delta (2005)			
Utility Survey - Delta was unable to locate a map of underground utilities for the site area. Depth to groundwater beneath the site is >30 feet below grade (bg), thus underground utilities are not considered a vertical conduit to shallow groundwater.						
Analysis - No vertical conduits appear to be present in the site area that would result in movement of contaminants to groundwater. Nearby Release Sites 76 Service Station, 4191 First Street, Pleasanton An operating 76-branded service station is located on the northwest side of First Street approximately 200 feet north of the site (see attached site area map and aerial photograph). On- and off-site soil and groundwater investigations have been performed for the 76 station (See site information). The site groundwater monitoring system consists of twelve monitoring wells (See attached map and Geotracker data). On March 17, 2005, depth to groundwater ranged from 72.54 to 94.66 feet below top of well casing (TOC). The average groundwater elevation in the area of the 76 station was 290 feet MSL. This compares with depth to groundwater beneath the Shell station on February 2, 2005 of 31.28 to 32.02 feet TOC and an average groundwater elevation of 340 feet MSL.		Site map (Cambria, 2001), Location map and DTW data from Geotracker Site geologic cross sections; concentration maps Map and aerial photograph of site area	Geotracker Gettler-Ryan (2001) Delta (2005)	Hydrogeologic relationship between groundwater beneath the site and 76-branded station. Possibility of faulting in the site area.	Drilling of boring(s) between the two stations	See attached work plan
The groundwater flow beneath and downgradient of the 76 station was toward the south and west on March 17, 2005. However, the distribution of contaminants dissolved in groundwater appears to be						

	DESCRIPTION	Data Tables	Graphics	Reference	Data Gaps	Work Necessary to fill data gap	Comments
	more indicative of flow to the north (See concentration maps). Groundwater flow beneath the Shell station is consistently to the northeast. Three hydrogeologic cross sections prepared by Gettler-Ryan, Inc. for the 76 station are provided. The sections show a series of sand and gravel beds dipping to the north beneath the 76 station (See Section B-B). These beds appear to meet the regional description of the Livermore Formation. In contrast, sand and gravel beds beneath the Shell station have been interpretted as nearly flat lying and likely representative of alluvium capping the Livermore Formation (See Site Geology below). It appears, based on available data, that the two sites monitor different but possibly interconnected sand and gravel aguifers.						
Site Setting	Site Geology A series of site maps are attached that show the location of borings and wells. Borings have found the site is underlain by interlayered silt, silty sand, gravelly sand, and silty gravel to the maximum depth explored of 100 feet bg (Boring SB-7). Two geologic cross sections prepared by Cambria Environmental Technology, Inc. (Cambria) are attached. The sections indicate that deposits beneath the site are nearly flat lying. An approximately 40-foot thick silt layer was encountered in Boring SB-7 from 59 to 99 feet bg. Silt was also encountered at a depth of 40 to 50 feet in Borings SB-1, SB-4, SB-5, SB-6, MW-1, MW-2, and MW-3.		Boring logs for S-A, S-B, S-C, S-D, and S-1 Boring logs for SB-1, SB-2, SB-3, and WA-1 Boring logs for SB-4 and SB-5 Borings logs for SB-6 and SB-7 Boring logs for MW-1, MW-2, and MW-3 Geologic Cross Sections A-A' and B-B'	Emcon Associates (1985) HartCrowser (1990) HartCrowser (1990) Cambria (1999) Cambria (1999) Cambria (date?)	Extent of silt layer not defined	Drill additional boring(s) to define extent of silt layer	See attached work plan and area site map
	Groundwater Conditions Three groundwater monitoring wells (MW-1 through MW-3) have been installed on site. No off-site wells have been installed. Groundwater was encountered in the borings for Wells MW-1 and MW-3 at depths of 43 feet and 25 feet bg, respectively. Groundwater was not encountered during the drilling of the boring for Well MW-2 (See Boring Logs above). The total depths of the three wells are 58 feet, 48 feet, and 41.5 feet bg, respectively. Well MW-1 is screened from 37 feet to 58 feet bg; Well MW-2 from 26 feet to 46 feet bg; and Well MW-3 from 19 feet to 35 feet bg (See well construction details on boring logs). Depth to water in wells has historically been approximately 30 to 40 feet bg.	Groundwater depth and elevation data			Relationship between perched groundwater beneath the site and deeper groundwater beneath the 76-branded station	Drill additional boring (s) between the two stations	See attached work plan and area site map
	Groundwater appears to be perched above the silt layer described above (site geologic section). This silt layer appears to prevent further downward migration of petroleum hydrocarbons and fuel oxygenates. Benzene, toluene, ethylbenzene, and xylene (BTEX compounds) and MTBE were not detected in any soil samples collected within the silt layer (see summary of soil analytical data, Boring SB-7). The silt layer is believed to separate perched groundwater beneath the site from deeper groundwater encountered beneath the 76-branded service station.				Water quality beneath perching silt layer	Drill additional boring(s)	See attached work plan and area site plan
	A series of <u>historic groundwater elevation contour maps</u> are attached. Groundwater flow has ranged from north to northeast.		Groundwater Elevation Contour Maps (historic)	Cambria; Toxichem; Delta; Blaine Tech			

DESCRIPTION	Data Tables	Graphics	Reference	Data Gaps	Work Necessary to fill data gap	Comments
The most recent groundwater measurements were on November 19, 2005. Historic depth to groundwater and groundwater elevations are provided on the attached <u>Blaine Tech Services report</u> dated December 19, 2005. Groundwater flow was to the northeast (See <u>Groundwater Contour Map for 4005</u>).		August 5, 2005 November 22, 2005	Services			
Source Area In September 1985, Emcon Associates drilled three soil borings in the vicinity of the former underground fuel storage tanks (S-B, S-C, and S-D). The four former fuel underground storage tanks (USTs) were originally located in the northern portion of the site. Total petroleum hydrocarbons as gasoline (TPH-G) was detected at 1,300 mg/kg in the 14- to 15.5-foot sample from boring S-B. In May 1986, the USTs were removed and the pit backfilled. Soil samples were collected beneath the ends of each of the former tanks. The maximum TPH-G detected was 240 mg/kg. New USTs were installed in front of the service station building (current location).	Soil analytical data summary tables	Soil boring locations map		None		
In March 1990, Hart Crowser, Inc. advanced three additional soil borings (SB-1, SB-2, and SB-3). The boring for the destruction of Well S-1 was advanced 20 feet beyond the bottom of the well. This boring was designated WA-1. The highest concentrations of TPH-G were detected in two soil samples from boring WA-1; 30 feet bg (380 mg/kg) and 35 feet (290 mg/l). Analysis for for methyl tert-butyl ether (MTBE) was not performed.	Soil analytical data summary tables					
In December 1990, Hart Crowser, Inc. advanced Borings SB-4 and SB-5 downgradient (north) of the location of the former USTs. Petroleum hydrocarbons were only detected in one soil sample (SB-5 at 35 feet, TPH-G 820 ug/l).						
In September 1995, Weiss and Associates collected soil samples beneath four site dispensers and product piping. TPH-G was detected at 120 mg/kg beneath the eastern-most dispenser island. Approximately 40 cubic yards of impacted soil were removed. TPH-G was detected at less than 3 mg/kg in confirmation soil samples. Analysis for MTBE was not performed.	Soil analytical data summary tables	Weiss Associates report dated December 21, 1995				
In July 1998, Cambria collected a sample of the pea gravel backfill near the waste oil tank remote fill piping. No evidence of a release was found.		Cambria report dated September 22, 1998				
In April 1999, Cambria advanced two soil borings (SB-6 and SB-7) to depths of 58 and 100 feet, respectively. TPH-G was only detected in the 40-foot sample of boring SB-7 (83 mg/kg). MTBE was not detected in any soil sample. The boring was converted to Well MW-1. In January 2000, Cambria installed Wells MW-2 and MW-3. TPH-G and MTBE were not detected in any soil sample.	Soil analytical data summary tables		Cambria report dated August 12, 1999			
In January 2005, it was determined that a liquid had likely been poured into a second port on the waste oil tank which goes directly into the pea gravel surrounding the tank. An <u>Unauthorized Release Report (URR)</u> dated January 19, 2005 was submitted to the local Fire Prevention District and Alameda County Environmental Health Department. Total petroleum hydrocarbons as oil and grease were		Toxichem work plan dated March 16, 2005				

DESCRIPTION	Data Tables	Graphics	Reference	Data Gaps	Work Necessary to fill data gap	Comments
detected in a sample of the pea gravel at 10,000 mg/kg. The impacted soil near the fill port was removed and transported off site for disposal. On June 10, 2005, Delta advanced a boring (WO-1) adjacent to the waste oil UST. Analysis of soil sample indicated that waste oil had not moved outside the UST backfill.		Delta report dated July 11, 2005				
Dissolved plume A plume of dissolved petroleum hydrocarbons and MTBE exists in groundwater at a depth of approximately 30 feet beneath the site. The plume extends from the central portion of the site, off-site to the north-northeast.	Summary of groundwater analytical data	Map of TPH-G, benzene, and MTBE Concentrations in Groundwater, August 5, 2005 November 22, 2005	Delta (July 2005)	Downgradient extent of MTBE in shallow perched aquifer	Collect groundwater sample from downgradient of the site.	See attached work plan
The highest concentrations of total petroleum hydrocarbons as gasoline (TPH-G), benzene, and MTBE have been detected in groundwater samples from Well MW-1 located on the downgradient (northern) edge of the property. The groundwater sample from Well MW-1 collected on November 22, 2005 contained TPH-G (1,760 ug/l), benzene (27.4 ug/l), and MTBE (1,160 ug/l). MTBE concentrations in Well MW-1 increased to a historic high. A MTBE time/concentration graph is attached.	Historic groundwater analytical data	MTBE concentration graph	Delta (November 2005)			
Remediation Approximately 40 cubic yards of petroleum hydrocarbon impacted soil were removed during the dispenser and product line upgrade activities in September 1995. Impacted soil was transported off site for disposal at a licensed landfill facility.		Weiss Associates report dated December 21, 1995		No remediation proposed at this time pending results of additional site assessment		
Evaluation of potential impacts to water supply wells The potential for shallow groundwater containing MTBE to impact a water supply well appears to be low.		Zone 7 Well Location Aerial Photograph	Zone 7		None	Site outside of well capture zone.
Work Plans						See attached work plan

Abbreviations

Abbreviations

DWR = California Department of Water Resources

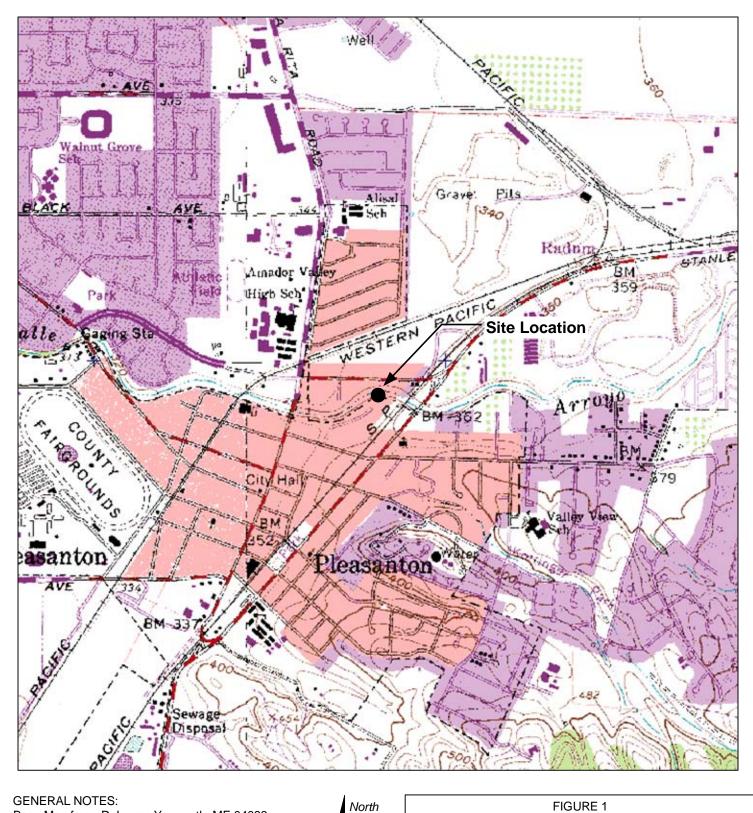
Zone 7 = Zone 7 Water District

MTBE = methyl tert-butyl ether

bg = below grade

mg/kg = milligrams per kilogram

ug/l = micrograms per liter



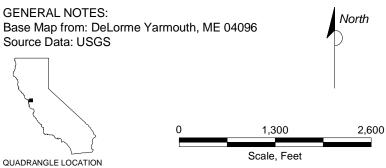
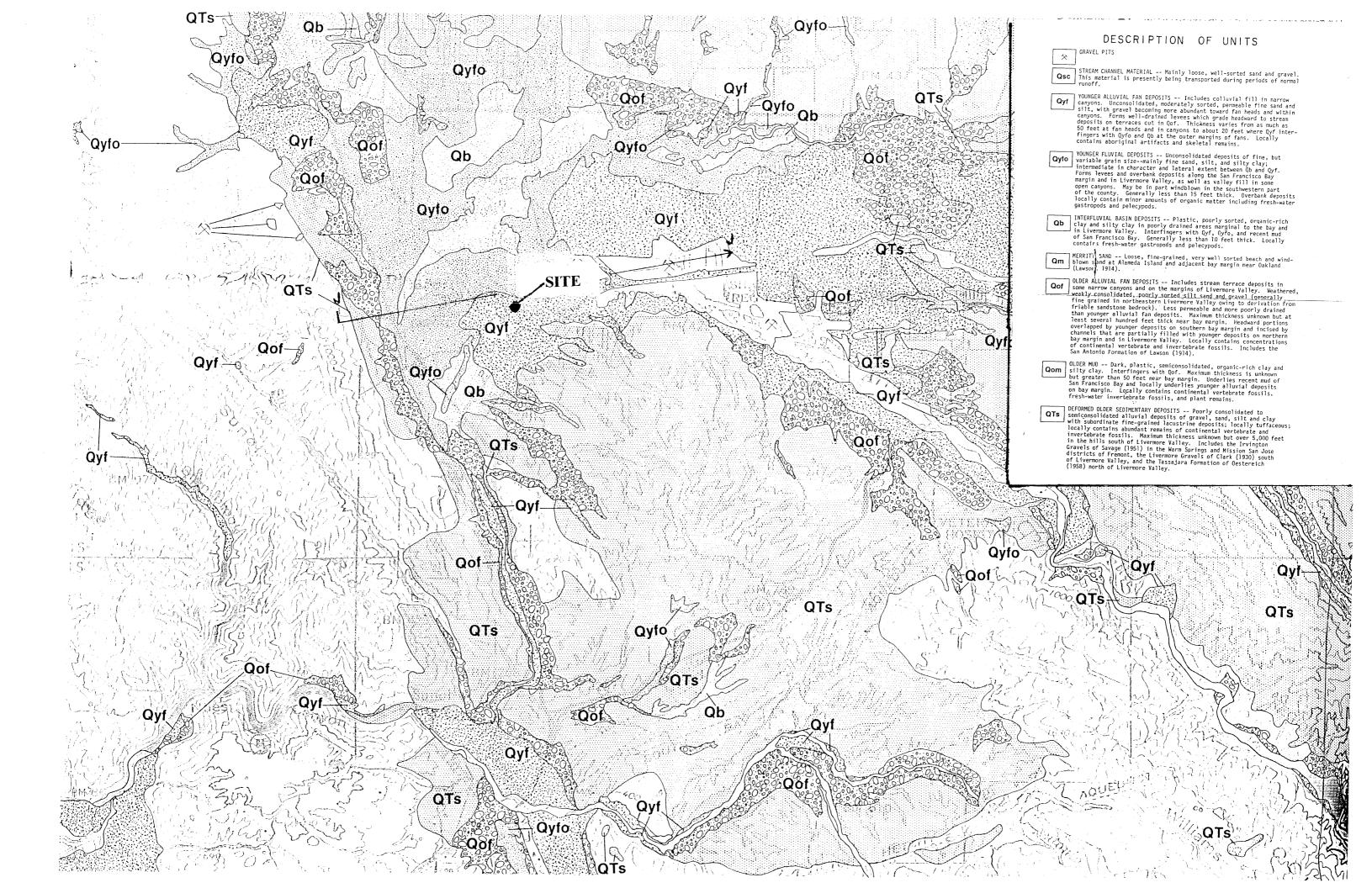


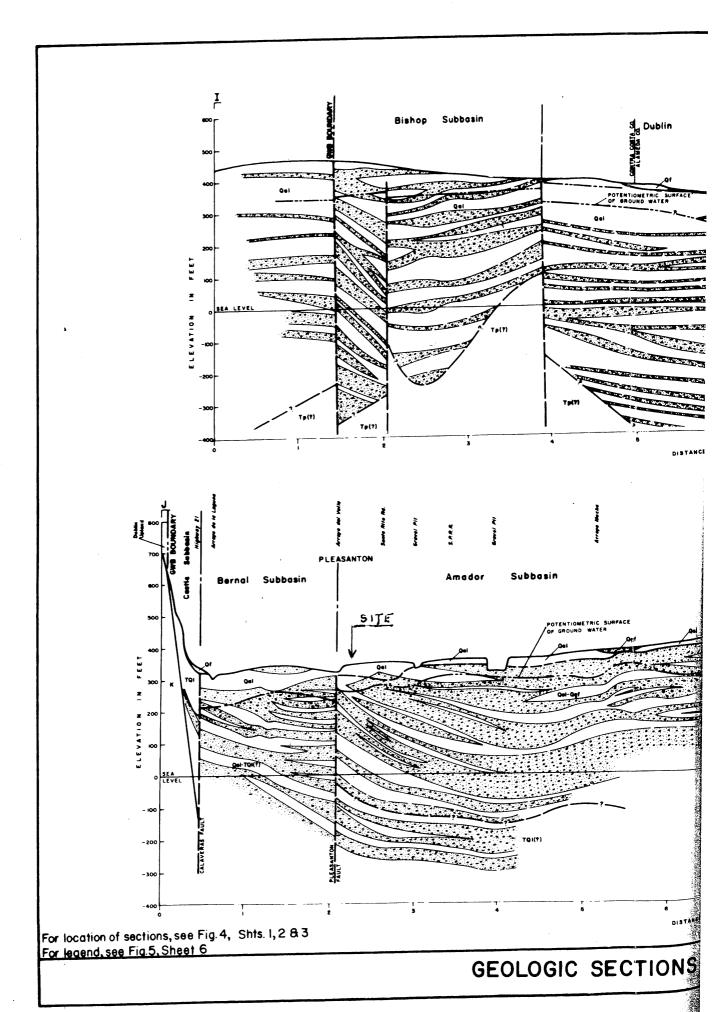
FIGURE 1 SITE LOCATION MAP

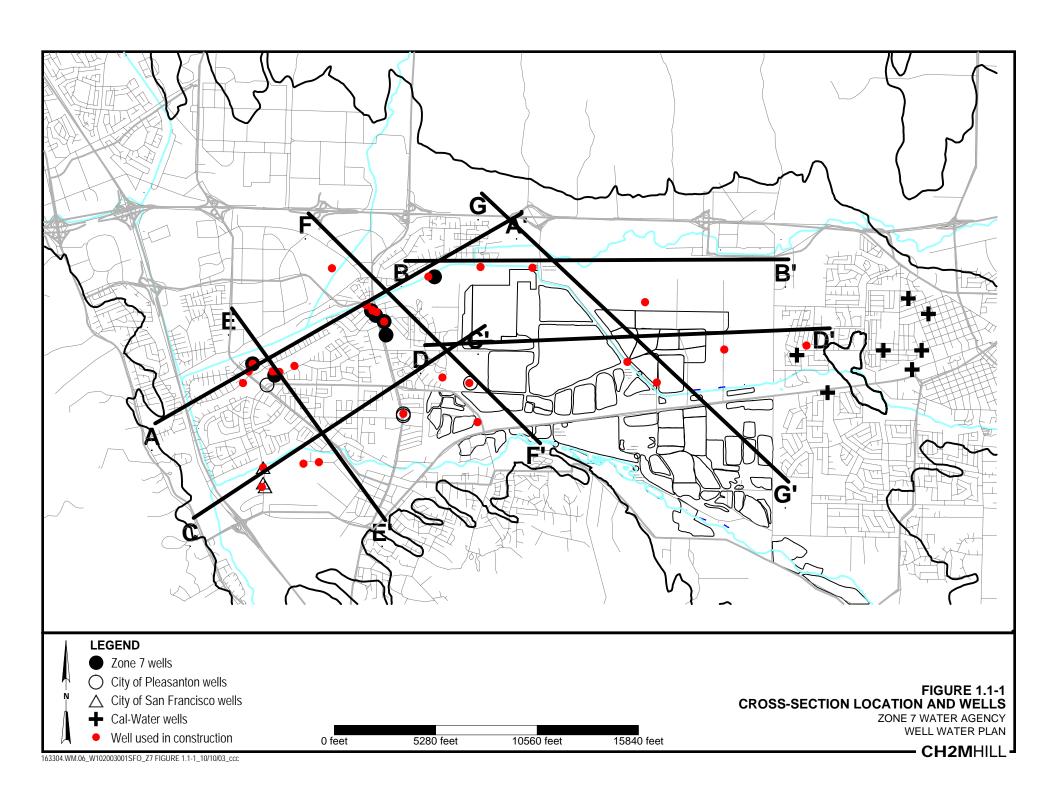
SHELL-BRANDED SERVICE STATION 4226 First Street Pleasanton, California

PROJECT NO.	DRAWN BY
SJ42-26F-1.2005	V. F. 5/5/05
FILE NO.	PREPARED BY
SJ42-26F-1.2005	VF
REVISION NO.	REVIEWED BY









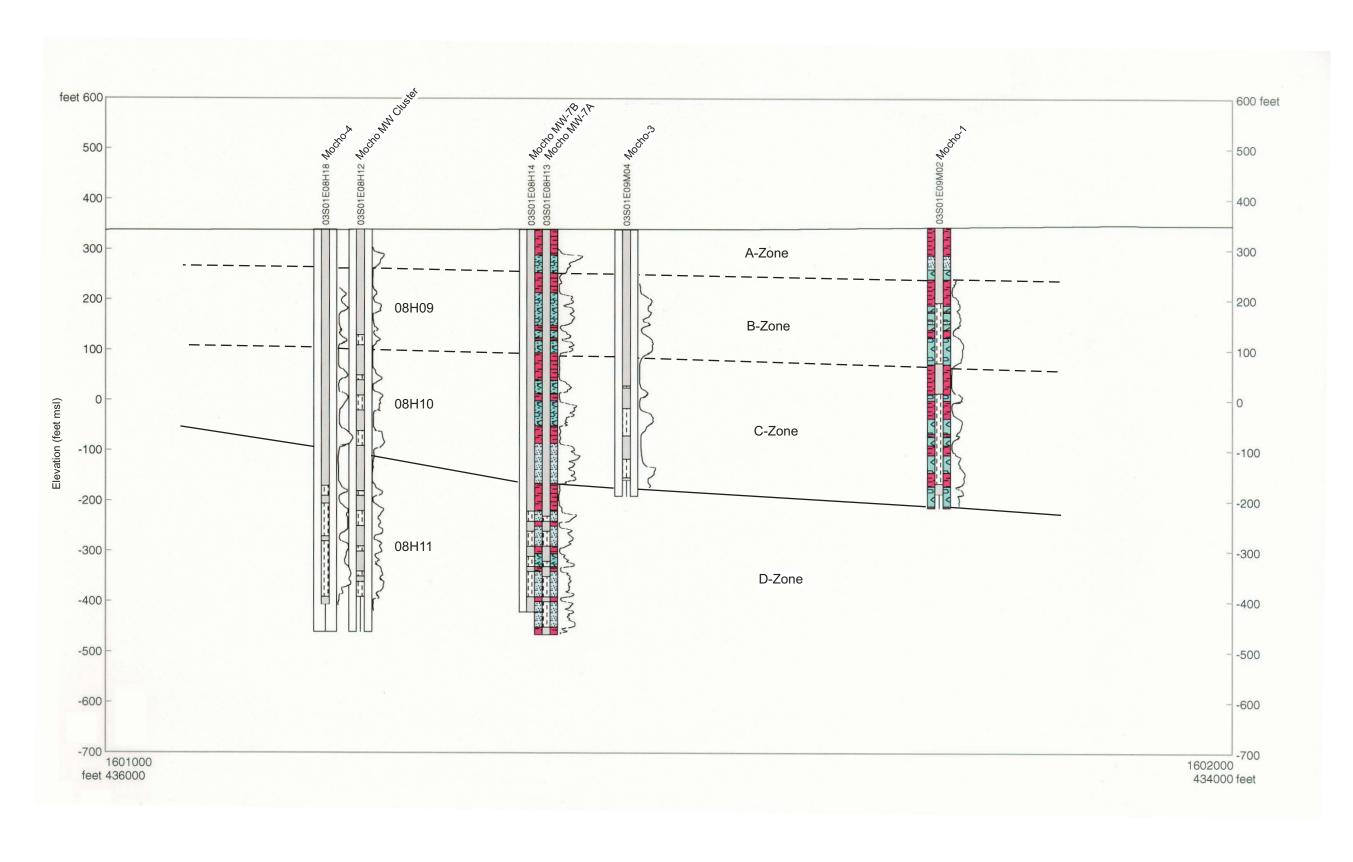


FIGURE 1.1-2 CROSS-SECTION MOCHO WELLFIELD WELL MASTER PLAN

ZONE 7 WATER AGENCY WELL WATER PLAN

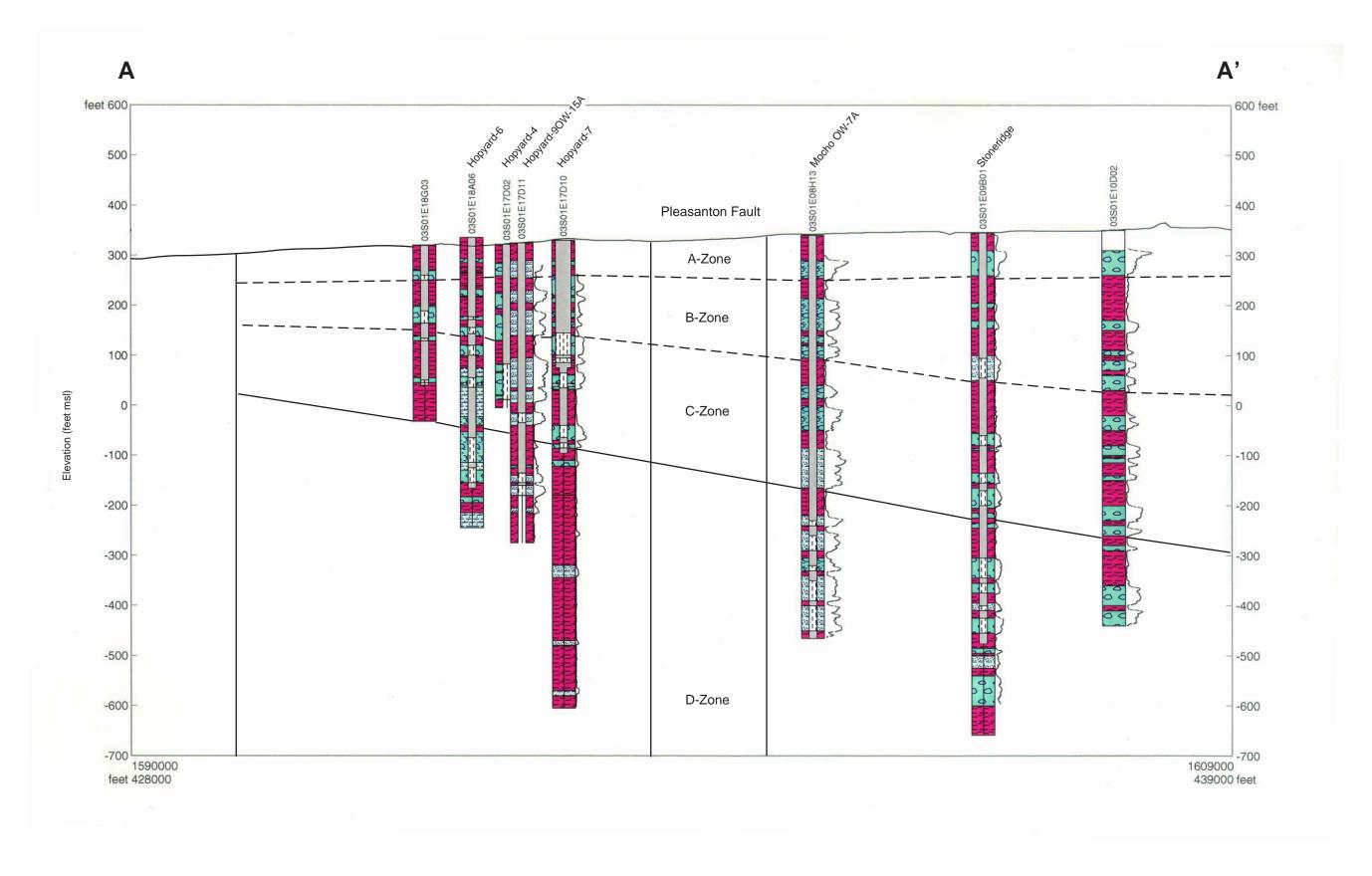


FIGURE 1.1-3 CROSS-SECTION A-A' WELL MASTER PLAN ZONE 7 WATER AGENCY WELL WATER PLAN

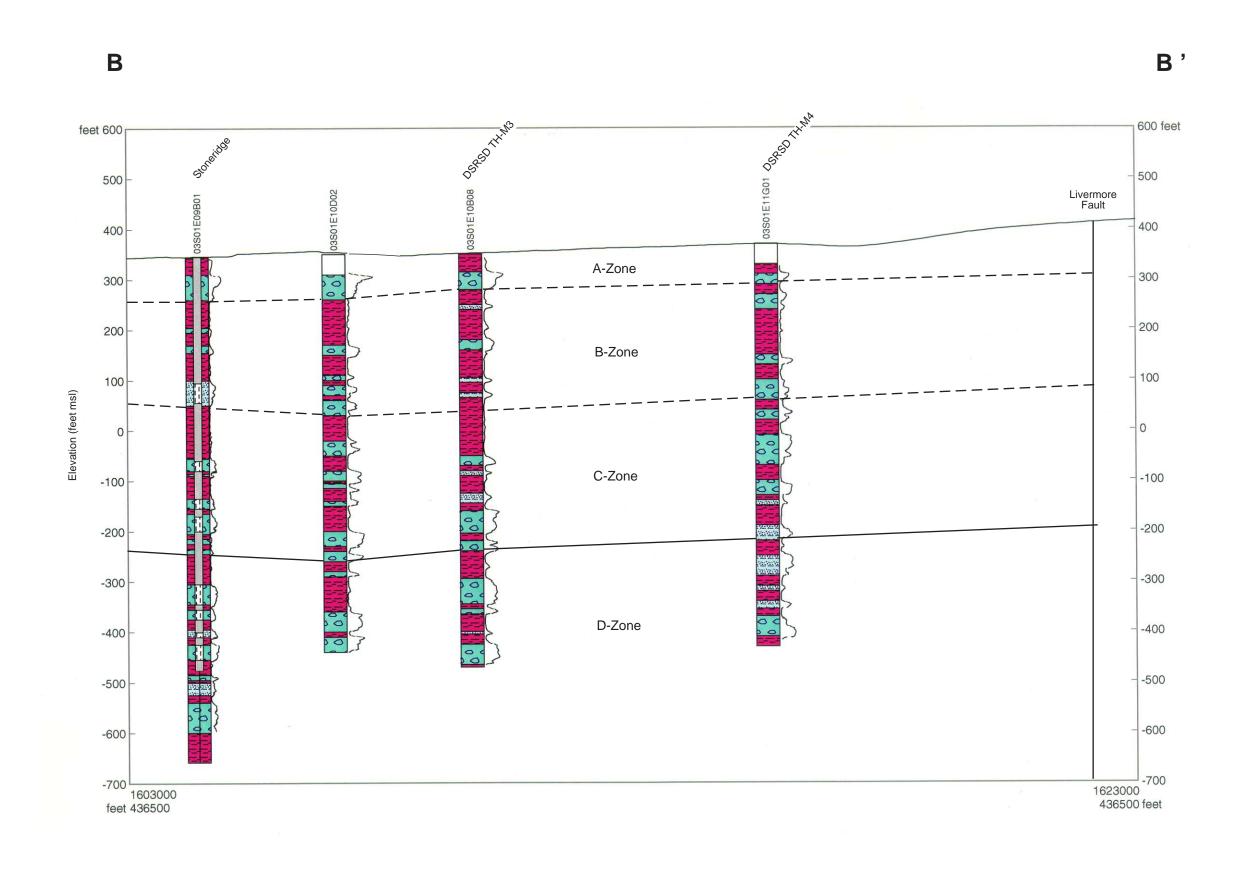


FIGURE 1.1-4 CROSS-SECTION B-B' WELL MASTER PLAN ZONE 7 WATER AGENCY WELL WATER PLAN

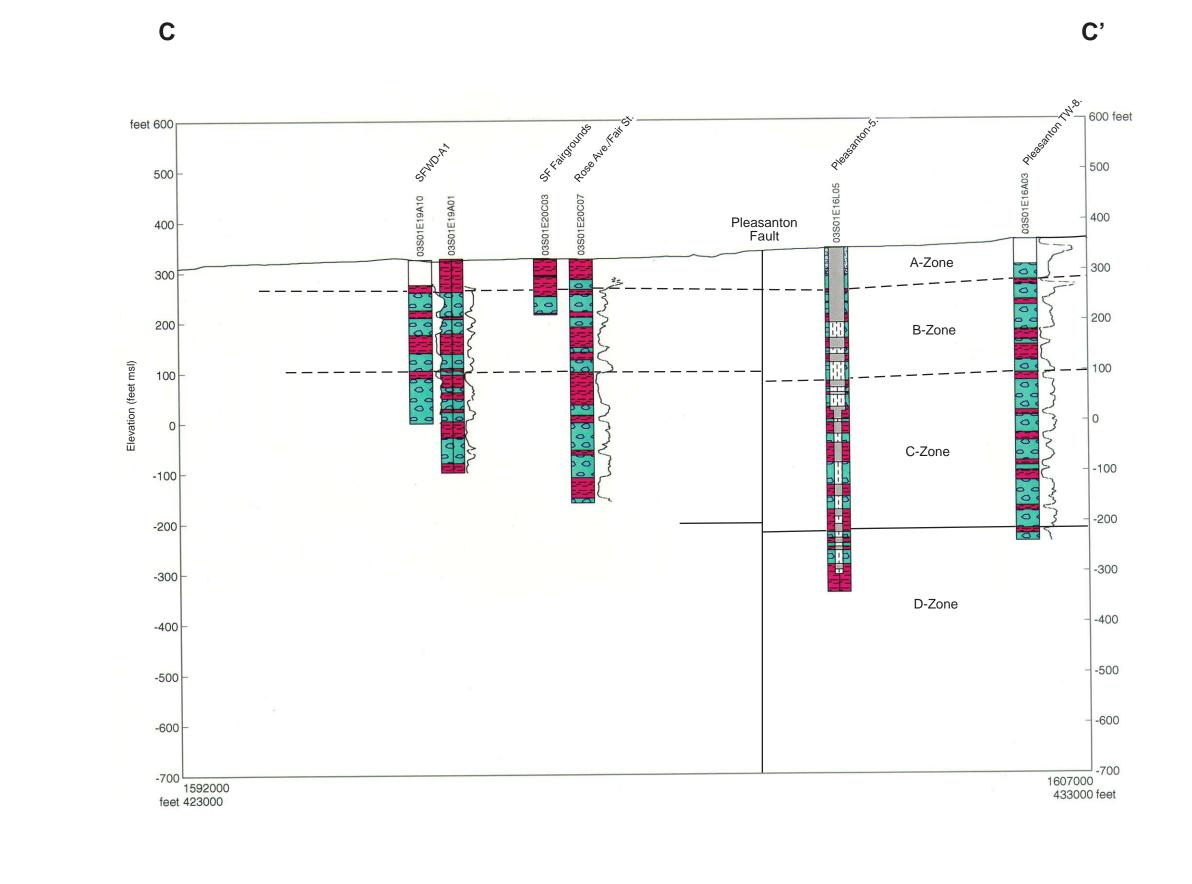


FIGURE 1.1-5 CROSS-SECTION C-C' WELL MASTER PLAN ZONE 7 WATER AGENCY WELL WATER PLAN

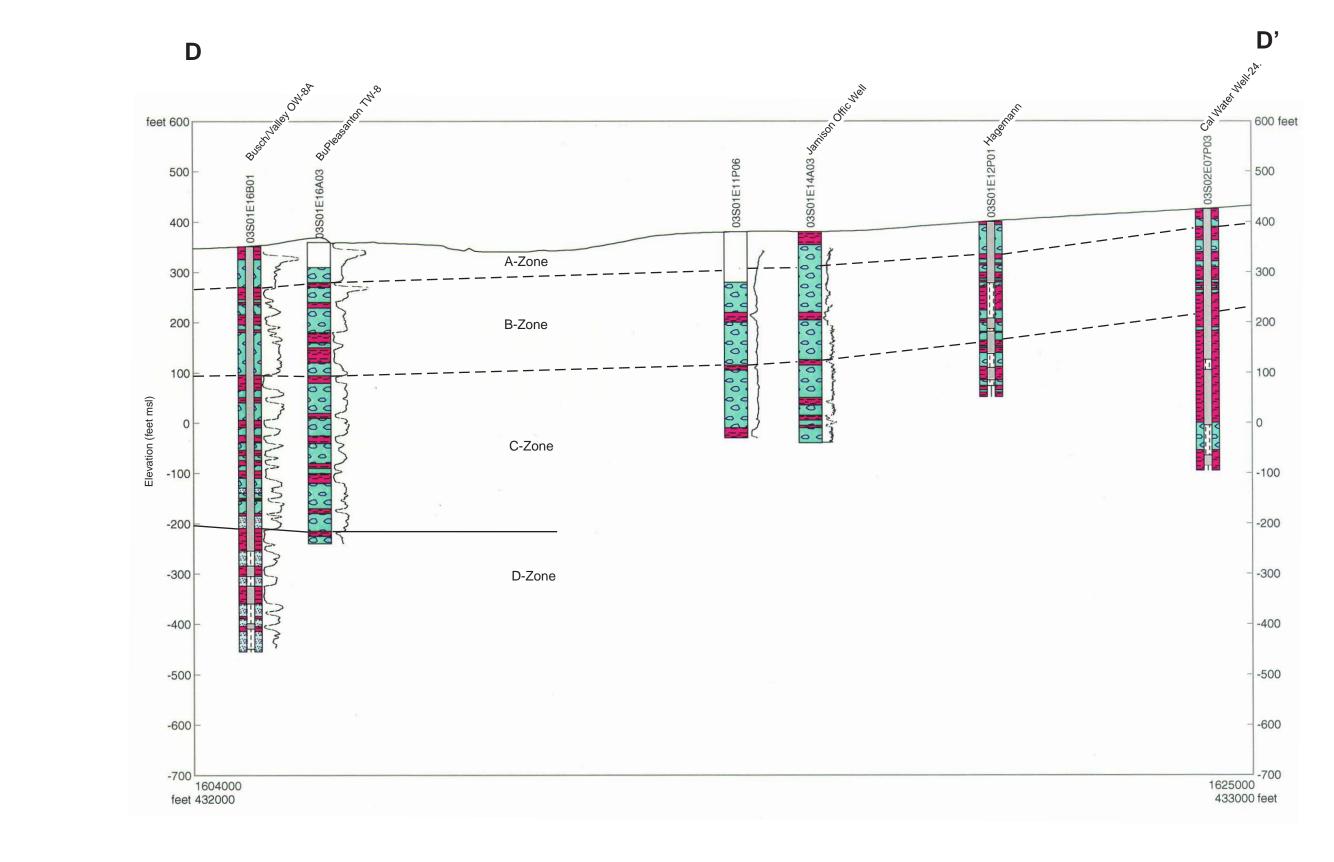


FIGURE 1.1-6 CROSS-SECTION D-D' WELL MASTER PLAN ZONE 7 WATER AGENCY WELL WATER PLAN



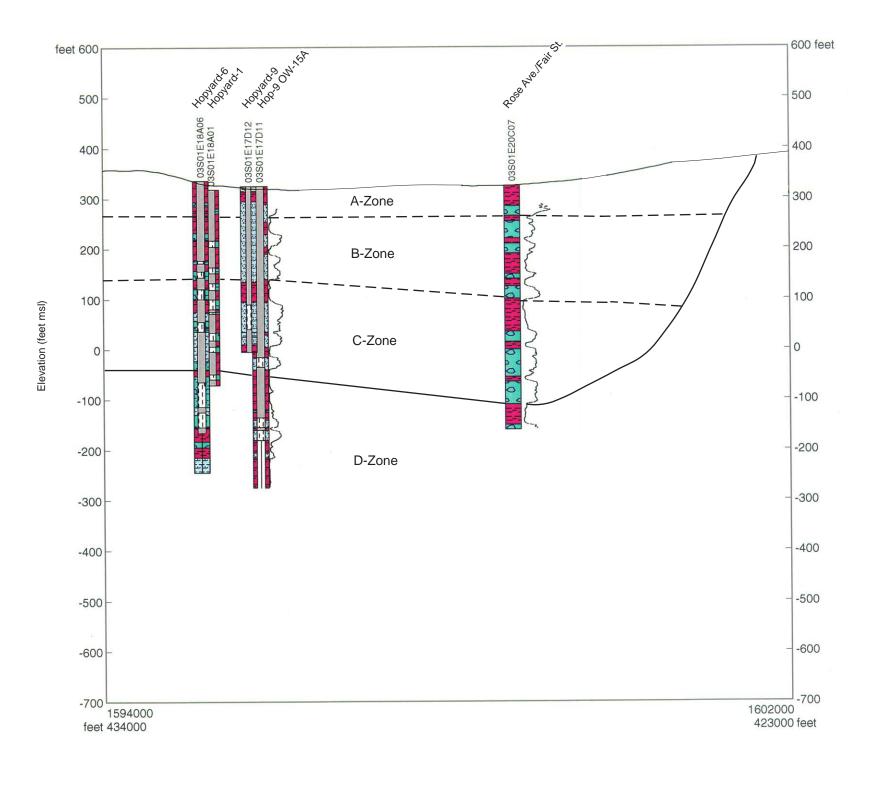


FIGURE 1.1-7 CROSS-SECTION E-E' WELL MASTER PLAN ZONE 7 WATER AGENCY WELL WATER PLAN

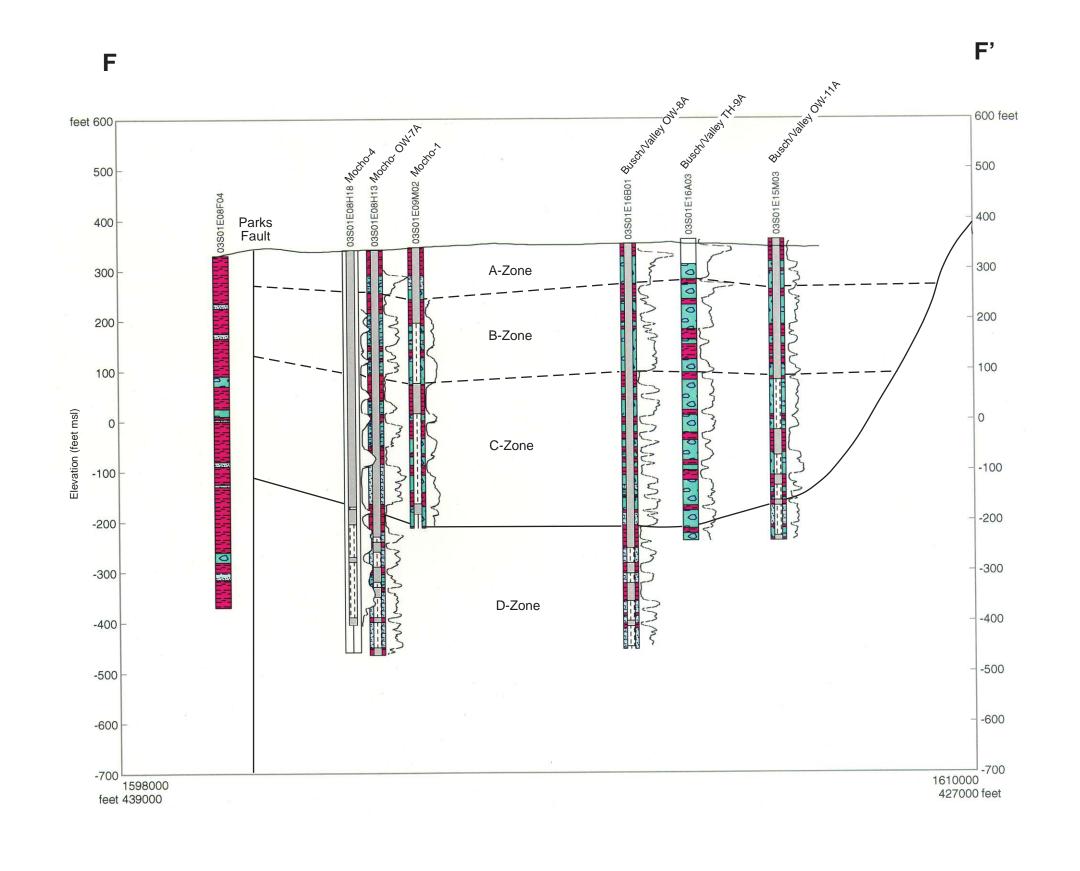
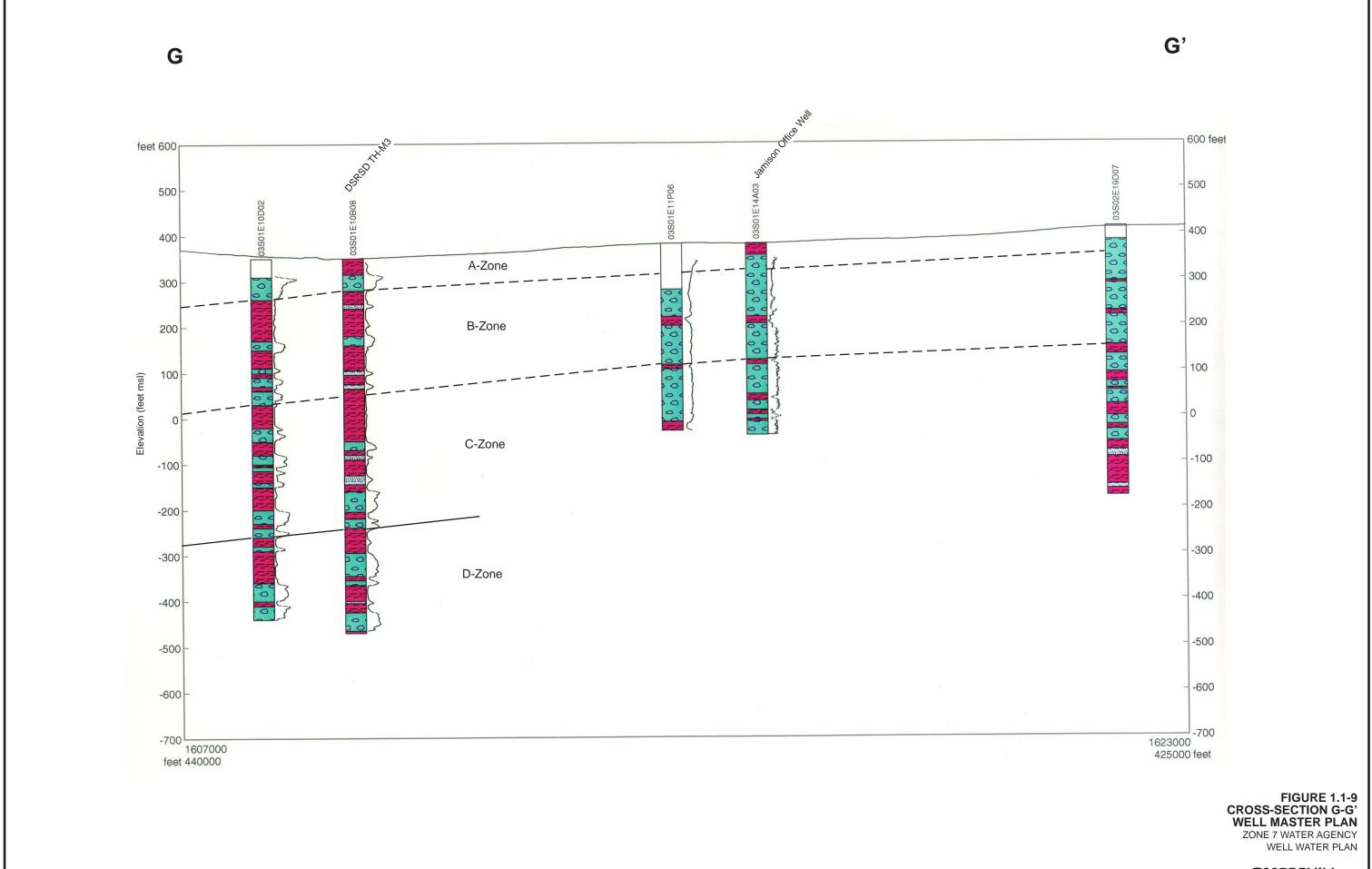


FIGURE 1.1-8 CROSS-SECTION F-F' WELL MASTER PLAN ZONE 7 WATER AGENCY WELL WATER PLAN

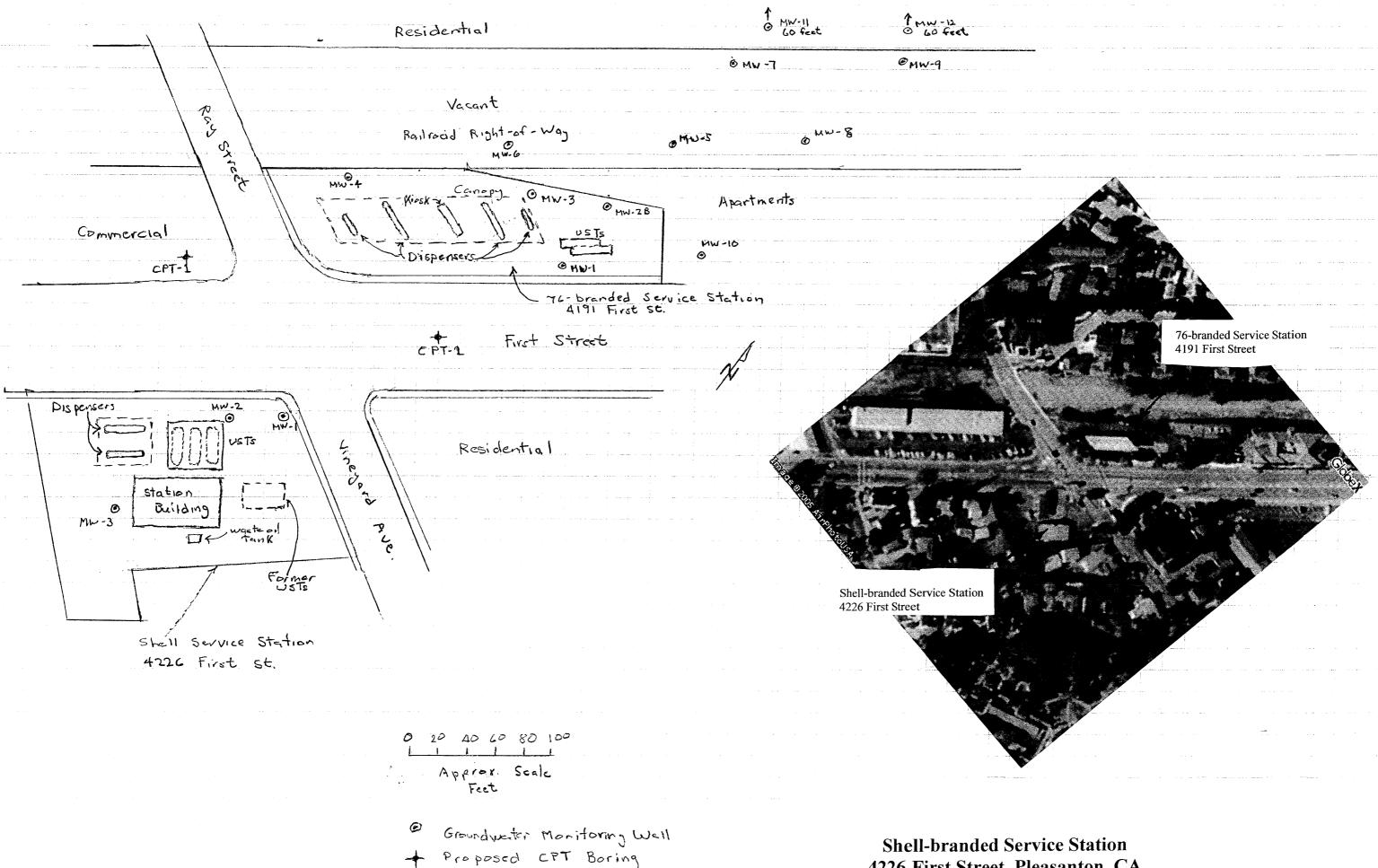


The material and data in this report were prepared under the supervision and direction of the undersigned California Certified Hydrogeologist CHG 183.

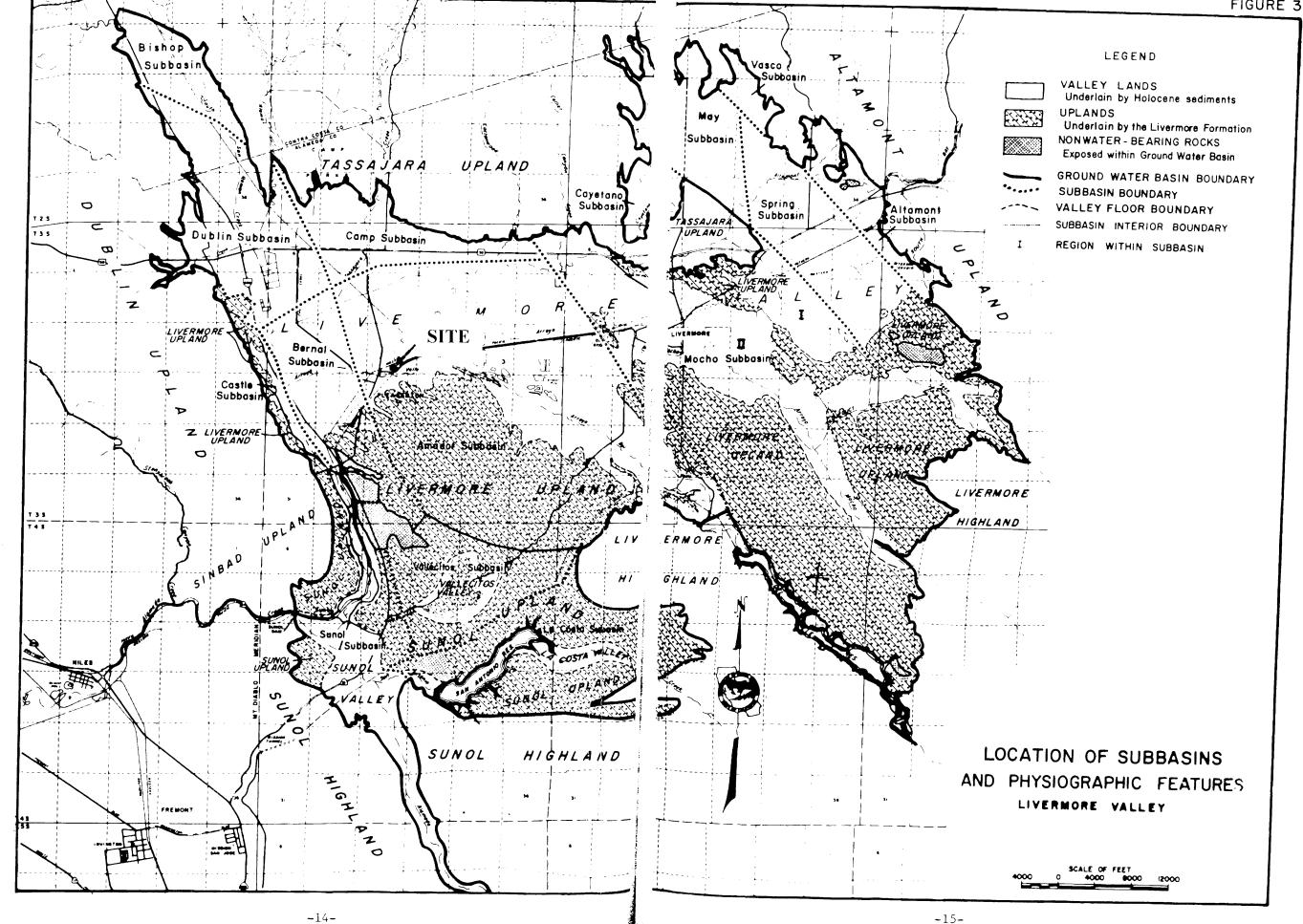
Delta Environmental Consultants, Inc.

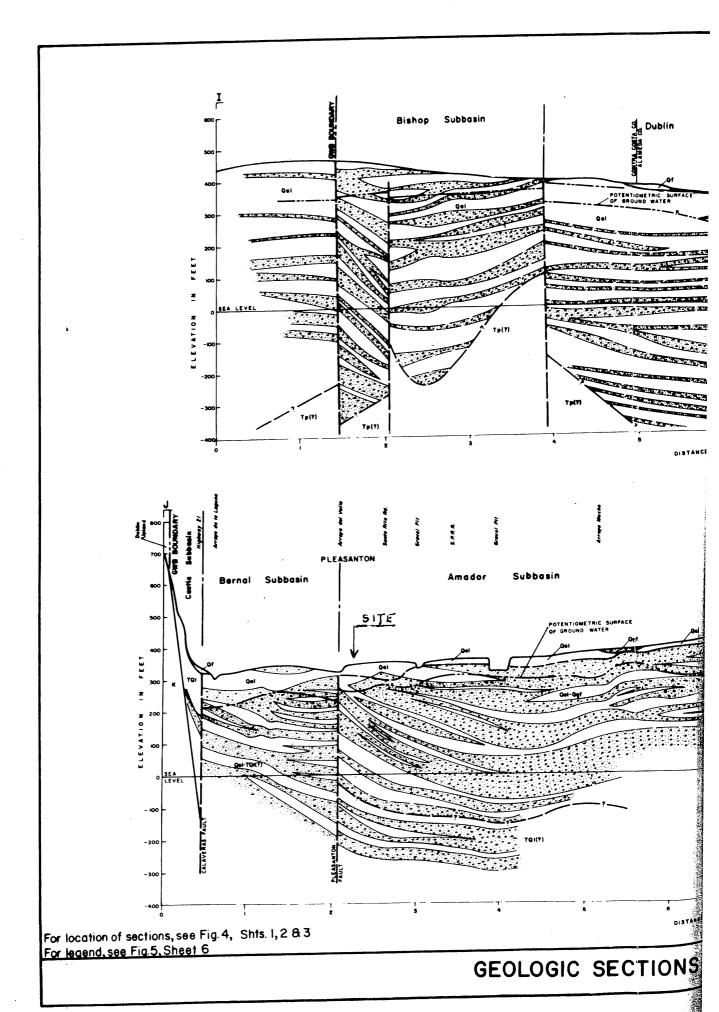
R. Lee Dooley

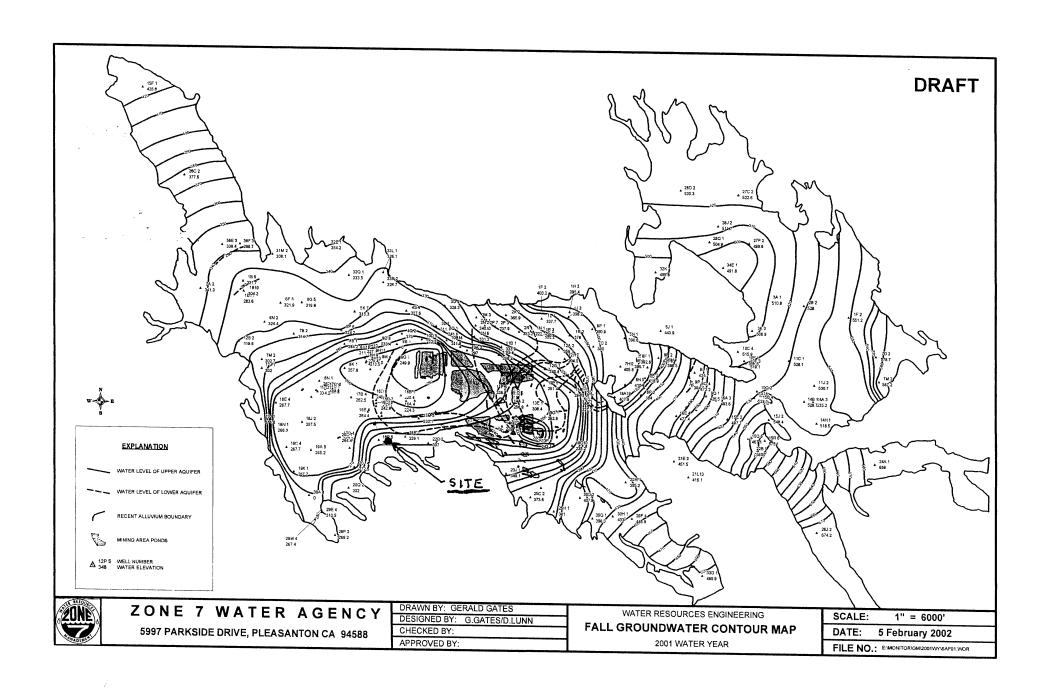
Project Manager, CHG 183

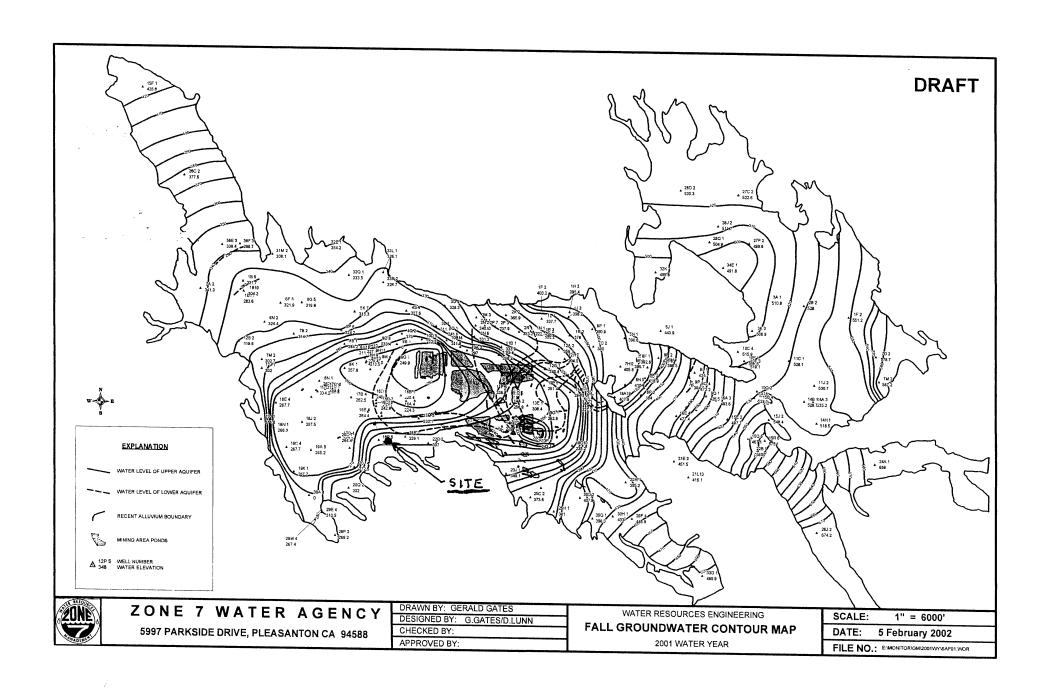


4226 First Street, Pleasanton, CA









WORK PLAN 1-24-06 Shell-branded Service Station 4226 First Street Pleasanton, California

Description of Methods

Delta proposes to further define hydrogeologic conditions in the area by drilling two deep off-site borings.

Delta will obtain drilling permits from the Zone 7 Water District for all proposed borings. Delta will also need to obtain an encroachment from the City of Pleasanton in order drill within First Street. Shell will need to obtain an access agreement from the owner of the property located on the western corner of First and Ray Streets.

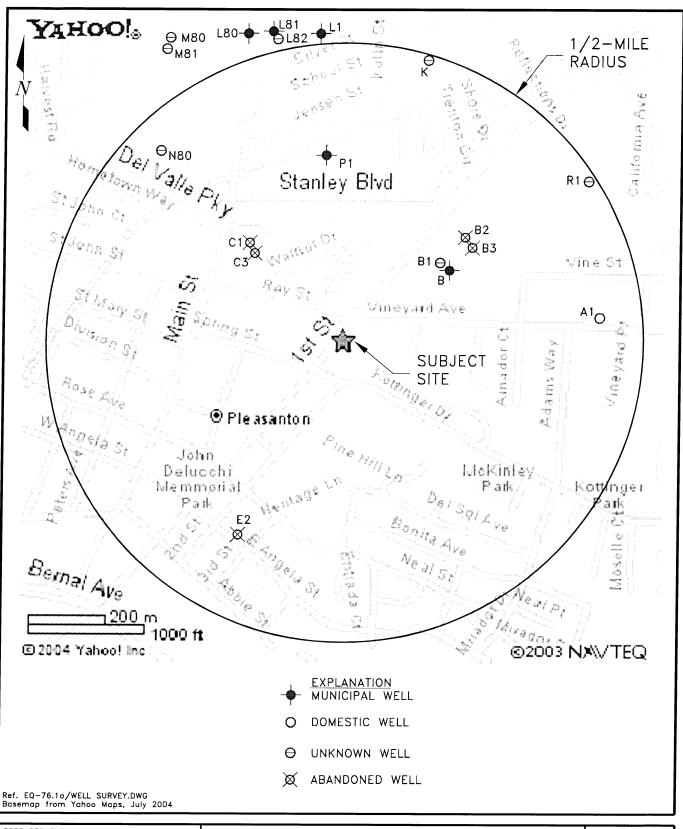
Prior to conducting any field work at the site, Delta will prepare a site specific Health and Safety Plan (HASP). The Delta field geologist on-site will review the HASP with site subcontractors at the start of each work day.

Borings CPT-1 and CPT-2

Delta proposes to two cone penetration test (CPT) borings to define the vertical of extent of petroleum hydrocarbons and fuel oxygenates detected in perched groundwater beneath the site. The borings will also define the lateral and vertical extent of a silt layer encountered beneath the site at a depth of approximately 60 feet. The locations of the CPT borings (CPT-1 and CPT-2) are shown on attached site area map. 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. CPT borings will be advanced to a depth of approximately 100 feet bg. Grout will be pumped into the borehole behind the cone by using a grout collar (retraction grouting).

A second CPT borehole will be drilled at each location for collection of depth discrete groundwater samples. Sand layers throughout the stratigraphic profile will be targeted for sampling. Collection of groundwater samples will be attempted both above and below the silt layer encountered in deep on-site Boring SB-7. 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 should flow hydrostatically from the formation into the sampler. The predominance of silt and clay may prevent collection of groundwater samples from some depth intervals. 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, and TBA by EPA Method 8260B.



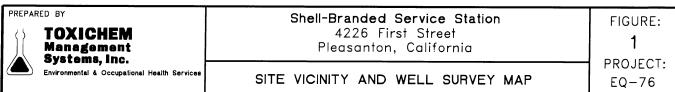


Table 4

Well Location Details

Shell-branded Service Station
4226 First Street, Pleasanton

Approximate Distance Source of and Direction from Site Total Depth Map Number Well Number Information Well Location (Feet) Date Installed Use Κ 3S/1E - 16K DWR 1500' North of Ball Park (according to log) >2,200 NNE 133 1916 NA L1 3S/1E - 16L1 DWR No distances on log, see approximate location on map >2,200 N 152 1945 Municipal L80 3S/1E - 16L80 DWR 20'S Blacow South Vine, 150'W of Santa Rita Road >2,400 NNW 158 1936 Municipal L81 3S/1E - 16L81 DWR No distances on log, see approximate location on map >2,200 N 205 NA Municipal L82 3S/1E - 16L82 DWR No distances on log, see approximate location on map >2,200 N 45 1912 NA M80 3S/1E - 16M80 DWR No distances on log, see approximate location on map >2,400NNW 33 1912 NA M81 3S/1E - 16M81 DWR No distances on log, see approximate location on map >2,400NNW 37 1912 NA N80 3S/1E - 16N80 DWR No distances on log, see approximate location on map >1,300 NW 178 1912 NA P1 3S/1E - 16P1 DWR No distances on log, see approximate location on map >1,200 N 305 1956 Municipal Α1 3S/1E - 21A1 DWR No distances on log, see approximate location on map >1,800 E 262 1954 Domestic В 3S/1E - 21B DWR 400'E of First St., 500'N of Vineyard 900'NE 250 1913 Municipal B1 3S/1E - 21B1 DWR 400'E of First St., 500'N of Vineyard 900'NE 796 Test Well 1960 B2 3S/1E - 21B2 Zone 7 See Map 1200'NE 30 NA Abandoned Water Well ВЗ 3S/1E - 21B3 Zone 7 See Map 1200'NE 55 NA Abandoned Water Well C1 3S/1E - 21C1 Zone 7 See Map 1,100'NW 57 NA Abandoned water Well СЗ 3S/1E - 21C3 Zone 7 See Map 1,100'NW NA NA Abandoned Water Well E2 3S/1E - 21E2 Zone 7 See Map 2,000SW 35 NA Abandoned Water Well R1 3S/1E - 16R1 Zone 7 See Map 2,600NE 226 NA Water Production Well

NA = Information Not Available

Table 5
Well Construction Details
Shell-branded Service Station
4226 First Street, 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)
K	133	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L1	152	22	12 Gauge	12	56-136	NA	NA	NA	NA	NA	NA	NA
L80	158	NA	NA	NA	48-66 and various to 156'	NA	NA	NA	NA	NA	NA	NA
L81	205	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L82	4 5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
M80	33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
M81	37	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N80	178	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P1	305	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A1	262	86	3/16 steel	10	110-178	NA	NA	NA	Cable	NA	33	NA
В	250	NA	NA	12	50-60, 105-135, 188-238	NA	NA	NA	NA	NA	NA	NA
B1	796	NA	NA	NA	NA	NA	NA	NA	Rotary	50865	NA NA	
B2	30	NA	NA	8	NA	NA	NA	NA	NA	NA	NA NA	NA
В3	55	NA	NA	12	NA	NA	NA	NA	NA NA	NA NA		NA
C1	57	NA	NA	12	NA	NA	NA	NA	NA	NA NA	NA	NA
С3	NA	NA	NA	NA	NA	NA	NA	NA	NA NA		NA	NA
E2	35	NA	Brick	3'2"	NA	NA	NA NA	NA NA		NA	NA	NA
R1	226	NA	NA	10	NA	NA			NA	NA	NA	NA
				.0	IAW	INA	NA	NA	NA	NA	NA	NA

NA = Information Not Available

ft. bgs = Feet below ground surface

gpm = Gallons per minute

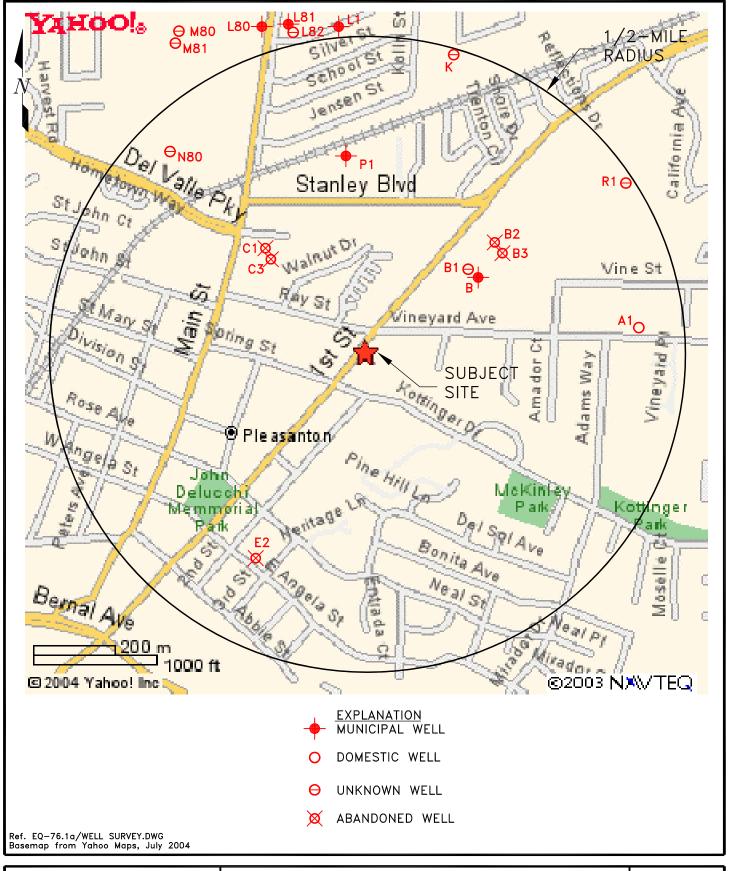




Table 4
Well Location Details
Shell-branded Service Station
4226 First Street. Pleasanton

Approximate Distance Source of and Direction from Site Total Map Number Well Number Information Well Location (Feet) Depth ft. Date Installed Use Κ 3S/1E - 16K DWR 1500' North of Ball Park (according to log) >2,200 NNE 133 1916 NA L1 3S/1E - 16L1 DWR No distances on log, see approximate location on map >2,200 N 152 1945 Municipal L80 3S/1E - 16L80 DWR >2,400 NNW 158 1936 20'S Blacow South Vine, 150'W of Santa Rita Road Municipal L81 3S/1E - 16L81 DWR No distances on log, see approximate location on map >2,200 N 205 NA Municipal DWR L82 3S/1E - 16L82 No distances on log, see approximate location on map >2,200 N 45 1912 NA M80 3S/1E - 16M80 DWR >2,400NNW 33 1912 NA No distances on log, see approximate location on map M81 3S/1E - 16M81 DWR No distances on log, see approximate location on map >2,400NNW 37 1912 NA N80 DWR 178 NA 3S/1E - 16N80 >1,300 NW 1912 No distances on log, see approximate location on map P1 3S/1E - 16P1 DWR No distances on log, see approximate location on map >1,200 N 305 1956 Municipal DWR A1 3S/1E - 21A1 No distances on log, see approximate location on map >1,800 E 262 1954 Domestic В 3S/1E - 21B DWR 400'E of First St., 500'N of Vineyard 900'NE 250 1913 Municipal B1 3S/1E - 21B1 DWR 400'E of First St., 500'N of Vineyard 900'NE 796 1960 Test Well B2 3S/1E - 21B2 Zone 7 See Map 1200'NE 30 NA Abandoned Water Well В3 3S/1E - 21B3 Zone 7 See Map 1200'NE 55 NA Abandoned Water Well C1 3S/1E - 21C1 Zone 7 See Map 1,100'NW 57 NA Abandoned water Well C3 3S/1E - 21C3 Zone 7 See Map 1,100'NW NA NA Abandoned Water Well E2 NA 3S/1E - 21E2 Zone 7 See Map 2,000SW 35 Abandoned Water Well R1 3S/1E - 16R1 Zone 7 See Map 2,600NE 226 NA Water Production Well

NA = Information Not Available

EQ\76\1A\Well Survey Tables

Table 5
Well Construction Details
Shell-branded Service Station
4226 First Street, Pleasanton

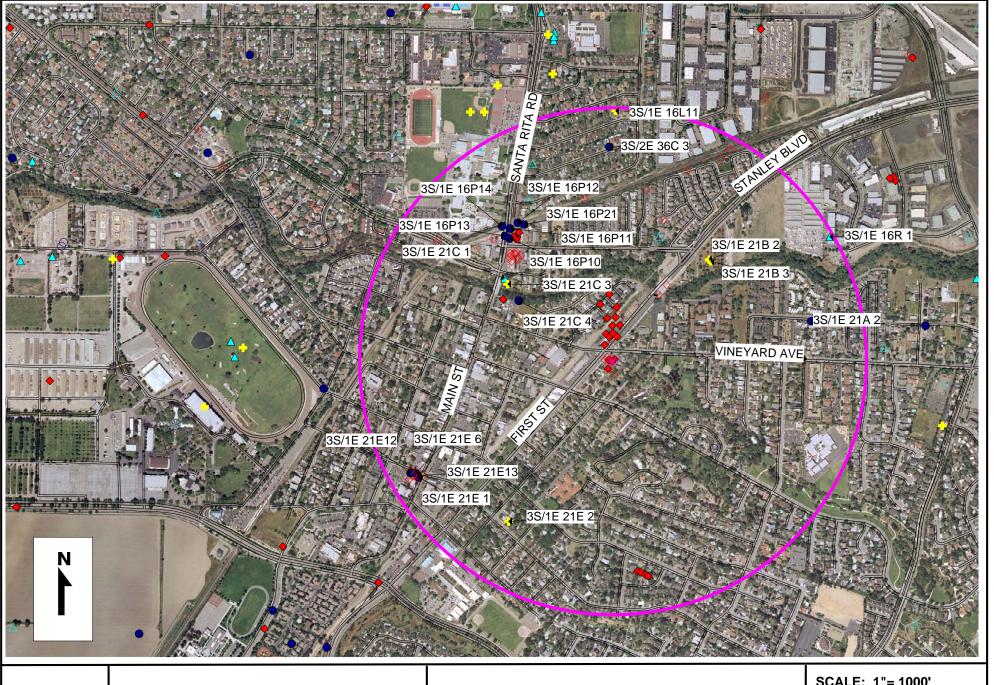
Map Number	Total Depth	Depth to Water (ft. bgs)	Casing Type	Casing Diameter (in.)	Screen Interval (ft. bgs)	Gravel Pack Interval (ft. bgs)	Annular Seal Depth (ft. bgs)	Annular Seal Material	Well Construction Method	Driller's log Number	Pumping Test Rate (gpm)	Test Duration (hours)
K	133	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L1	152	22	12 Gauge	12	56-136	NA	NA	NA	NA	NA	NA	NA
L80	158	NA	NA	NA	48-66 and various to 156'	NA	NA	NA	NA	NA	NA	NA
L81	205	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
L82	45	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
M80	33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
M81	37	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N80	178	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
P1	305	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A1	262	86	3/16 steel	10	110-178	NA	NA	NA	Cable	NA	33	NA
В	250	NA	NA	12	50-60, 105-135, 188-238	NA	NA	NA	NA	NA	NA	NA
B1	796	NA	NA	NA	NA	NA	NA	NA	Rotary	50865	NA	NA
B2	30	NA	NA	8	NA	NA	NA	NA	NA	NA	NA	NA
В3	55	NA	NA	12	NA	NA	NA	NA	NA	NA	NA	NA
C1	57	NA	NA	12	NA	NA	NA	NA	NA	NA	NA	NA
C3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E2	35	NA	Brick	3'2"	NA	NA	NA	NA	NA	NA	NA	NA
R1	226	NA	NA	10	NA	NA	NA	NA	NA	NA	NA	NA

NA = Information Not Available

ft. bgs = Feet below ground surface

gpm = Gallons per minute

EQ\76\2A\Well Survey Tables



ZONE 7 WATER AGENCY 100 NORTH CANYONS PARKWAY LIVERMORE, CA 94551

WELL LOCATION MAP

SCALE: 1"= 1000'

RADIUS = 1/2 mi

4226 FIRST ST

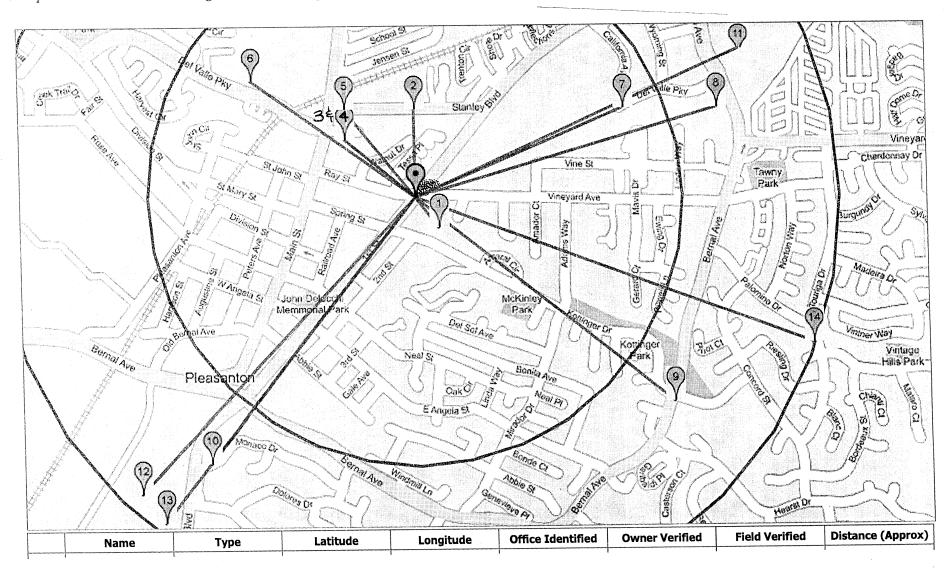
H:\FLOOD\REFERALLS\REFERALLS.WOR

♦ Site #135782

Note:

All distances are approximate Only the closest $1\hat{0}\hat{0}$ receptors are displayed

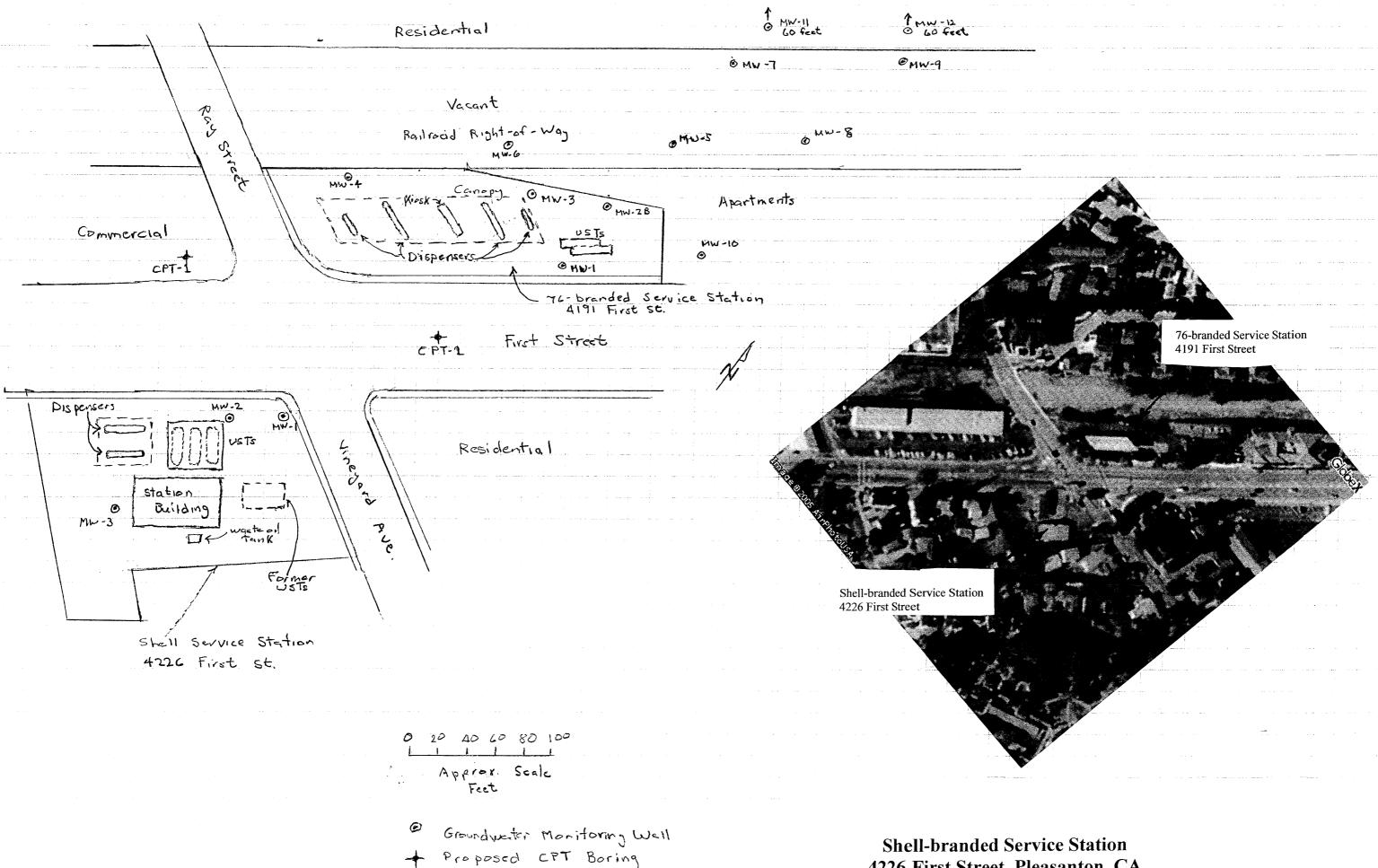
Receptors without a latitude and longitude will not be displayed



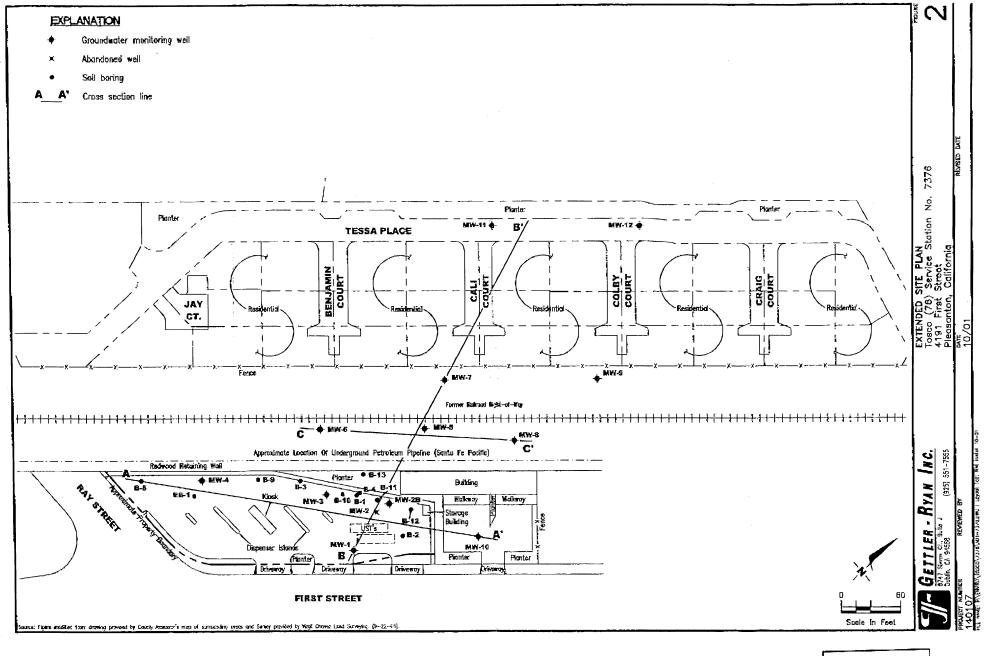
Receptor wap

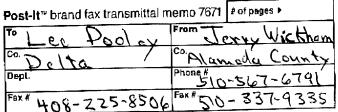
0	Irrigation Canal? (a)	Surface Water Body	37.662	-121.869	Yes	No	Verified	465.78 FT
(2)	Unocal (LUFT)	Other [internal only]	37.666	-121.870	Yes	No	Verified	1095.61 FT
(3)	Arroyo Del Valle	Surface Water Body	37.665	-121.873	Yes	No ,	Verified	1133.89 FT
T A	3S/1E 21C4	Other Well	37.665	-121.873	Yes	No '	Verified	1133.89 FT
(5)	Mobil (LUFT)	Other [internal only]	37.666	-121.873	Yes	No	Verified	1397.34 FT
6	N80	Other Well	37.667	-121.877	Yes	No	Verified	2495.83 FT
	Creek	Surface Water Body	37.666	-121.861	No	No	Verified	2823.13 FT
8	Fire Department	Other Well	37.666	-121.857	No	No	Verified	3914.69 FT
	Seasonal Water Basir	Surface Water Body	37.656	-121.859	No	No	Verified	4080.37 FT
109	Semipermanent Water Body (a)	Surface Water Body	37.654	-121.879	Yes	No	Verified	4192.15 FT
100		Surface Water Body	37.668	-121.856	Yes	No	Verified	4440.15 FT
12	Dry Creek Designed for Rain Runoff	Surface Water Body	37.653	-121.882	No	No	Verified	5037.31 FT
13		Surface Water Body	37.652	-121.881	Yes	No	Verified	5123.76 FT
		Surface Water Body	37.658	-121.853	Yes	No	Verified	5243.15 FT

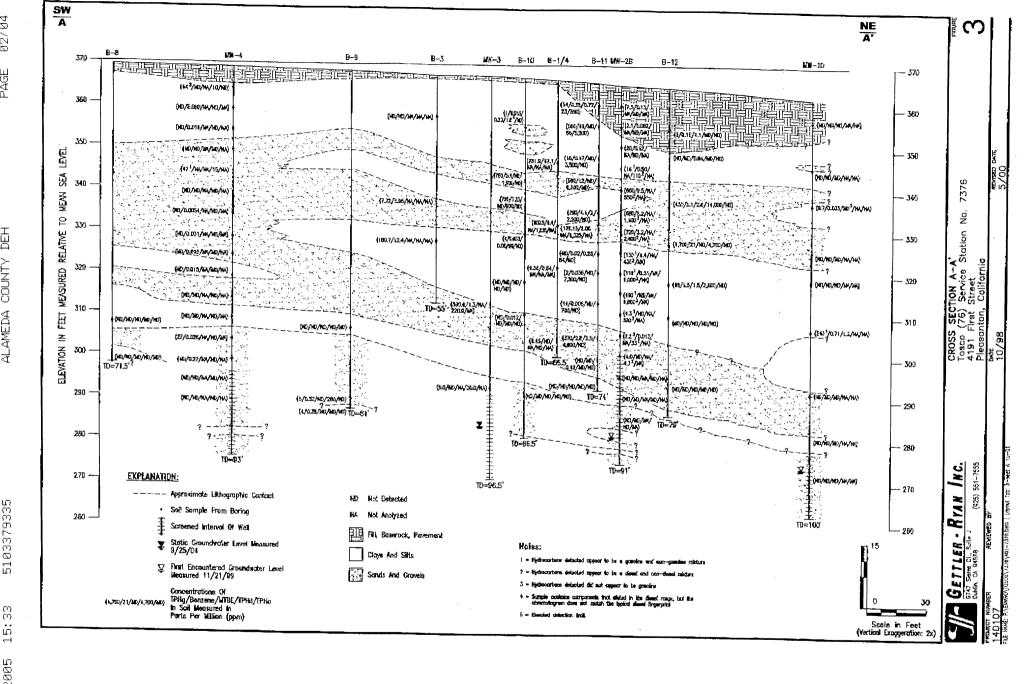
Note: only the closest 100 receptors are displayed



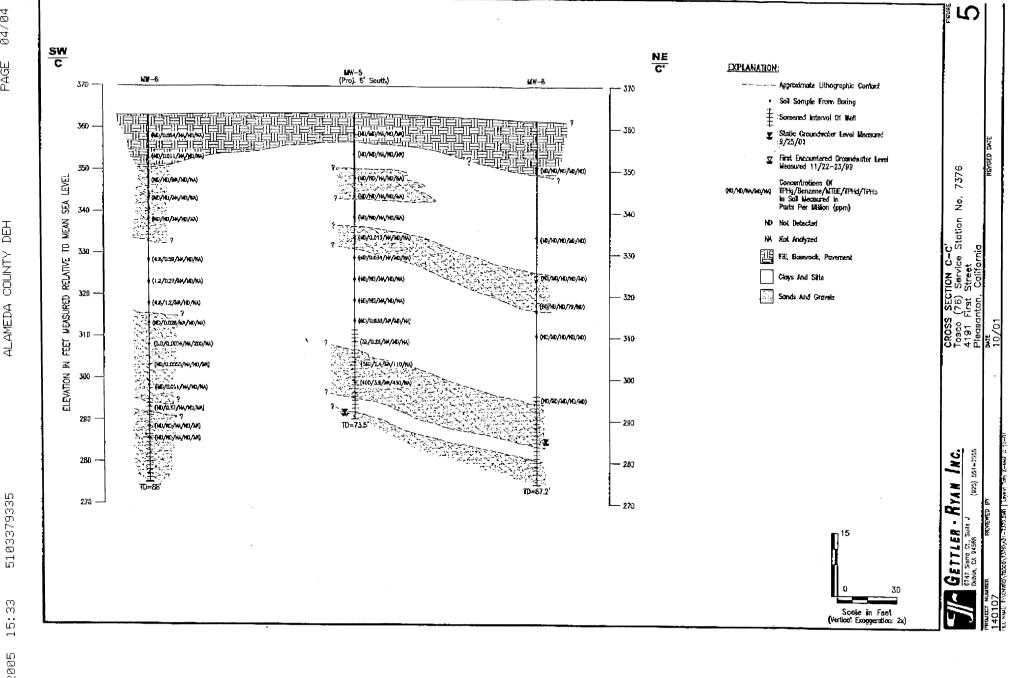
4226 First Street, Pleasanton, CA

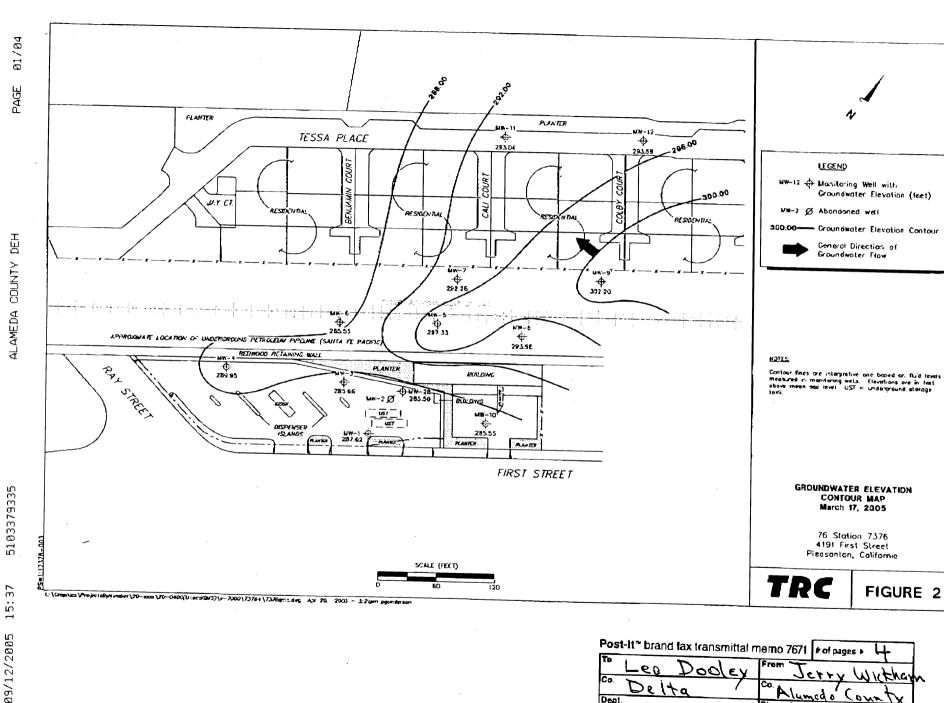






2005

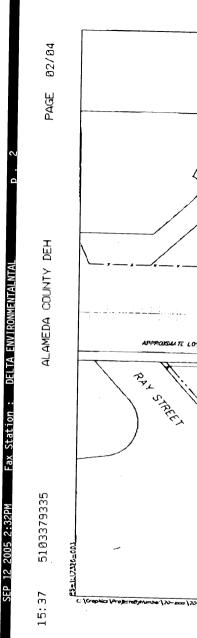




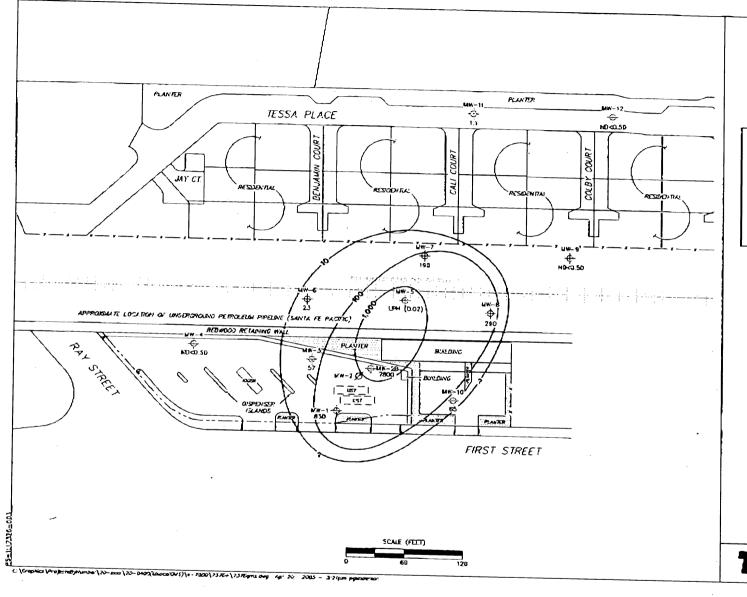
DELTA ENVIRONMENTALNTAL

SEP 12 2005 2:32PM

Dept. Fax #408-225-8506



09/12/2005





LEGEND

Ma-12 + Monitoring Well with Dissolved-Phose MT6E Concentration ($\mu g \Lambda$) \propto LPH thickness (feet)

MW-2 Ø Abandored well

_1.000 Dissolved-Phose MTBE Cantour (µg/1)

NOTES

Carlour lines are interpretive and based on laboratory analysis results of groundwater samples. WTEL writing butly elber polysis are line. Mol and analysis of carbon carbon elber lines with a consideration of limit indicated an afficial laboratory report. UST = indiagraph of strongs lank. LPH = ligital-phase hydrocarbons. Results obtained using EPA Method 6260R.

DISSOLVED-PHASE MITBE CONCENTRATION MAP

> 76 Station 7376 419's First Street Pleasanton, California

TRC

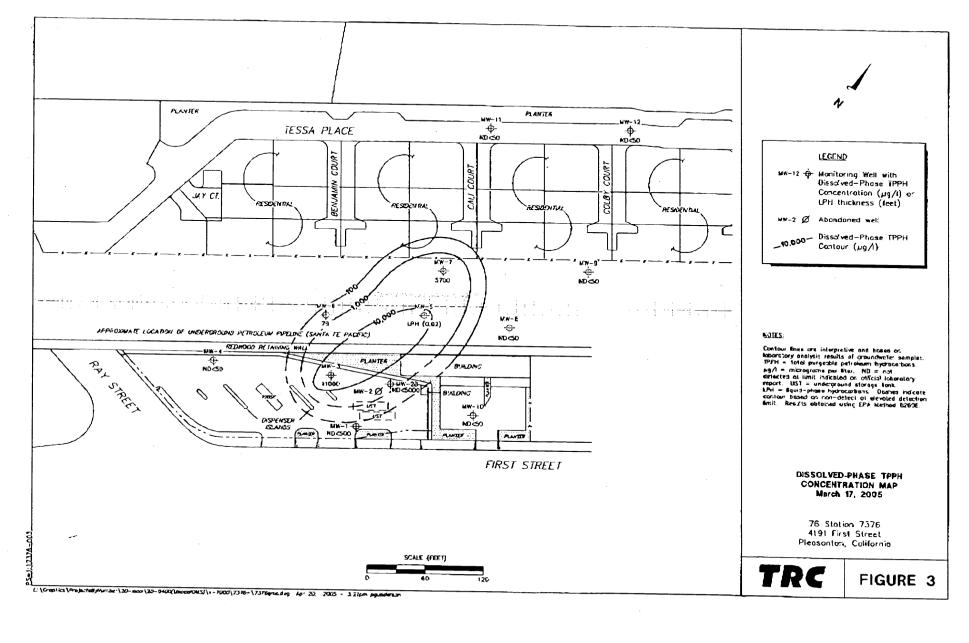
FIGURE 5

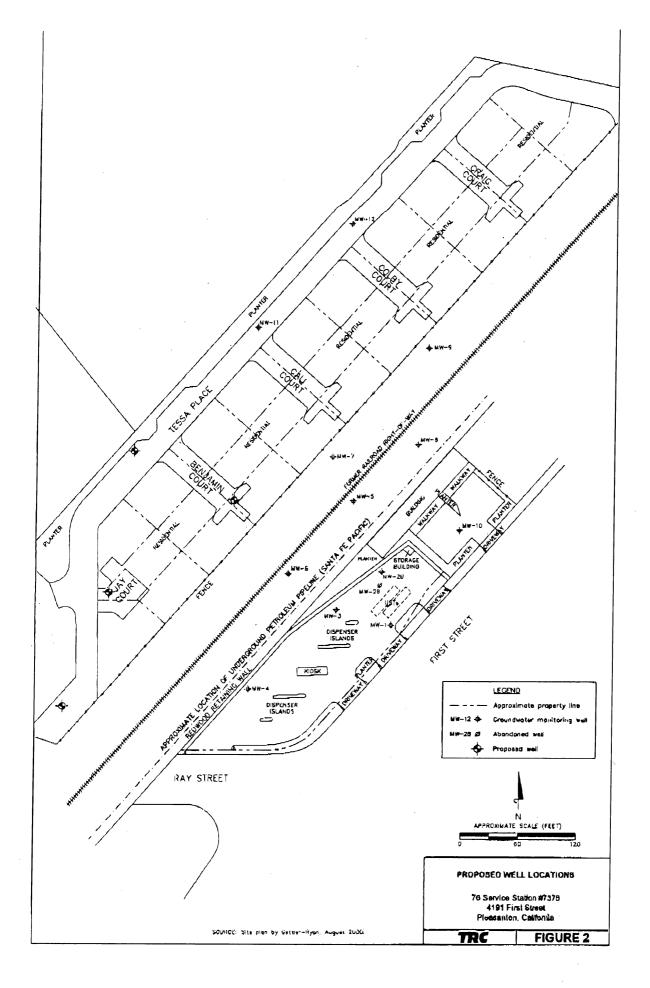


5103379335

15:37

09/12/2005





PAGE 04/04

ALAMEDA COUNTY DEH

9886788018

75/2005 15:37

GLOBAL_I FIELD_P	O STATUS	GW_MEAS D	TFPROD D	TW	RISER_HT TOT_DEP' GW_	MEAS SHEEN	
T06001001MW-1	ACT	3/17/2005		79.36		N	
T06001001MW-8	ACT	3/17/2005		67.85	84.37	N	
T06001001MW-7	ACT	3/17/2005		63.69	76.65	N	
T06001001MW-10	ACT	3/17/2005		77.07	90.34	N	
T06001001MW-5	ACT	3/17/2005	65.86	65.88	72.45	N	
T06001001MW-2B	ACT	3/17/2005		79.55	85.15	N	
T06001001MW-4	ACT	3/17/2005		78.86	94.66	N	
T06001001MW-9	ACT	3/17/2005		60.42	77.95	N	
T06001001MW-12	ACT	3/17/2005		60.49	90.78	N	
T06001001MW-11	ACT	3/17/2005		61.62	87.35	N	
T06001001MW-6	ACT	3/17/2005		77.58	87.96	N	
T06001001MW-3	ACT	3/17/2005		81.33	94.13	N	

Electronic Submittals

UNOCAL (PLEASANTON)
4191 1ST ST
PLEASANTON , CA 94566
CASE STATUS: OPEN
SHOW_THIS SITE ON MAP

RETURN TO REPORT MAIN MENU

REGIONAL BOARD - CASE #: 01-0109 SAN FRANCISCO BAY RWQCB (REGION 2) - (BG) CONTACT: BETTY GRAHAM - (510) 622-2300 LOCAL AGENCY (LEAD AGENCY) - CASE #: 5017 ALAMEDA COUNTY LOP - (AG)

ELECTRONIC SUBMITTALS - ANALYTICAL DATA (Show all Analytical Submittals)

EDF Data Report

Report Title: "76 Station, 1st Q, 2005"

Analysis performed by STL ChromaLab, Inc., Pleasanton, CA

EDF Submitted: 5/4/2005 # of Field Points Sampled: 12

			(Ç	C Data	Client	Data D	etections)		
								REPORTING RESULTS	REP(LI M IT
SAMPLING DATE	ANALYSIS DATE	MATRIX	BATCH #	FIELD PT NAME	SAMPLE ID		PARAMETER	QUALIFIER VAI	UE UNITS
3/17/2005	3/31/2005	W	503312B- 66	MW-7	MW-7	SW8260B	BENZENE	= 180	00 UG/L
3/17/2005	3/31/2005	w	503311C- 68	MW-8	MW-8	SW8260B	BENZENE	ND 0	UG/L
3/17/2005	3/31/2005	w	503311C- 68	MW-1	MW-1	SW8260B	BENZENE	ND 0	UG/L
3/17/2005	3/31/2005	w	503311C- 68	MW-11	MW-11	SW8260B	BENZENE	ND 0	UG/L
3/17/2005	3/31/2005	w	503311A- 07	MW-2B	MW-2B	SW8260B	BENZENE	ND 0	UG/L
3/17/2005	3/31/2005	w	503311C- 68	MW-4	MW-4	SW8260B	BENZENE	ND 0	UG/L
3/17/2005	3/31/2005	W	503311C- 68	MW-6	MW-6	SW8260B	BENZENE	= 0.6	7 UG/L
3/17/2005	3/31/2005	W	503311C- 68	MW-3	MW-3	SW8260B	BENZENE	= 110) UG/L
3/17/2005	3/31/2005	w	503311C- 68	MW-12	MW-12	SW8260B	BENZENE	ND 0	UG/L
3/17/2005	3/31/2005	w	503312A- 68	MW-10	MW-10	SW8260B	BENZENE	ND 0	UG/L
3/17/2005	3/31/2005	w	503311C- 68	MW-9	MW-9	SW8260B	BENZENE	ND 0	UG/L
3/17/2005	3/31/2005	w	503311C- 68	MW-7	MW-7	SW8260B	TOLUENE	= 7.8	UG/L
3/17/2005	3/31/2005	w	503311C- 68	MW-6	MW-6	SW8260B	TOLUENE	ND 0	UG/L
3/17/2005	3/31/2005	W	503311C- 68	MW-4	MW-4	SW8260B	TOLUENE	ND 0	UG/L
3/17/2005	3/31/2005	w	503311C- 68	MW-3	MW-3	SW8260B	TOLUENE	= 1.3	UG/L
3/17/2005	3/31/2005	W	503311C- 68	MW-8	MW-8	SW8260B	TOLUENE	ND 0	UG/L
3/17/2005	3/31/2005	W	503311C- 68	MW-1	MW-1	SW8260B	TOLUENE	ND 0	UG/L
3/17/2005	3/31/2005	W	503311C- 68	MW-11	MW-11	SW8260B	TOLUENE	ND 0	UG/L
3/17/2005	3/31/2005	W	503311A- 07	MW-2B	MW-2B	SW8260B	TOLUENE	ND 0	UG/L
3/17/2005	3/31/2005	W	503311C- 68	MW-12	MW-12	SW8260B	TOLUENE	ND 0	UG/L
3/17/2005	3/31/2005	W	503312A- 68	MW-10	MW-10	SW8260B	TOLUENE	ND 0	UG/L
3/17/2005	3/31/2005	W	503311C-	MW-9	MW-9	SW8260B	TOLUENE	ND 0	UG/L

١	l			68						
l	3/17/2005	3/31/2005	W	5033104- 10 MW-7	MW-7	M8015	DIESEL RANGE ORGANICS	=	380	UG/L
l	3/17/2005	3/31/2005	W	5033104- 10 MW-6	MW-6	M8015	DIESEL RANGE ORGANICS	=	150	UG/L
	3/17/2005	3/31/2005	W	5033104- 10 MW-4	MW-4	M8015	DIESEL RANGE ORGANICS	ND	0	UG/L
	3/17/2005	3/31/2005	W	5033104- 10 MW-3	MW-3	M8015	DIESEL RANGE ORGANICS	=	2400	UG/L
	3/17/2005	3/31/2005	w	5033104- 10 MW-2B	MW-2B	M8015	DIESEL RANGE ORGANICS	=	280	UG/L
	3/17/2005	3/31/2005	W	5033104- 10 MW-12	MW-12	M8015	DIESEL RANGE ORGANICS	=	350	UG/L
l	3/17/2005	3/31/2005	W	5033104- 10 MW-11	MW-11	M8015	DIESEL RANGE ORGANICS	=	85	UG/L
	3/17/2005	3/31/2005	W	5033104- 10 MW-10	MW-10	M8015	DIESEL RANGE ORGANICS	ND	0	UG/L
	3/17/2005	3/31/2005	W	5033104- 10 MW-1	MW-1	M8015	DIESEL RANGE ORGANICS	ND	0	UG/L
	3/17/2005	3/31/2005	W	5033104- 10 MW-8	MW-8	M8015	DIESEL RANGE ORGANICS	=	56	UG/L
	3/17/2005	3/31/2005	W	5033104- 10 MW-9	MW-9	M8015	DIESEL RANGE ORGANICS	ND	0	UG/L
	3/17/2005	3/31/2005	W	503311C- 68 MW-6	MW-6	SW8260B	ETHYLBENZENE	ND	0	UG/L
I	3/17/2005	3/31/2005	W	503311C- 68 MW-4	MW-4	SW8260B	ETHYLBENZENE	ND	0	UG/L
I	3/17/2005	3/31/2005	W	503311C- 68 MW-3	MW-3	SW8260B	ETHYLBENZENE	=	38	UG/L
	3/17/2005	3/31/2005	W	503311A- 07 MW-2B	MW-2B	SW8260B	ETHYLBENZENE	=	0.83	UG/L
	3/17/2005	3/31/2005	W	503311C- 68 MW-12	MW-12	SW8260B	ETHYLBENZENE	ND	0	UG/L
	3/17/2005	3/31/2005	W	503311C- 68 MW-11	MW-11	SW8260B	ETHYLBENZENE	ND	0	UG/L
	3/17/2005	3/31/2005	w	503312A- 68 MW-10	MW-10	SW8260B	ETHYLBENZENE	ND	0	UG/L
	3/17/2005	3/31/2005	w	503311C- 68 MW-1	MW-1	SW8260B	ETHYLBENZENE	ND	0	UG/L
	3/17/2005	3/31/2005	W	503311C- 68 MW-9	MW-9	SW8260B	ETHYLBENZENE	ND	0	UG/L
	3/17/2005	3/31/2005	W	503311C- 68 MW-7	MW-7	SW8260B	ETHYLBENZENE	=	24	UG/L
	3/17/2005	3/31/2005	W	503311C- 68 MW-8	MW-8	SW8260B	ETHYLBENZENE	ND	0	UG/L
l	3/17/2005	3/31/2005	W	503311C- 68 MW-6	MW-6	SW8260B	GASOLINE RANGE ORGANICS	=	79	UG/L
	3/17/2005	3/31/2005	W	503311C- 68 MW-4	MW-4	SW8260B	GASOLINE RANGE ORGANICS	ND	0	UG/L
	3/17/2005	3/31/2005	W	503312B- 66 MW-3	MW-3	SW8260B	GASOLINE RANGE ORGANICS	=	11000	UG/L
	3/17/2005	3/31/2005	W	503311C- 68 MW-12	MW-12	SW8260B	GASOLINE RANGE ORGANICS	ND	0	UG/L
	3/17/2005	3/31/2005	W	503311C- 68 MW-11	MW-11	SW8260B	GASOLINE RANGE ORGANICS	ND	0	UG/L
	3/17/2005	3/31/2005	W	503312A- 68 MW-10	MW-10	SW8260B	GASOLINE RANGE ORGANICS	ND	0	UG/L
	3/17/2005	3/31/2005	W	503312B- 66 MW-1	MW-1	SW8260B	GASOLINE RANGE ORGANICS	ND	0	UG/L
	3/17/2005	3/31/2005	w	503311C- 68 MW-9	MW-9	SW8260B	GASOLINE RANGE ORGANICS	ND	0	UG/L
	3/17/2005	3/31/2005	W	503311C- 68 MW-8	MW-8	SW8260B	GASOLINE RANGE ORGANICS	ND	0	UG/L
	3/17/2005	3/31/2005	W	503311C- 68 MW-7	MW-7	SW8260B	GASOLINE RANGE ORGANICS	=	5700	UG/L
	3/17/2005	3/31/2005	W	503311C- 68 MW-6	MW-6	SW8260B	METHYL-TERT-BUTYL ETHER (MTBE)	=	23	UG/L
ļ										

Electronic Submittals Page 3 of 3

1.										
I	3/17/2005	3/31/2005	W	503311C- MW-9	MW-9	SW8260B	METHYL-TERT-BUTYL ETHER (MTBE)	ND	0	UG/L
	3/17/2005	3/31/2005	W	503312B- 66 MW-1	MW-1	SW8260B	METHYL-TERT-BUTYL ETHER (MTBE)	=	830	UG/L
	3/17/2005	3/31/2005	W	503311C- MW-4	MW-4	SW8260B	METHYL-TERT-BUTYL ETHER (MTBE)	ND	0	UG/L
	3/17/2005	3/31/2005	W	503311C- MW-3	MW-3	SW8260B	METHYL-TERT-BUTYL ETHER (MTBE)	=	57	UG/L
I	3/17/2005	3/31/2005	W	503311C- MW-12	MW-12	SW8260B	METHYL-TERT-BUTYL ETHER (MTBE)	ND	0	UG/L
	3/17/2005	3/31/2005	W	503311C- 68 MW-11	MW-11	SW8260B	METHYL-TERT-BUTYL ETHER (MTBE)	=	1.1	UG/L
	3/17/2005	3/31/2005	W	503312A- 68 MW-10	MW-10	SW8260B	METHYL-TERT-BUTYL ETHER (MTBE)	=	65	UG/L
	3/17/2005	3/31/2005	W	503312B- 66 MW-7	MW-7	SW8260B	METHYL-TERT-BUTYL ETHER (MTBE)	=	190	UG/L
l	3/17/2005	3/31/2005	W	503312B- 66 MW-8	MW-8	SW8260B	METHYL-TERT-BUTYL ETHER (MTBE)	=	290	UG/L
I	3/17/2005	3/31/2005	W	503311C- 68 MW-6	MW-6	SW8260B	XYLENES	ND	0	UG/L
	3/17/2005	3/31/2005	W	503311C- 68 MW-12	MW-12	SW8260B	XYLENES	ND	0	UG/L
	3/17/2005	3/31/2005	W	503311C- 68 MW-4	MW-4	SW8260B	XYLENES	ND	0	UG/L
	3/17/2005	3/31/2005	W	503312B- 66 MW-3	MW-3	SW8260B	XYLENES	=	1100	UG/L
	3/17/2005	3/31/2005	W	503311A- 07 MW-2B	MW-2B	SW8260B	XYLENES	ND	0	UG/L
	3/17/2005	3/31/2005	W	503311C- 68 MW-11	MW-11	SW8260B	XYLENES	ND	0	UG/L
	3/17/2005	3/31/2005	W	503312A- 68 MW-10	MW-10	SW8260B	XYLENES	ND	0	UG/L
	3/17/2005	3/31/2005	W	503311C- MW-7	MW-7	SW8260B	XYLENES	=	16	UG/L
	3/17/2005	3/31/2005	W	503312B- 66 MW-1	MW-1	SW8260B	XYLENES	ND	0	UG/L
	3/17/2005	3/31/2005	W	503311C- 68 MW-9	MW-9	SW8260B	XYLENES	ND	0	UG/L
	3/17/2005	3/31/2005	W	503311C- 68 MW-8	MW-8	SW8260B	XYLENES	ND	0	UG/L
	3/17/2005	4/5/2005	W	504042A- 66 MW-2B	MW-2B	SW8260B	GASOLINE RANGE ORGANICS	ND	0	UG/L
	3/17/2005	4/5/2005	w	504042A- 66 MW-2B	MW-2B	SW8260B	METHYL-TERT-BUTYL ETHER (MTBE)	=	7800	UG/L

Geotracker Home | Site/Facility Finder | Case Finder | MTBE/Case Reports

Depth to Water Information

UNOCAL (PLEASANTON)

4191 1ST ST

PLEASANTON , CA 94566

CASE STATUS: OPEN
SHOW THIS SITE ON MAP
RETURN TO REPORT MAIN MENU

REGIONAL BOARD - CASE #: 01-0109

SAN FRANCISCO BAY RWQCB (REGION 2) - (BG) CONTACT: BETTY GRAHAM - (510) 622-2300

LOCAL AGENCY (LEAD AGENCY) - CASE #: 5017

ALAMEDA COUNTY LOP - (AG)

MIN DEPTH TO WATER 60.42 feet MAX DEPTH TO WATER 92.09 feet

FREE PRODUCT? YES MAX FREE PRODUCT THICKNESS

0.42 feet

Electronic Submittals Page 1 of 1

Electronic Submittals

UNOCAL (PLEASANTON)

4191 1ST ST

PLEASANTON , CA 94566
CASE STATUS: OPEN
SHOW THIS SITE ON MAP
RETURN TO REPORT MAIN MENU

REGIONAL BOARD - CASE #: 01-0109

SAN FRANCISCO BAY RWQCB (REGION 2) - (BG) CONTACT: BETTY GRAHAM - (510) 622-2300

LOCAL AGENCY (LEAD AGENCY) - CASE #: 5017

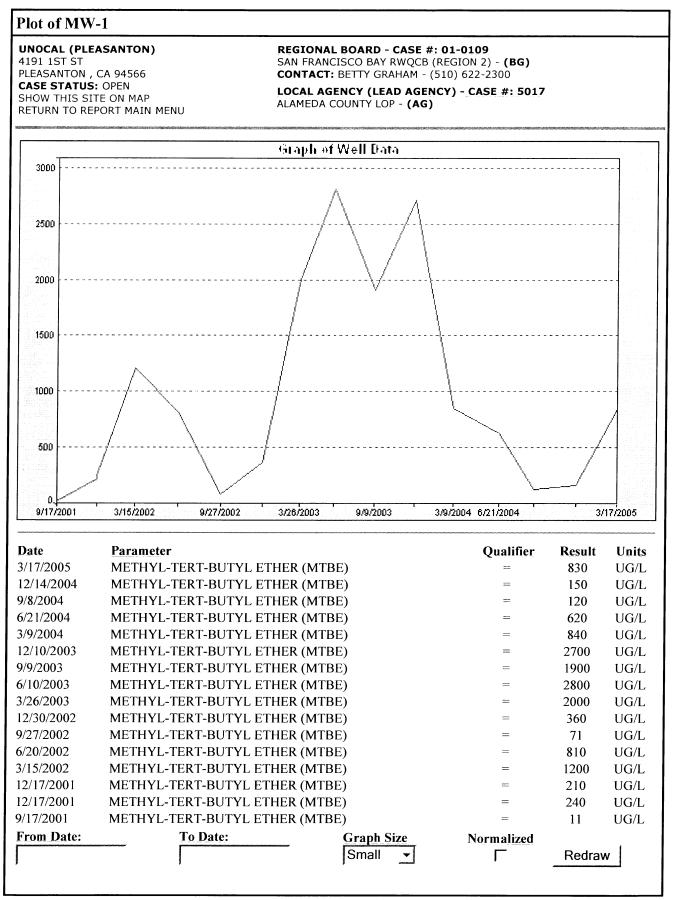
ALAMEDA COUNTY LOP - (AG)

	ubmitted By ENNIS JENS	EN (CONTRACT	OR)		Subm 5/4/20	itted Date 005	e	Confir 111624	mation # 5865	Global T06001	
#	GLOBAL ID	FIELD POINT NAME	STATUS	GW MEAS	DATE	DTFPROD	DTW	RISER HT	TOT DEPTH	GW MEAS DE	SC SHEE
1	T0600100101	MW-1	ACT	3/17/2005			79.36		86.35		N
2	T0600100101	MW-8	ACT	3/17/2005			67.85		84.37		N
3	T0600100101	MW-7	ACT	3/17/2005			63.69		76.65		N
4	T0600100101	MW-10	ACT	3/17/2005			77.07		90.34		N
5	T0600100101	MW-5	ACT	3/17/2005		65.86	65.88		72.45		N
6	T0600100101	MW-2B	ACT	3/17/2005			79.55		85.15		N
7	T0600100101	MW-4	ACT	3/17/2005			78.86		94.66		N
8	T0600100101	MW-9	ACT	3/17/2005			60.42		77.95		N
9	T0600100101	MW-12	ACT	3/17/2005			60.49		90.78		N
10	T0600100101	MW-11	ACT	3/17/2005			61.62		87.35		N
11	T0600100101	MW-6	ACT	3/17/2005			77.58		87.96		N
12	T0600100101	MW-3	ACT	3/17/2005			81.33		94.13		N

Remediation On Site UNOCAL (PLEASANTON) REGIONAL BOARD - CASE #: 01-0109 4191 1ST ST SAN FRANCISCO BAY RWQCB (REGION 2) - (BG) PLEASANTON, CA 94566 **CONTACT: BETTY GRAHAM - (510) 622-2300 CASE STATUS: OPEN** LOCAL AGENCY (LEAD AGENCY) - CASE #: 5017 SHOW THIS SITE ON MAP ALAMEDA COUNTY LOP - (AG) RETURN TO REPORT MAIN MENU Start Date Method Phase 4/5/2000 **ERR** Unknown

Plot of MW-7 **UNOCAL (PLEASANTON)** REGIONAL BOARD - CASE #: 01-0109 4191 1ST ST SAN FRANCISCO BAY RWQCB (REGION 2) - (BG) PLEASANTON, CA 94566 **CONTACT:** BETTY GRAHAM - (510) 622-2300 **CASE STATUS: OPEN** LOCAL AGENCY (LEAD AGENCY) - CASE #: 5017 SHOW THIS SITE ON MAP ALAMEDA COUNTY LOP - (AG) RETURN TO REPORT MAIN MENU Graph of Well Data 800 700 600 500 400 300 200 100 9/17/2001 3/15/2002 9/27/2002 3/26/2003 9/9/2003 3/9/2004 6/21/2004 3/17/2005 Qualifier Date Parameter Result Units 3/17/2005 METHYL-TERT-BUTYL ETHER (MTBE) 190 UG/L 12/14/2004 METHYL-TERT-BUTYL ETHER (MTBE) 320 UG/L 9/8/2004 METHYL-TERT-BUTYL ETHER (MTBE) 440 UG/L 6/21/2004 METHYL-TERT-BUTYL ETHER (MTBE) 300 UG/L 3/9/2004 METHYL-TERT-BUTYL ETHER (MTBE) 280 UG/L METHYL-TERT-BUTYL ETHER (MTBE) 12/10/2003 340 UG/L 9/9/2003 METHYL-TERT-BUTYL ETHER (MTBE) 380 UG/L 6/10/2003 METHYL-TERT-BUTYL ETHER (MTBE) 270 UG/L 3/26/2003 METHYL-TERT-BUTYL ETHER (MTBE) 500 UG/L 12/30/2002 METHYL-TERT-BUTYL ETHER (MTBE) 610 UG/L 9/27/2002 METHYL-TERT-BUTYL ETHER (MTBE) 390 UG/L 6/20/2002 METHYL-TERT-BUTYL ETHER (MTBE) 540 UG/L 3/15/2002 METHYL-TERT-BUTYL ETHER (MTBE) 360 UG/L UG/L 12/17/2001 METHYL-TERT-BUTYL ETHER (MTBE) 670 12/17/2001 METHYL-TERT-BUTYL ETHER (MTBE) 760 UG/L 9/17/2001 METHYL-TERT-BUTYL ETHER (MTBE) 750 UG/L To Date: From Date: Graph Size Normalized Small Redraw

Geotracker Home | Site/Facility Finder | Case Finder | MTBE/Case Reports



LUFT ANALYTICAL DATA REPORT

UNOCAL (PLEASANTON) 4191 1ST ST PLEASANTON, CA 94566 CASE STATUS: OPEN SHOW THIS SITE ON MAP RETURN TO REPORT MAIN MENU

REGIONAL BOARD - CASE #: 01-0109 SAN FRANCISCO BAY RWQCB (REGION 2) - (BG) **CONTACT:** BETTY GRAHAM - (510) 622-2300

LOCAL AGENCY (LEAD AGENCY) - CASE #: 5017

ALAMEDA COUNTY LOP - (AG)

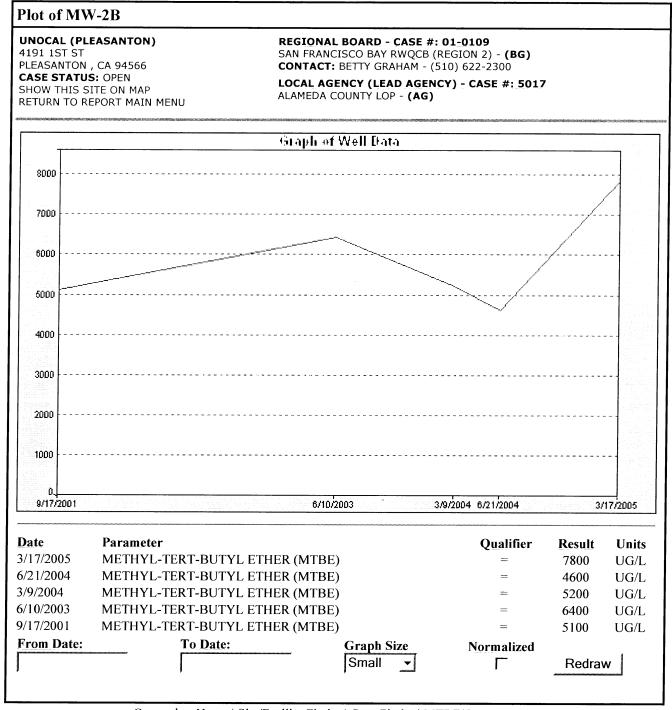
Plot Selected Chemicals

Reset Boxes

Note: You may select up to 6 chemicals.

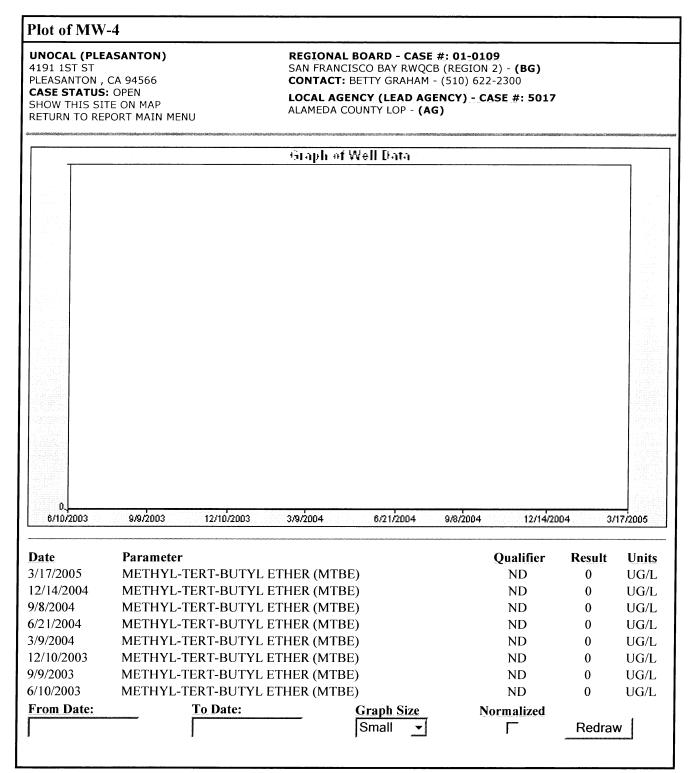
(All Data) | (Most Recent) | (Maximum Concentrations)

۱	NAME	DATE	PARAMETER	MATRIX	QUALIFIER	RESULT	UNITS	PL
	MW-3	3/17/2005	BENZENE	W	=	110	UG/L	Γ
	MW-3	3/17/2005	TOLUENE	W	=	1.3	UG/L	Γ
	MW-3	3/17/2005	TOLUENE-D8	W	SU	98.6	PERCENT	Γ
	MW-3	3/17/2005	TOLUENE-D8	W	SU	102.7	PERCENT	Γ
	MW-3	3/17/2005	1,2-DICHLOROETHANE-D4	W	SU	95.6	PERCENT	Γ
	MW-3	3/17/2005	1,2-DICHLOROETHANE-D4	W	SU	96.4	PERCENT	Γ
	MW-3	3/17/2005	DEPTH TO WATER		=	81.33	FEET	Γ
	MW-3	3/17/2005	DIESEL RANGE ORGANICS	W	=	2400	UG/L	Γ
	MW-3	3/17/2005	ETHYLBENZENE	W	=	38	UG/L	Γ
	MW-3	3/17/2005	GASOLINE RANGE ORGANICS	W	=	11000	UG/L	Γ
	MW-3	3/17/2005	METHYL-TERT-BUTYL ETHER (MTBE)	W	=	57	UG/L	F
	MW-3	3/17/2005	O-TERPHENYL	W	SU	113.5	PERCENT	Γ
	MW-3	3/17/2005	XYLENES	W	=	1100	UG/L	Γ

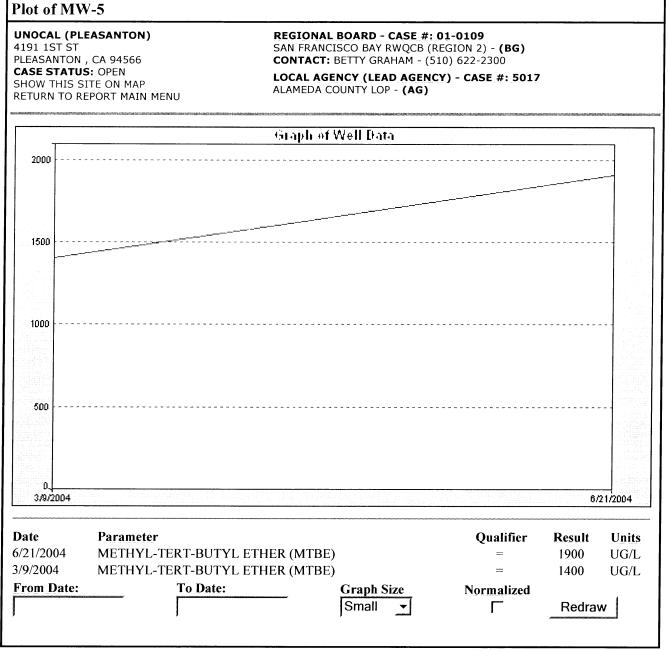


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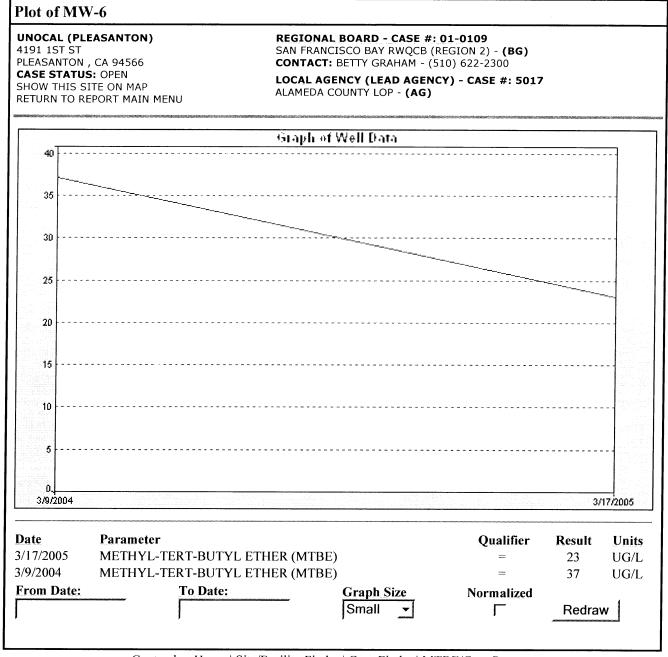
Plot of MW-3 **UNOCAL (PLEASANTON)** REGIONAL BOARD - CASE #: 01-0109 4191 1ST ST SAN FRANCISCO BAY RWQCB (REGION 2) - (BG) PLEASANTON, CA 94566 **CONTACT:** BETTY GRAHAM - (510) 622-2300 CASE STATUS: OPEN LOCAL AGENCY (LEAD AGENCY) - CASE #: 5017 SHOW THIS SITE ON MAP ALAMEDA COUNTY LOP - (AG) RETURN TO REPORT MAIN MENU Graph of Well Data 160 140 120 100 80 60 40 20 9/17/2001 9/27/2002 3/15/2002 3/26/2003 9/9/2003 3/9/2004 6/21/2004 3/17/2005 Date Parameter **Qualifier** Result Units 3/17/2005 METHYL-TERT-BUTYL ETHER (MTBE) 57 UG/L 12/14/2004 METHYL-TERT-BUTYL ETHER (MTBE) 120 UG/L 9/8/2004 METHYL-TERT-BUTYL ETHER (MTBE) 82 UG/L 6/21/2004 METHYL-TERT-BUTYL ETHER (MTBE) 59 UG/L 3/9/2004 METHYL-TERT-BUTYL ETHER (MTBE) 83 UG/L 12/10/2003 METHYL-TERT-BUTYL ETHER (MTBE) 90 UG/L 9/9/2003 METHYL-TERT-BUTYL ETHER (MTBE) 63 UG/L 6/10/2003 METHYL-TERT-BUTYL ETHER (MTBE) 54 UG/L 3/26/2003 METHYL-TERT-BUTYL ETHER (MTBE) 130 UG/L 12/30/2002 METHYL-TERT-BUTYL ETHER (MTBE) UG/L 160 METHYL-TERT-BUTYL ETHER (MTBE) 9/27/2002 67 UG/L 6/20/2002 METHYL-TERT-BUTYL ETHER (MTBE) 92 UG/L 3/15/2002 METHYL-TERT-BUTYL ETHER (MTBE) ND 0 UG/L 12/17/2001 METHYL-TERT-BUTYL ETHER (MTBE) 80 UG/L 12/17/2001 METHYL-TERT-BUTYL ETHER (MTBE) 91 UG/L 9/17/2001 METHYL-TERT-BUTYL ETHER (MTBE) 71 UG/L From Date: To Date: Graph Size Normalized Small Redraw



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Geotracker Home | Site/Facility Finder | Case Finder | MTBE/Case Reports



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WORK PLAN 1-24-06 Shell-branded Service Station 4226 First Street Pleasanton, California

Description of Methods

Delta proposes to further define hydrogeologic conditions in the area by drilling two deep off-site borings.

Delta will obtain drilling permits from the Zone 7 Water District for all proposed borings. Delta will also need to obtain an encroachment from the City of Pleasanton in order drill within First Street. Shell will need to obtain an access agreement from the owner of the property located on the western corner of First and Ray Streets.

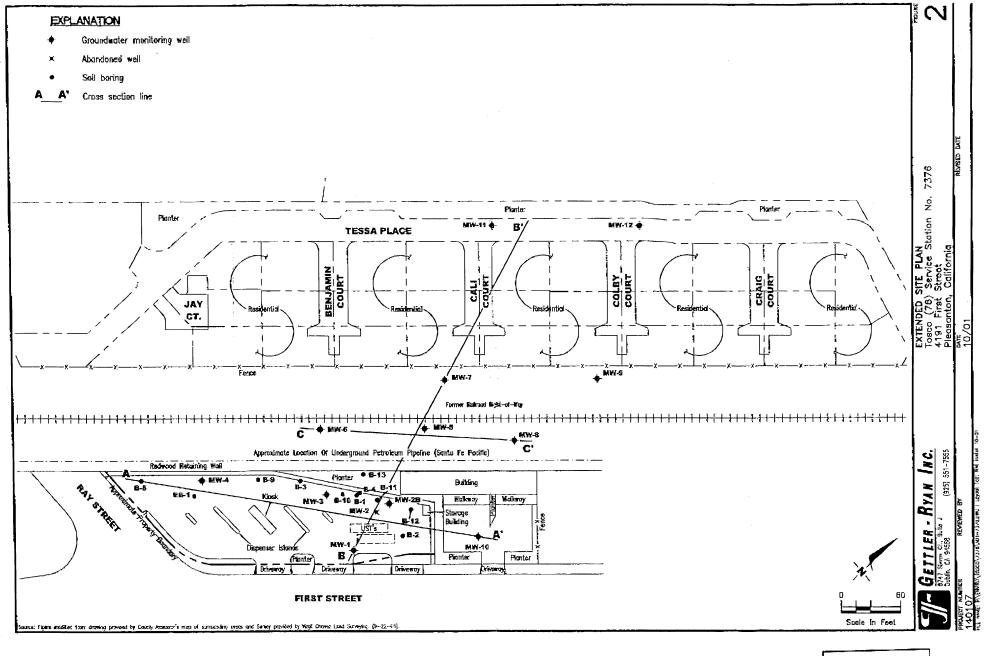
Prior to conducting any field work at the site, Delta will prepare a site specific Health and Safety Plan (HASP). The Delta field geologist on-site will review the HASP with site subcontractors at the start of each work day.

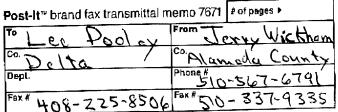
Borings CPT-1 and CPT-2

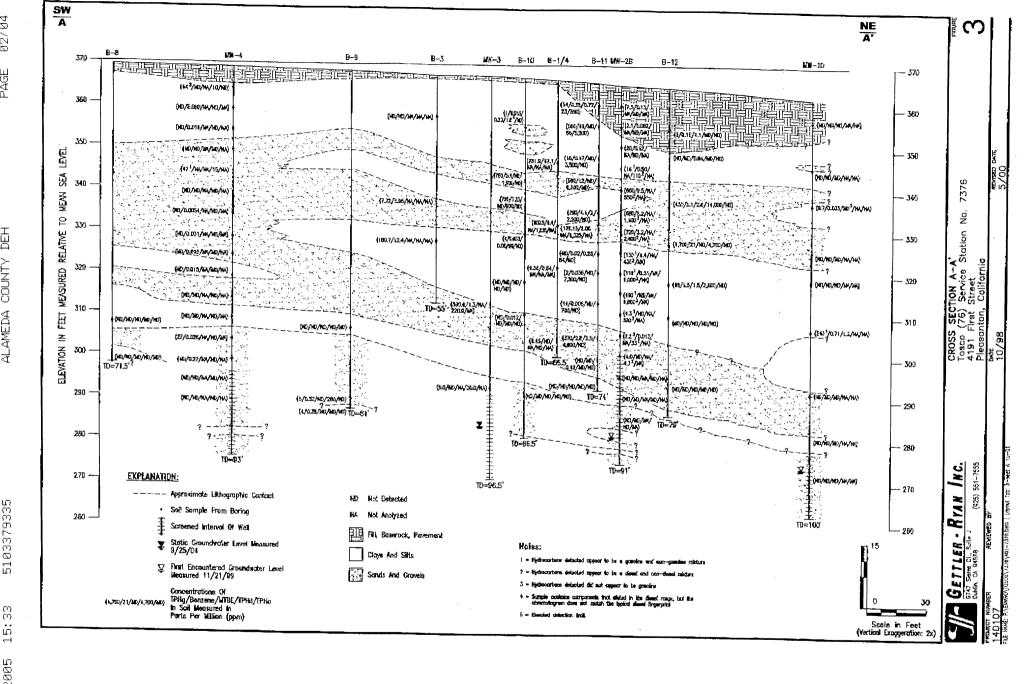
Delta proposes to two cone penetration test (CPT) borings to define the vertical of extent of petroleum hydrocarbons and fuel oxygenates detected in perched groundwater beneath the site. The borings will also define the lateral and vertical extent of a silt layer encountered beneath the site at a depth of approximately 60 feet. The locations of the CPT borings (CPT-1 and CPT-2) are shown on attached site area map. 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. CPT borings will be advanced to a depth of approximately 100 feet bg. Grout will be pumped into the borehole behind the cone by using a grout collar (retraction grouting).

A second CPT borehole will be drilled at each location for collection of depth discrete groundwater samples. Sand layers throughout the stratigraphic profile will be targeted for sampling. Collection of groundwater samples will be attempted both above and below the silt layer encountered in deep on-site Boring SB-7. 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 should flow hydrostatically from the formation into the sampler. The predominance of silt and clay may prevent collection of groundwater samples from some depth intervals. 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.

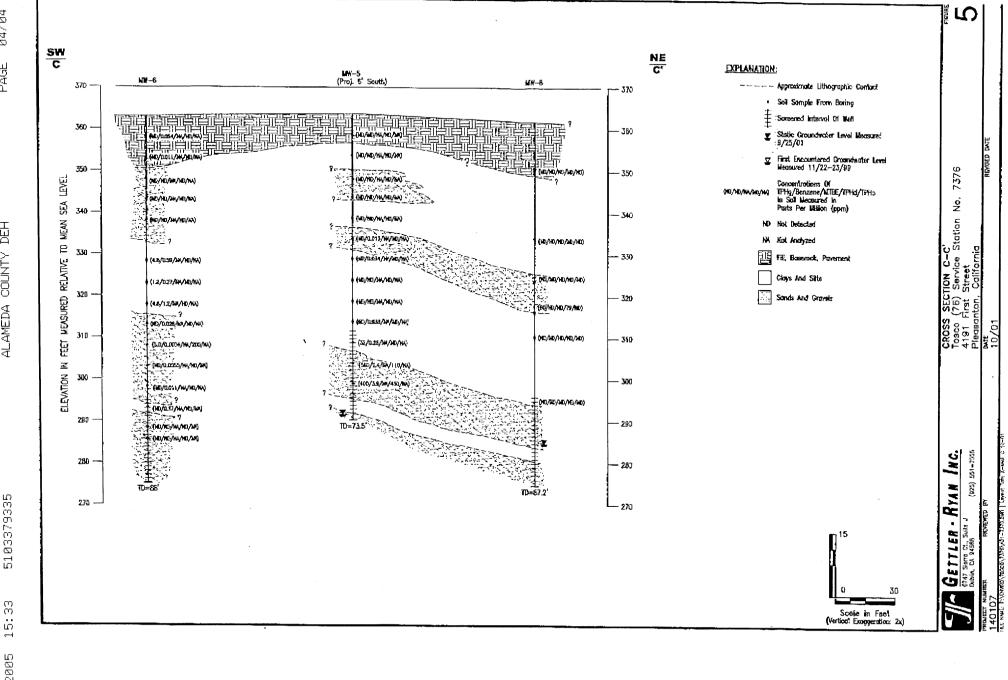
After sample collection, the push rods will be removed from the hole. The rods will be steam cleaned and a new hydropunch screen installed. The sealed screen will then be advanced to the next sampling depth and the above described process repeated. After collection of the final groundwater sample, grout 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, and TBA by EPA Method 8260B.

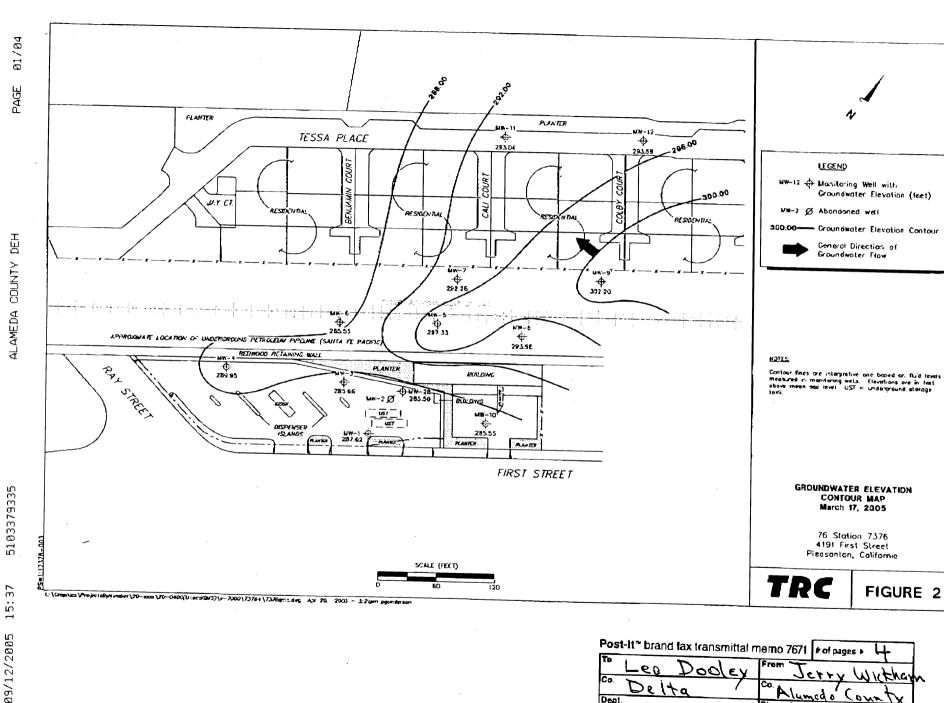






2005

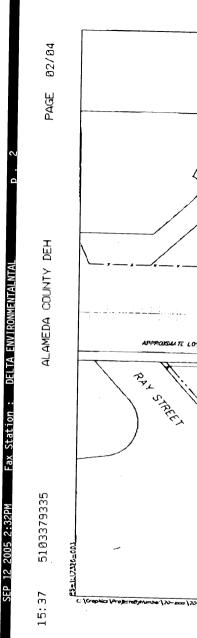




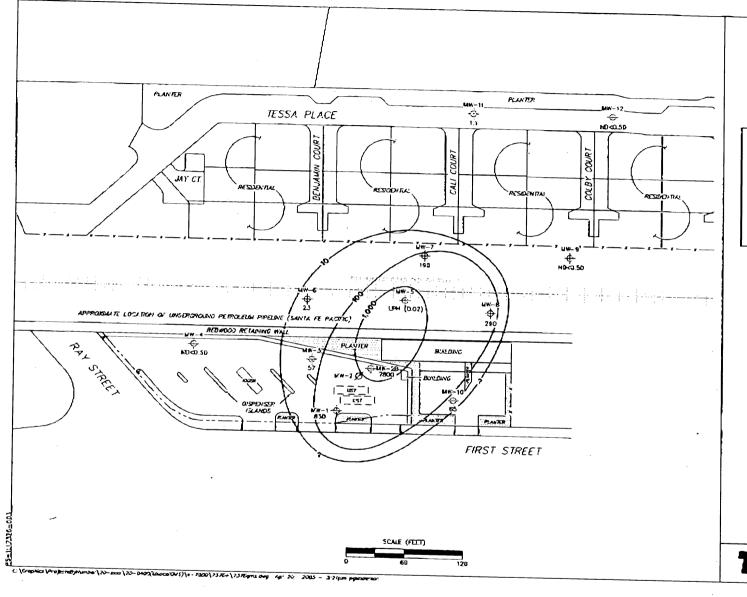
DELTA ENVIRONMENTALNTAL

SEP 12 2005 2:32PM

Dept. Fax #408-225-8506



09/12/2005





LEGEND

Ma-12 + Monitoring Well with Dissolved-Phose MT6E Concentration ($\mu g \Lambda$) \propto LPH thickness (feet)

MW-2 Ø Abandored well

_1.000 Dissolved-Phose MTBE Cantour (µg/1)

NOTES

Carlour lines are interpretive and based on laboratory analysis results of groundwater samples. WTEL writing butly elber polysis are line. Mol and analysis of carbon carbon elber lines with a consideration of limit indicated an afficial laboratory report. UST = indiagraph of strongs lank. LPH = ligital-phase hydrocarbons. Results obtained using EPA Method 6260R.

DISSOLVED-PHASE MITBE CONCENTRATION MAP

> 76 Station 7376 419's First Street Pleasanton, California

TRC

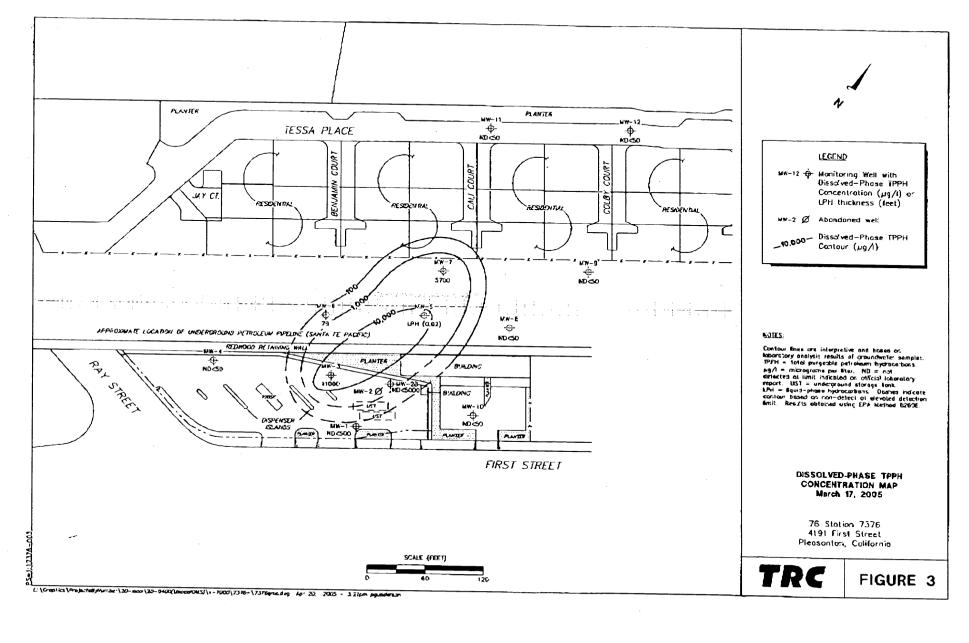
FIGURE 5

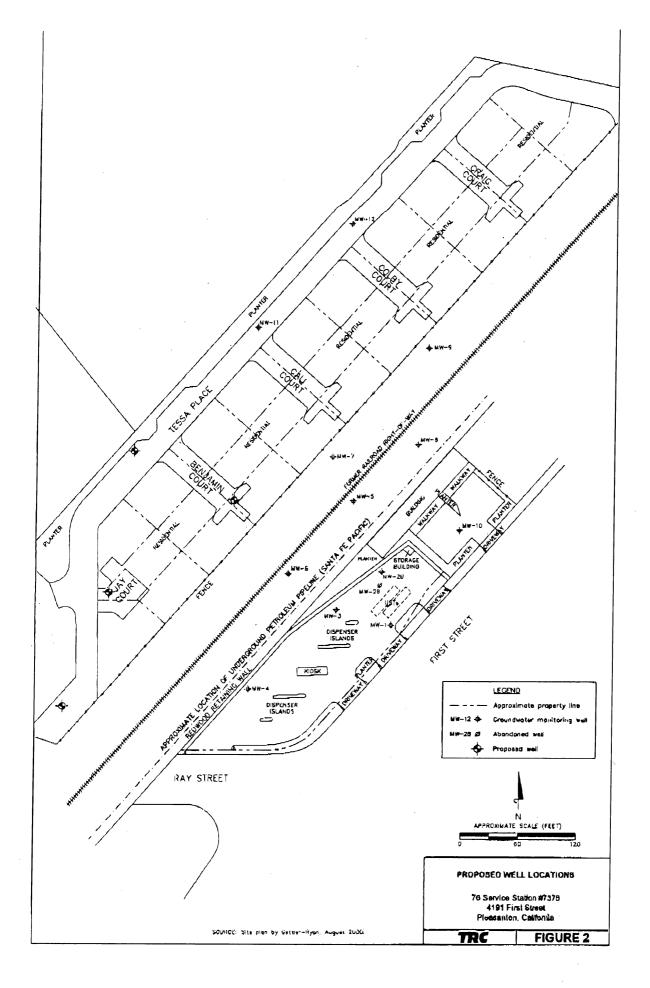


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09/12/2005



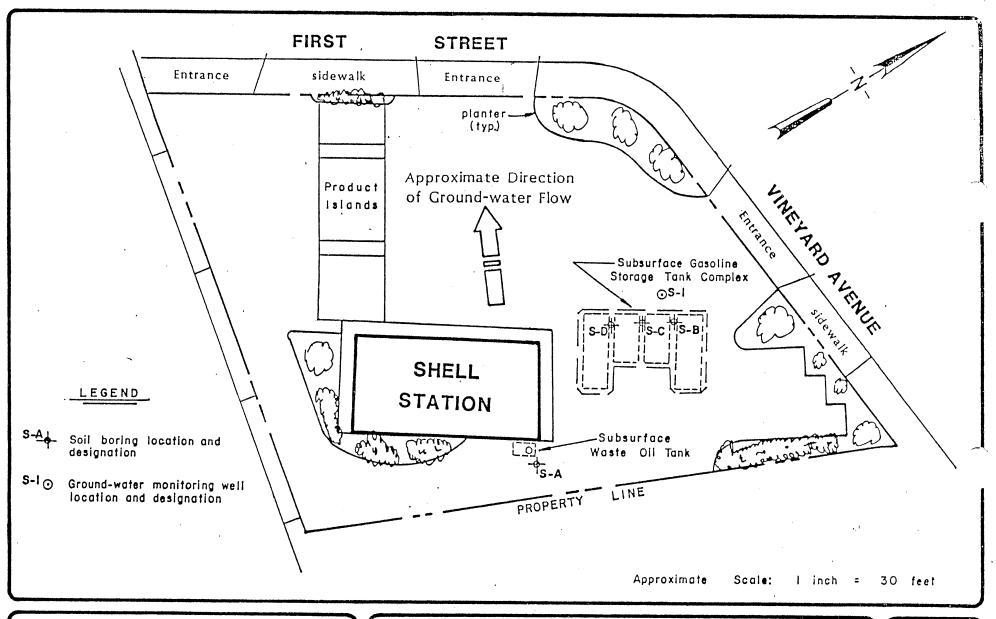


PAGE 04/04

ALAMEDA COUNTY DEH

9886788018

75/2005 15:37





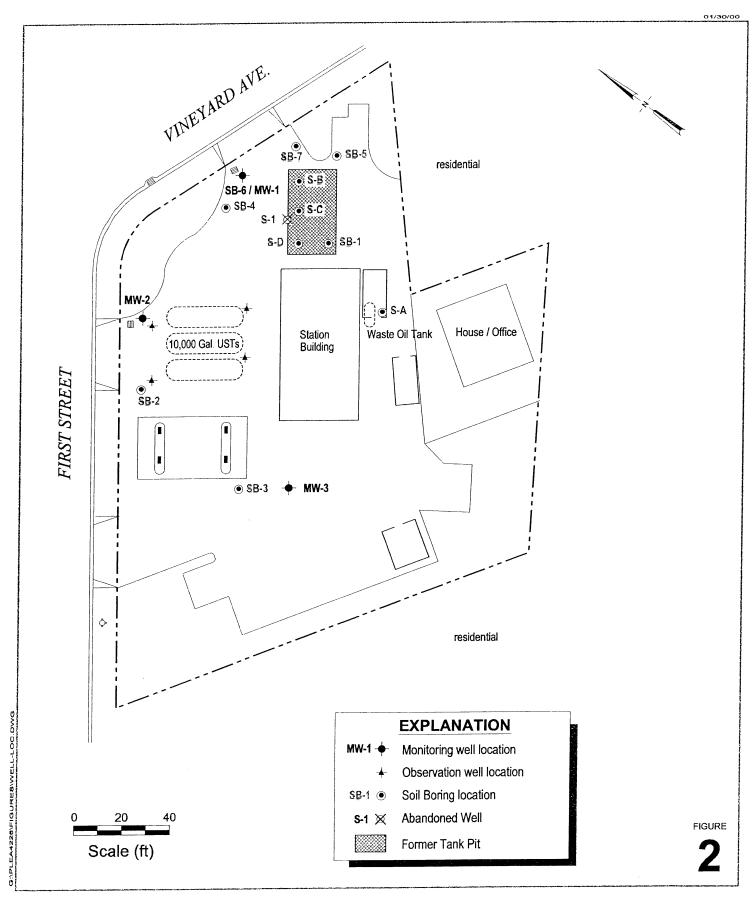
San Jose, California

GETTLER-RYAN, INC.
SUBSURFACE HYDROGEOLOGIC INVESTIGATION
SHELL STATION, FIRST STREET AND VINEYARD AVENUE
PLEASANTON, CALIFORNIA

SOIL BORING AND MONITORING WELL LOCATION MAP

FIGURE

PROJECT NO. 738-60.01



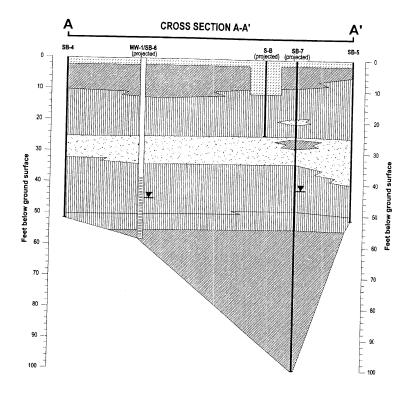
Shell-branded Service Station

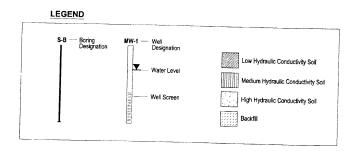
4226 First Street Pleasanton, California Incident #98995840

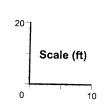


Monitoring Well Locations

CAMBRIA







Shell-branded Service Station

4226 First Street Pleasanton, California

Designed By:	Drawn By:	Approved By:
B. Jakub	G. Glasser	B. Jakub
Revisions By:	- Vision	Date:
Description:		

Geologic Cross Section Incident #98995840

CAMBRIA



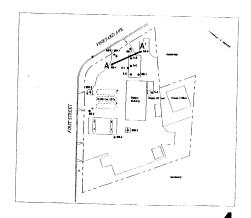
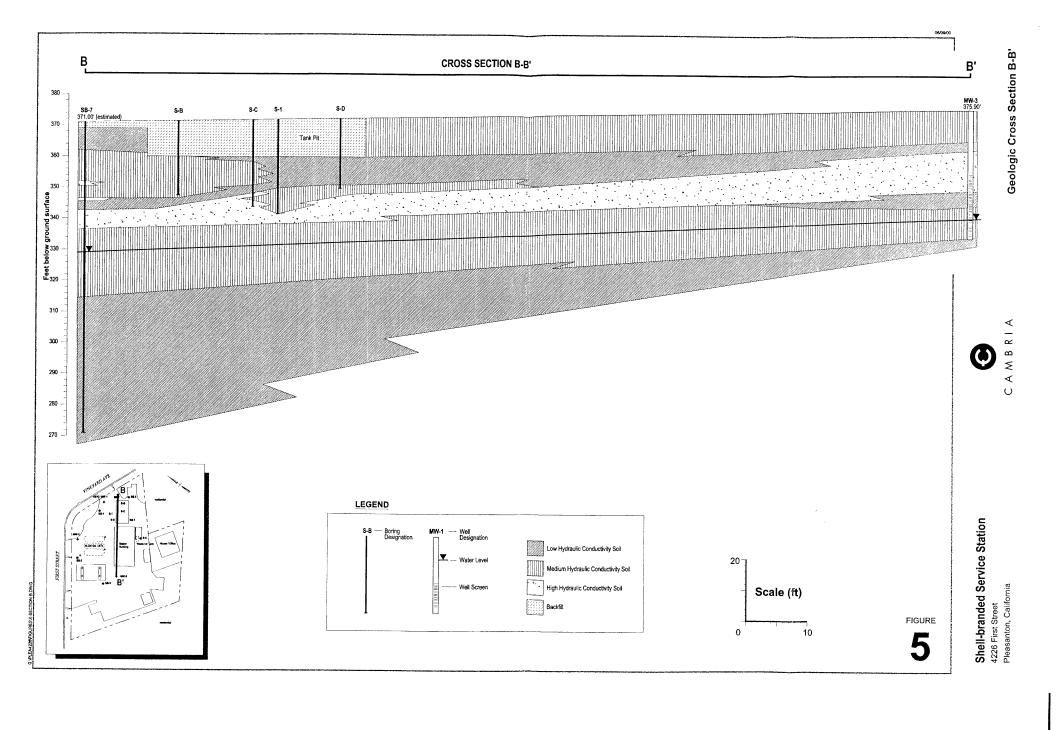
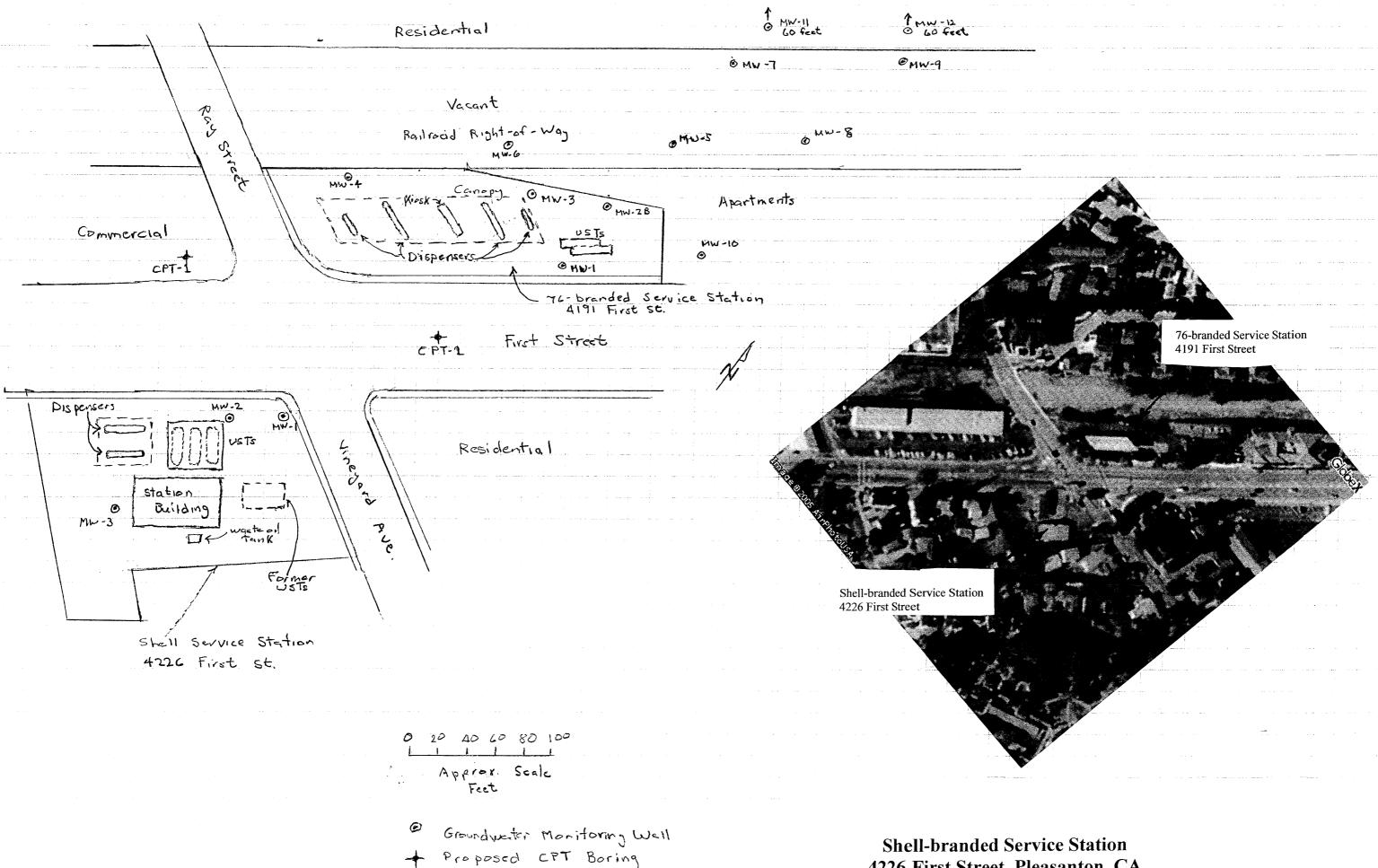
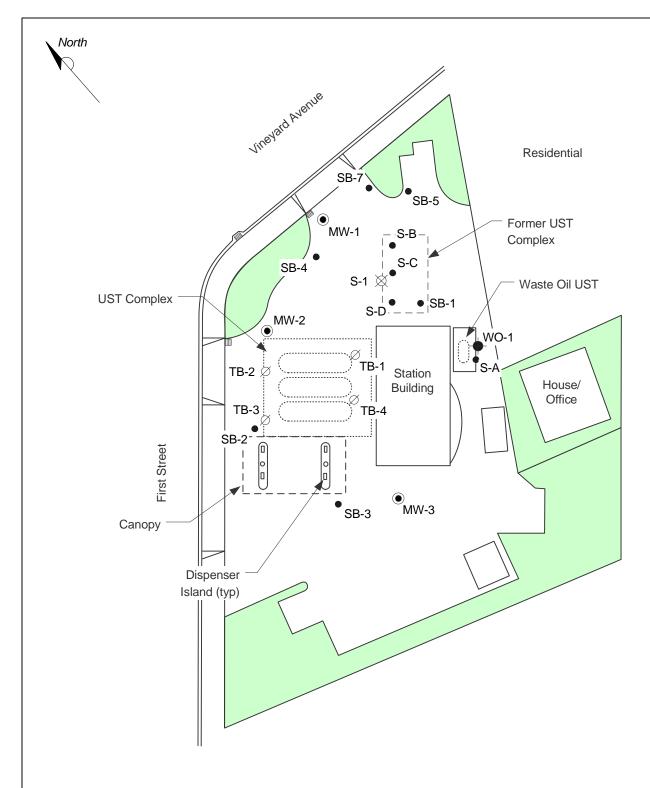


FIGURE 4





4226 First Street, Pleasanton, CA



LEGEND

MW-2 • GROUNDWATER MONITORING WELL LOCATION

S-1 X DESTROYED WELL

TB-1 Ø ABANDONED TANK BACKFILL WELL LOCATION

S-C • SOIL BORING LOCATION

WO-1 PROPOSED SOIL BORING LOCATION

APPROX. SCALE

40 FT

FIGURE 2 SITE MAP

SHELL-BRANDED SERVICE STATION 4226 First Street Pleasanton, California

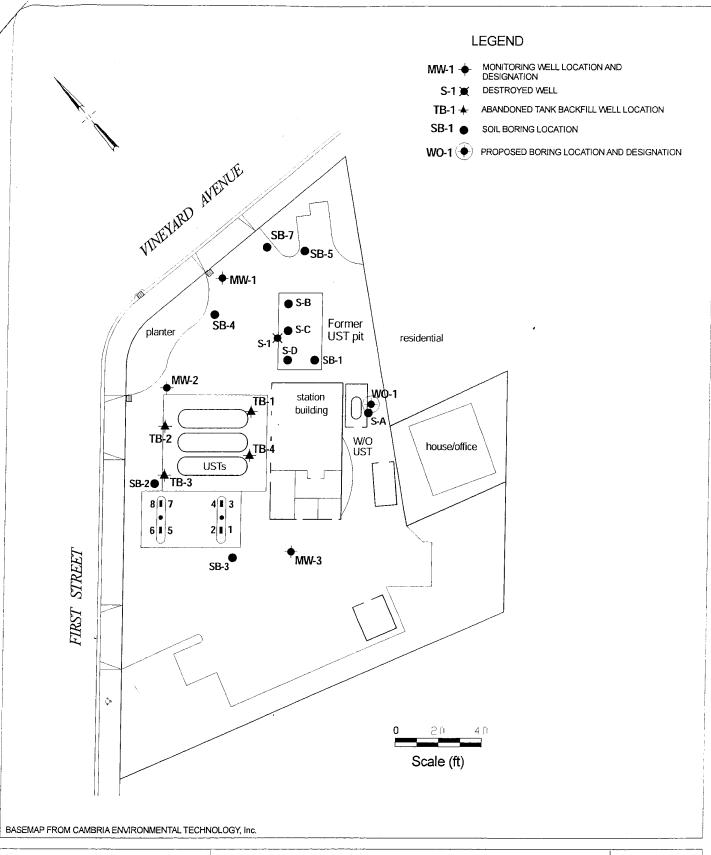
PROJECT NO. SJ42-26F-1.2005 DRAWN BY V.F. 5/9/05

FILE NO. PREPARED BY J.T.

REVISION NO. REVIEWED BY



BaseMap from: Cambria Environmental Technology, Inc. and Toxichem Management Systems, Inc.





TOXICHEM Management Systems, Inc.

Environmental & Occupational Health Services

Shell-Branded Service Station 4226 First Street Pleasanton, California

SITE MAP

FIGURE: 2
PROJECT:

PROJECT: EQ-76

PROJECT NUMBER 738-60.01

BORING NO. S-A

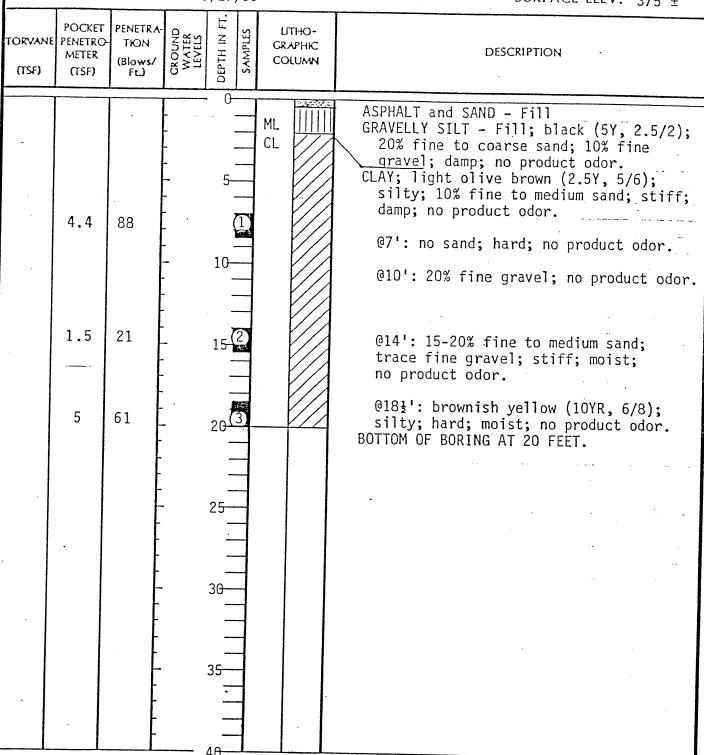
PROJECT NAME Gettler-Ryan, Shell, 4226 First St., Pleasanton

PAGE 1 OF 1

BY MGB

DATE 9/27/85

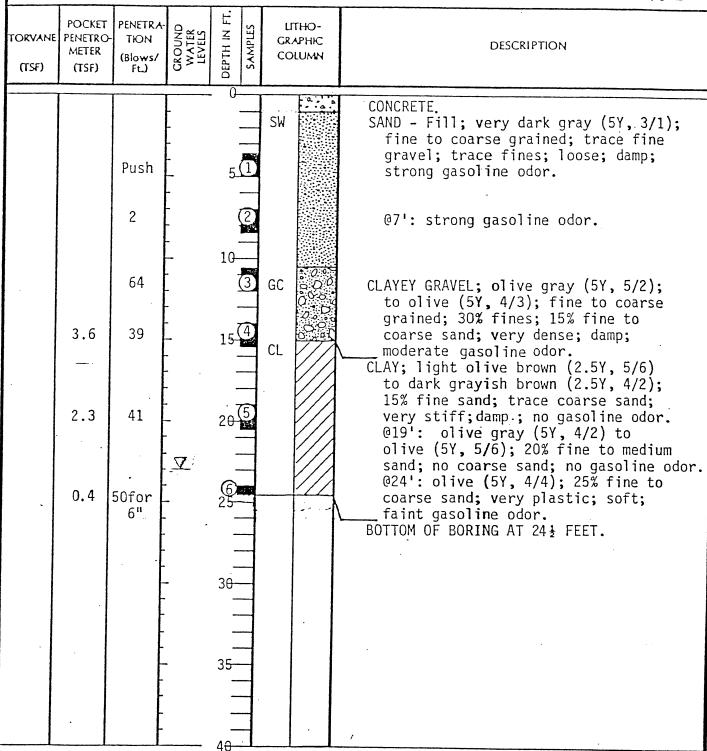
SURFACE ELEV. 375'±



REMARKS Drilled by 5-inch continuous flight, auger; samples collected with 2-inch California modified split-spoon sampler; borehole backfilled with soil cuttings to ½ foot; concrete to surface.



PROJECT NUMBER 738-60.01 BORING NO. S-B PROJECT NAME Gettler-Ryan, Shell, 4226 First St. , Pleasanton PAGE $_1$ OF $_1$ BY MGB DATE 9/27/85 SURFACE ELEV. $_{373'\pm}$



REMARKS Drilled by 8-inch continuous flight, hollow stem auger; samples collected with 2-inch California modified split-spoon sampler; borehole backfilled with soil cuttings to ½ foot; concrete to surface.



PROJECT NUMBER 738-60.01

BORING NO. S-C

PROJECT NAME Gettler-Ryan, Shell, 4226 First St., Pleasanton

PAGE 1 OF 1

BY MGB DATE 9/27/85

SURFACE ELEV. 373'±

	,	·		,	,			SURFACE ELEV. 3/3 ±
TORVANE (TSF)	POCKET PENETRO METER (TSF)		CROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITH CRAPI COLU	НC	DESCRIPTION
	0.4	Push 2 30 50for 6" 19 72 48		10- 15- 20- 30- 35- 40-	(5) (6) (7)	SW CL GC CL SMLC		CONCRETE. SAND - Fill; very dark gray (5Y, 3/1); fine to coarse grained; trace fine gravel; trace fines; damp; strong gasoline odor. @7': loose; strong gasoline odor. CLAY; olive (5Y, 5/6, 5/3); 20% fine to coarse sand; silty; hard; damp; no gasoline odor. CLAYEY GRAVEL; olive (5Y, 5/6, 5/4); fine grained; 35% fine to coarse sand; 15% fines; very dense; damp; no gasoline odor. CLAY; yellowish brown (10YR, 5/6, 5/8); 35% fine to coarse sand; silty; soft; moist; no gasoline odor. SAND: olive (5Y, 4/3); fine to coarse grained; 10% fines; medium dense; moist; no gasoline odor. SANDY SILT; light olive brown (2.5Y, 5/6) 40% fine sand; very stiff; moist; no gasoline odor. CLAYEY SAND; olive brown (2.5Y, 4/4); fine to coarse grained; 40% clay; dense moist; faint gasoline odor. BOTTOM OF BORING AT 28 FEET

REMARKS Drilled by 8-inch continuous flight, hollow-stem auger; samples collected with 2-inch California modified split-spoon sampler; borehole backfilled with concrete from 28 to 15 feet, soil cuttings to ½ foot; concrete to surface.



PROJECT NUMBER 738-60.01

BORING NO. S-D

PROJECT NAME Gettler-Ryan, Shell, 4226 First St., Pleasanton

PAGE 1 OF 1

BY MGB DATE 9/27/85

SURFACE ELEV. 374'+

D1	ויום	Ur	\ E 3	,,,,,	700		SURFACE ELEV. 374'±
TORVANE (TSF)	POCKET PENETRO- METER (TSF)	PENETRA- TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	171.36.611.11(7)3
	4.25 5 2.2 1.25	Push 2 37 44 22 31		15	(3) (4) (5) (6)	SW CL	CONCRETE. SAND - Fill; very dark gray (5Y, 3/1); fine to coarse grained; 15% fine gravel; trace fines; loose; damp; strong gasoline odor. 07': strong gasoline odor. CLAY; olive yellow (5Y, 6/8) to olive (5Y, 4/3); 20% fine to coarse sand; silty; hard; damp; faint gasoline odor. 014': olive (5Y, 4/3); 35% fine to coarse sand; 10% fine gravel; faint gasoline odor. 019': olive (5Y, 4/3); to gray (5Y, 5/1); 20% fine to medium sand; slightly silty; very stiff; damp; faint gasoline odor. SANDY SILT; olive (5Y, 4/4); 40% fine sand; slightly clayey; stiff; damp; faint gasoline odor. BOTTOM OF BORING AT 22½ FEET.

REMARKS Drilled by 8-inch continuous flight, hollow-stem auger; samples collected with 2-inch California modified split-spoon sampler; borehole backfilled with concrete from 22½ to 11½ feet, soil cuttings to ½ foot ; concrete to surface.



PROJECT NUMBER 738-60.01

BORING NO. S-1

PROJECT NAME Gettler-Ryan, Shell, 4226 First St., Pleasanton

PAGE 1 OF 1

BY MGB

DATE 9/27/85

SURFACE ELEV. 373'±

		·					SORTACE ELLY. 070 =
TORVANE (TSF)	POCKET PENETRO- METER (TSF)	PENETRA TION (Blows/ Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
	3.6	34 28 57		5 - 10- 15- 20- 30- 35-	1	SW SC CL CL	ASPHALT and GRAVEL - Fill SAND - Fill; very dark gray (5Y, 3/1); fine to coarse grained; 10% fine gravel trace fines; damp; moderate gasoline odor. CLAYEY SAND; very dark gray (5Y, 3/1); fine to coarse grained; damp; moderate gasoline odor. CLAY; light olive brown (2.5Y, 5/6); 5% fine to coarse sand; silty; hard; damp; faint gasoline odor. CLAY; light to coarse sand; silty; very stiff; faint gasoline odor. CLAYEY GRAVEL; olive (5Y, 5/4); fine grained; 35% fine to coarse sand; clayey; very dense; damp; no gasoline odor. C29': no gasoline odor. BOTTOM OF BORING AT 30½ FEET.

REMARKS Drilled by 8-inch continuous flight, hollow-stem auger; samples collected with 2-inch California modified split-spoon sampler; borehole converted to 3-inch monitoring well as detailed on Plate F.



WELL DETAILS



PROJECT NUMBER	738-60.01	BORING / WELL NO. S-1
	Gettler-Ryan, Shell	TOP OF CASING ELEV
COUNTY		GROUND SURFACE ELEV. 373'±
WELL PERMIT NO		DATUM MSL

G-5 vault box (Std.)

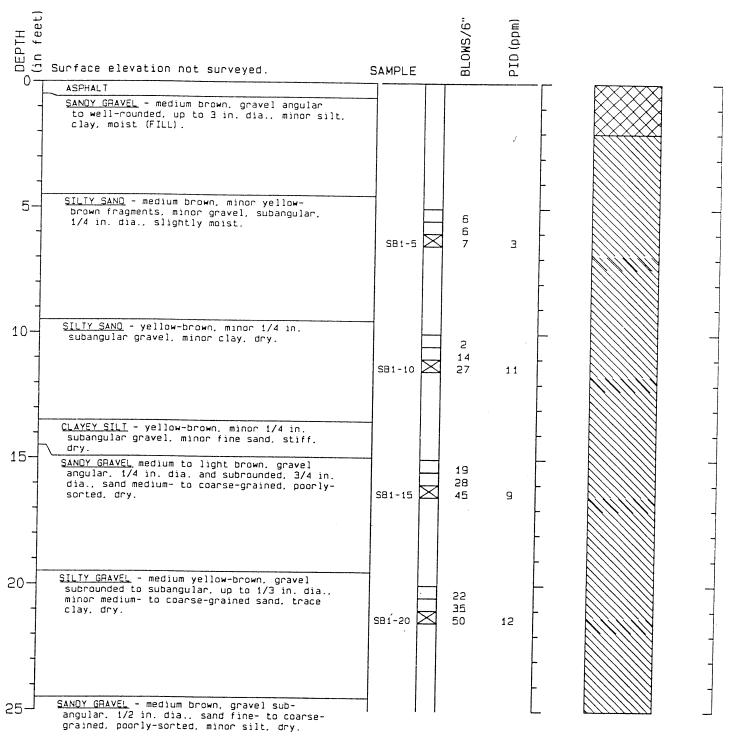
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a	c						
		f					j
·							
		L	 ///		777	-	k ·
	ı			b			

a.	Total depth	30½	_ft.
b.	Diameter	8	_in.
	Drilling method Hollow-Stem	Auger	
	_		
W	ELL CONSTRUCTION		
c.	Casing length	_28 1	_ft.
	C-F-4-1- 40 DUO		

EXPLORATORY BORING

Schedule 40 PVC Material ___ <u>3</u>in. d. Diameter 14_ft. e. Depth to top perforations 14½ ft. f. Perforated length Perforated interval from 14 to 28½ ft. Perforation type <u>Machined Slot</u> Perforation size 0.020 inch 1_ft. g. Surface seal Seal material __Concrete 10 h. Backfill _ft. Concrete Backfill material ___ i. Seal 1 Bentonite Seal material ____ j. Gravel pack (12'-28½') 16½ ft. Pack material Coarse Aquarium Sand k. Bottom seal Seal material___ NOTE: Caved to 28½ feet.

Geologic Log



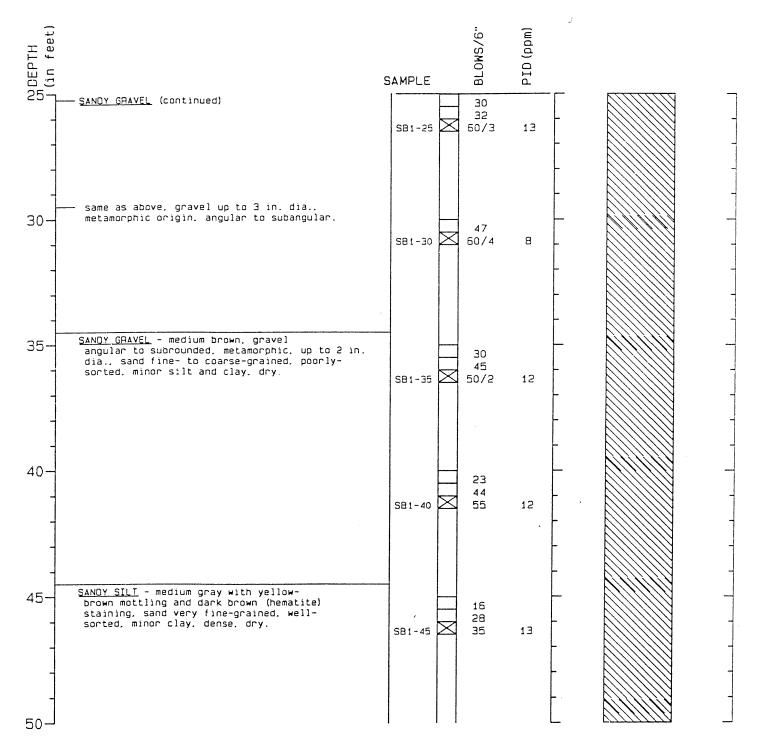
- Refer to Figure A-1 for explanation of descriptions and symbols.
- Soil description and stratum lines are interpretive and actual changes may be gradual.
- \Im . No free water encountered.



Figure A-2

Page 1 of 3

Geologic Log

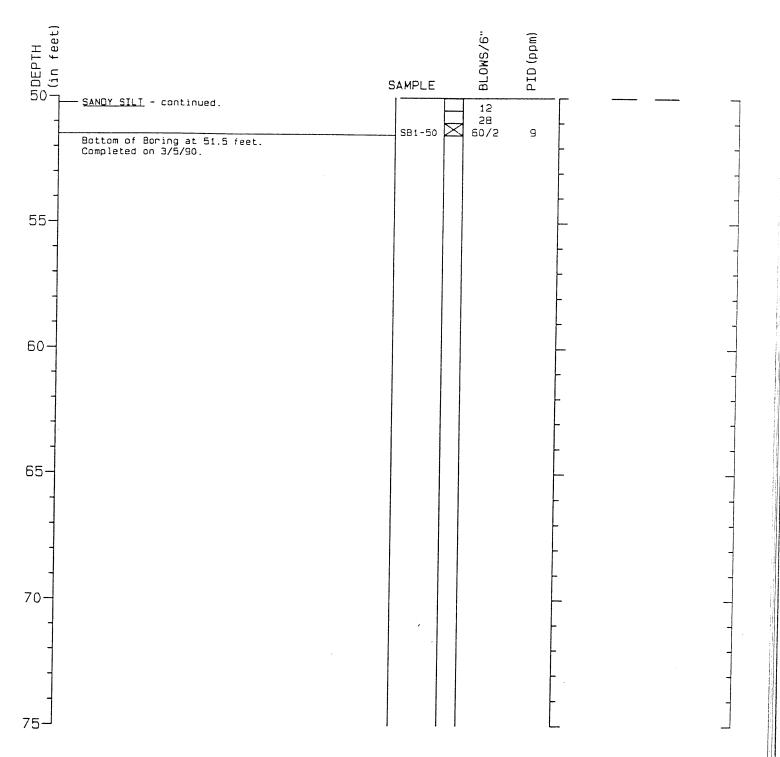


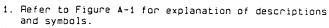
- Refer to Figure A-1 for explanation of descriptions and symbols.
- Soil description and stratum lines are interpretive and actual changes may be gradual.
- 3. No free water encountered.



Page 2 of 3

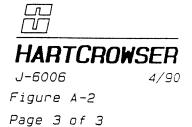
Geologic Log



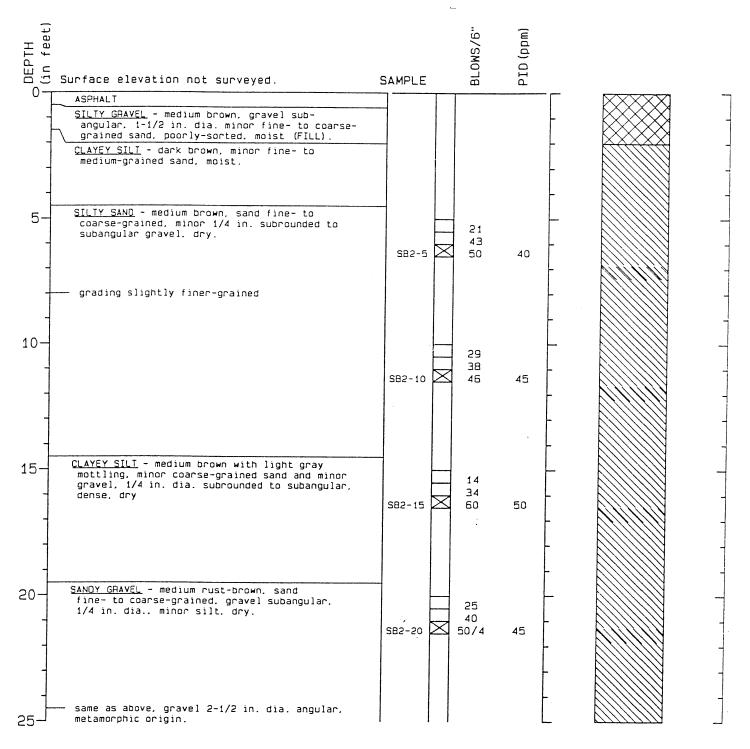


Soil description and stratum lines are interpretive and actual changes may be gradual.

3. No free water encountered.



Geologic Log

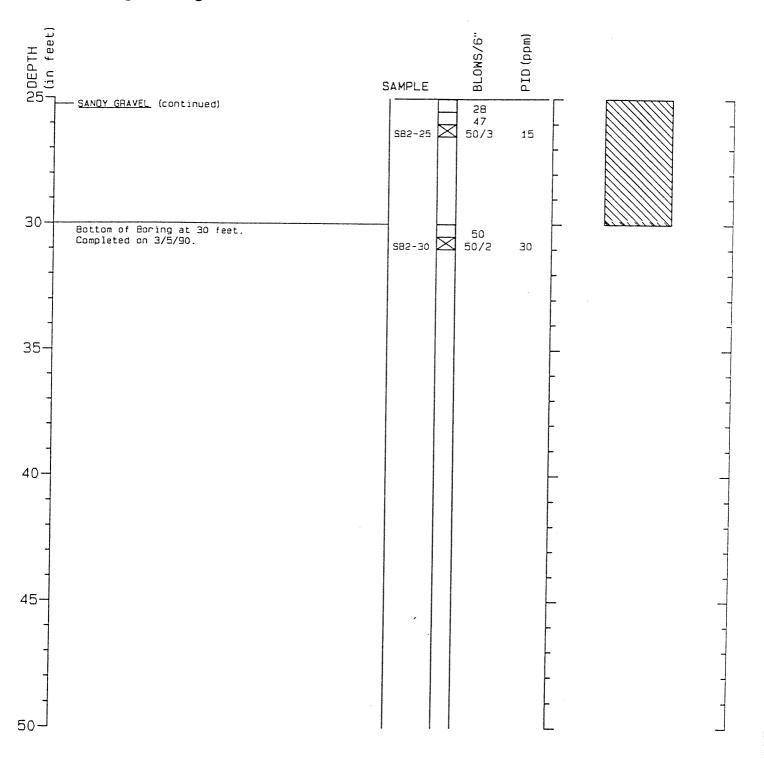


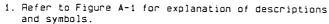
- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- Soil description and stratum lines are interpretive and actual changes may be gradual.
- 3. No free water encountered.



Page 1 of 2

Geologic Log





Soil description and stratum lines are interpretive and actual changes may be gradual.

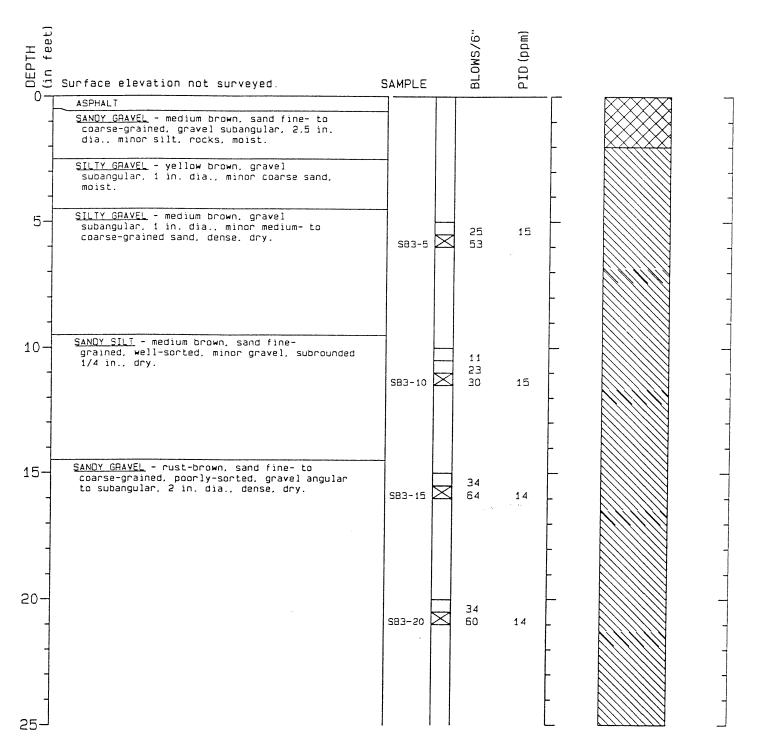
3. No free water encountered.



Figure A-3

Page 2 of 2

Geologic Log

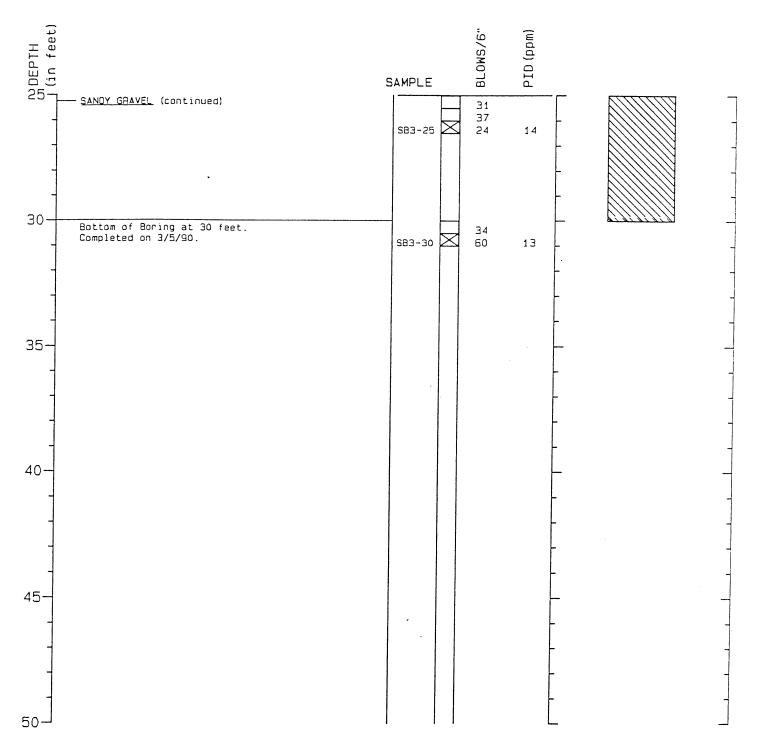


- Refer to Figure A-1 for explanation of descriptions and symbols.
- Soil description and stratum lines are interpretive and actual changes may be gradual.
- 3. No free water encountered.



Page 1 of 2

Geologic Log

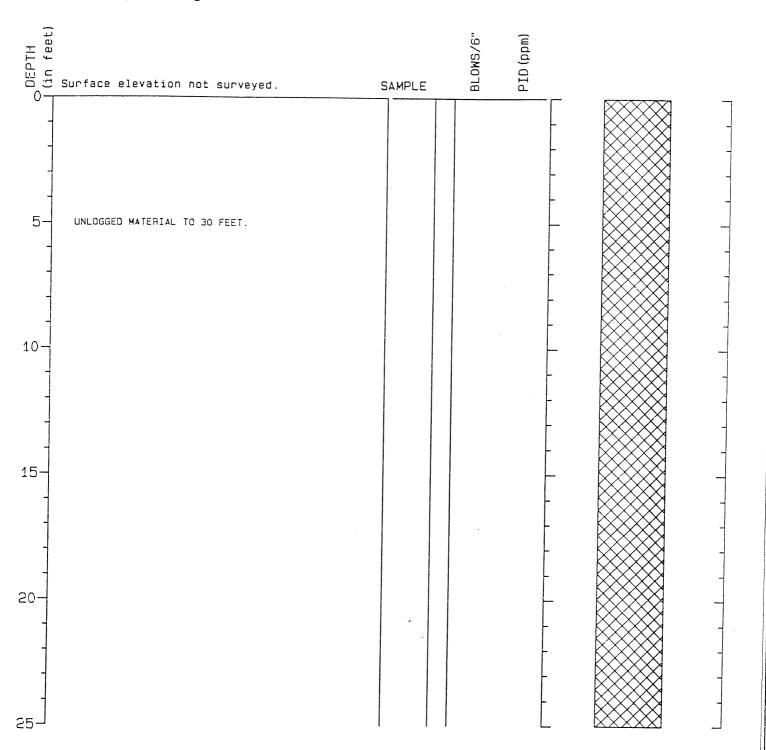


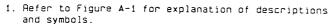
- Refer to Figure A-1 for explanation of descriptions and symbols.
- Soil description and stratum lines are interpretive and actual changes may be gradual.
- 3. No free water encountered.



Boring Log WA-1

Geologic Log





^{2.} Soil description and stratum lines are interpretive and actual changes may be gradual.

3. No free water encountered.

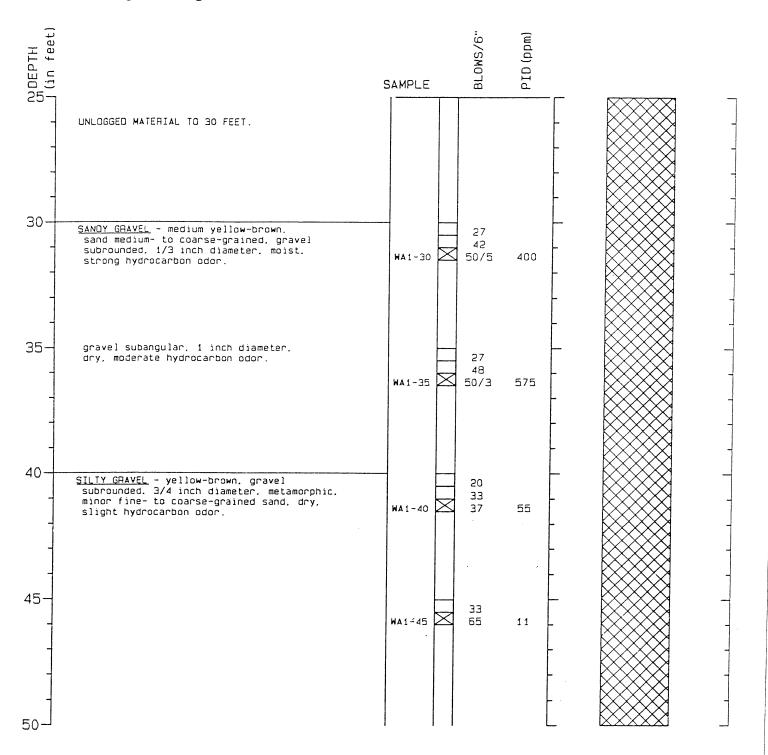


Figure A-5

Page 1 of 3

Boring Log WA-1

Geologic Log



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- Soil description and stratum lines are interpretive and actual changes may be gradual.
- 3. No free water encountered.

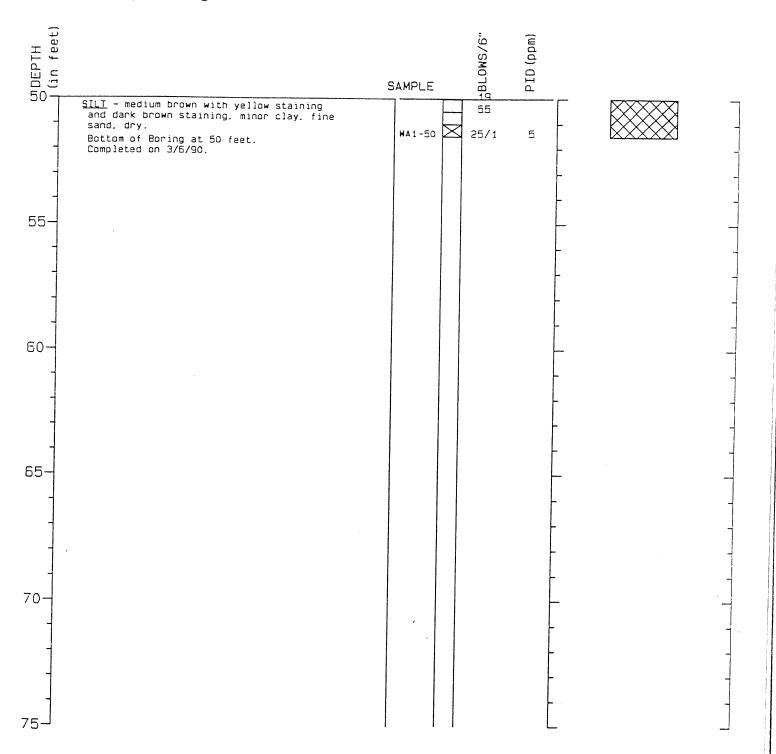


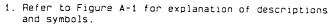
Figure A-5

Page 2 of 3

Boring Log WA-1

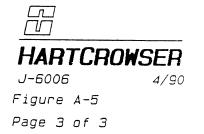
Geologic Log



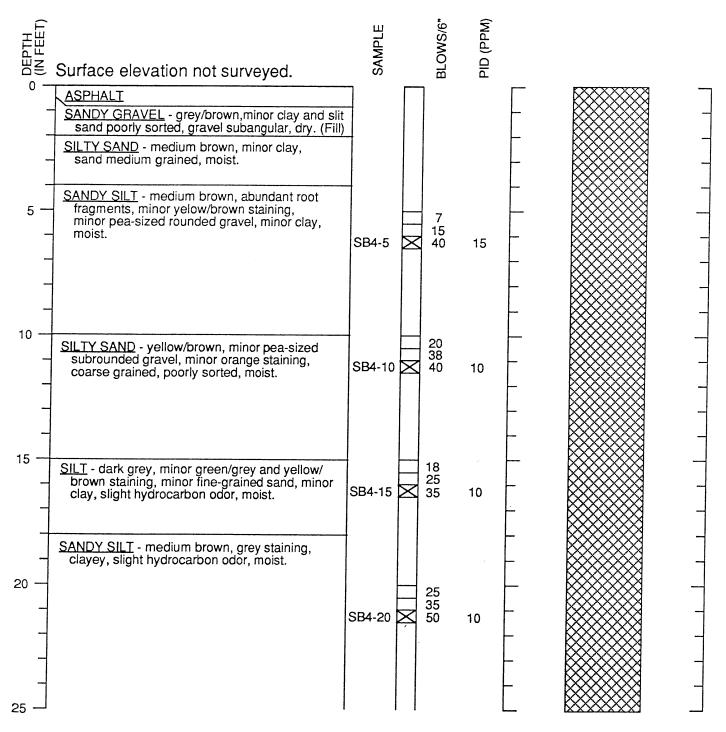


Soil description and stratum lines are interpretive and actual changes may be gradual.

3. No free water encountered.



Geologic Log

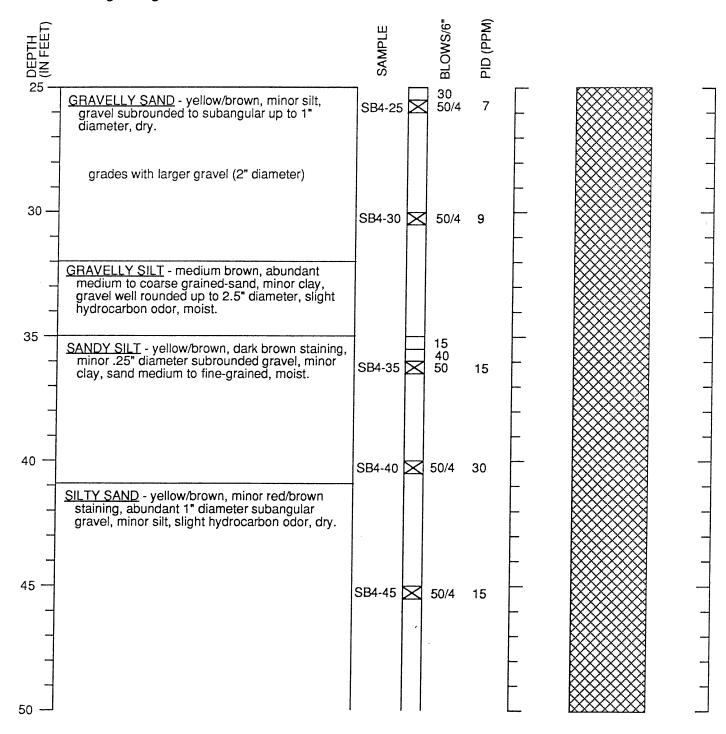


- Refer to Figure A-1 for explanation of descriptions and symbols.
- Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. No free water encountered.



J-6006 Figure A-2 Page 1 of 3 12/90

Geologic Log



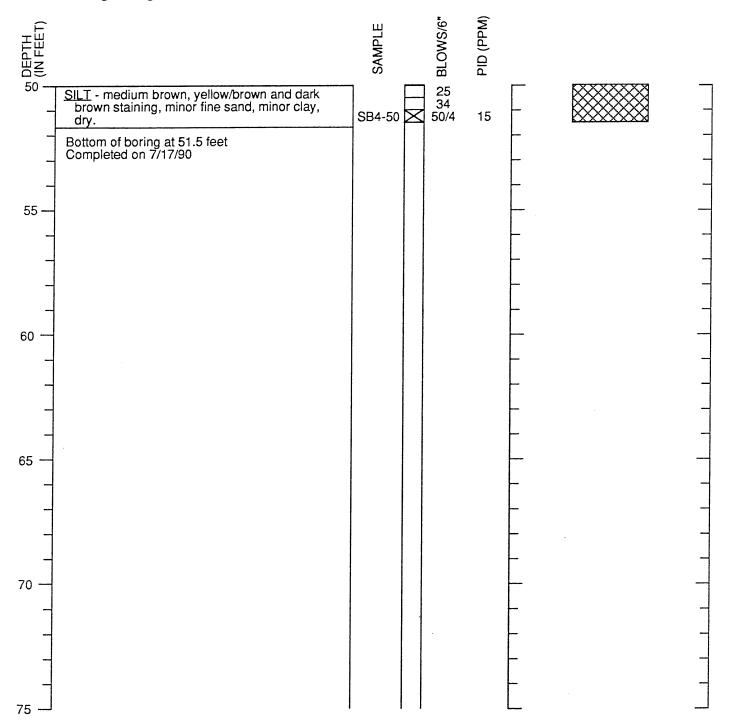
- Refer to Figure A-1 for explanation of descriptions and symbols.
- Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. No free water encountered.



12/90

J-6006 Figure A-2 Page 2 of 3

Geologic Log



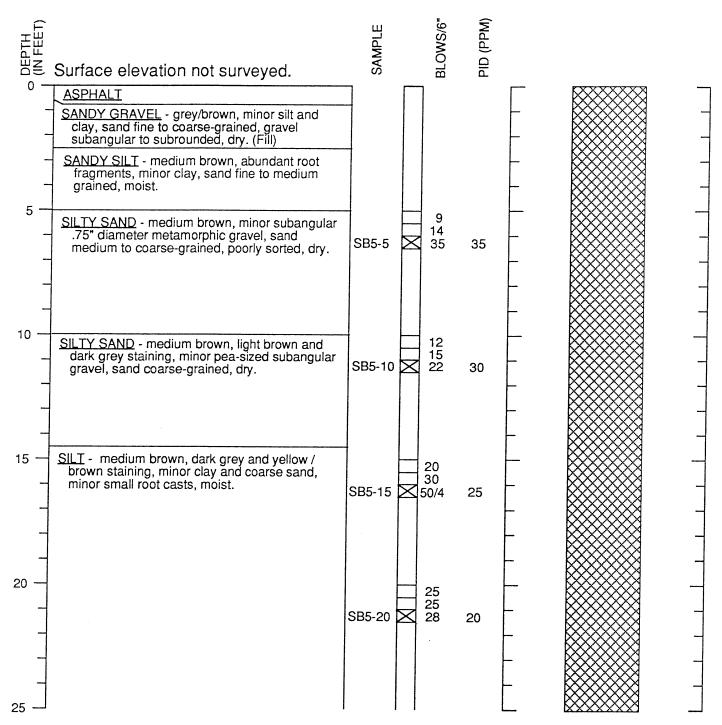
- Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

 3. No free water encountered.



J-6006 12/90 Figure A-2 Page 3 of 3

Geologic Log

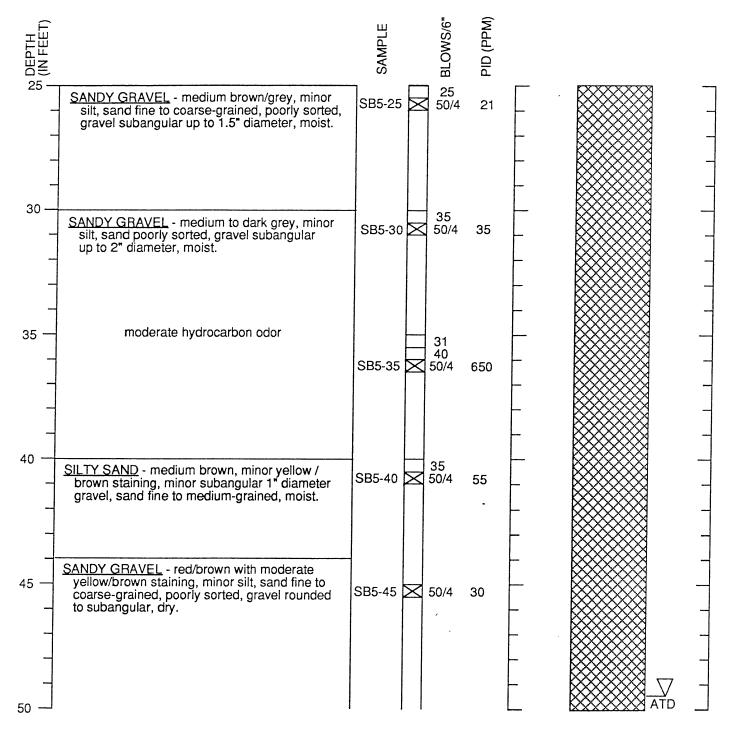


- Refer to Figure A-1 for explanation of descriptions and symbols.
- Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
- 3. Perched water encountered at 49.5 feet BGS.



J-6006 12/90 Figure A-3 Page 1 of 3

Geologic Log



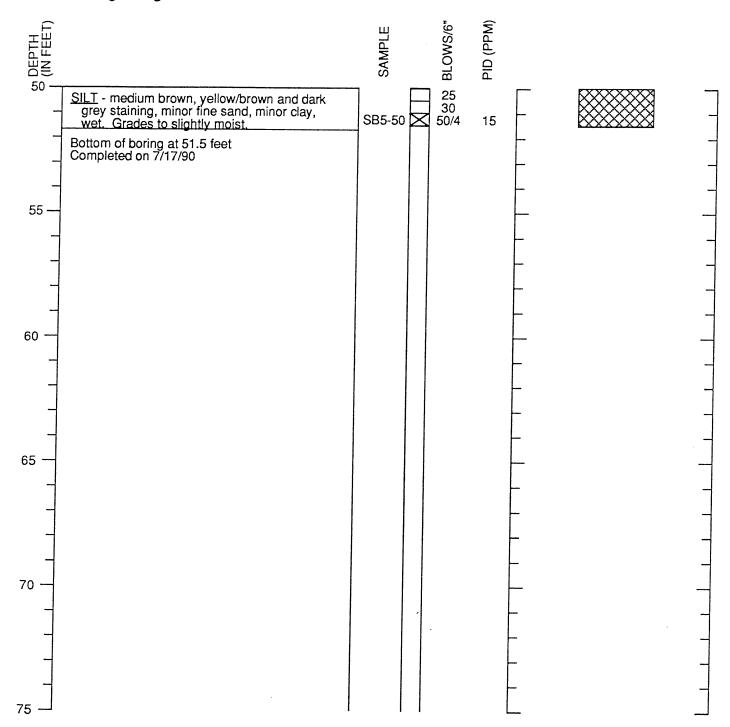
- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- 2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.

 3. Perched water encountered at 49.5 feet BGS



Figure A-3 Page 2 of 3

Geologic Log



- 1. Refer to Figure A-1 for explanation of descriptions and symbols.
- Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
 Perched water encountered at 49.5 feet.



12/90 J-6006 Figure A-3 Page 3 of 3



WELL LOG (TPH-G) G:\PLE4226\GINT\PLE4226.GPJ

Cambria Environmental Technology, Inc. 1144 - 65th St. Oakland, CA 94608 Telephone: (510) 420-0700

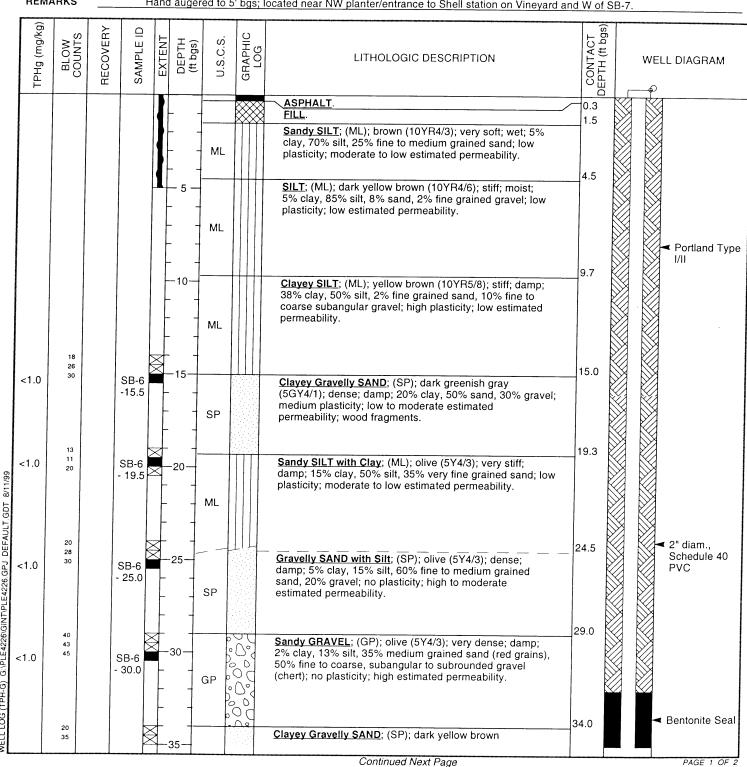
Fax: (510) 420-9170

BORING/WELL LOG

(SB-6)

CLIENT NAME Equiva Services LLC **BORING/WELL NAME** MW-1 JOB/SITE NAME ple-4226 **DRILLING STARTED** 08-Apr-99 LOCATION 4226 First Street, Pleasanton, California DRILLING COMPLETED __ 09-Apr-99 **PROJECT NUMBER** 241-0395 WELL DEVELOPMENT DATE (YIELD) DRILLER Gregg Drilling **GROUND SURFACE ELEVATION** 371.83 ft DRILLING METHOD Hollow-stem auger TOP OF CASING ELEVATION 371.20 ft BORING DIAMETER SCREENED INTERVAL 37.5 to 57.5 ft bgs LOGGED BY B. Jakub DEPTH TO WATER (First Encountered) 42.5 ft (08-Apr-99) REVIEWED BY ___ B. Jakub **DEPTH TO WATER (Static)**

REMARKS Hand augered to 5' bgs; located near NW planter/entrance to Shell station on Vineyard and W of SB-7.





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BORING/WELL LOG

PAGE 2 OF 2

Telephone: (510) 420-0700 Fax: (510) 420-9170

CLIENT NAME	Equiva Services LLC	BORING/WELL NAME	MW-1
JOB/SITE NAME	ple-4226	DRILLING STARTED	08-Apr-99
LOCATION	4226 First Street, Pleasanton, California	DRILLING COMPLETED	09-Apr-99

Continued from Previous Page CONTACT DEPTH (ft bgs) TPHg (mg/kg) SAMPLE ID RECOVERY GRAPHIC LOG BLOW COUNTS U.S.C.S. EXTENT DEPTH (ft bgs) LITHOLOGIC DESCRIPTION WELL DIAGRAM SB-6 (10YR4/6); very dense; damp; 20% clay, 10% silt, 40% - 35.0 medium grained sand, 30% fine to coarse grained gravel Monterey (sandstone/claystone, serpentinite, some MnO2/Fe Sand #3 staining); low plasticity; moderate to low estimated permeability. 20 45 SB-6 <1.0 - 40.0 SP Ā @ 44' - moist to wet. 45 45 2"-diam., 0.020" Slotted Schedule 40 PVC 50.0 50 Clayey GRAVEL with Silt; (GC); dark yellow brown 60/6 (10YR4/6); very dense; moist to wet; 25% clay, 15% silt, 20% fine to coarse grained sand, 40% fine to coarse grained gravel. GC 55.2 40 Clayey SILT; (MH); light olive brown (2.5Y5/4); hard; damp; 25% clay, 75% silt; medium to high plasticity; very low estimated permeability; black MnO_2 blebs throughout. 50 MH 58.0 Bottom of Boring @ 58 ft WELL LOG (TPH-G) G:\PLE4226\GINT\PLE4226.GPJ DEFAULT.GDT 8/11/99



8/11/99

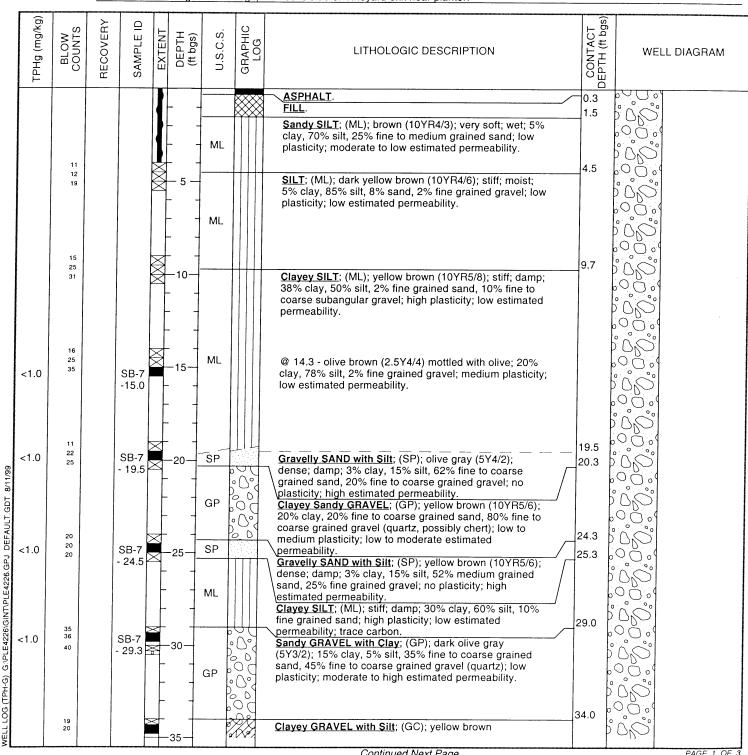
LOG (TPH-G)

Cambria Environmental Technology, Inc. 1144 - 65th St. Oakland, CA 94608

BORING/WELL LOG

Telephone: (510) 420-0700 Fax: (510) 420-9170

CLIENT NAME	Equiva Services LLC	BORING/WELL NAME SB-7	
JOB/SITE NAME	ple-4226	DRILLING STARTED 07-Apr-99	
LOCATION	4226 First Street, Pleasanton, California	DRILLING COMPLETED 07-Apr-99	
PROJECT NUMBER _	241-0395	WELL DEVELOPMENT DATE (YIELD)	NA
DRILLER	Gregg Drilling	GROUND SURFACE ELEVATION	Not Surveyed
DRILLING METHOD	Hollow-stem auger	TOP OF CASING ELEVATION Not Surv	eyed
BORING DIAMETER	8"	SCREENED INTERVAL NA	
LOGGED BY	B. Jakub	DEPTH TO WATER (First Encountered)	NA 🗸
REVIEWED BY	B. Jakub	DEPTH TO WATER (Static)	42.50ft (08-Apr-99)
REMARKS	Hand augered to 4' bgs; located E side of Vineyard	l exit near planter.	





WELL LOG (TPH-G) GNPLE4226\GINT\PLE4226.GPJ DEFAULT.GDT 8/11/99

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BORING/WELL LOG

PAGE 2 OF 3

Telephone: (510) 420-0700 Fax: (510) 420-9170

CLIENT NAME	Equiva Services LLC	
JOB/SITE NAME	ple-4226	
LOCATION	4226 First Street, Pleasanton, California	

BORING/WELL NAME SB-7 DRILLING STARTED 07-Apr-99 DRILLING COMPLETED 07-Apr-99

***************************************	Continued from Previous Page									
TPHg (mg/kg)	BLOW	RECOVERY	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (# hgs)	WELL DIAGRAM
	50		SB-7 - 34.3					(10YR5/8); very dense; damp; 35% clay, 15% silt, 10% sand, 40% fine to coarse grained gravel (quartz); medium plasticity; moderate to low estimated permeability.		
<1.0	25 45 53		SB-7 - 40.0	X	40 	GC		@ 39' - quartz, siltstone, chert gravels.	7	
83	25 40 50/3		SB-7 - 44.5	X	- 45 - 45 			@ 44' - moist to wet.		
<1.0	20 30 50		SB-7 -49.5		-50-			Clayey GRAVEL; (GC); yellow brown (10YR5/4); very dense; moist to wet; 20% clay, 10% silt, 10% medium to coarse grained sand, 60% fine grained gravel; medium plasticity; low to moderate estimated permeability.	49.0	Portland Type
<1.0	30 50/3		SB-7 - 54.3		-55	GC				
<1.0	20 30 50/3		SB-7		-60-			Clayey SILT; (MH); mottled yellow brown (10YR4/6) and light brownish gray (2.5Y6/2); hard; dry; 20% clay, 70% silt, 10% very fine to fine grained sand; medium plasticity; low estimated permeability.	59.0	
<1.0	25 35 50/3		SB-7 - 64.5		-65-	MH		@ 64' - dark brown MnO_2 or organic blebs throughout.		
	17 32 50/4		SB-7 - 69.5	-	70-			Clayey SILT; (MH); light olive brown (2.5Y5/4); hard; dry; 25% clay, 75% silt; medium plasticity; very low estimated permeability.	69.0	
	20 40		>		75-			@ 74' - increasing mottled with yellow brown (10YR5/8).	74.5	

Continued Next Page

BORING/WELL LOG

PAGE 3 OF 3



LOG (TPH-G) G:\PLE4226\GINT\PLE4226.GPJ DEFAULT.GDT 8/11/99

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Fax: (510) 420-9170

 CLIENT NAME
 Equiva Services LLC
 BORING/WELL NAME
 SB-7

 JOB/SITE NAME
 ple-4226
 DRILLING STARTED
 07-Apr-99

 LOCATION
 4226 First Street, Pleasanton, California
 DRILLING COMPLETED
 07-Apr-99

Continued from Previous Page CONTACT DEPTH (ft bgs) TPHg (mg/kg) RECOVERY BLOW COUNTS U.S.C.S. DEPTH (ft bgs) EXTENT щ GRAPHI LOG SAMPLI LITHOLOGIC DESCRIPTION WELL DIAGRAM SB-7 @ 74' to 74.5' - black blebs, possibly MnO₂. - 74.5 15 79.5 - 79.5 80 50/2 MH 25 SB-7 @ 84' - dark yellow brown (10YR4/6); damp; 30% clay, - 85.0 70% silt. 46 50 @ 94' - MnO2 blebs throughout; becomes siltier. SB-7 50 - 94.5 99.0 25 SB-7 Clayey SAND with Gravel; (SC); dark yellow brown SC 100.0 50/3 (10YR4/6); dense; damp; 30% clay, 5% silt, 50% fine to coarse grained sand, 15% fine grained gravel (quartz); 100-Bottom of 100.0 Boring @ 100 ft medium plasticity; low to moderate estimated permeability. Ground water sample (SB-7-GW) collected.





8/11/99

LOG (TPH-G) G:/PLE4226/GINT/PLE4226.GPJ DEFAULT.GDT

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Fax: (510) 420-9170

CLIENT NAME	Equiva Services LLC	BORING/WELL NAME MW-1		
JOB/SITE NAME	ple-4226	DRILLING STARTED 08-Apr-99		
LOCATION	4226 First Street, Pleasanton, California	DRILLING COMPLETED 09-Apr-99		
PROJECT NUMBER _	241-0395	WELL DEVELOPMENT DATE (YIELD)	NA	
DRILLER _	Gregg Drilling	GROUND SURFACE ELEVATION	371.83 ft	
DRILLING METHOD _	Hollow-stem auger	TOP OF CASING ELEVATION 371.20 ft		
BORING DIAMETER _	8"	SCREENED INTERVAL 37.5 to 57	7.5 ft bas	
LOGGED BY	B. Jakub	DEPTH TO WATER (First Encountered)	42.5 ft (08-Apr-99)	$\overline{\nabla}$
REVIEWED BY	B. Jakub	DEPTH TO WATER (Static)	NA	T
DEMARKS	Hand augarad to El base last de la ANN Last de	` '		_=

Hand augered to 5' bgs; located near NW planter/entrance to Shell station on Vineyard and W of SB-7. CONTACT DEPTH (ft bgs) TPHg (mg/kg) RECOVERY GRAPHIC LOG EXTENT U.S.C.S. BLOW SAMPLE 1 DEPTH (ft bgs) LITHOLOGIC DESCRIPTION WELL DIAGRAM ASPHALT. 0.3 FILL. 1.5 Sandy SILT; (ML); brown (10YR4/3); very soft; wet; 5% clay, 70% silt, 25% fine to medium grained sand; low ML plasticity; moderate to low estimated permeability. 4.5 SILT; (ML); dark yellow brown (10YR4/6); stiff; moist; 5% clay, 85% silt, 8% sand, 2% fine grained gravel; low plasticity; low estimated permeability. ML Portland Type 1/11 9.7 Clayey SILT; (ML); yellow brown (10YR5/8); stiff; damp; 38% clay, 50% silt, 2% fine grained sand, 10% fine to coarse subangular gravel; high plasticity; low estimated permeability. ML 15.0 <1.0 SB-6 Clayey Gravelly SAND; (SP); dark greenish gray -15.5 (5GY4/1); dense; damp; 20% clay, 50% sand, 30% gravel; medium plasticity; low to moderate estimated SP permeability; wood fragments. 19.3 <1.0 Sandy SILT with Clay; (ML); olive (5Y4/3); very stiff; SB-6 20 damp; 15% clay, 50% silt, 35% very fine grained sand; low - 19.5 plasticity; moderate to low estimated permeability. ML 2" diam., 24.5 28 Schedule 40 Gravelly SAND with Silt; (SP); olive (5Y4/3); dense; 30 <1.0 SB-6 PVC damp; 5% clay, 15% silt, 60% fine to medium grained - 25.0 sand, 20% gravel; no plasticity; high to moderate SP estimated permeability. 29.0 40 Sandy GRAVEL; (GP); olive (5Y4/3); very dense; damp; 30 2% clay, 13% silt, 35% medium grained sand (red grains), 45 <1.0 SB-6 0 50% fine to coarse, subangular to subrounded gravel - 30.0 (chert); no plasticity; high estimated permeability. GP 0 Ó(Bentonite Seal 34.0 Clayey Gravelly SAND; (SP); dark yellow brown Continued Next Page PAGE 1 OF 2



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BORING/WELL LOG

CLIENT NAME	Equiva Services LLC	BORING/WELL NAME	MW-1
JOB/SITE NAME	ple-4226	DRILLING STARTED	08-Apr-99
LOCATION	4226 First Street, Pleasanton, California	DRILLING COMPLETED	09-Apr-99

Continued from Previous Page CONTACT DEPTH (ft bgs) TPHg (mg/kg) SAMPLE ID GRAPHIC LOG RECOVERY BLOW COUNTS U.S.C.S. DEPTH (ft bgs) EXTENT LITHOLOGIC DESCRIPTION WELL DIAGRAM <1.0 SB-6 (10YR4/6); very dense; damp; 20% clay, 10% silt, 40% - 35.0 medium grained sand, 30% fine to coarse grained gravel Monterey (sandstone/claystone, serpentinite, some MnO₂/Fe Sand #3 staining); low plasticity; moderate to low estimated permeability. 20 45 SB-6 <1.0 - 40.0 SP Ā @ 44' - moist to wet. 45 45 2"-diam., 0.020" Slotted Schedule 40 **PVC** 50.0 Clayey GRAVEL with Silt; (GC); dark yellow brown 60/6 (10YR4/6); very dense; moist to wet; 25% clay, 15% silt, 20% fine to coarse grained sand, 40% fine to coarse grained gravel. GC 55.2 40 Clayey SILT; (MH); light olive brown (2.5Y5/4); hard; damp; 25% clay, 75% silt; medium to high plasticity; very low estimated permeability; black MnO_2 blebs throughout. 50 МН 58.0 Bottom of Boring @ 58 ft

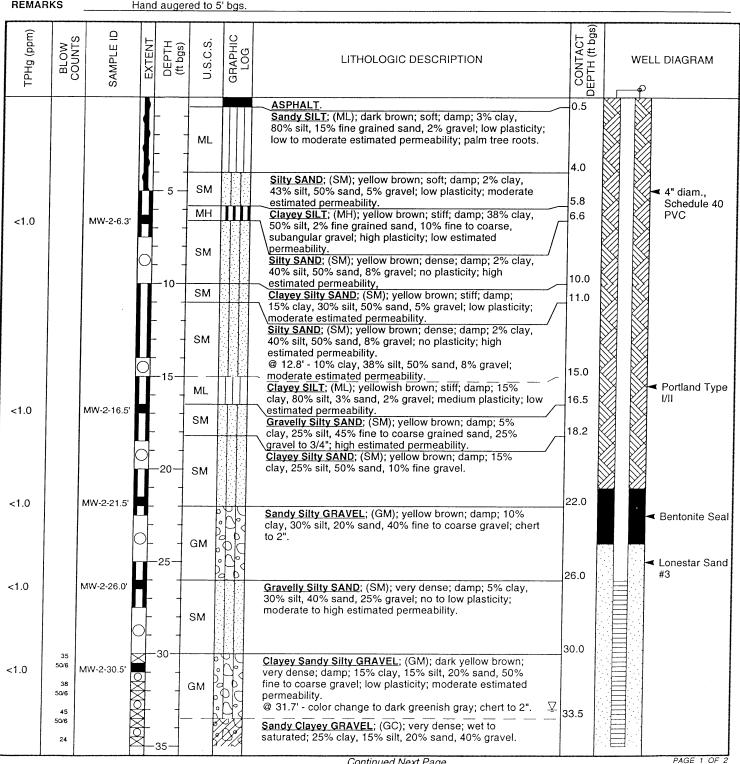


WELL LOG (SHELL) GNPLEASA-4NGINTNPLE4226.GPJ DEFAULT.GDT

Cambria Environmental Technology, Inc. 1144 - 65th St. Oakland, CA 94608 Telephone: (510) 420-0700

Fax: (510) 420-9170

CLIENT NAME	Equiva Services LLC	BORING/WELL NAME MW-2					
JOB/SITE NAME	Shell-branded service station	DRILLING STARTED 18-Jan-00					
LOCATION	4226 First Street, Pleasanton, California	DRILLING COMPLETED 19-Jan-00					
PROJECT NUMBER _	241-0395	WELL DEVELOPMENT DATE (YIELD) 03-Feb-00					
DRILLER	Gregg Drilling	GROUND SURFACE ELEVATION 372.65 ft above msl					
DRILLING METHOD _	Hollow-stem auger	TOP OF CASING ELEVATION 372.40 ft above msi					
BORING DIAMETER _	8"	SCREENED INTERVAL 26 to 46 ft bgs					
LOGGED BY	B. Jakub	DEPTH TO WATER (First Encountered) 33.0 ft (18-Jan-00)					
REVIEWED BY	S. Bork, RG# 5620	DEPTH TO WATER (Static) NA					





BORING/WELL LOG

Telephone: (510) 420-0700 Fax: (510) 420-9170

CLIENT NAME	Equiva Services LLC	BORING/WELL NAME	MW-2
JOB/SITE NAME	Shell-branded service station	DRILLING STARTED	18-Jan-00
LOCATION	4226 First Street, Pleasanton, California	DRILLING COMPLETED	19-Jan-00

Continued from Previous Page CONTACT DEPTH (ft bgs) TPHg (ppm) SAMPLE ID GRAPHIC LOG BLOW COUNTS U.S.C.S. DEPTH (ft bgs) EXTENT LITHOLOGIC DESCRIPTION WELL DIAGRAM <1.0 MW-2-35.0' Sandy Clayey GRAVEL; (GC); very dense; wet to ¶ 4"-diam., saturated; 25% clay, 15% silt, 20% sand, 40% gravel. 50/6 GC 0.020" Slotted Schedule 40 PVC 50/6 40.3 Sandy Gravelly SILT; (ML); hard; saturated; 12% clay, 50/6 58% silt, 15% sand, 15% gravel; medium plasticity; low MLestimated permeability. 50/6 43.5 Sandy Clayey SILT; (ML); hard; saturated; 15% clay, 50/6 ML 60% silt, 15% sand, 10% gravel. 45.0 Sandy SILT; (ML); hard; saturated; 12% clay, 45% silt, 50/6 43% fine grained sand; slight plasticity; low estimated ML12 permeability. 19 27 48.0 Bottom of Boring @ 48 ft



WELL LOG (SHELL) G:\PLEASA~4\GINT\PLE4226.GPJ DEFAULT.GDT

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Fax: (510) 420-9170

CLIENT NAME MW-3 Equiva Services LLC **BORING/WELL NAME** JOB/SITE NAME Shell-branded service station DRILLING STARTED 18-Jan-00 LOCATION 4226 First Street, Pleasanton, California DRILLING COMPLETED 19-Jan-00 PROJECT NUMBER 241-0395 WELL DEVELOPMENT DATE (YIELD) 03-Feb-00 Gregg Drilling DRILLER GROUND SURFACE ELEVATION 375.90 ft above msl DRILLING METHOD Hollow-stem auger TOP OF CASING ELEVATION 375.05 ft above msl BORING DIAMETER SCREENED INTERVAL 20 to 35 ft bgs B. Jakub 25.0 ft (18-Jan-00) LOGGED BY DEPTH TO WATER (First Encountered) __ S. Bork, RG# 5620 NA **DEPTH TO WATER (Static)**

REVIEWED BY ____ REMARKS Hand augered to 5' bgs. CONTACT DEPTH (ft bgs) BLOW COUNTS TPHg (ppm) GRAPHIC LOG EXTENT DEPTH (ft bgs) SAMPLE .S.C. LITHOLOGIC DESCRIPTION WELL DIAGRAM 0.5 SILT; (ML); brown; soft; damp; 2% clay, 90% silt, 7% fine grained sand, 1% gravel; no plasticity; moderate to low estimated permeability. ML 4" diam., Schedule 40 5.3 **PVC** <1.0 MW-3-5.0 SM 28 Silty SAND; (SM); yellow brown; dense; damp; 2% clay, 5.8 40 43% silt, 55% sand. Clayey SILT; (ML); yellow brown; hard; wet; 15% clay, 60% silt, 5% sand, 10% fine to coarse, subangular gravel; medium plasticity; low estimated permeability. ML 50/6 <1.0 MW-3-10.5' Portland Type 1/11 15.0 Gravelly Silty SAND; (SM); yellow brown; very dense; 50/6 <1.0 MW-3-15.5' 5% clay, 20% silt, 60% fine grained sand, 15% fine, subangular to subrounded gravel. ■ Bentonite Seal ■ Lonestar Sand 20 SM MW-3-20.5' <1.0 @ 22' - silt layer noted by driller. _____25.0 Clayey Silty SAND; (SM); yellow brown; dense; wet to <1.0 MW-3-25.5' saturated; 15% clay, 35% silt, 40% fine grained sand, 10% fine to coarse, subangular gravel; low plasticity; low estimated permeability. SM 4"-diam., 0.020" Slotted Schedule 40 **PVC** 30.0 50/6 Sandy Silty GRAVEL; (GM); very dense; 5% clay, 30% silt, 25% sand, 40% gravel; low plasticity; moderate estimated permeability. GM 35.0 PAGE 1 OF

Continued Next Page



Cambria Environmental Technology, Inc. 1144 - 65th St.

Oakland, CA 94608 Telephone: (510) 420-0700 Fax: (510) 420-9170

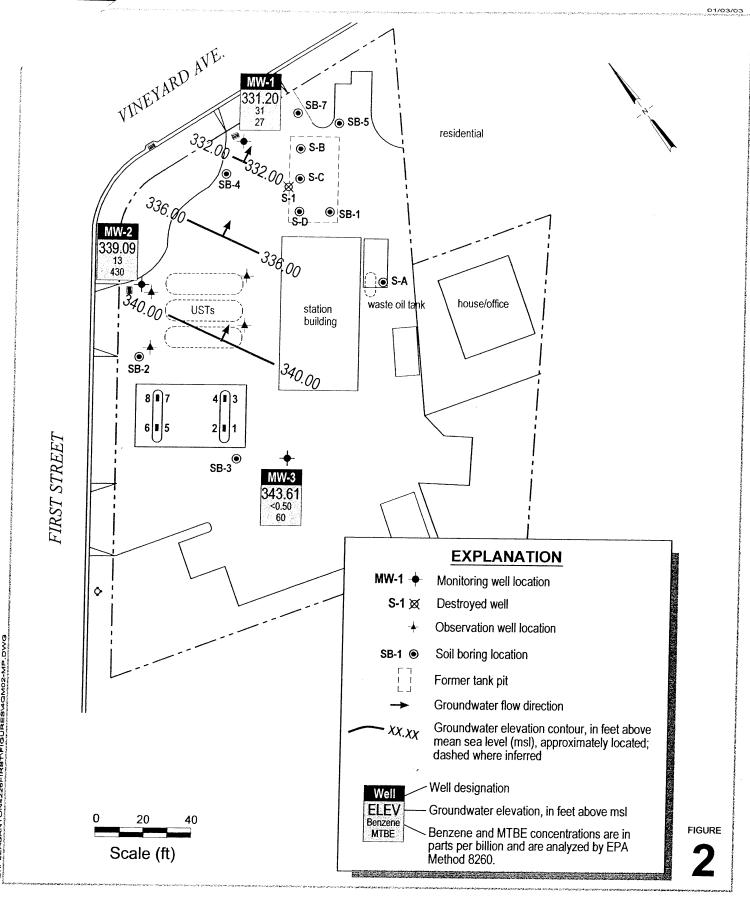
CLIENT NAME Equiva Services LLC BORING/WELL NAME **DRILLING STARTED** JOB/SITE NAME Shell-branded service station DRILLING COMPLETED 19-Jan-00 LOCATION 4226 First Street, Pleasanton, California

MW-3 18-Jan-00

PAGE 2 OF 2

BORING/WELL LOG

Continued from Previous Page								
TPHg (ppm)	COUNTS SAMPLE ID	EXTENT DEPTH (# hgs)	U.S.C.S.	LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM	
q) PHg (p	15 36 46 15 25 42	EXTER TO DEPT	ML ML	CLOO	SILT; (ML); light brown; hard; 10% clay, 80% silt, 10% sand; low plasticity; low estimated permeability. Clayey SILT; (ML); hard; 20% clay, 70% silt, 10% fine grained sand; medium plasticity; low estimated permeabillity.	# 1.5 40.0 41.5	■ Bentonite Seal Bottom of Boring @ 41.5 ft	



Shell-branded Service Station

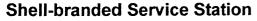
4226 First Street Pleasanton, California Incident #98995840



Groundwater Elevation Contour Map

CAMBRIA

November 14, 2002



4226 First Street Pleasanton, California Incident #98995840

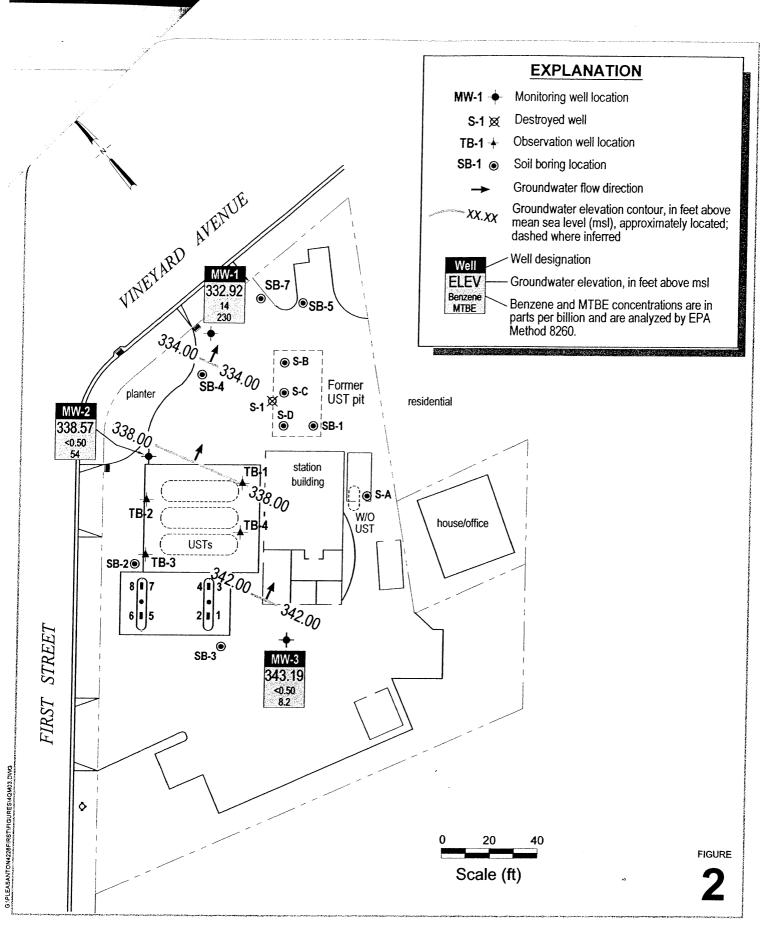
G.PLEASANTON4228FIRSTJFIGURES/1QM03-MP.DW0



Groundwater Elevation Contour Map

CAMBRIA

February 12, 2003

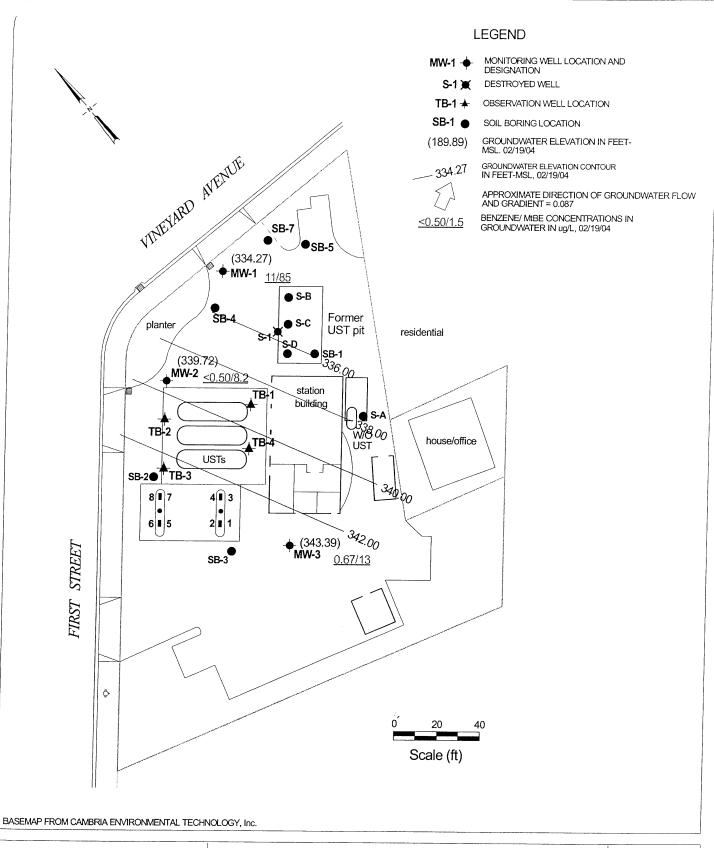




4226 First Street Pleasanton, California Incident #98995840



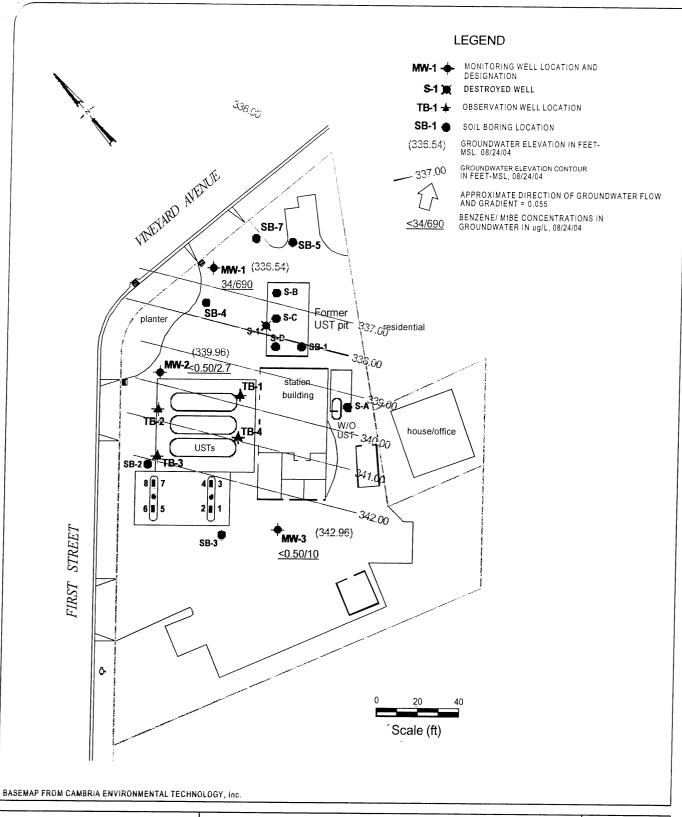
Groundwater Elevation Contour Map





Shell-Branded Service Station 4226 First Street Pleasanton, California

BENZENE/MtBE CONCENTRATION AND GROUNDWATER ELEVATION MAP, FEBRUARY 19, 2004 FIGURE:
2
PROJECT:
EQ-76

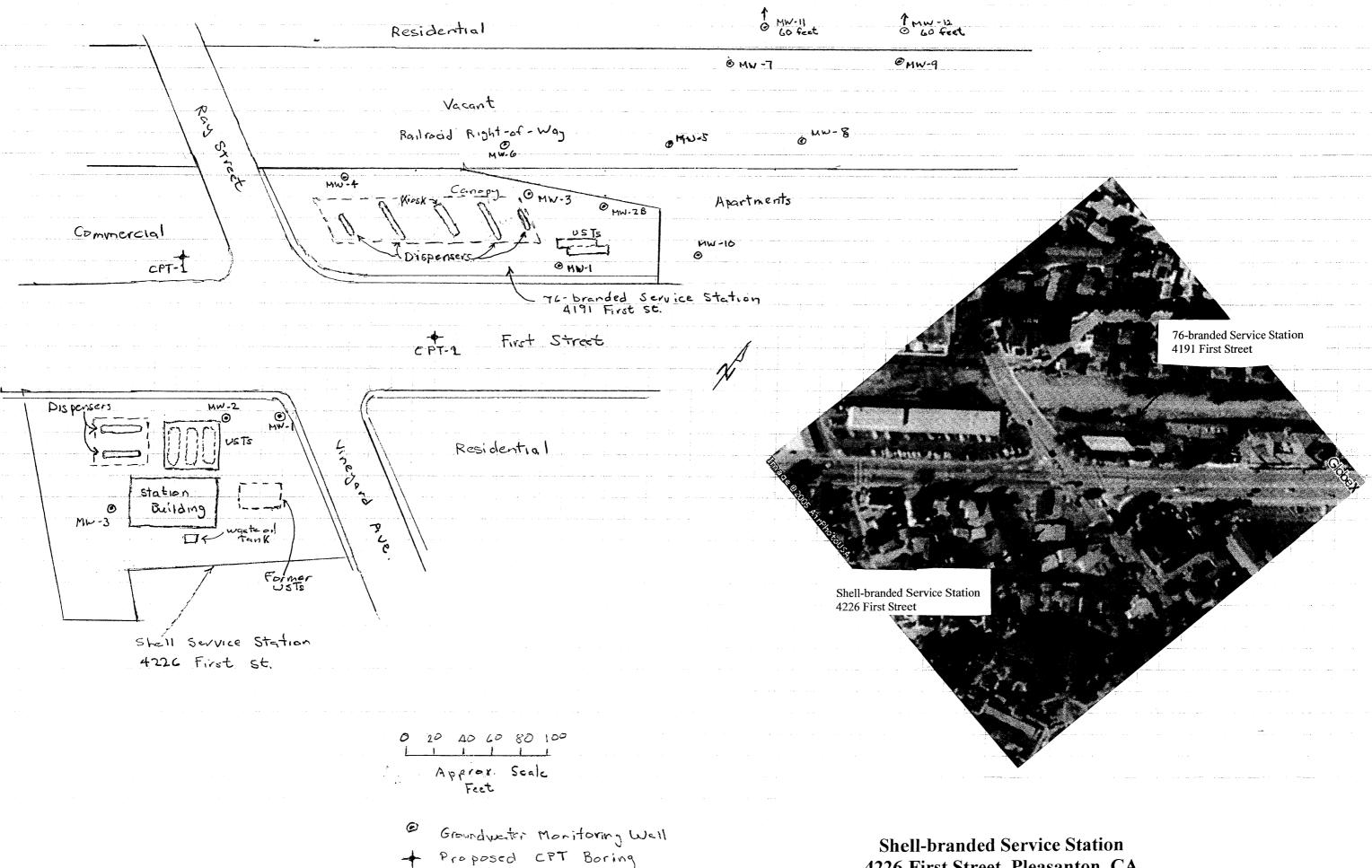




Shell-Branded Service Station 4226 First Street Pleasanton, California

BENZENE/MtBE CONCENTRATION AND GROUNDWATER ELEVATION MAP, August 24, 2004 FIGURE: 2
PROJECT:

EQ-76



4226 First Street, Pleasanton, CA



GROUNDWATER SAMPLING SPECIALISTS SINCE 1985

December 19, 2005

Denis Brown Shell Oil Products US 2095 South Wilmington Avenue Carson, CA 90810

> Fourth Quarter 2005 Groundwater Monitoring at Shell-branded Service Station 4226 First Street Pleasanton, CA

Monitoring performed on November 22, 2005

Groundwater Monitoring Report 051122-DW-1

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

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

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

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

Please call if you have any questions.

Yours truly,

Mike Ninokata Project Coordinator

MN/ks

attachments: Cumulative Table of WELL CONCENTRATIONS

Certified Analytical Report

Field Data Sheets

cc: Vera Fischer

Delta Environmental 175 Bernal Rd., Suite 200 San Jose, CA 95119

							MTBE	MTBE		Depth to	GW
Well ID	Date	TPPH	В	Т	E	X	8020	8260	TOC	Water	Elevation
		(ug/L)	(MSL)	(ft.)	(MSL)						
MW-1	06/16/1999	NA	371.20	37.81	333.39						
MW-1	06/30/1999	89.0	5.89	<0.500	<0.500	0.652	<5.00	NA	371.20	33.65	337.55
MW-1	09/24/1999	1,560	473	<10.0	<10.0	22.8	<2.50	NA	371.20	37.04	334.16
MW-1	12/08/1999	1,020	375	<5.00	<5.00	15.2	<50.0	NA	371.20	36.79	334.41
MW-1	02/10/2000	523	106	<5.00	<5.00	31.8	2.90	NA	371.20	34.90	336.30
MW-1	05/17/2000	<50.0	<0.500	<0.500	<0.500	<0.500	37.0	29.5	371.20	32.55	338.65
MW-1	08/03/2000	808	290	<2.50	<2.50	8.90	<12.5	NA	371.20	39.13	332.07
MW-1	10/31/2000	507	250	0.962	<0.500	23.5	3.76	NA	371.20	37.91	333.29
MW-1	03/01/2001	<50.0	<0.500	<0.500	<0.500	<0.500	74.6	NA	371.20	39.60	331.60
MW-1	05/30/2001	780	280	<2.0	<2.0	11	NA	<2.0	371.20	39.53	331.67
MW-1	08/02/2001	1,900	580	<2.5	<2.5	12	NA	<25	371.20	39.61	331.59
MW-1	12/06/2001	840	190	<0.50	<0.50	13	NA	<5.0	371.20	39.63	331.57
MW-1	02/05/2002	2,700	650	<2.5	<2.5	7.2	NA	<25	371.20	35.53	335.67
MW-1	06/17/2002	2,500	550	<2.0	<2.0	5.9	NA	<20	371.20	39.29	331.91
MW-1	07/25/2002	690	130	<0.50	<0.50	4.4	NA	18	371.20	39.39	331.81
MW-1	11/14/2002	400	31	<0.50	<0.50	2.7	NA	27	371.20	40.00	331.20
MW-1	02/12/2003	840	0.85	<0.50	<0.50	<0.50	NA	40	371.20	32.92	338.28
MW-1	05/14/2003	680	190	<2.5	<2.5	<5.0	NA	95	371.20	32.57	338.63
MW-1	07/29/2003	870	190	<2.5	<2.5	<5.0	NA	150	371.20	33.82	337.38
MW-1	11/19/2003	<200	14	<2.0	<2.0	<4.0	NA	230	371.20	38.28	332.92
MW-1	02/19/2004	58 d	11	<0.50	<0.50	<1.0	NA	85	371.20	36.93	334.27
MW-1	05/03/2004	670	310	<2.5	<2.5	<5.0	NA	420	371.20	32.70	338.50
MW-1	08/24/2004	430 d	34	<2.5	<2.5	<5.0	NA	690	371.20	34.66	336.54
MW-1	11/15/2004	<250	29	<2.5	<2.5	<5.0	NA	470	371.20	38.27	332.93
MW-1	02/02/2005	540 e	87	<2.5	<2.5	<5.0	NA	700	371.20	32.02	339.18
MW-1	05/05/2005	460 e	88	<2.5	<2.5	<5.0	NA	300	371.20	36.82	334.38
MW-1	08/05/2005	910	230	<2.5	<2.5	<5.0	NA	480	371.20	33.35	337.85
MW-1	11/22/2005	1,760	27.4	<0.500	<0.500	1.18	NA	1,160	371.20	33.42	337.78

							MTBE	MTBE		Depth to	GW
Well ID	Date	TPPH	В	Т	Ε	X	8020	8260	TOC	Water	Elevation
		(ug/L)	(MSL)	(ft.)	(MSL)						
MW-2	02/03/2000	NA	372.40	32.65	339.75						
MW-2	02/07/2000	NA	372.40	35.51	336.89						
MW-2	02/10/2000	<50.0	<0.500	<0.500	<0.500	<0.500	2.61	NA	372.40	36.62	335.78
MW-2	05/17/2000	120	4.09	<0.500	<0.500	<0.500	29.0	NA	372.40	32.14	340.26
MW-2	08/03/2000	<50.0	0.692	<0.500	<0.500	<0.500	40.5	36.6b	372.40	32.42	339.98
MW-2	10/31/2000	<50.0	<0.500	<0.500	<0.500	<0.500	57.4	44.8c	372.40	33.02	339.38
MW-2	03/01/2001	173	1.64	1.65	2.86	3.97	127	167	372.40	32.54	339.86
MW-2	05/30/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	170	372.40	32.42	339.98
MW-2	08/02/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	160	372.40	32.55	339.85
MW-2	12/06/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	170	372.40	33.15	339.25
MW-2	02/05/2002	<50	0.72	<0.50	<0.50	1.7	NA	170	372.40	32.29	340.11
MW-2	06/17/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	260	372.40	32.63	339.77
MW-2	07/25/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	280	372.40	32.80	339.60
MW-2	11/14/2002	120	13	9.0	3.8	14	NA	430	372.40	33.31	339.09
MW-2	02/12/2003	<100	<1.0	<1.0	<1.0	<1.0	NA	430	372.40	32.15	340.25
MW-2	05/14/2003	<250	<2.5	<2.5	<2.5	<5.0	NA	470	372.40	32.01	340.39
MW-2	07/29/2003	<250	<2.5	<2.5	<2.5	<5.0	NA	670	372.40	32.51	339.89
MW-2	11/19/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	54	372.40	33.83	338.57
MW-2	02/19/2004	65	<0.50	3.4	1.4	6.5	NA	8.2	372.40	32.68	339.72
MW-2	05/03/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	5.2	372.40	32.07	340.33
MW-2	08/24/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	2.7	372.40	32.44	339.96
MW-2	11/15/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	1.3	372.40	32.95	339.45
MW-2	02/02/2005	<50	<0.50	<0.50	<0.50	<1.0	NA	24	372.40	31.94	340.46
MW-2	05/05/2005	72 f	<0.50	<0.50	<0.50	<1.0	NA	4.9	372.40	31.91	340.49
MW-2	08/05/2005	<50	<0.50	<0.50	<0.50	<1.0	NA	16	372.40	32.15	340.25
MW-2	11/22/2005	840	0.800	<0.500	<0.500	0.870	NA	556	372.40	32.31	340.09
MW-3	02/03/2000	NA	375.05	32.06	342.99						
MW-3	02/07/2000	NA	375.05	32.57	342.48						

							MTBE	MTBE		Depth to	GW
Well ID	Date	TPPH	В	Т	E	X	8020	8260	TOC	Water	Elevation
		(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(MSL)	(ft.)	(MSL)
MW-3	02/10/2000	180	5.12	<0.500	<0.500	0.714	26.8	21.5a	375.05	32.77	342.28
MW-3	05/17/2000	1,360	414	<5.00	<5.00	17.6	<25.0	NA	375.05	31.00	344.05
MW-3	08/03/2000	<50.0	0.536	<0.500	<0.500	<0.500	22.0	NA	375.05	31.03	344.02
MW-3	10/31/2000	<50.0	<0.500	<0.500	<0.500	<0.500	31.1	NA	375.05	31.28	343.77
MW-3	03/01/2001	384	172	0.815	<0.500	8.00	5.16	NA	375.05	31.21	343.84
MW-3	05/30/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	110	375.05	31.02	344.03
MW-3	08/02/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	93	375.05	30.94	344.11
MW-3	12/06/2001	110	<0.50	<0.50	<0.50	2.3	NA	180	375.05	31.28	343.77
MW-3	02/05/2002	<50	0.89	0.60	<0.50	2.1	NA	130	375.05	31.12	343.93
MW-3	06/17/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	72	375.05	31.21	343.84
MW-3	07/25/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	81	375.05	30.96	344.09
MW-3	11/14/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	60	375.05	31.44	343.61
MW-3	02/12/2003	<50	<0.50	<0.50	<0.50	<0.50	NA	43	375.05	31.28	343.77
MW-3	05/14/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	24	375.05	31.20	343.85
MW-3	07/29/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	21	375.05	31.29	343.76
MW-3	11/19/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	8.2	375.05	31.86	343.19
MW-3	02/19/2004	81	0.67	4.4	1.8	8.6	NA	13	375.05	31.66	343.39
MW-3	05/03/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	13	375.05	31.72	343.33
MW-3	08/24/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	10	375.05	32.09	342.96
MW-3	11/15/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	6.6	375.05	31.50	343.55
MW-3	02/02/2005	<50	<0.50	<0.50	<0.50	<1.0	NA	3.1	375.05	31.28	343.77
MW-3	05/05/2005	<50	<0.50	<0.50	<0.50	<1.0	NA	2.3	375.05	31.42	343.63
MW-3	08/05/2005	<50	<0.50	<0.50	<0.50	<1.0	NA	2.4	375.05	31.35	343.70
MW-3	11/22/2005	<50	<0.500	<0.500	<0.500	<0.500	NA	3.84	375.05	31.98	343.07
TB-1	02/12/2003	Well inacces	sible	NA	NA						
TB-1	02/28/2003	NA	NA	NA	NA	NA	NA	NA	NA	12.54	NA
TB-1	05/14/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	<5.0	NA	12.31	NA

Well ID	Date	TPPH (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)
TB-2	02/12/2003	Well inacces	sible	NA	NA	NA	NA	NA	NA	NA	NA
TB-2	02/28/2003	NA	NA	NA	NA	NA	NA	NA	NA	12.56	NA
TB-2	05/14/2003	Insufficient w	ater	NA	NA	NA	NA	NA	NA	12.54	NA
TB-3	02/12/2003	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA
TB-3	02/28/2003	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA
TB-3	05/14/2003	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA
TB-4	02/12/2003	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA
TB-4	02/28/2003	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA
TB-4	05/14/2003	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA

Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; prior to May 30, 2001, analyzed by 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

GW = Groundwater

ug/L = Parts per billion

MSL = Mean sea level

ft. = Feet

<n = Below detection limit

NA = Not applicable

WELL CONCENTRATIONS

Shell-branded Service Station 4226 First Street Pleasanton, CA

							MTBE	MTBE		Depth to	GW
Well ID	Date	TPPH	В	Т	E	X	8020	8260	TOC	Water	Elevation
		(ug/L)	(MSL)	(ft.)	(MSL)						

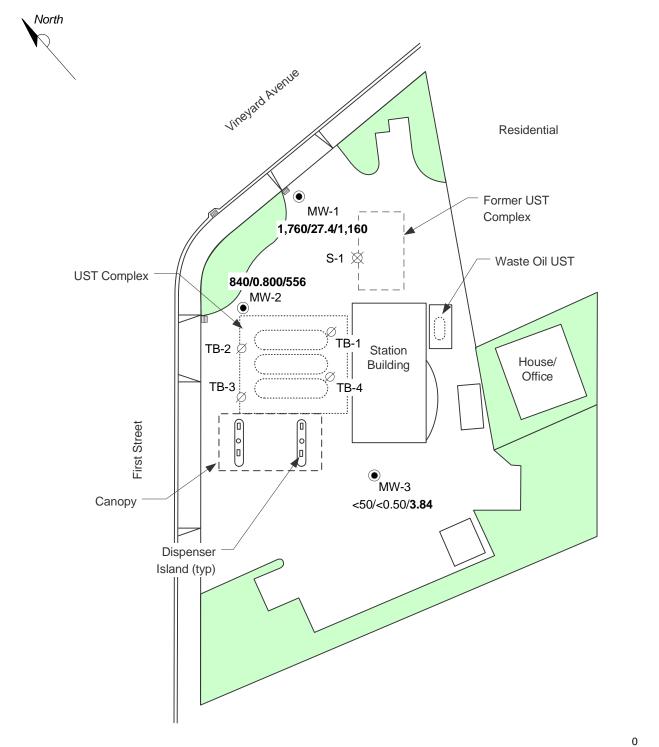
Notes:

- a = Sample was analyzed outside of the EPA recommended holding time.
- b = Concentration is an estimate value above the linear quantitation range.
- c = The result reported was generated out of time. The sample was originally run within hold time, but needed to be re-analyzed.
- d = Sample contains discrete peak in addition to gasoline.
- e = Quantity of unknown hydrocarbon(s) in sample based on gasoline.
- f = The concentration reported reflect(s) individual or discrete unidentified peaks not matching a typical fuel pattern.

Well MW-1 surveyed on May 4, 1999 by Virgil Chavez Land Surveying of Vallejo, CA.

Site surveyed on March 19, 2000 by Virgil Chavez Land Surveying of Vallejo, CA.

Site surveyed on January 15, 2002 by Virgil Chavez Land Surveying of Vallejo, CA.





APPROX. SCALE

LEGEND

MW-2 • GROUNDWATER MONITORING WELL LOCATION

S-1 🛭 DESTROYED WELL

ABANDONED TANK BACKFILL

TB-1 Ø WELL LOCATION

<50/<0.50/<0.50</p>
TPH-G/BENZENE/MTBE
CONCENTRATION MAP, 11/22/05

BaseMap from: Cambria Environmental Technology, Inc. and Toxichem Management Systems, Inc.

FIGURE 3

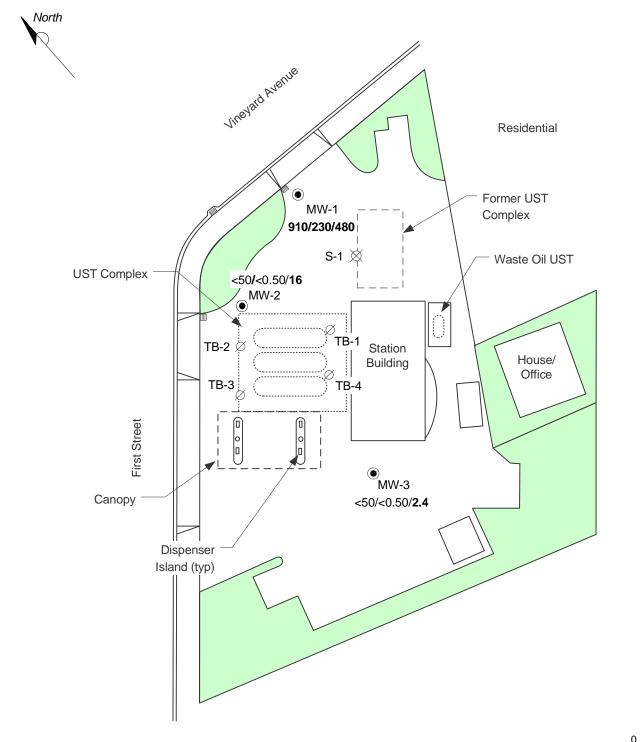
TPH-G, BENZENE, AND MTBE CONCENTRATION MAP, NOVEMBER 22, 2005

SHELL-BRANDED SERVICE STATION 4226 First Street

Pleasanton, California

l	,	
PROJECT NO.	DRAWN BY	Г
SJ42-26F-1.2005	V.F. 5/9/05	
FILE NO.	PREPARED BY	
SJ42-26F-1.2005	J.T.	
REVISION NO.	REVIEWED BY	
2		







APPROX. SCALE

LEGEND

MW-2 • GROUNDWATER MONITORING WELL LOCATION

S-1 🛭 DESTROYED WELL

TB-1 Ø ABANDONED TANK BACKFILL WELL LOCATION

<50/<0.50/<0.50 TPH-G/BENZENE/MTBE CONCENTRATION MAP, 8/5/05

BaseMap from: Cambria Environmental Technology, Inc. and Toxichem Management Systems, Inc.

FIGURE 3

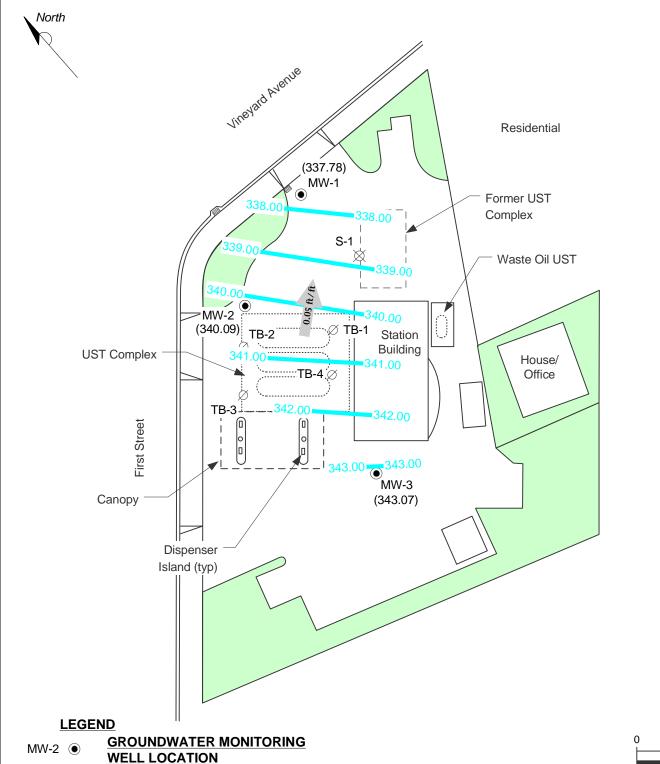
TPH-G, BENZENE, AND MTBE CONCENTRATION MAP, AUGUST 5, 2005

SHELL-BRANDED SERVICE STATION 4226 First Street

Pleasanton, California

l	,	_
PROJECT NO. SJ42-26F-1,2005	DRAWN BY V.F. 5/9/05	
3J42-20F-1.2005	V.F. 3/9/03	l
FILE NO. SJ42-26F-1.2005	PREPARED BY	
SJ42-26F-1.2005	J.1.	l
REVISION NO.	REVIEWED BY	
1 2		





DESTROYED WELL S-1 \boxtimes

ABANDONED TANK BACKFILL TB-1 Ø **WELL LOCATION**

GROUNDWATER ELEVATION (343.63)

(FEET - MSL), 11/22/05

GROUNDWATER ELEVATION 343.00 **CONTOUR**

0.02 ft/ft

APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT

BaseMap from: Cambria Environmental Technology, Inc. and Toxichem

Management Systems, Inc.



APPROX. SCALE

FIGURE 2

GROUNDWATER ELEVATION CONTOUR MAP, **NOVEMBER 22, 2005**

> SHELL-BRANDED SERVICE STATION 4226 First Street

> > Pleasanton, California

PROJECT NO.	DRAWN BY
SJ42-26F-1.2005	V.F. 5/9/05
FILE NO.	PREPARED BY
SJ42-26F-1.2005	J.T.
REVISION NO.	REVIEWED BY



Table 1Soil Analytical Results - Shell-branded Service Station Incident# 989958404226 First Street, Pleasanton, California

Sample	TPHg	Benzene	Toluene	Ethylbenzene	Xylene	MTBE
			- (concentrations	reported in ppm) ——		
MW-2-6.3'	<1.0	< 0.005	<0.005	< 0.005	< 0.010	<0.05
MW-2-16.5'	<1.0	< 0.005	< 0.005	< 0.005	< 0.010	< 0.05
MW-2-21.5'	<1.0	< 0.005	< 0.005	< 0.005	< 0.010	< 0.05
MW-2-26.0'	<1.0	< 0.005	< 0.005	< 0.005	< 0.010	< 0.05
MW-2-30.5'	<1.0	< 0.005	< 0.005	< 0.005	< 0.010	< 0.05
MW-2-35.0'	<1.0	r <0.005	< 0.005	< 0.005	< 0.010	< 0.05
MW-3-5.0'	<1.0	< 0.005	< 0.005	< 0.005	< 0.010	< 0.05
MW-3-10.5'	<1.0	< 0.005	< 0.005	< 0.005	< 0.010	< 0.05
MW-3-15.5'	<1.0	< 0.005	< 0.005	< 0.005	< 0.010	< 0.05
MW-3-20.5'	<1.0	< 0.005	< 0.005	< 0.005	< 0.010	< 0.05
MW-3-25.5'	<1.0	< 0.005	< 0.005	< 0.005	< 0.010	<0.05

Abbreviations and Notes:

TPHg = Total petroleum hydrocarbons as gasoline

MTBE = Methyl tert-Butyl Ether by EPA 8020.

ppm = parts per million

Samples collected January 18 and 19, 2000

TABLE 1

CHEMICAL ANALYSIS OF SOIL SAMPLES SHELL SERVICE STATION 4226 FIRST STREET PLEASANTON, CALIFORNIA

Concentrations in mg/kg (parts per million)

_	Boring	Depth (ft)	TPH	Benzene	Toluene	Ethylbenzene	Xvlene
	SB-1	15	4.2	ND	ND	ND	ND
	SB-1	35	18	ND	ND	ND	ND
	SB-1	50	ND	ND	ND	ND	ND
	SB-2	15	ND	ND	ND	ND	ND
	SB-2	30	7.2	ND	0.17	ND	ND
	SB-3	10	ND	ND	ND	ND	ND
	SB-3	30	ND	ND	ND	ND	ND
	WA-1	30	380	2.2	2.7	5.3	32
	WA-1	35	290	1.8	0.35	0.24	1.5
	WA-1	40	ND	ND	ND	ND	ND
	WA-1	50	ND	ND	ND	ND	ND
			·		,		
D:	etection Li	mits:	1.0	0.050	0.10	0.10	0.10

Notes:

- 1) TPH Total Petroleum Hydrocarbons (gasoline range) analyzed by EPA Methods 5030/8015
- 2) Benzene, Toluene, Ethylbenzene and Xylene analyzed by EPA Method 8020
- 3) ND- Not Detected at detection limit shown
- 4) SB-1, SB-2 and SB-3 samples collected March 5, 1990 WA-1 samples collected March 6, 1990

TABLE 1

ANALYTICAL RESULTS OF SOIL SAMPLES

Concentrations in mg/kg (parts per million)

SHELL OIL COMPANY 4226 FIRST STREET PLEASANTON, CALIFORNIA

Boring	TPH	Benzene	Toluene	Ethylbenzene	Xylenes
SB4-15	N.D.	N.D.	N.D.	N.D.	N.D.
SB4-35	N.D.	0.023	0.0071	N.D.	0.0055
SB4-50	N.D.	0.030	0.0059	N.D.	N.D.
SB5-35	820	65	3.7	6.5	65
SB5-40	N.D.	N.D.	N.D.	N.D.	N.D.
SB5-50	N.D.	N.D.	N.D.	N.D.	N.D.
DETECTION LIMITS:	1.0	0.0050	0.0050	0.0050	0.0050

NOTES:

- 1) TPH Total Petroleum Hydrocarbons (Gasoline Range) analyzed by EPA Methods 5030/8015.
- 2) Benzene, Toluene, Ethylbenzene and Xylene analyzed by EPA Method 8020.
- 3) ND Not detected.

Table 1 Soil Analytical Results - Shell-branded Service Station Incident# 98995840 4226 First Street, Pleasanton, California

Sample	TPHg	Benzene	Toluene	Ethyl Benzene	Xylene	MTBE
	-		(ppm) —————		
SB-6-15.5'	<1.0	-0.0050	0.0050			
SB-6-19.5'	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025
SB-6-25.0'		<0.0050	<0.0050	<0.0050	<0.0050	<0.025
SB-6-30.0'	<1.0	<0.0050	<0.0050	< 0.0050	< 0.0050	< 0.025
	<1.0	<0.0050	<0.0050	< 0.0050	< 0.0050	< 0.025
SB-6-35.0'	<1.0	0.0069	<0.0050	< 0.0050	< 0.0050	<0.025
SB-6-40.0'	<1.0	<0.0050	0.28	< 0.0050	< 0.0050	<0.025
SB-6-45.0'	<1.0	0.1	<0.0050	<0.0050	<0.0050	<0.025
SB-7-15.0'	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	-0.005
SB-7-19.5'	<1.0	< 0.0050	<0.0050	<0.0050		<0.025
SB-7-24.5'	<1.0	< 0.0050	<0.0050	<0.0050	<0.0050	<0.025
SB-7-29.3'	<1.0	< 0.0050	<0.0050		<0.0050	<0.025
SB-7-34.3'	<1.0	<0.0050		<0.0050	<0.0050	<0.025
SB-7-40.0'			<0.0050	<0.0050	<0.0050	<0.025
	83	<0.0050	0.37	0.26	0.26	<0.025
SB-7-44.5'	<1.0	<0.0050	<0.0050	<0.0050	< 0.0050	< 0.025
SB-7-59.5'	<1.0	<0.0050	< 0.0050	<0.0050	< 0.0050	< 0.050
SB-7-64.5'	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.050

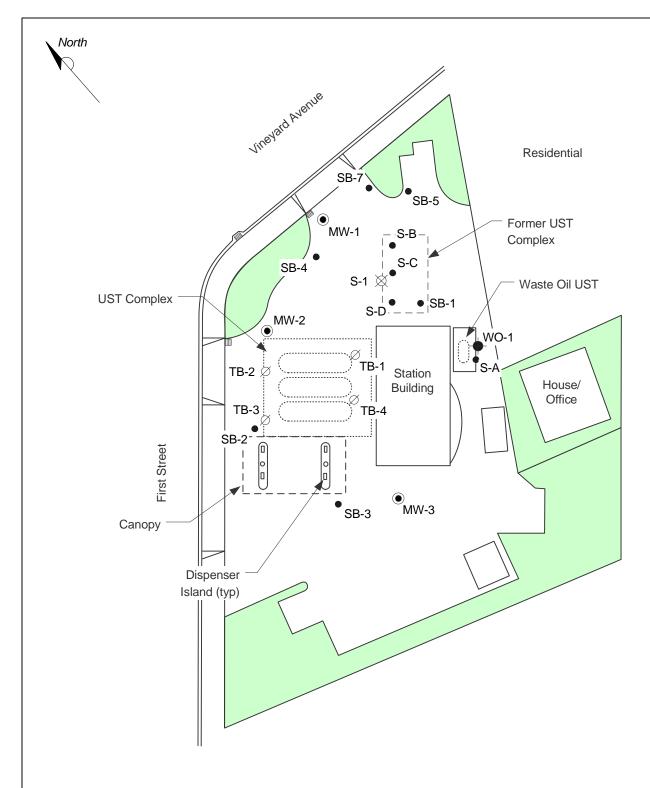
Abbreviations and Notes:

TPHg = Total petroleum hydrocarbons as gasoline

MTBE = Methyl tert-Butyl Ether

ppm = parts per million

Samples collected April 7 through 9, 1999



LEGEND

MW-2 • GROUNDWATER MONITORING WELL LOCATION

S-1 X DESTROYED WELL

TB-1 \varnothing ABANDONED TANK BACKFILL WELL LOCATION

S-C • SOIL BORING LOCATION

WO-1 PROPOSED SOIL BORING LOCATION

APPROX. SCALE

0

40 FT

FIGURE 2 SITE MAP

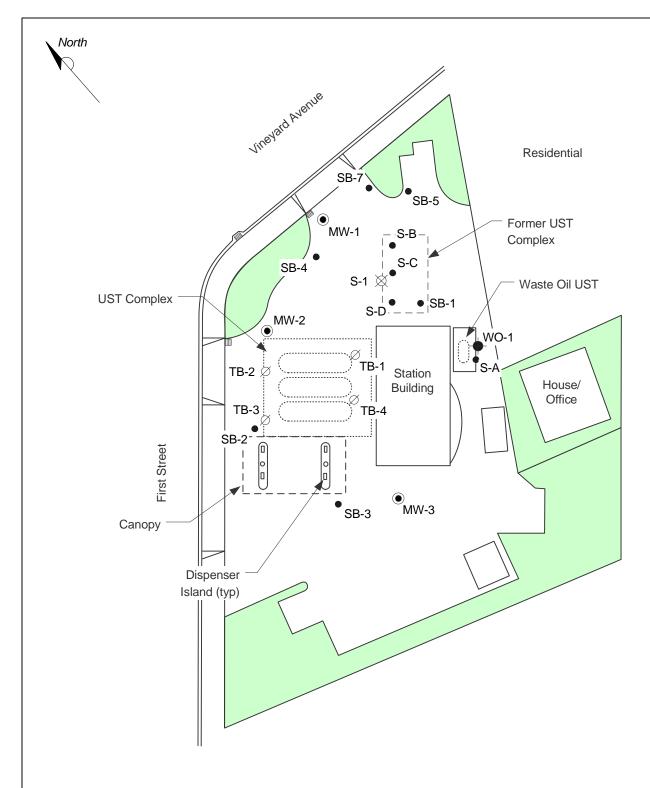
SHELL-BRANDED SERVICE STATION 4226 First Street

Pleasanton, California

PROJECT NO. SJ42-26F-1.2005	DRAWN BY V.F. 5/9/05	
FILE NO. SJ42-26F-1.2005	PREPARED BY J.T.	
REVISION NO. 2	REVIEWED BY	



BaseMap from: Cambria Environmental Technology, Inc. and Toxichem Management Systems, Inc.



LEGEND

MW-2 • GROUNDWATER MONITORING WELL LOCATION

S-1 X DESTROYED WELL

TB-1 \varnothing ABANDONED TANK BACKFILL WELL LOCATION

S-C • SOIL BORING LOCATION

WO-1 PROPOSED SOIL BORING LOCATION

APPROX. SCALE

0

40 FT

FIGURE 2 SITE MAP

SHELL-BRANDED SERVICE STATION 4226 First Street

Pleasanton, California

PROJECT NO. SJ42-26F-1.2005	DRAWN BY V.F. 5/9/05	
FILE NO. SJ42-26F-1.2005	PREPARED BY J.T.	
REVISION NO. 2	REVIEWED BY	



BaseMap from: Cambria Environmental Technology, Inc. and Toxichem Management Systems, Inc.

5500 Shellmound Street, Emeryville, CA 94608-2411

Fax: 510-547-5043 Phone: 510-450-6000

Sile <u>つい</u>(-い3왕-6363 Proj. 日 Rem.日 Rpt 図 Biii日 December 21, 1995 1日 2日 3日 4日 6日 6日

Scott Seery Senior Hazardous Materials Specialist Alameda County Health Care Services Agency 1131 Harbor Bay Parkway Alemeda, California 94502-6577

PROJECT COPY

RE: Dispenser Replacement Sampling

Shell Service Station WIC #204-6138-0303 4226 First Street Pleasanton, California WA Job #81-0571-008

Dear Mr. Seery:

On behalf of Shell Oil Products Company (Shell), Weiss Associates (WA) submits this report documenting soil sampling and excavation for the recent fuel dispenser and product piping replacements at the above referenced service station (Figure 1 and 2). The former dispensers and piping were used to pump gasoline from the sites underground storage tanks. The objective of this sampling was to assess whether hydrocarbons are in soil beneath these structures. WA's scope of work, the site background, and the soil sampling results are presented below.

SCOPE OF WORK

WA's scope of work for this investigation was to:

- Collect soil samples from beneath the former dispensers and product piping joints for laboratory analysis;
- Analyze the soil samples for petroleum hydrocarbons;
- Direct overexcavation of hydrocarbon-bearing soil;
- Sample and dispose of the excavated soil; and
- Report the results.

Scott Seerv December 21, 1995 Weiss Associates

SITE BACKGROUND

The operating Shell service station is located at the southeast Location:

corner of First Street and Vineyard Avenue in Pleasanton,

California (Figure 1).

Residential and commercial development. Surroundings:

According to Chris Boykin of the Pleasanton Fire Ground Water Depth:

Department (PFD), ground water is about 60 ft below

ground surface at this site.

INITIAL SAMPLING RESULTS

WA Geologist Faith Daverin collected the soil samples. Parties Present:

> PFD Inspector Chris Boykin observed and directed the soil sampling. Paradiso Mechanical of San Leandro, California excavated the trenches, removed the product lines, assisted with the sampling and replaced the dispensers and piping.

September 8 and 11, 1995. Sampling Dates:

Six: Four dispenser samples DP-1(3.0), DP-2(7.5), DP-Number of Initial Samples:

> 3(8.0) and DP-4(8.5) were collected at various depths beneath the former dispensers. Product line samples PT-1 and PT-2 were collect beneath former piping joints at 4.0 and 4.5 ft below ground surface (bgs), respectively. PFD inspector Chris Boykin requested that "stained, odorous soil" that she observed be excavated to the extent feasible from beneath the former dispensers. Sample locations are

presented on Figure 3.

Soil samples were collected by driving clean brass tubes into Soil Sampling Method:

undisturbed soil from the backhoe bucket. All sample tubes were immediately sealed with Teflon sheeting and plastic caps and placed on ice in a cooler for transport to the state-

certified analytical laboratory.

Seguoia Analytical in Redwood City, California. Analytical Laboratory:

Scott Seery December 21, 1995

Soil samples were analyzed for total petroleum hydrocarbons Analytical Methods:

3

as gasoline (TPH-G) by modified EPA Method 8015 and benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Method 8020. The certified analytical reports and chain-of-

custody forms are included in Attachment A.

Only one sample contained more than 3 parts per million Analytic Results:

> (ppm) TPH-G: 120 ppm TPH-G was detected in soil at 8 ft beneath the former eastern dispenser. No benzene was detected in any samples, except one where benzene was

slightly above the laboratory method detection limit.

SOIL OVEREXCAVATION AND CONFIRMATION SAMPLING

Overexcavation Objective: To remove hydrocarbon-bearing soil to the maximum extent

practical beneath the former dispensers.

Overexcavation Dates: September 8 and 11, 1995.

Volume Excavated: About 40 cubic yards of soil were excavated as shown in

> Figure 2. About 20 cubic yards of soil were removed in association with the dispenser and piping replacements. Approximately 20 cubic yards of hydrocarbon-bearing soil, including soil removed during the initial soil sampling, were

overexcavated as shown in Figure 3.

Based on the average TPH-G concentration of the excavated Hydrocarbons Removed:

soil, about 3.4 pounds of hydrocarbons were removed from

beneath the site.

8.5 ft below ground surface. Maximum Excavation Depth:

Sandy clay to about 8.5 ft depth. Lithology Encountered:

No ground water was encountered. Ground Water Depth:

September 8 and 11, 1995. Sampling Date:

Number of Confirmation Samples: Two: Samples DP-1(6.0) and DP-2-SW(4.0).

No benzene and less than 3 ppm TPH-G were detected in the Analytic Results:

confirmation samples.

Scott Seery December 21, 1995

Veiss Associates

SOIL DISPOSAL

Stockpile Sampling:

The soil stockpile was sampled by driving clean brass tubes at least 12 inches below the stockpile surface. The tubes were immediately capped and sealed with Teflon tape and refrigerated for transport to the analytical laboratory. The laboratory composited and analyzed the samples for TPH-G, BTEX and total characteristic leaching potential for metals by EPA Method 6010. The certified analytic report and chain-of-custody form are included in Attachment B.

Soil Transport and Disposal:

On September 29, 1995, Manley and Sons Inc. of Sacramento, California transported about 40 cubic yards of soil to Forward Incorporated in Stockton, California for disposal. The soil disposal confirmation sheet is presented in Attachment B.

CONCLUSIONS

Based on the sampling results, WA concludes that:

- Only one of six soil samples collected from beneath the six former dispensers contained more than 3 ppm TPH-G. No benzene was detected in any of the samples.
- Most of the hydrocarbon-bearing soil was removed from the site. About 20 cubic yards of soil were overexcavated from the dispenser areas.
- 120 ppm TPH-G was left 8.0 ft beneath the south dispensers on the east fuel island. Benzene, however was below laboratory method detection limits in this sample. Further overexcavation was not possible due to the foundation of the canopy support column.
- Soil samples from beneath the product piping collected adjacent to the west fuel island contained 0.01 ppm benzene. Therefore, the former product piping was probably not a hydrocarbon source to the subsurface.
- Depth to ground water in the site vicinity is about 60 ft below ground surface. Due to the localized and shallow extent of hydrocarbons in soil, it is unlikely that hydrocarbons detected during this sampling event have impacted ground water.

Scott Seery December 21, 1995

WA trusts that this submittal meets your needs. Please call if you have any questions.

No HOSTIT OF THE STREET OF THE

Sincerely, Weiss Associates

Faith Morris Daverin

Staff Geologist

James W. Carmody, CHG Senior Project Hydrogeologist

Faith Mores Daveni

FMD/JWC:fmd

ESHELL/0571/DISPENS.DOC Attachments:

Figures Table

A - Certified Analytical Reports and Chain-of-Custody Forms for Soil

B - Soil Disposal Confirmation and Certified Analytical Report for Stockpile Samples

R. Jeff Granberry, Shell Oil Products Company, PO Box 4023, Concord, CA 94524
 Jeff Byram, Shell Oil Products Company, PO Box 4023, Concord, CA 94524
 Kevin Graves, Regional Water Quality Control Board - San Francisco Bay, 2101 Webster Street, Suite 500, Oakland, CA 94612

Chris Boykin, Pleasanton Fire Department, P.O. Box 520, Pleasanton, CA 94566

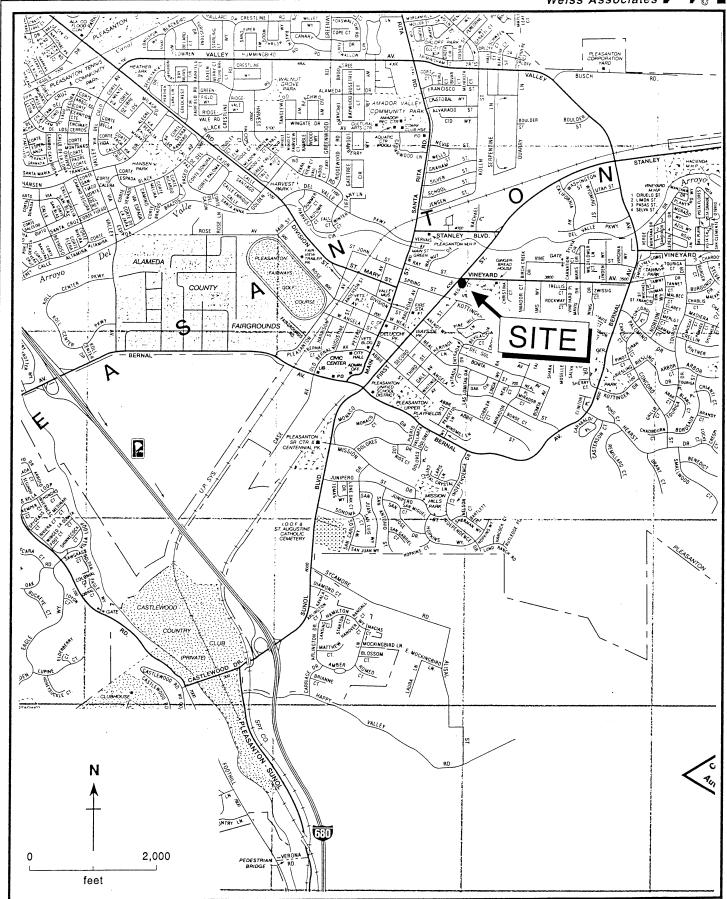


Figure 1. Site Location Map - Shell Service Station WIC #204-6138-0303, 4226 First Street, Pleasanton, California



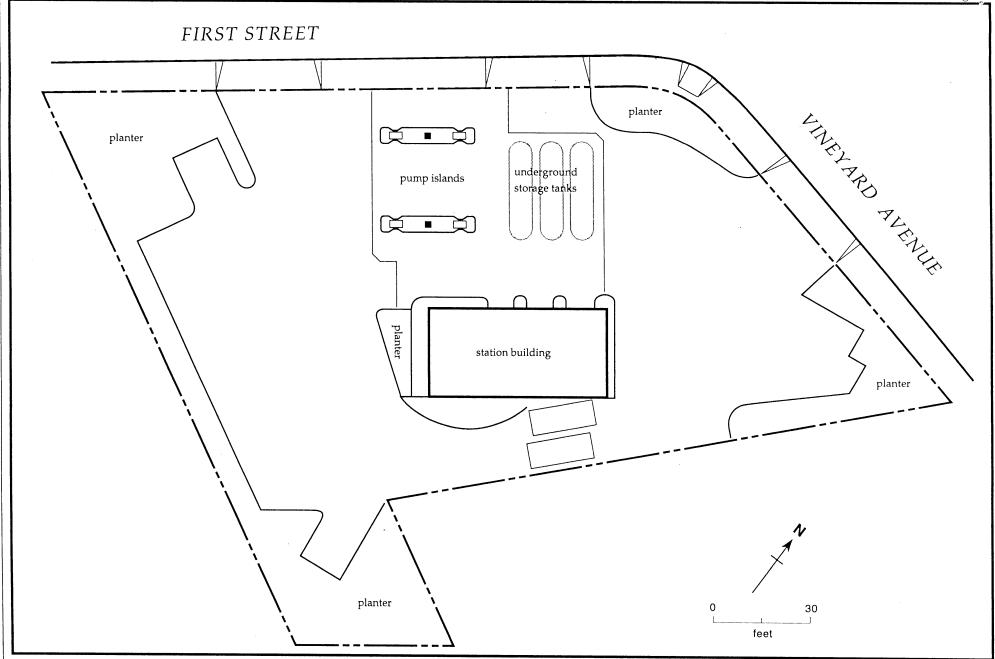


Figure 2. Site Layout - Shell Service Station WIC #204-6138-0303 - 4226 First Street, Pleasanton, California

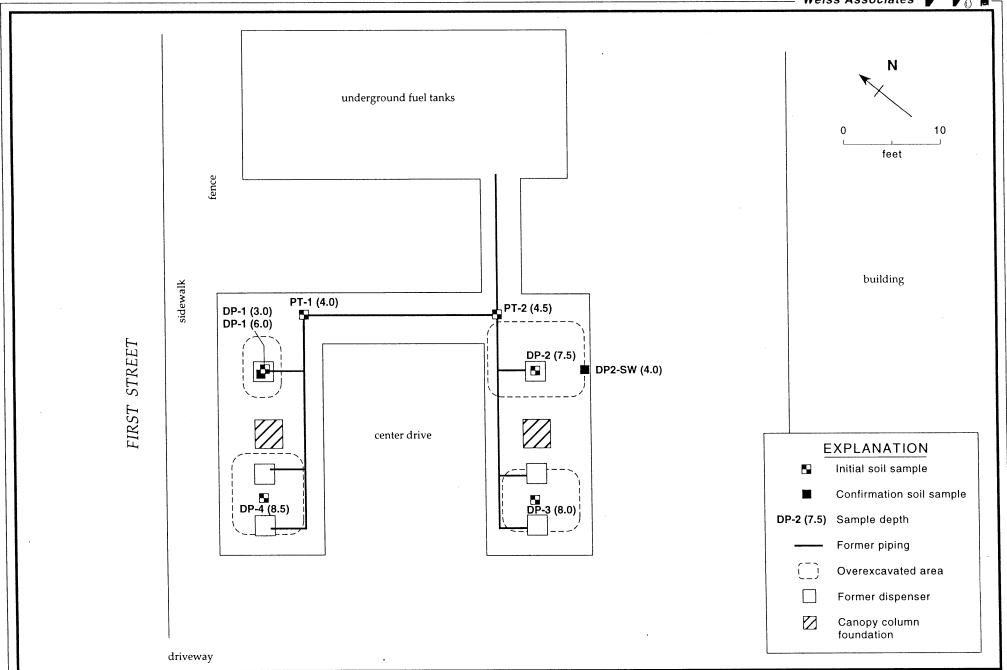


Figure 3. Soil Sample Locations - Shell Service Station WIC #204-6138-0303, 4226 First Street, Pleasanton, California

Weiss
Associate
S

Sample	Sample	Date	TPH-G	В	T	Е	X
ID Depth (ft) Sampled <				T	parts per million (m	g/kg)	>
nitial Soil Samp	oles						
OP-1	3.0	09/08/95	1.3	< 0.005	< 0.005	< 0.005	< 0.005
DP-2	7.5	09/08/95	< 1.0	< 0.005	< 0.005	< 0.005	< 0.005
DP-3	8.0	09/08/95	120	< 0.12	< 0.12	< 0.12	< 0.12
DP-4	8.5	09/08/95	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
PT-1	4.0	09/08/95	2.5	0.0080	< 0.005	0.038	0.19
PT-2	4.5	09/08/95	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
Confirmation So	oil Samples						
DP-1	6.0	09/11/95	2.5	< 0.005	< 0.005	0.020	0.035
DP-2-SW	4.0	09/08/95	1.7	< 0.005	< 0.005	0.0075	0.017

Abbreviations

j:\shell\0571\reports\soilanal.doc

Analytical Laboratory:

TPH-G = Total petroleum hydrocarbons as gasoline by Modified EPA Method 8015

Sequoia Analytical of Redwood City, California

B = Benzene by EPA Method 8020

T = Toluene by EPA Method 8020

E = Ethylbenzene by EPA Method 8020

X = Xylenes by EPA Method 8020

< n = Not detected at detection limit of n ppm

DP = Soil Sample collected beneath former dispenser

PT = Soil Sample collected beneath former product line

CAMBRIA

1 2 3 4 5 6

September 22, 1998

Julie Wyman Livermore-Pleasanton Fire Department 4550 East Avenue Livermore, California 94550

Re:

1998 Upgrade Site Inspection Report

FILE COPY Shell-branded Service Station

4226 First Street Pleasanton, California WIC# 204-6138-0303

Cambria Project# 240-0523-982



Dear Ms. Wyman:

On behalf of Equilon Enterprises LLC (Equilon), Cambria Environmental Technology, Inc. (Cambria) is submitting the results of the site visit conducted during station upgrade activities at the site referenced above. Presented below are a description of the site conditions, activities, and conclusions.

SITE CONDITIONS

The site is located at the intersection of First Street and Vineyard Avenue in Pleasanton, California. The area surrounding the site is commercial.

This Shell-branded service station was recently upgraded by Gettler-Ryan Inc. of Dublin, California (Gettler-Ryan). Gettler-Ryan removed the waste oil remote fill piping.

UPGRADE ACTIVITIES

Oakland, CA Sonoma, CA	Personnel Present	Title	Company
Portland, OR Seattle, WA	Christina Empedocles Michael Comer	Staff Geologist Site Foreman	Cambria Gettler-Ryan
Cambria Environmental Technology, Inc.	Julie Wyman	Inspector	Livermore-Pleasanton Fire Department

1144 65th Street

Site Inspection Date: July 1, 1998.

Suite B Oakland, CA 94608 Tel (510) 420-0700 Fax (510) 420-9170

Julie Wyman September 22, 1998

CAMBRIA

Site Inspection Activities: Cambria inspected the waste oil tank remote fill piping removal. No field indications of hydrocarbons, such as staining or odor, were observed during the site visit. One pea gravel sample was collected below the waste oil tank remote fill piping as directed by Julie Wyman (LPFD). The analytical results for the pea gravel sample are presented as Attachment A.

CONCLUSIONS



No field indications of hydrocarbons were observed during the site visit. Therefore, no further investigation of the waste oil tank area is proposed at this time.

CLOSING

We appreciate the opportunity to work with you on this project. Please call Michael Paves at (510) 420-3332 if you have any questions or comments.

Sincerely,

Cambria Environmental Technology, Inc.

Diane M. Lundquist, P.E.

Principal Engineer

Attachments: A - Laboratory Analytical Reports for Pea Gravel

cc: Mr. Tim Hargraves, Equilon Enterprises LLC, P.O. Box 8080, Martinez, CA 94553

Ms. Karen Petryna, Equiva Services LLC, P.O. Box 8080, Martinez, CA 94553

ATTACHMENT A

Laboratory Analytical Reports for Pea Gravel



68. nesapeake Drive404 N. Wiget Lane819 Striker Avenue, Suite 81455 McDowell Blvd. North, Ste. D

Redwood City. CA 94c Walnut Creek, CA 94598 Sacramento. CA 95834 Petaluma, CA 94954 (650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Cambria 1144 65th St. Suite C Oakland, CA 94608 Attention: Mike Paves

Project:

Shell 4226 1st St.

Enclosed are the results from samples received at Sequoia Analytical on July 2, 1998. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRI	PTION	DATE COLLECTED	D TEST METHOD
9807173 -01	SOLID, WO-1		07/01/98	TRPH (EPA 418.1M)
9807173 -01	SOLID, WO-1		07/01/98	8240 Volatile Organic Co
9807173 -01	SOLID, WO-1		07/01/98	8270 SemiVolatile Organi
9807173 -01	SOLID, WO-1		07/01/98	Cadmium by ICP
9807173 -01	SOLID, WO-1		07/01/98	Chromium by ICP
9807173 -01	SOLID, WO-1		07/01/98	Nickel by ICP
9807173 -01	SOLID, WO-1		07/01/98	Lead by ICP
9807173 -01	SOLID, WO-1		07/01/98	Zinc by ICP
9807173 -01	SOLID, WO-1		07/01/98	Purgeable TPH/BTEX/MTBE
9807173 -01	SOLID, WO-1		07/01/98	TPHD_S Extractable TPH

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours

SEQUEIA ANALYTICAL

Peggy Penner Project Manager

573 W



Mike Paves

6દ nesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 1455 McDowell Blvd. North, Ste. D Redwood City, CA 94. Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954

(650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865

FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Cambria

Attention:

1144 65th St. Suite C Oakland, CA 94608

Client Proj. ID:

Shell 4226 1st St.

Sampled: 07/01/98 Received: 07/02/98

Lab Proj. ID: 9807173

Analyzed: see below

Reported: 07/17/98

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9807173-01 Sample Desc : SOLID,WO-1				
Cadmium by ICP Chromium by ICP Lead by ICP Nickel by ICP TRPH (EPA 418.1M) Zinc by ICP	mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	07/08/98 07/08/98 07/08/98 07/08/98 07/09/98	0.50 0.50 5.0 2.5 15 0.50	N.D. 13 7.3 26 280 26

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner Project Manager



6c Inesapeake Drive404 N. Wiget Lane819 Striker Avenue, Suite 81455 McDowell Blvd. North, Ste. D

Redwood City, CA 94. Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 (650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Cambria Client Proj. ID:
1144 65th St. Suite C Sample Descri
Oakland, CA 94608 Matrix: SOLID
Analysis Metho

Client Proj. ID: Shell 4226 1st St. Sample Descript: WO-1 Matrix: SOLID

Analysis Method: EPA 8240 Lab Number: 9807173-01 Sampled: 07/01/98 Received: 07/02/98 Extracted: 07/07/98 Analyzed: 07/07/98 Reported: 07/17/98

QC Batch Number: MS0707988240EXA

Instrument ID: F3

Attention: Mike Paves

Volatile Organics (EPA 8240)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acetone Benzene Bromodichloromethane Bromoform Bromomethane 2-Butanone Carbon disulfide Carbon tetrachloride Chlorobenzene Chloroethane 2-Chloroethyl vinyl ether Chloroform Chloromethane Dibromochloromethane 1,1-Dichloroethane 1,2-Dichloroethene trans-1,2-Dichloroethene trans-1,2-Dichloropropene trans-1,3-Dichloropropene trans-1,3-Dichloropropene Ethylbenzene 2-Hexanone Methylene chloride 4-Methyl-2-pentanone Styrene 1,1,2,2-Tetrachloroethane Tetrachloroethene Toluene 1,1,1-Trichloroethane Trichloroethene Trichloroethene Trichloroethene Trichloroethene Trichloroethene Trichloroethene Trichloroethene Trichloroethene Trichloroethene Trichlorofluoromethane Vinyl acetate	\$00 100 100 100 100 100 100 500 100 100 1	ug/Kg
Vinyl chloride Total Xylenes	100 100	N.D. N.D.







6c inesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 1455 McDowell Blvd. North, Ste. D Redwood City, CA 94、 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 (650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

 Cambria
 Client Proj. ID:
 Shell 4226 1st St.
 Sampled: 07/01/98

 1144 65th St. Suite C
 Sample Descript: WO-1
 Received: 07/02/98

 Oakland, CA 94608
 Matrix: SOLID
 Extracted: 07/07/98

 Analysis Method: EPA 8240
 Analyzed: 07/07/98

 Attention: Mike Paves
 Lab Number: 9807173-01
 Reported: 07/17/98

QC Batch Number: MS0707988240EXA

Instrument ID: F3

Analyte	Detection ug/K	Sample Results ug/Kg	
Surrogates	Control Li	imits %	% Recovery
1,2-Dichloroethane-d4	70	121	102
Toluene-d8	81	117	99
4-Bromofluorobenzene	74	121	97

Analytes reported as N-D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL -

ELAP #1210

Peggy Penner Project Manager

Page:

3





6. .nesapeake Drive404 N. Wiget Lane819 Striker Avenue, Suite 81455 McDowell Blvd. North, Ste. D

Redwood City, CA 94. Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 (650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

 Cambria
 Client Proj. ID:
 Shell 4226 1st St.
 Sampled: 07/01/98

 1144 65th St. Suite C
 Sample Descript:
 WO-1
 Received: 07/02/98

 Oakland, CA 94608
 Matrix:
 SOLID
 Extracted: 07/06/98

 Analysis Method:
 EPA 8270
 Analyzed: 07/08/98

 Attention:
 Mike Paves
 Lab Number:
 9807173-01
 Reported: 07/17/98

QC Batch Number: MS0706988270EXA

Instrument ID: F4

Semivolatile Organics (EPA 8270)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	500	N.D.
Acenaphthylene	500	N.D.
Anthracene	500	N.D.
Benzoic Acid	1000	N.D.
Benzo(a)anthracene	500	N.D.
Benzo(b)fluoranthene	500	N.D.
Benzo(k)fluoranthene	500	N.D.
Benzo(g,h,i)perylene	500	N.D.
Benzo(a)pyrene	500	N.D.
Benzyl alcohol	500	N.D.
Bis(2-chloroethoxy)methane	500	N.D.
Bis(2-chloroethyl)ether	500	N.D.
Bis(2-chloroisopropyl)ether	500	N.D.
Bis(2-ethylhexyl)phthalate	1000	N.D.
4-Bromophenyl phenyl ether	500	N.D.
Butyl benzyl phthalate	500	N.D.
4-Chloroaniline	1000	N.D.
2-Chloronaphthalene	500	N.D.
4-Chloro-3-methylphenol	500	N.D.
2-Chlorophenol	500	N.D.
4-Chlorophenyl phenyl ether	500	N.D.
Chrysene	500	N.D.
Dibenzo(a,h)anthracene	500	N.D.
Dibenzofuran	500	N.D.
Di-n-butyl phthalate	1000	N.D.
1,2-Dichlorobenzene	500	N.D.
1,3-Dichlorobenzene	500	N.D.
1,4-Dichlorobenzene	500	N.D.
3,3'-Dichlorobenzidine	1000	N.D.
2,4-Dichlorophenol	500	N.D.
Diethyl phthalate	500	N.D.
2,4-Dimethylphenol	500	N.D.
Dimethyl phthalate	500	N.D.
4,6-Dinitro-2-methylphenol	1000	N.D.
2,4-Dinitrophenol	1000	N.D.
2,4-Dinitrotoluene	500	N.D.
2,6-Dinitrotoluene	500	N.D.
Di-n-octyl phthalate	500	N.D.
Fluoranthene	500	N.D.







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FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Sampled: 07/01/98 Cambria Client Proj. ID: Shell 4226 1st St. Received: 07/02/98 Extracted: 07/06/98 Analyzed: 07/08/98 1144 65th St. Suite C Sample Descript: WO-1 Oakland, CA 94608 Matrix: SOLID Analysis Method: EPA 8270 Attention: Mike Paves Lab Number: 9807173-01 Reported: 07/17/98

QC Batch Number: MS0706988270EXA

Instrument ID: F4

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Fluorene	500	N.D.
Hexachlorobenzene	500	N.D.
Hexachlorobutadiene	500	N.D.
Hexachlorocyclopentadiene	1000	N.D.
Hexachloroethane	500	N.D.
Indeno(1,2,3-cd)pyrene	500	N.D.
Isophorone	500	N.D.
2-Methylnaphthalene	500	N.D.
2-Methylphenol	500	N.D.
4-Methylphenol	500	N.D.
Naphthalene	500	N.D.
2-Nitroaniline	1000	N.D.
3-Nitroaniline	1000	N.D.
4-Nitroaniline	1000	N.D.
Nitrobenzene	500	N.D.
2-Nitrophenol	500	N.D.
4-Nitrophenol	1000	N.D.
N-Nitrosodiphenylamine	500	N.D.
N-Nitroso-di-n-propylamine	500	N.D.
Pentachlorophenol	1000	N.D.
Phenanthrene	500	N.D.
Phenol	500	N.D.
Pyrene	500	N.D.
1,2,4-Trichlorobenzene	500	N.D.
2,4,5-Trichlorophenol	1000	N.D.
2,4,6-Trichlorophenol	500	N.D.

Surrogates	Control Li	% Recovery		
2-Fluorophenol	25	121	54	
Phenol-d5	24	113	62	
Nitrobenzene-d5	23	120	63	
2-Fluorobiphenyl	30	115	74	
2,4,6-Tribromophenol	19	122	56	
p-Terphenyl-d14	18	137	101	

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA/ANALYTICAL -

ELAP #1210

Peggy Penner Project Manager

Page:



6 _hesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 1455 McDowell Blvd. North, Ste. D Redwood City, CA 9-. Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954

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Cambria 1144 65th St. Suite C

Oakland, CA 94608

Client Proj. ID: Shell 4226 1st St. Sample Descript: WO-1

Matrix: SOLID

Analysis Method: 8015Mod/8020 Lab Number: 9807173-01

Sampled: 07/01/98 Received: 07/02/98 Extracted: 07/07/98

Analyzed: 07/08/98 Reported: 07/17/98

QC Batch Number: GC070898BTEXEXA

Instrument ID: GCHP07

Attention: Mike Paves

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection mg/K		Sample Results mg/Kg
TPPH as Gas Methyl t-Butyl Ether Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:	1.0 0.02 0.00 0.00 0.00 0.00	50 50 50	N.D. N.D. N.D. N.D. N.D.
Surrogates Trifluorotoluene 4-Bromofluorobenzene	Control Lir 70 60	nits % 130 140	% Recovery 78 91

Analytes reported as N.O. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL -

ELAP #1210

Peggy Penner Project Manager

Page:



6 _hesapeake Drive404 N. Wiget Lane819 Striker Avenue, Suite 81455 McDowell Blvd. North, Ste. D

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 Cambria
 Client Proj. ID:
 Shell 4226 1st St.
 Sampled: 07/01/98

 1144 65th St. Suite C
 Sample Descript: WO-1
 Received: 07/02/98

 Oakland, CA 94608
 Matrix: SOLID
 Extracted: 07/13/98

 Analysis Method: EPA 8015 Mod
 Analyzed: 07/13/98

 Attention: Mike Paves
 Lab Number: 9807173-01
 Reported: 07/17/98

QC Batch Number: GC0713980HBPEXA

Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg		Sample Results mg/Kg
TEPH as Diesel Chromatogram Pattern:	10		27
Unidentified HC			C9-C24
Surrogates	Control Limits %	9	6 Recovery
n-Pentacosane (C25)	50	150	274 Q

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL -

ELAP #1210

Peggy Remer Project Manager

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66 Linesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 1455 McDowell Blvd. North, Ste. D Redwood City, CA 94000 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954

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Cambria

1144 65th St., Ste. C Oakland, CA 94608 Attention: Mike Paves Client Project ID: shell 4226 1st St.

QC Sample Group: 9807173-01

Reported: Jul 17, 1998

QUALITY CONTROL DATA REPORT

Matrix:

Liquid

Method: EPA 418.1 Analyst: B. Anderson

ANALYTE

TRPH

QC Batch #: IN070798418100B

Sample No.: LCS070798

Date Prepared:

7/7/98

Date Analyzed:

7/7/98

Sample Conc., mg/L:

N.D.

Conc. Spiked, mg/L:

42.0

LCS Spike, mg/L: % Recovery: 36 86

Matrix

LCS Duplicate, mg/L: % Recovery: 33 79

elative % Difference:

8.5

RPD Control Limits:

0-20

LCS Batch#: LCS070898

Date Prepared:

7/8/98

Date Analyzed:

7/8/98

Conc. Spiked, mg/L:

42.0

LCS Recovery, mg/L:

37

LCS % Recovery:

QUQIA AMALYTICAL

88

Percent Recovery Control Limits:

LCS/LCSD

60-140

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met

Please Note

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents. preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

Reggy/Penner Project Manager



66 unesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 1455 McDowell Blvd. North, Ste. D در باRedwood City, CA 94 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954

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Cambria

1144 65th St., Ste. C Oakland, CA 94608 Attention: Mike Paves Client Project ID: shell 4226 1st St

QC Sample Group: 9807173-01

Reported: Jul 17, 1998

QUALITY CONTROL DATA REPORT

Matrix:

Solid

Method: EPA 8015M

Analyst: A. PORTER

ANALYTE

Diesel

QC Batch #: GC0713980HBPEXA

Sample No.: 9807173-1

7/13/98

Date Prepared:

7/13/98

Date Analyzed: Instrument i.D.#:

GCHP5A

ample Conc., mg/Kg:

27 mg/Kg

Conc. Spiked, mg/Kg:

17

Matrix Spike, mg/Kg:

20

% Recovery:

-41

Matrix

ike Duplicate, mg/Kg:

21

% Recovery:

-35

elative % Difference:

5

RPD Control Limits:

0-50

*Spike diluted out.

LCS Batch#: BLK071398AS

Date Prepared:

7/13/98

Date Analyzed:

7/13/98

Instrument I.D.#:

GCHP5A

Conc. Spiked, mg/Kg:

17

Recovery, mg/Kg:

12

LCS % Recovery:

71

Percent Recovery Control Limits:

MS/MSD

50-150

LCS

SEQUOIA ANALYTICAL

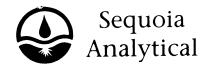
60-140

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

Please Note

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

Peggy Penner Project Manager



68c chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 1455 McDowell Blvd. North, Ste. D

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FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921 - 0100 FAX (707) 792-0342

Cambria

1144 65th St., Ste. C Oakland, CA 94608 Attention: Mike Paves Client Project ID: shell 4226 1st St.

QC Sample Group: 9807173-01

Reported: Jul 17, 1998

QUALITY CONTROL DATA REPORT

Matrix:

Solid

Method: EPA 8015

Analyst: R. GECKLER

ANALYTE

Gasoline

QC Batch #: GC070898BTEXEXA

Sample No.: GS9807265-32

Date Prepared:

7/8/98

Date Analyzed:

7/8/98

Instrument I.D.#:

GCHP7

ample Conc., mg/Kg:

13 mg/Kg

Conc. Spiked, mg/Kg:

5.0

Matrix Spike, mg/Kg:

14

% Recovery:

20

Matrix

ike Duplicate, mg/Kg:

18

% Recovery:

100.0

elative % Difference:

25

RPD Control Limits:

0-25

LCS Batch#: GSBLK070898A

Date Prepared:

7/8/98

Date Analyzed:

7/8/98

Instrument I.D.#:

GCHP7

Conc. Spiked, mg/Kg:

5.0

Recovery, mg/Kg:

5.2

LCS % Recovery:

104

Percent Recovery Control Limits:

MS/MSD

60-140

70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Please Note

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents. preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix

interference, the LCS recovery is to be used to validate the batch.

Peggy Penner Project Manager



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Cambria Environmental Tech.

1144 65th St., Ste. C Oakland, CA 94608 Client Project ID: Shell 4226 1st St.

Matrix: Solid

Attention: Mike Paves

Control Limits

Reggy Penner Preject Manager

ANALYTICAL

Work Order #: 9807173 -01

Reported: J

Jul 20, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME0707986010MDF	ME0707986010MDF	ME0707986010MDF	ME0707986010MDF
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3050	EPA 3050	EPA 3050	EPA 3050
Analyst:	C. Medefesser	C. Medefesser	C. Medefesser	C. Medefesser
MS/MSD #:	9806J4154	9806J4154	9806J4154	9806J4154
Sample Conc.:	N.D.	N.D.	34	30
Prepared Date:	7/7/98	7/7/98	7/7/98	7/7/98
Analyzed Date:	7/8/98	7/8/98	7/8/98	7/8/98
Instrument I.D.#:	MTJA5	MTJA5	MTJA5	MTJA5
Conc. Spiked:	50 mg/Kg	50 mg/Kg	50 mg/Kg	50 mg/Kg
Result:	43	44	81	81
MS % Recovery:	86	88	94	102
Dup. Result:	43	44	77	77
MSD % Recov.:	86	88	86	94
RPD:	0.0	0.0	5.1	5.1
RPD Limit:	0-20	0-20	0-20	0-20
LCS #:	BLK070798	BLK070798	BLK070798	BLK070798
Prepared Date:	7/7/98	7/7/98	7/7/98	7/7/98
Analyzed Date:	7/8/98	7/8/98	7/8/98	7/8/98
Instrument I.D.#:	MTJA5	MTJA5	MTJA5	MTJA5
Conc. Spiked:	50 mg/Kg	50 mg/Kg	50 mg/Kg	50 mg/Kg
LCS Result:	47	48	49	48
LCS % Recov.:	94	96	98	96
Me/Men	00 100	00.100	20.100	20.400
MS/MSD	80-120	80-120	80-120	80-120
LCS	80-120	80-120	80-120	80-120

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

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Cambria Environmental Tech.

1144 65th St., Ste. C Oakland, CA 94608 Client Project ID: Shell 4226 1st St.

Matrix: Solid

Attention: Mike Paves Work Order #: 9807173-01 Reported: Jul 20, 1998

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloroethene	Trichloroethene	Benzene	Toluene	Chloro-
000.					benzene
	MS0707988240EXA	MS0707988240EXA	MS0707988240EXA	MS0707988240EXA	MS0707988240EXA
Analy. Method:	EPA 8240	EPA 8240	EPA 8240	EPA 8240	EPA 8240
Prep. Method:	N.A.	N.A.	N.A.	N.A.	N.A.
Analyst:	L. Duong	L. Duong	L. Duong	L. Duong	L. Duong
MS/MSD #:	980726504	980726504	980726504	980726504	980726504
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/7/98	7/7/98	7/7/98	7/7/98	7/7/98
Analyzed Date:	7/7/98	7/7/98	7/7/98	7/7/98	7/7/98
Instrument I.D.#:	F3	F3	F3	F3	F3
Conc. Spiked:	$2500\mu\mathrm{g/Kg}$	$2500\mu\mathrm{g/Kg}$	$2500\mu\mathrm{g/Kg}$	$2500\mu\mathrm{g/Kg}$	$2500\mu\mathrm{g/Kg}$
Result:	1900	2100	2200	2100	2100
MS % Recovery:	76	84	88	84	84
Dup. Result:	2100	2100	2200	2200	2200
MSD % Recov.:	84	84	88	88	88
RPD:	10	0.0	0.0	4.7	4.7
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	LCS070798	LCS070798	LCS070798	LCS070798	LCS070798
Prepared Date:	7/7/98	7/7/98	7/7/98	7/7/98	7/7/98
Analyzed Date:	7/7/98	7/7/98	7/7/98	7/7/98	7/7/98
nstrument I.D.#:	F3	F3	F3	F3	F3
Conc. Spiked:	$2500\mu\mathrm{g/Kg}$	$2500\mu\mathrm{g/Kg}$	$2500\mu\mathrm{g/Kg}$	$2500\mu\mathrm{g}/\mathrm{Kg}$	2500 μg/Kg
LCS Result:	2400	2300	2500	2400	2400
LCS % Recov.:	96	92	100	96	96
MS/MSD	60-140	60-140	60-140	60-140	60-140
ĽCS	65-135	70-130	70-130	70-130	70-130
Control Limits					

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Peggy Penner Project Manager

NALYTICAL

D-Nelative % Difference



Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 1455 McDowell Blvd. North. Ste. D Redwood City, CA 5 3 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 (650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Cambria Environmental Tech.

1144 65th St., Ste. C Oakland, CA 94608 Attention: Mike Paves Client Project ID: Shell 4226 1st St.

Matrix: Solid

Work Order #: 9807173-01

Reported: Jul 20, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Phenol	2-Chlorophenol	1,4-Dichloro-	N-Nitroso-Di-
			benzene	N-propylamine
	MS0706988270EXA	MS0706988270EXA	MS0706988270EXA	MS0706988270EXA
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550	EPA 3550
Analyst:	B. Pitamah	B. Pitamah	B. Pitamah	B. Pitamah
MS/MSD #:	980713501	980713501	980713501	980713501
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/6/98	7/6/98	7/6/98	7/6/98
Analyzed Date:	7/6/98	7/6/98	7/6/98	7/6/98
nstrument I.D.#:	F4	F4	F4	F4
Conc. Spiked:	$3300\mu\mathrm{g/Kg}$	$3300\mu\mathrm{g/Kg}$	$3300\mu\mathrm{g/Kg}$	3300 μg/Kg
Result:	2110	2150	2310	1990
MS % Recovery:	64	65	70	60
Dup. Result:	1940	2110	2280	1970
MSD % Recov.:	59	64	69	60
RPD:	8.4	1.9	1.3	1.0
RPD Limit:	0-40	0-40	0-40	0-40
LCS #:	LCS070698	LCS070698	LCS070698	LCS070698
Prepared Date:	7/6/98	7/6/98	7/6/98	7/6/98
Analyzed Date:	7/6/98	7/6/98	7/6/98	7/6/98
nstrument I.D.#:	F4	F4	F4	F4
Conc. Spiked:	$3300\mu\mathrm{g/Kg}$	$3300\mu\mathrm{g/Kg}$	$3300\mu\mathrm{g/Kg}$	3300 μg/Kg
LCS Result:	2150	2170	2310	2040
LCS % Recov.:	65	66	70	62

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26-90

ANALYTICAL

Peggy Penner Project Manager

LCS Control Limits

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

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** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

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C. Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 1455 McDowell Bivd. North, Ste. D (650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Cambria Environmental Tech.

1144 65th St., Ste. C Oakland, CA 94608 Attention: Mike Paves Client Project ID: Shell 4226 1st St.

Matrix: Solid

Work Order #: 9807173-01

Reported: Ju

Jul 20, 1998

QUALITY CONTROL DATA REPORT

Analyte:	1,2,4-Trichloro-	4-Chloro-3-	Acenaphthene	4-Nitrophenol
1	benzene	Methylphenol	, , , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,
QC Batch#:	MS0706988270EXA	MS0706988270EXA	MS0706988270EXA	MS0706988270EXA
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550	EPA 3550
Analyst:	B. Pitamah	B. Pitamah	B. Pitamah	B. Pitamah
MS/MSD #:	980713501	980713501	980713501	980713501
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/6/98	7/6/98	7/6/98	7/6/98
Analyzed Date:	7/6/98	7/6/98	7/6/98	7/6/98
Instrument I.D.#:	F4	F4	F4	F4
Conc. Spiked:	3300 <i>µ</i> g/Kg	3300 μg/Kg	3300 μg/Kg	3300 μ g/Kg
•		, -	, -	, .
Result:	2800	2540	2990	2410
MS % Recovery:	85	77	91	73
Dup. Result:	2690	2470	2900	2210
MSD % Recov.:	82	75	2900 88	67
MSD 76 Necov	62	75	00	07
RPD:	4.0	2.8	3.1	8.7
RPD Limit:	0-40	0-40	0-40	0-40
LCS #:	LCS070698	LCS070698	LCS070698	LCS070698
Prepared Date:	7/6/98	7/6/98	7/6/98	7/6/98
Analyzed Date:	7/6/98	7/6/98	7/6/98	7/6/98
Instrument I.D.#:	F4	F4	F4	F4
Conc. Spiked:	3300 μg/Kg	3300 μg/Kg	3300 μg/Kg	3300 μg/Kg
	5555 [49] 1.19	3333 µg/g	0000 µg/ Ng	ουσο μ _{9/} ng
LCS Result:	2350	2030	2340	1580
LCS % Recov.:	71	62	71	48
MS/MSD				
LCS Control Limits	38-107	26-103	31-137	11-114

SEQUOIA ANALYTICAL

Peggy Penner Project Manager Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Page 2 of 3

9807173.CCC <4>





C Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 9. 3 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 (650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Cambria Environmental Tech.

1144 65th St., Ste. C Oakland, CA 94608 Client Project ID: Shell 4226 1st St.

Matrix: Solid

Attention: Mike Paves Work Order #: 9807173-01 Reported: Jul 20, 1998

QUALITY CONTROL DATA REPORT

Analyte:	2,4-Dinitro-	Pentachloro-	Pyrene	
	toluene	phenol		
QC Batch#:	MS0706988270EXA	MS0706988270EXA	MS0706988270EXA	
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	
Prep. Method:	EPA 3550	EPA 3550	EPA 3550	
Analyst:	B. Pitamah	B. Pitamah	B. Pitamah	
MS/MSD #:	980713501	980713501	980713501	
Sample Conc.:	N.D.	N.D.	N.D.	
Prepared Date:	7/6/98	7/6/98	7/6/98	
Analyzed Date:	7/6/98	7/6/98	7/6/98	
Instrument I.D.#:	F4	F4	F4	
Conc. Spiked:	$3300\mu\mathrm{g/Kg}$	$3300\mu\mathrm{g/Kg}$	$3300\mu\mathrm{g/Kg}$	
Result:	2590	2230	3850	
MS % Recovery:	78	68	117	
Dup. Result:	2490	2150	3520	
MSD % Recov.:	75	65	107	
RPD:	3.9	3.7	9.0	
RPD Limit:	0-40	0-40	0-40	
LCS #:	LCS070698	LCS070698	LCS070698	
Prepared Date:	7/6/98	7/6/98	7/6/98	
Analyzed Date:	7/6/98	7/6/98	7/6/98	
Instrument I.D.#:	F4	F4	F4	
Conc. Spiked:	3300 μg/Kg	3300 μg/Kg	3300 μg/Kg	
LCS Result:	1970	1490	3000	

MS/MSD LCS Control Limits 28-89 17-109 35-142

91

Please Note:

45

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference Page 3 of 3

2 3 01 3



ANALYTICAL

LCS % Recov.:

60



C. Linesapeake Drive404 N. Wiget Lane819 Striker Avenue, Suite 81455 McDowell Blvd. North, Ste. D

Redwood City, CA 9 3 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 (650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342

Cambria Client Proj. ID: Shell 4226 1st St. Received: 07/02/98 1144 65th St. Suite C

Oakland, CA 94608 Lab Proj. ID: 9807173

Attention: Mike Paves

Reported: 07/17/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

8270 Note:

Sample 9807173-01 was diluted 2 times due to dark and dirty extract.

SEQUOTAANALYTICAL

Peggy Penner Project Manager

SES

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Shell Engineer:						(570)												'		4461	
TIM HARG	RAL	IES		<i>3</i> 35 Fax #:	-503	5016					 .] 4441	24 hours
Consultant Name & .	Addre	ss:			9	41.0	1					8020								- 1	48 hours
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Consultant Contact:				Phone	No.:	(520)	1_	<u>€</u>	١,	64		BTEX	8020						Classify/Disposal	4443	Olher
MIKE PAVE	<u>-</u> S			Phone ط42 Fax #:	420	9170	Gas)	Diesel)		82		8	8	P	ن٨				Soil/Air Rem. or Sys.	4452	
Comments:							ן ט	D D	2	(EP/		- i		2540	Fal				Water Rem. or Sys.	4453	NOTE: Notity Lab as soon as Possible of
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Sample ID	Date	Time Sludge		Water	l	No. of conts.	H	TPH (EPA	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Teat feet Bingspeci	Combination IPH 8015 &	MTBE	Svoc	Aspeste	Container Size	^p reparation Used	Composite	MATERIAL DESCRIPTION		SAMPLE CONDITION/
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TOXICHEMManagement Systems, Inc.

Environmental & Occupational Health Services

11 Kenton Avenue San Carlos, California 94070 (650) 551-0112 / Fax (650) 551-0116

March 16, 2005 Project EQ-76.

Robert Schultz Alameda County Health Care Services Agency 1131 Harbor Bay Parkway Alameda, CA 94502-6577

Re: Work Plan for Waste Oil Tank Investigation

Shell Branded Service Station 4226 First Street, Pleasanton, California Incident No. 98995840, SAP No. 135782

Dear Mr. Schultz:

On behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell), Toxichem Management Systems, Inc. (TOXICHEM) has prepared this work plan to perform additional site assessment activities at the site referenced above (Figure 1). The proposed scope of work is designed to assess soil and groundwater conditions in the immediate vicinity of the waste oil tank. The following presents the site background, recent waste oil tank findings and proposed scope of work.

BACKGROUND

Site Description: The subject site is a Shell-branded service station located at the southern corner of First Street and Vineyard Avenue in a mixed commercial and residential area of Pleasanton, California. Three 10,000 gallon gasoline underground storage tanks (USTs) and one 550 gallon waste oil UST are located at the site. Based on previous investigations briefly discussed below, the site is underlain by silts to 15 and 20 feet below ground surface (bgs). Interbedded gravelly sand, sandy silt and sandy and clayey gravels underlie the silt to the total depth explored of 100 feet bgs. Clayey silt was encountered at varying depths between 40 and 59 feet bgs. Groundwater flow direction is generally to the north with static water currently between 31 and 38 feet bgs.

1985, Subsurface Investigation: In 1985 Emcon Associates of San Jose advanced five borings between 20 and 30 feet bgs adjacent to the gasoline USTs and collected soil samples. One soil boring was converted into a groundwater monitoring well to a depth of 30 feet (Well S-1, Figure 2). The maximum concentration detected was 1,300 milligrams per kilogram (mg/kg) total petroleum hydrocarbons as gasoline (TPH-g) in SB-4 at 15 feet bgs. No benzene was detected in the soil samples collected during this investigation. No groundwater was encountered in the monitoring well.

1986 Underground Storage Tank Removal: In 1986 Blaine Tech Services of San Jose collected soil samples beneath each end of the four removed gasoline USTs. The maximum concentration of TPH-g detected in the samples was 240 mg/kg. Three 10,000 gallon double-walled fiberglass tanks were installed at a location closer to the dispenser islands (Figure

Industrial Hygiene - Exposure Assessment
Quantitative Risk Assessment
Compliance Audits
Real Property Environmental Assessments
Remedial Investigations
Air. Soil, and Groundwater Sampling
Remedial Engineering and Construction
Regulatory Compliance and Negotiation
Litigation Support Services

REPORTS

Work Plan for WO Site Assessment

2). A soil sample was also collected from the waste oil tank excavation; no oil was detected in this sample.

March 1990, Subsurface Investigation: In March 1990, Hart Crowser, Inc. of San Francisco advanced three soil borings between 30 and 50 feet deep in the vicinity of the former gasoline USTs and collected soil samples. They also abandoned monitoring well S-1 by drilling it out and they continued drilling past the depth of the monitoring well to a total depth of 45 feet bgs to collect soil samples. Soil samples from all four borings were analyzed for TPH-g and BTEX compounds. Concentrations of 380 mg/kg and 290 mg/kg TPH-g were detected in the samples from the well abandonment boring at 30 and 35 feet bgs, respectively. TPH-g concentrations in the other soil samples were only as high as 18 mg/kg. In April 1990, Hart Crowser drilled two more soil borings at the site to a total depth of 51.5 feet bgs and collected soil samples. A maximum concentration of 820 mg/kg TPH-g was detected at a depth of 35 feet bgs. No TPH-g was detected in the other soil boring. A small amount of groundwater was observed at 49.5 feet bgs in one boring.

September, 1995, Dispenser and Piping Replacement: In September 1995, Weiss Associates of Emeryville collected soil samples from beneath the removed product piping and dispensers during replacement activities by Paradiso Mechanical of San Leandro. Approximately 20 cubic yards of soil were overexcavated to a maximum depth of 8.5 feet bgs at the direction of the Pleasanton Fire Department. A maximum remaining concentration of 120 mg/kg TPH-g was detected in soil samples collected at this overexcavated southernmost former product dispenser location (Sample DP-3 at 8 feet bgs).

July 1998, Facility Upgrade: In July 1998, Cambria inspected the waste oil tank remote fill piping during its removal by Gettler-Ryan of Dublin. No field indications of hydrocarbons were observed during the site visit, therefore, no further investigation was required.

April 1999, Subsurface Investigation: In April 1999 Cambria advanced two soil borings (SB-6 and SB-7) to depths of 58 and 100 feet bgs, respectively. One of the borings (Boring SB-6) was converted to Monitoring Well MW-1 with screened interval extending from 37 to 57 feet bgs. During drilling, groundwater was encountered at 42.5 feet bgs, but was not evident in the boring until the hole was left open overnight. The only detection of TPHg was in sample SB-7 at 40 feet bgs at 83 mg/kg. The only detection of benzene was in sample SB-6/MW-1 at 45 feet bgs at 0.1 mg/kg. No MtBE was detected in any soil sample collected. TPH-g was detected in grab groundwater in Borings SB-6/MW-1 and SB-7 at concentrations of 10,000 and 750 micrograms per liter (μg/L). Benzene was detected grab groundwater samples in Borings SB-6 and SB-7 at concentrations of 4,500 μg/L and 20 μg/L, respectively. No MtBE was detected in groundwater from either boring.

January 2000, Subsurface Investigation: In January 2000, Cambria advanced two borings to a maximum depth of 47 feet bgs and installed Monitoring Wells MW-2 and MW-3 with screened intervals extending from 24-36 and 20-35 feet bgs, respectively. No hydrocarbons or MtBE was detected in the eleven soil samples analyzed during the investigation. The wells were then integrated into the site quarterly groundwater monitoring program.

January 2005, Site Upgrade and Backfill Well Abandonment: On January 13, 2005, Town and Country Contractors, Inc. of Rancho Cordova destroyed four UST backfill wells according to the provisions of the Zone 7. Water Agency by infilling with pea gravel and cutting off the top two feet of casing. A concrete slab was then poured over the entire UST complex upon completion of the enhanced vapor recovery tank-top upgrade activities.

RECENT WASTE OIL TANK FINDINGS

The following presents recent details, work performed and the findings regarding the existing waste oil tank.

On January 18, 2005 it was discovered that a liquid was poured into a second port present on the waste oil tank which goes directly into the surrounding pea gravel of the tank. Two of Shell's contractors, Service Station Systems and Able Maintenance, removed as much pea gravel as possible and containerized the material within a drum on-site, totaling approximately 18-gallons of pea gravel. The port was then sealed by Able Maintenance utilizing epoxy so future dumping cannot happen. On January 19, 2005 an Unauthorized Release Report was submitted by the operator to Paul Smith of the Livermore-Pleasanton Fire Department. The quantity and type of the liquid is unknown.

Based on emailed communication between yourself, Paul Smith of the Livermore-Pleasanton Fire Department and Karen Petryna of Shell the first course of action was determined to assess the nature of the material by profiling the removed pea gravel. Sampling the pea gravel around the tank was not feasible since the material had already been removed to the maximum extent possible and the access port sealed with epoxy preventing any future inadvertent incidents.

On February 16, 2005 TOXICHEM collected a 6-part representative composite sample of the removed pea gravel and submitted on ice accompanied by chain of custody to STL Laboratories in Pleasanton. The pea gravel was analyzed for waste oil parameters including:

- TPH-g, BTEX compounds, MtBE, tert-butyl alcohol (TBA), di-isopropyl ether (DIPE), ethyl tertiary-butyl ether (ETBE), tert-amyl methyl ether (TAME), 1,2-DCA and EDB and for chlorinated hydrocarbons by EPA Method 8260B.
- For TPH as diesel (TPH-d) by EPA Method 8015M, TPH as oil and grease (TPH-o&g) by EPA Method 1664A and for PCBs by EPA Method 8082.
- For Semi-volatile organic compounds (SVOCs including PCP, PNA and creosol compounds) by EPA Method 8270.
- For cadmium, chromium, lead, nickel, and zinc by EPA Method 6010B.

The results are presented in Tables 1 and 2 and certified analytical results included in Attachment A. All the above constituents analyzed were non-detect with the following exceptions:

- Total petroleum hydrocarbons were detected in the composite sample at concentrations of 1.4 mg/kg TPH-g, 1,400 mg/kg TPH-d and 10,000 mg/kg TPH-o&g. The laboratory noted that the concentration reported as TPH-d was of the late diesel range and did not match their laboratory diesel standard.
- Phenanthrene (the only SVOC compound detected) was reported at a concentration of 0.42 mg/kg.
- Minor concentrations of four of the five metals were detected (Table 2).
- All concentrations of detected constituents were below their respective Residential Environmental Screening Levels (Regional Water Quality Control Board Environmental Screening Levels, revised February, 2005) with the exception of TPH-d and TPH-o&g (Tables 1 and 2).

PROPOSED SCOPE OF WORK

The proposed scope of work is designed to assess native soil and groundwater conditions in the immediate vicinity of the waste oil tank based on the above findings. It is likely that used motor oil was inadvertently poured down the wrong fill port, resulting in the discharge to the pea gravel.

Therefore, TOXICHEM proposes one hydraulic push boring be advanced adjacent to the east of the existing waste oil tank. The proposed boring location is shown on Figure 2. Field and laboratory procedures are presented in Attachment A. The scope of work proposed is as follows.

- Obtain applicable soil boring permit.
- Prepare a site-specific Health and Safety Plan.
- Provide notification for underground utility service clearance prior to boring advancement. Due to the proximity to the waste oil tank, utilize an air knife or hand auger to 10 feet bgs to clear utilities prior to boring advancement utilizing the hydraulic push rig.
- Advance the boring to approximately 35 to 40 feet bgs into first encountered groundwater.
- Collect soil samples for logging at minimum 5-foot depth intervals.
- Perform field analysis for organic vapor concentrations on selected soil samples using a photo-ionization detector (PID).
- Submit selected soil and groundwater samples from the boring to a state certified laboratory for chemical analysis if field observations or PID readings warrant. It is anticipated that at least three soil samples will be selected from the boring at approximately 10, 20 and 30 feet bgs and one grab groundwater sample will be obtained from first encountered water. The submitted soil and groundwater samples will be analyzed for TPH-g, TPH-d, BTEX compounds and MtBE by EPA Method 8260. Additionally the samples will be analyzed for TPH-o&g by EPA Method 1664A.
- Prepare a technical report presenting the findings of the investigation.

If you have any questions regarding this work plan, please contact me at (650)551-0112. Sincerely,

Toxichem Management Systems, Inc.

Ross Tinline, P.G. Senior Geologist

Attachment: Figure 1 - Well Survey Map

Figure 2 - Site Map

Table 1 - Soil Analytical Data (Total Petroleum Hydrocarbons, Volatile and

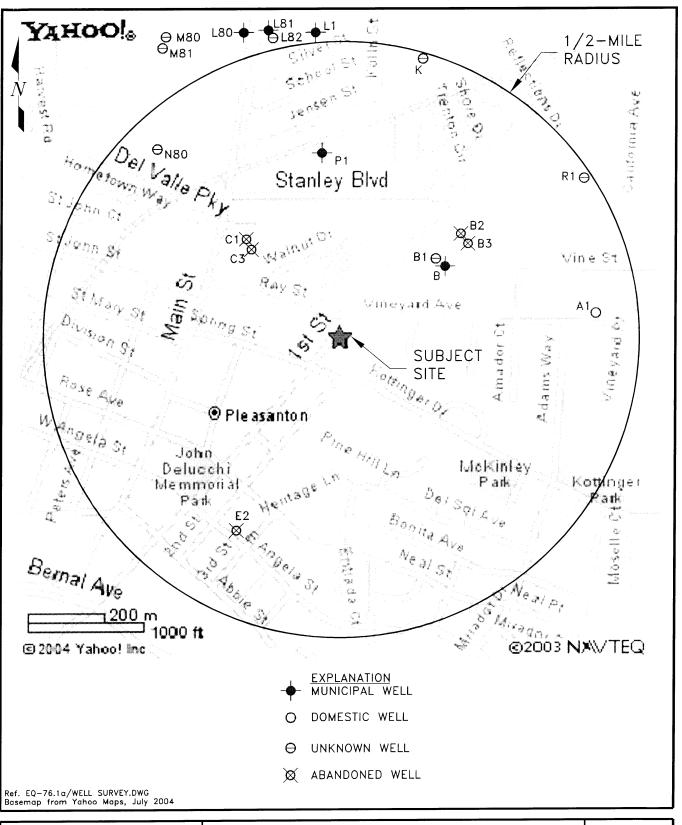
No. 5860

Semi-Volatile Organic Compounds)

Table 2 - Soil Analytical Data (Total Metals)

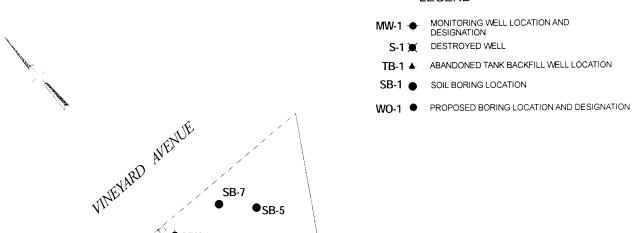
Attachment A - Field Procedures for Hydraulic Push Borings and Certified Analytical Results

cc: Karen Petryna, Shell Oil Products US, 20945 S. Wilmington, Carson, CA 90810 Aura Sibley, Shell Oil Products US, 1635 Pacheco Blvd, Martinez, CA 94553 Paul Smith, Livermore-Pleasanton Fire Department, 3560 Nevada Street Pleasanton, California 94566





LEGEND



FIRST STREET

 \Diamond S-B Former SB-4 planter UST pit residential ● SB-1 MW-2 WQ-1 station TB-1 building W/O UST TB-2 house/office TB-4 USTs 8 ▮ 7 4 1 3 6 1 5 2 1 MW-3 SB-3 Scale (ft)

∳-MW-1

BASEMAP FROM CAMBRIA ENVIRONMENTAL TECHNOLOGY, Inc.



Shell-Branded Service Station 4226 First Street Pleasanton, California FIGURE:

2

PROJECT: EQ-76

SITE MAP

Table 1

Soil Analytical Data

Total Petroleum Hydrocarbons, Volatile and Semi-Volatile Organic Compounds Shell Branded Service Station

4226 First Street, Pleasanton, California

	Sampled	(mg/kg)	(mg/kg)	TPH-o&g (mg/kg)	Benzene (mg/kg)	(mg/kg)	Ethylbenzene (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)	VOC (mg/kg)	SVOC (mg/kg)	PCBs (mg/kg)
D-1 Composite	02/16/05	1.4	1400 *	10,000	<0.005	<0.005	<0.005	<0.01	<0.005	<0.010	<0.010	<0.005	<0.005	<0.005	<0.005	NA	ND (0.42)**	<0.500
Soil Screening Levels																		
Residential ESL (Groundwater Protect	tion, Leaching)***	100	100	500	0.044	2.9	3.3	2.3	0.023	NA	NA	NA	NA	NA	NA	NA	NA (11)	6.3 (0.22)
Commercial ESL (Groundwater Prote	ction, Leaching)**	100	100	1,000	0.044	2.9	3.3	2.3	0.023	NA	NA	NA	NA	NA	NA	NA	NA (11)	6.3 (0.74)

TPH-g = Total petroleum hydrocarbons as gasoline (EPA Method 8260B)

TPH-d = Total petroleum hydrocarbons as diesel fuel (EPA Method 8015M)

TPH-o&g = Total petroleum as oil and grease (EPA Method 1664A)

MtBE = Methyl tert-butyl ether (EPA Method 8260B)

TBA = Tert-butyl alcohol (EPA Method 8260B)

DIPE = Di-isopropyl Ether (EPA Method 8260B)

ETBE = Ethyl tert-butyl ether (EPA Method 8260B)

TAME = tert-Amyl methyl ether (EPA Method 8260B)

VOC = Volatile Organic Compounds including 1,2-DCA and EDB (EPA Method 8260B)

SVOC = Semi voliatile organic compounds (EPA Method 8270C)

PCB = Polychlorinated biphenyls (EPA Method 8082)

mg/kg = Milligrams per kilogram

bgs = feet below ground surface of the bottom of the sample

= Hydrocarbon reported is in the late diesel range, and does not match the laboratory diesel standard.

** = All SVOCs non detect except Phenanthrene (concentration in parentheses)

*** = SFRWQCB ESL for surface soil (<3m) where groundwater is a potential drinking water

Table 2 Soil Analytical Data Total Metals by EPA 6010B

Shell Branded Service Station 4226 First Street Pleasanton, California

Sample Designation	Depth (feet bgs)	Date Sampled	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)
D-1	Composite	02/16/05	<0.5	13	6.8	27	100
oil Screening Levels*							
Residential ESL			1.70	58	150	150	600
Commercial ESL			7.4	58	750	150	600

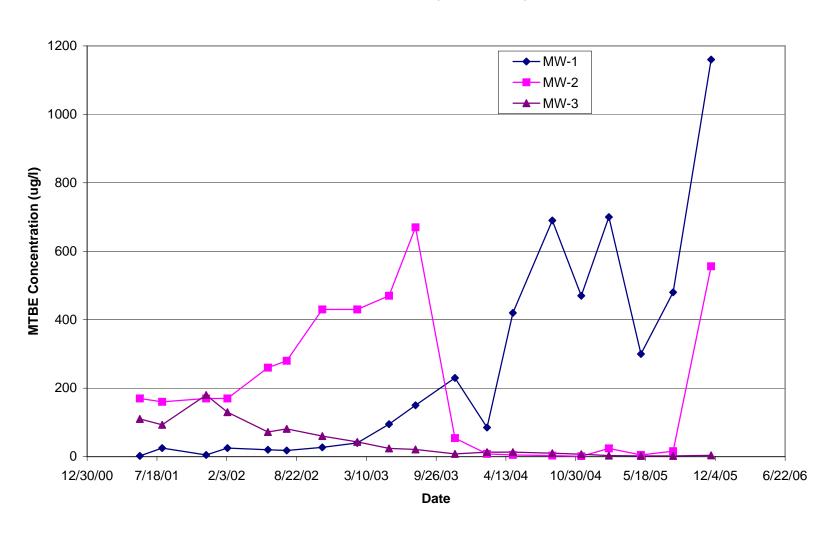
mg/kg = Milligrams per kilogram

* = SFRWQCB ESL for surface soil (<3m) where groundwater is a potential drinking water

	UNDERGROUND STORAGE TANK UNAUT	HORIZE	D RELEASE (LE	AK) / CONTAMIN/	ATION SITE REPORT					
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SITE LOCATION	ADDRESS		KIEF- ISI	avenini	945					
9	4226 STREET FIRST	Street	t crry F	leasanton	COUNTY A/19 ZIP					
8	CROSS STREET		T B							
g	LOCAL AGENCY AGENCY NAME		CONTACT PERSON &		PHONE					
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· Dorr

MTBE Concentrations
Wells MW-1, MW-2, and MW-3
Shell-branded Service Station
4226 First Street, Pleasanton, California





GROUNDWATER SAMPLING SPECIALISTS SINCE 1985

December 19, 2005

Denis Brown Shell Oil Products US 2095 South Wilmington Avenue Carson, CA 90810

> Fourth Quarter 2005 Groundwater Monitoring at Shell-branded Service Station 4226 First Street Pleasanton, CA

Monitoring performed on November 22, 2005

Groundwater Monitoring Report 051122-DW-1

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

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

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

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

Please call if you have any questions.

Yours truly,

Mike Ninokata Project Coordinator

MN/ks

attachments: Cumulative Table of WELL CONCENTRATIONS

Certified Analytical Report

Field Data Sheets

cc: Vera Fischer

Delta Environmental 175 Bernal Rd., Suite 200 San Jose, CA 95119

							MTBE	MTBE		Depth to	GW
Well ID	Date	TPPH	В	Т	E	X	8020	8260	TOC	Water	Elevation
		(ug/L)	(MSL)	(ft.)	(MSL)						
MW-1	06/16/1999	NA	371.20	37.81	333.39						
MW-1	06/30/1999	89.0	5.89	<0.500	<0.500	0.652	<5.00	NA	371.20	33.65	337.55
MW-1	09/24/1999	1,560	473	<10.0	<10.0	22.8	<2.50	NA	371.20	37.04	334.16
MW-1	12/08/1999	1,020	375	<5.00	<5.00	15.2	<50.0	NA	371.20	36.79	334.41
MW-1	02/10/2000	523	106	<5.00	<5.00	31.8	2.90	NA	371.20	34.90	336.30
MW-1	05/17/2000	<50.0	<0.500	<0.500	<0.500	<0.500	37.0	29.5	371.20	32.55	338.65
MW-1	08/03/2000	808	290	<2.50	<2.50	8.90	<12.5	NA	371.20	39.13	332.07
MW-1	10/31/2000	507	250	0.962	<0.500	23.5	3.76	NA	371.20	37.91	333.29
MW-1	03/01/2001	<50.0	<0.500	<0.500	<0.500	<0.500	74.6	NA	371.20	39.60	331.60
MW-1	05/30/2001	780	280	<2.0	<2.0	11	NA	<2.0	371.20	39.53	331.67
MW-1	08/02/2001	1,900	580	<2.5	<2.5	12	NA	<25	371.20	39.61	331.59
MW-1	12/06/2001	840	190	<0.50	<0.50	13	NA	<5.0	371.20	39.63	331.57
MW-1	02/05/2002	2,700	650	<2.5	<2.5	7.2	NA	<25	371.20	35.53	335.67
MW-1	06/17/2002	2,500	550	<2.0	<2.0	5.9	NA	<20	371.20	39.29	331.91
MW-1	07/25/2002	690	130	<0.50	<0.50	4.4	NA	18	371.20	39.39	331.81
MW-1	11/14/2002	400	31	<0.50	<0.50	2.7	NA	27	371.20	40.00	331.20
MW-1	02/12/2003	840	0.85	<0.50	<0.50	<0.50	NA	40	371.20	32.92	338.28
MW-1	05/14/2003	680	190	<2.5	<2.5	<5.0	NA	95	371.20	32.57	338.63
MW-1	07/29/2003	870	190	<2.5	<2.5	<5.0	NA	150	371.20	33.82	337.38
MW-1	11/19/2003	<200	14	<2.0	<2.0	<4.0	NA	230	371.20	38.28	332.92
MW-1	02/19/2004	58 d	11	<0.50	<0.50	<1.0	NA	85	371.20	36.93	334.27
MW-1	05/03/2004	670	310	<2.5	<2.5	<5.0	NA	420	371.20	32.70	338.50
MW-1	08/24/2004	430 d	34	<2.5	<2.5	<5.0	NA	690	371.20	34.66	336.54
MW-1	11/15/2004	<250	29	<2.5	<2.5	<5.0	NA	470	371.20	38.27	332.93
MW-1	02/02/2005	540 e	87	<2.5	<2.5	<5.0	NA	700	371.20	32.02	339.18
MW-1	05/05/2005	460 e	88	<2.5	<2.5	<5.0	NA	300	371.20	36.82	334.38
MW-1	08/05/2005	910	230	<2.5	<2.5	<5.0	NA	480	371.20	33.35	337.85
MW-1	11/22/2005	1,760	27.4	<0.500	<0.500	1.18	NA	1,160	371.20	33.42	337.78

							MTBE	MTBE		Depth to	GW
Well ID	Date	TPPH	В	Т	E	Χ	8020	8260	TOC	Water	Elevation
		(ug/L)	(MSL)	(ft.)	(MSL)						
MW-2	02/03/2000	NA	372.40	32.65	339.75						
MW-2	02/07/2000	NA	372.40	35.51	336.89						
MW-2	02/10/2000	<50.0	<0.500	<0.500	<0.500	<0.500	2.61	NA	372.40	36.62	335.78
MW-2	05/17/2000	120	4.09	<0.500	<0.500	<0.500	29.0	NA	372.40	32.14	340.26
MW-2	08/03/2000	<50.0	0.692	<0.500	<0.500	<0.500	40.5	36.6b	372.40	32.42	339.98
MW-2	10/31/2000	<50.0	<0.500	<0.500	<0.500	<0.500	57.4	44.8c	372.40	33.02	339.38
MW-2	03/01/2001	173	1.64	1.65	2.86	3.97	127	167	372.40	32.54	339.86
MW-2	05/30/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	170	372.40	32.42	339.98
MW-2	08/02/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	160	372.40	32.55	339.85
MW-2	12/06/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	170	372.40	33.15	339.25
MW-2	02/05/2002	<50	0.72	<0.50	<0.50	1.7	NA	170	372.40	32.29	340.11
MW-2	06/17/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	260	372.40	32.63	339.77
MW-2	07/25/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	280	372.40	32.80	339.60
MW-2	11/14/2002	120	13	9.0	3.8	14	NA	430	372.40	33.31	339.09
MW-2	02/12/2003	<100	<1.0	<1.0	<1.0	<1.0	NA	430	372.40	32.15	340.25
MW-2	05/14/2003	<250	<2.5	<2.5	<2.5	<5.0	NA	470	372.40	32.01	340.39
MW-2	07/29/2003	<250	<2.5	<2.5	<2.5	<5.0	NA	670	372.40	32.51	339.89
MW-2	11/19/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	54	372.40	33.83	338.57
MW-2	02/19/2004	65	<0.50	3.4	1.4	6.5	NA	8.2	372.40	32.68	339.72
MW-2	05/03/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	5.2	372.40	32.07	340.33
MW-2	08/24/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	2.7	372.40	32.44	339.96
MW-2	11/15/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	1.3	372.40	32.95	339.45
MW-2	02/02/2005	<50	<0.50	<0.50	<0.50	<1.0	NA	24	372.40	31.94	340.46
MW-2	05/05/2005	72 f	<0.50	<0.50	<0.50	<1.0	NA	4.9	372.40	31.91	340.49
MW-2	08/05/2005	<50	<0.50	<0.50	<0.50	<1.0	NA	16	372.40	32.15	340.25
MW-2	11/22/2005	840	0.800	<0.500	<0.500	0.870	NA	556	372.40	32.31	340.09
MW-3	02/03/2000	NA	375.05	32.06	342.99						
MW-3	02/07/2000	NA	375.05	32.57	342.48						

							MTBE	MTBE		Depth to	GW
Well ID	Date	TPPH	В	Т	Е	X	8020	8260	TOC	Water	Elevation
		(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(MSL)	(ft.)	(MSL)
MW-3	02/10/2000	180	5.12	<0.500	<0.500	0.714	26.8	21.5a	375.05	32.77	342.28
MW-3	05/17/2000	1,360	414	<5.00	<5.00	17.6	<25.0	NA	375.05	31.00	344.05
MW-3	08/03/2000	<50.0	0.536	<0.500	<0.500	<0.500	22.0	NA	375.05	31.03	344.02
MW-3	10/31/2000	<50.0	<0.500	<0.500	<0.500	<0.500	31.1	NA	375.05	31.28	343.77
MW-3	03/01/2001	384	172	0.815	<0.500	8.00	5.16	NA	375.05	31.21	343.84
MW-3	05/30/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	110	375.05	31.02	344.03
MW-3	08/02/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	93	375.05	30.94	344.11
MW-3	12/06/2001	110	<0.50	<0.50	<0.50	2.3	NA	180	375.05	31.28	343.77
MW-3	02/05/2002	<50	0.89	0.60	<0.50	2.1	NA	130	375.05	31.12	343.93
MW-3	06/17/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	72	375.05	31.21	343.84
MW-3	07/25/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	81	375.05	30.96	344.09
MW-3	11/14/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	60	375.05	31.44	343.61
MW-3	02/12/2003	<50	<0.50	<0.50	<0.50	<0.50	NA	43	375.05	31.28	343.77
MW-3	05/14/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	24	375.05	31.20	343.85
MW-3	07/29/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	21	375.05	31.29	343.76
MW-3	11/19/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	8.2	375.05	31.86	343.19
MW-3	02/19/2004	81	0.67	4.4	1.8	8.6	NA	13	375.05	31.66	343.39
MW-3	05/03/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	13	375.05	31.72	343.33
MW-3	08/24/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	10	375.05	32.09	342.96
MW-3	11/15/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	6.6	375.05	31.50	343.55
MW-3	02/02/2005	<50	<0.50	<0.50	<0.50	<1.0	NA	3.1	375.05	31.28	343.77
MW-3	05/05/2005	<50	<0.50	<0.50	<0.50	<1.0	NA	2.3	375.05	31.42	343.63
MW-3	08/05/2005	<50	<0.50	<0.50	<0.50	<1.0	NA	2.4	375.05	31.35	343.70
MW-3	11/22/2005	<50	<0.500	<0.500	<0.500	<0.500	NA	3.84	375.05	31.98	343.07
TB-1	02/12/2003	Well inacces	sible	NA	NA						
TB-1	02/28/2003	NA	NA	NA	NA	NA	NA	NA	NA	12.54	NA
TB-1	05/14/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	<5.0	NA	12.31	NA

Well ID	Date	TPPH (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)
TB-2	02/12/2003	Well inacces	sible	NA	NA	NA	NA	NA	NA	NA	NA
TB-2	02/28/2003	NA	NA	NA	NA	NA	NA	NA	NA	12.56	NA
TB-2	05/14/2003	Insufficient w	ater	NA	NA	NA	NA	NA	NA	12.54	NA
TB-3	02/12/2003	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA
TB-3	02/28/2003	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA
TB-3	05/14/2003	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA
TB-4	02/12/2003	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA
TB-4	02/28/2003	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA
TB-4	05/14/2003	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA

Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; prior to May 30, 2001, analyzed by 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

GW = Groundwater

ug/L = Parts per billion

MSL = Mean sea level

ft. = Feet

<n = Below detection limit

NA = Not applicable

WELL CONCENTRATIONS

Shell-branded Service Station 4226 First Street Pleasanton, CA

							MTBE	MTBE		Depth to	GW
Well ID	Date	TPPH	В	Т	E	X	8020	8260	TOC	Water	Elevation
		(ug/L)	(MSL)	(ft.)	(MSL)						

Notes:

- a = Sample was analyzed outside of the EPA recommended holding time.
- b = Concentration is an estimate value above the linear quantitation range.
- c = The result reported was generated out of time. The sample was originally run within hold time, but needed to be re-analyzed.
- d = Sample contains discrete peak in addition to gasoline.
- e = Quantity of unknown hydrocarbon(s) in sample based on gasoline.
- f = The concentration reported reflect(s) individual or discrete unidentified peaks not matching a typical fuel pattern.

Well MW-1 surveyed on May 4, 1999 by Virgil Chavez Land Surveying of Vallejo, CA.

Site surveyed on March 19, 2000 by Virgil Chavez Land Surveying of Vallejo, CA.

Site surveyed on January 15, 2002 by Virgil Chavez Land Surveying of Vallejo, CA.

Table 2 Ground Water Analytical Results - Shell-branded Service Station Incident# 98995840 4226 First Street, Pleasanton, California

Sample	TPHg ←	Benzene	Toluene	Ethyl Benzene — (ppb) ———————————————————————————————————	Xylenes	MTBE
SB-6 (MW-1)	10,000	4,500	<50	<50	140	<250
SB-7	750	20	<0.50	3.4	2.9	<2.5

Abbreviations and Notes:

TPHg = Total petroleum hydrocarbons as gasoline

MTBE = Methyl tert-Butyl Ether

ppb = parts per billion

Samples collected April 7 through 9, 1999

Table 2Groundwater Analytical Results - Shell-branded Service Station Incident# 989958404226 First Street, Pleasanton, California

Sample	ТРНд	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE
			- (concentrat	tions reported in pph)		
MW-1	523	106	<5.00	<5.00	31.8	2.90
MW-2	<50.0	<0.500	< 0.500	<0.500	< 0.500	2.61
MW-3	180	5.12	< 0.500	<0.500	1	26.8 (21.5a)

Abbreviations and Notes:

TPHg = Total petroleum hydrocarbons as gasoline

MTBE = Methyl tert-Butyl Ether by EPA 8020. Results in parentheses confirmed using 8260.

ppb = parts per billion

a = sample analyzed out of hold time.

Samples collected February 10, 2000



July 11, 2005

Re:

Soil and Water Investigation Report

Shell-branded Service Station

4226 First Street

Pleasanton, California

Dear Mr. Jerry Wickham:

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

Sincerely, Shell Oil Products US

Denis L. Brown

Sr. Environmental Engineer





Solving environment-related business problems worldwide

175 Bernal Road • Suite 200 San Jose, California 95119 USA 408.224.4724 800.477.7411 Fax 408.225.8506

July 11, 2005 Project No. SJ42-26F-1.2005

Mr. Jerry Wickham Alameda County Health Care Services Agency Environmental Health Services – Environmental Protection 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577

Re: Soil and Water Investigation Report Shell-branded Service Station 4226 First Street Pleasanton, California

Dear Mr. Wickham:

Delta Environmental Consultants, Inc. (Delta), on behalf of Shell Oil Products US (Shell), has prepared the following Soil and Water Investigation Report for the above referenced site (Figure 1). The report was prepared in compliance with a letter from Alameda County Environmental Health Services (ACEHS) to Shell dated April 7, 2005.

BACKGROUND

A 550-gallon waste oil underground storage tank (UST) is located behind the station building (Figure 2)... On January 18, 2005 it was it was determined that a liquid had likely been poured into a second port present on the site waste oil tank which goes directly into the surrounding pea gravel of the tank pit. The quantity and type of the liquid is unknown.

Two of Shell's contractors, Service Station Systems and Able Maintenance, opened the tank pit and removed as much pea gravel as possible and containerized the material within a drum on-site. Approximately 18-gallons of pea gravel were removed. The port was sealed by Able Maintenance utilizing epoxy. On January 19, 2005 an Unauthorized Release Report was submitted by the operator to Paul Smith of the Livermore-Pleasanton Fire Department.



Based on emailed communication between Robert Schultz of ACEHS, Paul Smith of the Livermore-Pleasanton Fire Department, and Karen Petryna of Shell, it was decided that the first course of action was characterize the liquid that had been introduced into the pea gravel. Sampling the pea gravel around the tank was not feasible since the material had already been removed to the maximum extent possible and the access port sealed with epoxy preventing any future inadvertent incidents.

On February 16, 2005, Toxichem Management Systems, Inc. (Toxichem) collected a 6-part representative composite sample of the removed pea gravel and submitted it on ice accompanied by chain of custody documentation to STL Laboratories, Inc. (STL) in Pleasanton, California. The pea gravel was analyzed for petroleum hydrocarbon parameters including:

- Total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethylbenzene, and xylene (BTEX compounds), methyl tert-butyl ether (MTBE), tert-butyl alcohol (TBA), di-isopropyl ether (DIPE), ethyl tertiary-butyl ether (ETBE), tert-amyl methyl ether (TAME), 1,2-DCA and EDB and for chlorinated hydrocarbons by EPA Method 8260B.
- Total petroleum hydrocarbons as diesel (TPH-d) by EPA Method 8015M, total petroleum hydrocarbons as oil and grease (TPH-o&g) by EPA Method 1664A and for polychlorinated biphenyls (PCBs) by EPA Method 8082.
- Semi-volatile organic compounds (SVOCs) compounds by EPA Method 8270.
- Cadmium, chromium, lead, nickel, and zinc by EPA Method 6010B.

Analytical results are presented in Tables 1 and 2 prepared by Toxichem (Attachment A). All the above constituents analyzed were below the laboratory detection limit with the following exceptions:

- The composite sample contained TPH-G at 1.4 milligrams per kilogram (mg/kg), TPH-D at 1,400 mg/kg, and TPH-o&g at 10,000 mg/kg. The laboratory noted that the concentration reported as TPH-D was of the late diesel range and did not match their laboratory diesel standard.
- Phenanthrene (the only SVOC compound detected) was reported at a concentration of 0.42 mg/kg.
- Minor concentrations of four of the five metals were detected (Attachment A, Table 2).
- All concentrations of detected constituents were below their respective Residential Environmental Screening Levels (Regional Water Quality Control Board Environmental Screening Levels, revised February, 2005) with the exception of TPH-d and TPH-o&g.

WORK PLAN

Toxichem submitted a work plan to ACEHS dated April 7, 2005. Toxichem proposed the drilling of one hydraulic push boring adjacent to the north end of the existing waste oil tank (Boring WO-1, Figure 2). The boring was proposed to be drilled to a depth of 35 to 40 feet below grade (bg) into first encountered groundwater. It was anticipated that at least three soil samples would be collected from the boring at depths of 10, 20, and 30 feet bg. A grab groundwater sample would also be collected from the boring. Soil and groundwater samples would be analyzed for TPH-G, TPH-D, BTEX compounds, and MTBE by EPA Method 8260 and for TPH-o&g by EPA Method 1664A. The work plan was approved by ACEHS in a letter to Shell dated April 7, 2005.

SOIL AND WATER INVESTIGATION

Delta obtained a soil boring drilling permit from the Zone 7 Water Agency (Attachment B). On June 10, 2005, Delta drilled a direct push soil boring WO-1 at the location shown on Figure 2. The boring was drilled to a depth of 37 feet bg at which point drilling refusal was met. The boring was continuously cored from 6 feet bg to its total depth. The boring encountered clay to a depth of approximately 26 feet bg underlain by primarily gravel to 37 feet bg. A boring log is presented in Attachment C. No groundwater was encountered during drilling of the boring. Depth to groundwater in site wells ranged from 31.42 feet to 36.82 feet bg on May 5, 2005. The borehole was left open for three hours without accumulating any water. The boring was backfilled with cement-bentonite grout.

Soil samples from depths of 10 feet, 20 feet, and 30 feet bg were retained in sealed brass liners and placed on ice for shipment to the laboratory for analysis. Samples were analyzed STL. The soil samples from 10 feet and 20 feet were analyzed for TPH-G, BTEX compounds, and MTBE by EPA Method 8260B, TPH-D by Method 8015M, and TPH-o&g by Method 1664A. All parameters were below the laboratory detection limit (see Table 1). The 30-foot soil sample was analyzed for TPH-G, TPH-D and BTEX compounds by Method 8260B, CAM 17 Metals by Method 6010B, PCBs by Method 8082, volatile organic compounds (VOCs) by Method 8260B, and SVOCs by Method 8270C. Analytical results are summarized on Table 1. TPH-G, PCBs, VOCs and SVOCs were not detected in the soil sample. All metals were below the San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels for residential land use, deep soils, and potential source of drinking water. Laboratory reports and chain of custody documentation are provided as Attachment D.

CONCLUSIONS

It does not appear that petroleum hydrocarbons introduced into the waste oil tank backfill have moved into the underlying soil. Clay soil surrounding the tank helped contain any liquids in the backfill which was later removed. No further action is recommended.

REMARKS

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

Please call if you have any questions regarding the contents of this letter.

Sincerely,

Delta Environmental Consultants, Inc.

R. Lee Dooley Senior Hydrogeologist

CHG 0183

Attachments: Table 1 – Summary of Soil Analytical Data

Figure 1 – Site Location Map

Figure 2 – Site Map

Attachment A – Toxichem Analytical Data Summary Tables

HYDROGEOLOGIS

Attachment B – Soil Boring Permit

Attachment C – Boring Log

Attachment D - Laboratory Reports and Chain of Custody Documentation

cc: Denis Brown, Shell Oil Products US, Carson

Paul Smith, Livermore-Pleasanton Fire Department

Douglas Safreno, 1627 Vineyard Ave., Pleasanton, CA 94566

Matt Katen, Zone 7 Water District

Rick Branehini, First Street Shell, 4226 First Street, Pleasanto, CA 94566

Table 1 **Summary of Soil Analytical Data**

Shell-branded Service Station 4226 First Street Pleasanton, California

	Depth (feet)	TPH-G (mg/kg)	TPH-D (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	MTBE (mg/kg)	TPH-o&g (mg/kg)	PCBs (ug/kg)	Semi V0Cs	VOCs
W0-1 @ 10	10	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005	<100	NA NA	NA NA	NA
W0-1 @ 20 W0-3 @ 30	20 30	<1.0 <1.0	<1.0 <1.0	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005	<0.005 NA	<100 <100	NA <50	NA No Detections	NA No Detections

mg/kg = milligrams per kilogram

TPH-G = Total petroleum hydrocarbons as gasoline

TPH-D = Total petroleum hydrocarbons as diesel

TPH-o&g = Total petroleum hydrocarbons as oil and grease

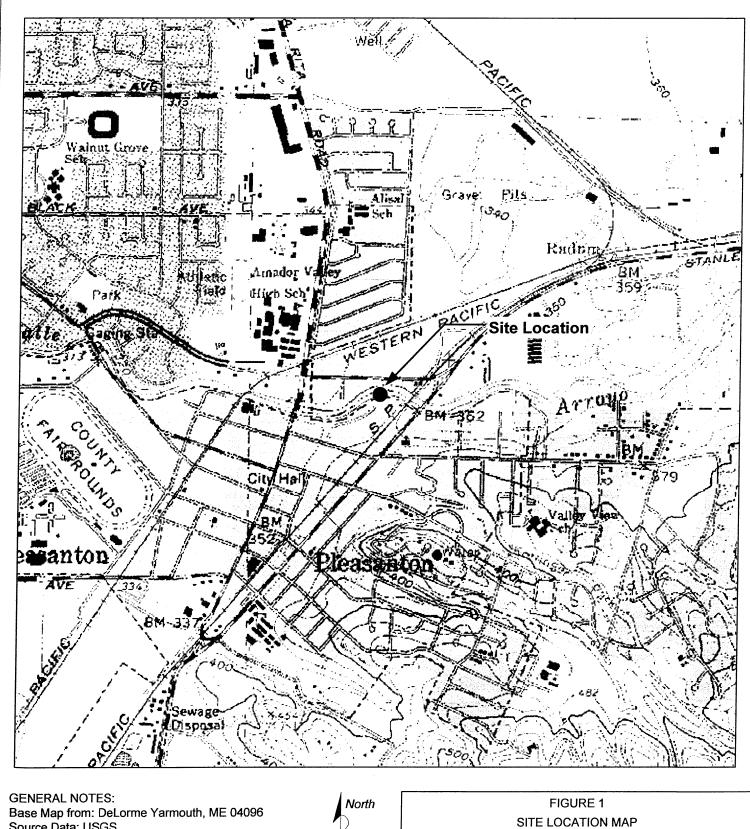
PCBs =polychlorinated biphenyl

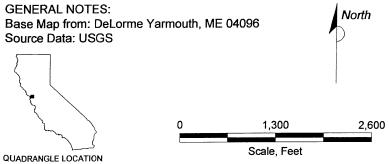
Semi VOCs = Semi volatile organics compounds

VOCs = volatile organic compounds

Sample WO-1 CAM 17 Metal		
	Site	ESL
	(mg/kg)	(mg/kg)
Antimony	<2.0	310
Arsenic	2.8	16
Barium	93	2500
Beryllium	<0.50	98
Cadmium	1.0	38
Chromium	30	58
Cobalt	6.2	94
Copper	13	2500
Lead	7.4	750
Molybdenum	<1.0	2500
Nickel	32	1000
Selenium	<2.0	2500
Thallium	<1.0	51
Vanadium	22	2500
Zinc	28	2500
Mercury	0.05	110

Note; ESL = Environmental screening level, deep soils (<3 m), potential source of drinking water, residential land use. San Francisco Bay Regional Water Quality Control Board



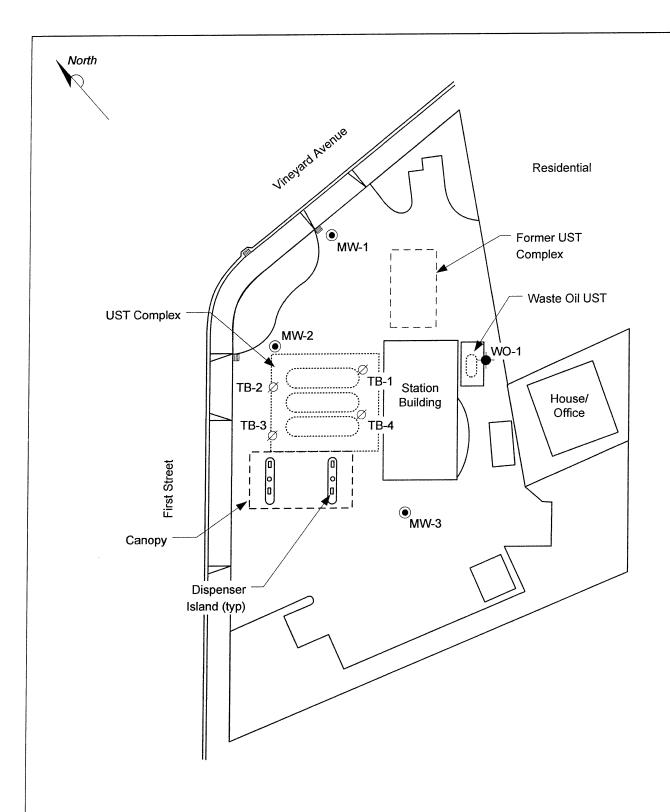


SHELL-BRANDED SERVICE STATION 4226 First Street

Pleasanton, California

PROJECT NO.	DRAWN BY
SJ42-26F-1.2005	V. F. 5/5/05
FILE NO.	PREPARED BY
SJ42-26F-1.2005	VF
REVISION NO.	REVIEWED BY





LEGEND

MW-2 • GROUNDWATER MONITORING WELL LOCATION

TB-1 Ø ABANDONED TANK BACKFILL WELL LOCATION

WO-1 • SOIL BORING LOCATION



FIGURE 2 SITE MAP

SHELL-BRANDED SERVICE STATION 4226 First Street

Pleasanton, California

PROJECT NO. SJ42-26F-1.2005 DRAWN BY V.F. 5/9/05

FILE NO. PREPARED BY J.T.

REVISION NO. REVIEWED BY



BaseMap from: Cambria Environmental Technology, Inc. and Toxichem Management Systems, Inc.

Attachment A

TOXICHEM ANALYTICAL SUMMARY TABLES

Table 1

Soil Analytical Data

Total Petroleum Hydrocarbons, Volatile and Semi-Volatile Organic Compounds

Shell Branded Service Station 4226 First Street, Pleasanton, California

Sample Designation	Sample Type or Depth (feet bgs)	Date Sampled	TPH-g (mg/kg)	TPH-d (mg/kg)	TPH-o&g (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (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)	VOC (mg/kg)	SVOC (mg/kg)	PCBs (mg/kg)
D-1	Composite	02/16/05	1.4	1400 *	10,000	<0.005	<0.005	<0.005	<0.01	<0.005	<0.010	<0.010	<0.005	<0.005	<0.005	<0.005	NA NA	ND (0.42)**	<0.500
Soil Screening Leve Residential ESL (Grod Commercial ESL (Gro	undwater Protection			100 100	500 1,000	0.044 0.044	2.9 2.9	3.3 3.3	2.3 2.3	0.023 0.023	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA (11) NA (11)	6.3 (0.22) 6.3 (0.74)

TPH-g = Total petroleum hydrocarbons as gasoline (EPA Method 8260B)

TPH-d = Total petroleum hydrocarbons as diesel fuel (EPA Method 8015M)

TPH-o&g = Total petroleum as oil and grease (EPA Method 1664A)

MtBE = Methyl tert-butyl ether (EPA Method 8260B)

TBA = Tert-butyl alcohol (EPA Method 8260B)

DIPE = Di-isopropyl Ether (EPA Method 8260B)

ETBE = Ethyl tert-butyl ether (EPA Method 8260B)

TAME = tert-Amyl methyl ether (EPA Method 8260B)

VOC = Volatile Organic Compounds including 1,2-DCA and EDB (EPA Method 8260B)

SVOC = Semi voliatile organic compounds (EPA Method 8270C)

PCB = Polychlorinated biphenyls (EPA Method 8082)

mg/kg = Milligrams per kilogram

bgs = feet below ground surface of the bottom of the sample

* = Hydrocarbon reported is in the late diesel range, and does not match the laboratory diesel standard.

** = All SVOCs non detect except Phenanthrene (concentration in parentheses)

*** = SFRWQCB ESL for surface soil (<3m) where groundwater is a potential drinking water

Table 2 Soil Analytical Data Total Metals by EPA 6010B Shell Branded Service Station

4226 First Street Pleasanton, California

Sample Designation	Depth (feet bgs)	Date Sampled	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Zinc (mg/kg)
D-1	Composite	02/16/05	<0.5	13	6.8	27	100
Soil Screening Levels* Residential ESL Commercial ESL			1.70 7.4	58 58	150 750	150 150	600 600

mg/kg = Milligrams per kilogram

* = SFRWQCB ESL for surface soil (<3m) where groundwater is a potential drinking water

Attachment B

SOIL BORING PERMIT



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

100 NORTH CANYONS PARKWAY, LIVERMORE, CA 94551

PHONE (925) 454-5000

May 27, 2005

Ms. Rebecca Wolff Delta Environmental Consultants 175 Bernal Road, Suite 200 San Jose, CA 95119

Dear Ms. Wolff:

Enclosed is drilling permit 25089 for a contamination investigation at 4226 – 1^{st} Street in Pleasanton for Shell Oil Porducts. Also enclosed are current drilling permit applications for your files.

Please note that permit conditions A-2 and G requires that a report be submitted after completion of the work. The report should include drilling and completion logs, location sketch, permit number and any analysis of the soil and water samples. Please submit the original of your completion report. We will forward your submittal to the California Department of Water Resources.

If you have any questions, please contact me at extension 5056 or Matt Katen at extension 5071.

Sincerely,

Wyman Hong

Water Resources Specialist

Enc.



ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE PLEASANTON, CALIFORNIA 94588-5127 VOICE (925) 484-2600 X235 FAX (925) 462-3914

FOR OFFICE USE

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 4226 15t ST	PERMIT NUMBER 25089
Pleasanton CA 94560	WELL NUMBER
Shell Skition	APN 094-0095-024-00
California Coordinates Source Accuracy± ft. CCN it. CCE ft. APN 49 5 - 7.4	PERMIT CONDITIONS
- 1 3 ··· D2	Circled Permit Requirements Apply
CLIENT Name Shell O.1 Products U5 Address 20935 5 Wilmington 4ve Phone 1707/365-0251 City Carson, CA 90810 Zip APPLICANT Name Delta Environmental Consolidation PROPOSED WELL USE: Domestic Other DOMESTIC OF PROJECT: Well Construction Geotechnical Investigation Cathodic Protection Other PROPOSED WELL USE: Domestic Irrigation Industrial Groundwater Monitoring Dewatering Other DRILLING METHOD: Mud Rotary Air Rotary Hollow Stem Auger Cable Tool Direct Push Other DRILLING COMPANY GREGO DE III MO DRILLER'S LICENSE NO. WELL SPECIFICATIONS: Drill Hole Diameter in. Maximum Casing Diameter in. Depth ft. Surface Seal Depth ft. SOIL BORINGS: Number of Borings In. Depth ft. ESTIMATED STARTING DATE GREGO OF STARTING DATE ESTIMATED COMPLETION DATE GREGO OF STARTING DATE ESTIMATED STARTING DATE ESTIMATED COMPLETION DATE City Carson Value Property of Consolidation	A. GENERAL 1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date. 2. Submit to Zone 7 within 60 days after completion of permitte work the original Department of Water Resources Water We Drillers Report or equivalent for well projects, or drilling log and location sketch for geotechnical projects. 3. Permit is void if project not begun within 90 days of approvate. 8. WATER SUPPLY WELLS 1. Minimum surface seal diameter is four inches greater than the well casing diameter. 2. Minimum seal depth is 50 feet for municipal and industrial well or 20 feet for domestic and irrigation wells unless a lesser dept is specially approved. 3. Grout placed by tremie. 4. An access port at least 0.5 inches in diameter is required on the wellhead for water level measurements. 5. A sample port is required on the discharge pipe near the wellhead. C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS 1. Minimum surface seal diameter is four inches greater than the well or piezometer casing diameter. 2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet. 3. Grout placed by tremie. GEOTECHNICAL. Backfill bore hole with compacted cuttings on heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings. E. CATHODIC. Fill hole above anode zone with concrete placed by tremie. E. WELL DESTRUCTION. See attached. G. SPECIAL CONDITIONS:, Submit to Zone 7 within 60 days after completion of permitted work the well installation report including all soil and water laboratory analysis results.
I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68. APPLICANT'S SIGNATURE Date 5-9-05	Approved Wyman Hong Date 5/27/05
Rebecca Wolff // ATTACH SITE PLAN OR SKETCH	



ZONE 7 WATER AGENCY

100 NORTH CANYONS PARKWAY, LIVERMORE, CALIFORNIA 94551 VOICE (925) 454-5000 FAX (925) 454-5728

FOR OFFICE USE

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT	PERMIT NUMBER
	WELL NUMBER
	APN
California Coordinates Source Accuracy±ft. CCNft. CCEft. APN	PERMIT CONDITIONS Circled Permit Requirements Apply
OLIENT	Onoica i cimit requirements / ppry
CLIENT Name	A. GENERAL
CityZip	 A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
APPLICANT Name	 Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs
FaxAddressPhone	and location sketch for geotechnical projects.
CityZip	3. Permit is void if project not begun within 90 days of approval
-	date. B. WATER SUPPLY WELLS
TYPE OF PROJECT: Well Construction	 Minimum surface seal diameter is four inches greater than the well casing diameter. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Grout placed by tremie. An access port at least 0.5 inches in diameter is required on the wellhead for water level measurements. A sample port is required on the discharge pipe near the wellhead. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS Minimum surface seal diameter is four inches greater than the well or piezometer casing diameter. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet. Grout placed by tremie. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.
SOIL BORINGS: Number of Borings Maximum	 E. CATHODIC. Fill hole above anode zone with concrete placed by tremie. F. WELL DESTRUCTION. See attached. G. SPECIAL CONDITIONS. Submit to Zone 7 within 60 days after
Hole Diameter in. Depth ft. ESTIMATED STARTING DATE ESTIMATED COMPLETION DATE	completion of permitted work the well installation report including all soil and water laboratory analysis results.
hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.	Approved
•	ApprovedDate Wyman Hong
APPLICANT'S	,
SIGNATUREDate	

ATTACH SITE PLAN OR SKETCH



ZONE 7 WATER AGENCY

100 NORTH CANYONS PARKWAY, LIVERMORE, CALIFORNIA 94551 VOICE (925) 454-5000 FAX (925) 454-5728

FOR OFFICE USE

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT	PERMIT NUMBER
	WELL NUMBER
	APN
California Coordinates Source Accuracy±ft. CCNft. CCEft. APN	PERMIT CONDITIONS Circled Permit Requirements Apply
CLIENT	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
NameAddressPhone	 A. GENERAL A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects. Permit is void if project not begun within 90 days of approval date. B. WATER SUPPLY WELLS Minimum surface seal diameter is four inches greater than the well casing diameter.
Cathodic Protection	 Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Grout placed by tremie. An access port at least 0.5 inches in diameter is required on the wellhead for water level measurements. A sample port is required on the discharge pipe near the wellhead. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
Mud Rotary	 Minimum surface seal diameter is four inches greater than the well or piezometer casing diameter. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet. Grout placed by tremie. GEOTECHNICAL. Backfill bore hole with compacted cuttings or
WELL SPECIFICATIONS: Drill Hole Diameter in. Maximum Casing Diameter in. Depthft. Surface Seal Depth ft. Number	heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings. E. CATHODIC. Fill hole above anode zone with concrete placed by tremie.
SOIL BORINGS: Number of Borings Maximum Hole Diameter in. Depth ft.	 F. WELL DESTRUCTION. See attached. G. SPECIAL CONDITIONS. Submit to Zone 7 within 60 days after completion of permitted work the well installation report <u>including</u> <u>all soil and water laboratory analysis results</u>.
ESTIMATED STARTING DATE ESTIMATED COMPLETION DATE	
hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68. APPLICANT'S SIGNATURE	ApprovedDate

ATTACH SITE PLAN OR SKETCH

Attachment C

SOIL BORING LOG

				Project	No:	Sj42-26	6F-1	CI	ient:	Shell Oil Products	US	Boring No: WO-1
	ł			Logged	d By:	Heather	r Buckin	ngham Lo	cation:	4226 First Street, F	Pleasanton	Page 1 of 2
		\ _ I	1 -	Driller:		Gregg		Da	ate Drilled	6/10/2005	Location Map	
)el	12	Drilling	Method:	Direct F	ush	Н	ole Diamet	ter: 3"	ľ	
	-		LU	Sampli	ng Method:	GeoPro	be	Н	le Depth:	37 ft	Please se	ee site map
	En	vironm	ental	Casing	Type:			W	ell Diamet	ter:		
	Cor	sultant	s, Inc.	Slot Siz	ze:			W	ell Depth:			
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	\ _	1_	Driller:		Gregg		Dat	e Drilled:	6/10/2005	Location Map	
)el	12	Drilling	Method:	Direct F	Push	Hol	e Diamet	er: 3"		
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Attachment D

LABORATORY REPORTS AND CHAIN OF CUSTODY DOCUMENTATION



Delta Env. Consultants San Jose

June 28, 2005

175 Bernal Road, Suite 200 San Jose, CA 95119

Attn.:

Debbie Arnold

Project#: SJ42-26F-1

Project:

98995840

Site:

4226 First Street, Pleasanton, CA

Dear Ms. Arnold:

Attached is our report for your samples received on 06/13/2005 12:35 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 07/28/2005 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



PCBs

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200 San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Samples Reported

Sample Name	Date Sampled	Matrix	Lab#
WO-1@30`	06/10/2005 10:14	Soil	3



PCBs

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Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Prep(s): 3550/8082 Test(s): 8082

Sample ID: **WO-1@30**` Lab ID: 2005-06-0339 - 3

Sampled: 06/10/2005 10:14 Extracted: 6/14/2005 11:51

Matrix: Soil QC Batch#: 2005/06/14-01.14

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Aroclor 1016	ND	50	ug/Kg	1.00	06/16/2005 10:16	
Aroclor 1221	ND	50	ug/Kg	1.00	06/16/2005 10:16	
Aroclor 1232	ND	50	ug/Kg	1.00	06/16/2005 10:16	
Aroclor 1242	ND	50	ug/Kg	1.00	06/16/2005 10:16	
Aroclor 1248	ND	50	ug/Kg	1.00	06/16/2005 10:16	
Aroclor 1254	ND	50	ug/Kg	1.00	06/16/2005 10:16	
Aroclor 1260	ND	50	ug/Kg	1.00	06/16/2005 10:16	
Surrogate(s)						
2,4,5,6-Tetrachloro-m-xylene	99.6	57-113	%	1.00	06/16/2005 10:16	
Decachlorobiphenyl (PCB/8082)	94.2	56-115	%	1.00	06/16/2005 10:16	



PCBs

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Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Batch QC Report

Prep(s): 3550/8082 Method Blank

MB: 2005/06/14-01.14-001

Soil

Test(s): 8082 QC Batch # 2005/06/14-01.14

Date Extracted: 06/14/2005 11:51

Compound	Conc.	RL	Unit	Analyzed	Flag
Aroclor 1016	ND	50	ug/Kg	06/16/2005 10:36	
Aroclor 1221	ND	50	ug/Kg	06/16/2005 10:36	
Aroclor 1232	ND	50	ug/Kg	06/16/2005 10:36	
Aroclor 1242	ND	50	ug/Kg	06/16/2005 10:36	
Aroclor 1248	ND	50	ug/Kg	06/16/2005 10:36	
Aroclor 1254	ND	50	ug/Kg	06/16/2005 10:36	
Aroclor 1260	ND	50	ug/Kg	06/16/2005 10:36	
Surrogates(s)					
2,4,5,6-Tetrachloro-m-xylene	88.2	57-113	%	06/16/2005 10:36	
Decachlorobiphenyl (PCB/8082)	84.0	56-115	%	06/16/2005 10:36	



PCBs

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Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

		E	Batch QC R	eport						
Prep(s): 3550/8082									Test(s	s): 8082
Laboratory Control Sp	Laboratory Control Spike					Q	C Batcl	ı # 20	05/06/14	4-01.14
LCS 2005/06/14-0 LCSD 2005/06/14-0						Analyzed: 06/16/2005 10:55 Analyzed: 06/16/2005 11:15				
Compound	Conc.	ug/Kg	Exp.Conc.	Reco	very %	RPD	Ctrl.Lin	nits %	Fla	ags
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Aroclor 1016 Aroclor 1260	60.4 60.1	57.9 60.6	66.4 66.4	91.0 90.5	87.9 92.0	3.5 1.6	65-135 65-135			
Surrogates(s) 2,4,5,6-Tetrachloro-m-xylene Decachlorobiphenyl	44.6 42.6	43.6 43.9	50 50	89.2 85.2	87.2 87.9		57-113 56-115	0 0		



Oil & Grease (Petroleum) by EPA 1664A

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Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Samples Reported

Sample Name	Date Sampled	Matrix	Lab#
WO-1@10` WO-1@20`	06/10/2005 09:34 06/10/2005 09:45	Soil Soil	1
WO-1@30`	06/10/2005 10:14	Soil	3



Oil & Grease (Petroleum) by EPA 1664A

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Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Prep(s):

1664A

Test(s):

1664A

Sample ID: WO-1@10`

Lab ID:

2005-06-0339 - 1

Sampled:

06/10/2005 09:34

Extracted:

6/16/2005 11:26

Matrix:

Soil

QC Batch#: 2005/06/16-02.23

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Oil & Grease (Petroleum)	ND	100	mg/Kg	1.00	06/17/2005 17:10	



Oil & Grease (Petroleum) by EPA 1664A

Delta Env. Consultants San Jose

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Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Prep(s): 1664A

Sample ID: WO-1@20`

Sampled: Matrix:

06/10/2005 09:45

Soil

Test(s): 1664A

Lab ID:

2005-06-0339 - 2

Extracted:

6/16/2005 11:26

QC Batch#: 2005/06/16-02.23

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Oil & Grease (Petroleum)	ND	100	mg/Kg	1.00	06/17/2005 17:10	



Oil & Grease (Petroleum) by EPA 1664A

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Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Prep(s): 1664A

Test(s):

1664A

Sample ID: WO-1@30`

Lab ID:

2005-06-0339 - 3

Sampled:

06/10/2005 10:14

Extracted:

6/16/2005 11:26

Matrix:

QC Batch#: 2005/06/16-02.23

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Oil & Grease (Petroleum)	ND	100	mg/Kg	1.00	06/17/2005 17:10	



Oil & Grease (Petroleum) by EPA 1664A

Delta Env. Consultants San Jose

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Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1 98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Batch QC Report

Prep(s): 1664A

Method Blank

MB: 2005/06/16-02.23-001

Soil

Test(s): 1664A QC Batch # 2005/06/16-02.23

Date Extracted: 06/16/2005 11:26

Compound	Conc.	RL	Unit	Analyzed	Flag
Oil & Grease (Petroleum)	ND	100	mg/Kg	06/17/2005 17:10	



Oil & Grease (Petroleum) by EPA 1664A

Delta Env. Consultants San Jose

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Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

			1	Batch QC Re	eport						
Prep(s):	1664A									Test(s):	1664A
Laborate	ory Control Sp	ike	Soil			Q	C Batch	ı # 20	05/06/16	6-02.23	
LCS	2005/06/16-02	2.23-002	Extracted: 06/16/2005			005		Analyze	ed: 06	/17/200	5 17:10
LCSD	2005/06/16-02	2.23-003		Extracted: (06/16/20	005		Analyze	ed: 06	/17/2005	5 17:10
Compound		Conc.	mg/Kg	Exp.Conc.	Reco	very %	RPD	Ctrl.Lin	nits %	Fla	ags
•		LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Oil & Greas	e (Petroleum)	357	309	400	89.3	77.3	14.4	66-114	24		



Oil & Grease (Petroleum) by EPA 1664A

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200

San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Dilution:

	Batch QC Report				
Prep(s): 1664A			Test(s): 1664A		
Matrix Spike (MS / MSD)	Soil	QC Bat	QC Batch # 2005/06/16-02.23		
WO-1@10` >> MS		Lab ID:	2005-06-0339 - 001		
MS: 2005/06/16-02.23-004	Extracted: 06/16/2005	Analyzed:	06/17/2005 17:10		
		Dilution:	1.00		
MSD:		Analyzed:			

Compound	Conc. mg/Kg		Spk.Level	Recovery %		Limits %		Flags			
	MS	MSD	Sample	mg/Kg	MS	MSD	RPD	Rec.	RPD	MS	MSD
Oil & Grease (Petroleum)	318		ND	400	79.5			66-114	24		



Diesel (C9-C24)

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Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Samples Reported

Date Sampled	Matrix	Lab#	
06/10/2005 09:34 06/10/2005 09:45	Soil Soil	1 2	
	06/10/2005 09:34	06/10/2005 09:34 Soil 06/10/2005 09:45 Soil	



Diesel (C9-C24)

Delta Env. Consultants San Jose

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Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Prep(s): 3550/8015M

Sample ID: WO-1@10`

Test(s):

8015M

Lab ID:

2005-06-0339 - 1

Sampled:

06/10/2005 09:34

Extracted:

6/14/2005 09:03

Matrix: Soil

QC Batch#: 2005/06/14-01.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	06/15/2005 12:10	
Surrogate(s)						
o-Terphenyl	81.3	60-130	%	1.00	06/15/2005 12:10	



Diesel (C9-C24)

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Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Prep(s): 3550/8015M

Test(s):

8015M

Sample ID: WO-1@20`

Lab ID:

2005-06-0339 - 2

Sampled: 06/10/2005 09:45 Extracted:

6/14/2005 09:03

Matrix:

Soil

QC Batch#: 2005/06/14-01.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	1.2	1.0	mg/Kg	1.00	06/17/2005 02:09	ndp
Surrogate(s)				,		
o-Terphenyl	80.9	60-130	%	1.00	06/17/2005 02:09	



Diesel (C9-C24)

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Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Prep(s):

3550/8015M

Test(s):

8015M

Sample ID: WO-1@30`

Lab ID:

2005-06-0339 - 3

Sampled: 06/10/2005 10:14 Extracted:

6/14/2005 09:03

Matrix: Soil

QC Batch#: 2005/06/14-01.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	06/17/2005 02:36	
Surrogate(s)						
o-Terphenyl	76.4	60-130	%	1.00	06/17/2005 02:36	



Diesel (C9-C24)

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Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Batch QC Report

Prep(s): 3550/8015M Method Blank DIESEL

MB: 2005/06/14-01.10-004

Soil

Test(s): 8015M QC Batch # 2005/06/14-01.10

Date Extracted: 06/14/2005 09:03

Compound	Conc.	RL	Unit	Analyzed	Flag
Diesel	ND	1	mg/Kg	06/14/2005 18:44	
Surrogates(s) o-Terphenyl	83.3	60-130	%	06/14/2005 18:44	



Diesel (C9-C24)

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Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Batch QC Report

Prep(s): 3550/8015M

Test(s): 8015M

Laboratory Control Spike DIESEL

Soil

QC Batch # 2005/06/14-01.10

LCS 2005/06/14-01.10-005

Extracted: 06/14/2005

An

Analyzed: 06/14/2005 17:50

LCSD 2005/06/14-01.10-006

Extracted: 06/14/2005

Analyzed: 06/14/2005 18:17

Compound	Conc.	mg/Kg	Exp.Conc.	Recov	ery %	RPD	Ctrl.Lim	nits %	Fla	ags
•	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Diesel	34.6	33.4	41.5	83.4	80.3	3.8	60-130	25		
Surrogates(s) o-Terphenyl	17.9	17.4	20.0	89.7	87.2		60-130	0		



Diesel (C9-C24)

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Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Legend and Notes

Result Flag

ndp

Hydrocarbon reported does not match the pattern of our Diesel standard



CAM 17 Metals

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Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
WO-1@30`	06/10/2005 10:14	Soil	3



CAM 17 Metals

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200 San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Prep(s):

3050B

7471A

Test(s):

6010B

7471A

Sample ID: WO-1@30`

Lab ID:

2005-06-0339 - 3

Sampled:

06/10/2005 10:14

Extracted:

6/20/2005 07:02

6/20/2005 14:41

Matrix:

Soil

QC Batch#: 2005/06/20-02.15

2005/06/20-04.16

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Antimony	ND	2.0	mg/Kg	1.00	06/20/2005 16:54	
Arsenic	2.8	1.0	mg/Kg	1.00	06/20/2005 16:54	
Barium	93	1.0	mg/Kg	1.00	06/20/2005 16:54	
Beryllium	ND	0.50	mg/Kg	1.00	06/20/2005 16:54	
Cadmium	1.0	0.50	mg/Kg	1.00	06/20/2005 16:54	
Chromium	30	1.0	mg/Kg	1.00	06/20/2005 16:54	
Cobalt	6.2	1.0	mg/Kg	1.00	06/20/2005 16:54	
Copper	13	1.0	mg/Kg	1.00	06/20/2005 16:54	
Lead	7.4	1.0	mg/Kg	1.00	06/20/2005 16:54	
Molybdenum	ND	1.0	mg/Kg	1.00	06/20/2005 16:54	
Nickel	32	1.0	mg/Kg	1.00	06/20/2005 16:54	
Selenium	ND	2.0	mg/Kg	1.00	06/20/2005 16:54	
Silver	ND	1.0	mg/Kg	1.00	06/20/2005 16:54	
Thallium	ND	1.0	mg/Kg	1.00	06/20/2005 16:54	
Vanadium	22	1.0	mg/Kg	1.00	06/20/2005 16:54	
Zinc	28	1.0	mg/Kg	1.00	06/20/2005 16:54	
Mercury	ND	0.050	mg/Kg	1.00	06/20/2005 18:24	



CAM 17 Metals

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Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Batch QC Report

Prep(s): 3050B Method Blank

MB: 2005/06/20-02.15-054

Soil

Test(s): 6010B QC Batch # 2005/06/20-02.15

Date Extracted: 06/20/2005 07:02

Compound	Conc.	RL	Unit	Analyzed	Flag
Antimony	ND	2.0	mg/Kg	06/20/2005 12:37	
Arsenic	ND	1.0	mg/Kg	06/20/2005 12:37	
Barium	ND	1.0	mg/Kg	06/20/2005 12:37	
Beryllium	ND	0.50	mg/Kg	06/20/2005 12:37	
Cadmium	ND	0.50	mg/Kg	06/20/2005 12:37	
Chromium	ND	1.0	mg/Kg	06/20/2005 12:37	
Cobalt	ND	1.0	mg/Kg	06/20/2005 12:37	
Copper	ND	1.0	mg/Kg	06/20/2005 12:37	
Lead	ND	1.0	mg/Kg	06/20/2005 12:37	
Molybdenum	ND	1.0	mg/Kg	06/20/2005 12:37	
Nickel	ND	1.0	mg/Kg	06/20/2005 12:37	
Selenium	ND	2.0	mg/Kg	06/20/2005 12:37	
Silver	ND	1.0	mg/Kg	06/20/2005 12:37	
Thallium	ND	1.0	mg/Kg	06/20/2005 12:37	
Vanadium	ND	1.0	mg/Kg	06/20/2005 12:37	
Zinc	ND	1.0	mg/Kg	06/20/2005 12:37	



CAM 17 Metals

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Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Batch QC Report

Prep(s): 7471A Method Blank

MB: 2005/06/20-04.16-065

Soil

Test(s): 7471A QC Batch # 2005/06/20-04.16

Date Extracted: 06/20/2005 14:41

Compound	Conc.	RL	Unit	Analyzed	Flag
Mercury	ND	0.050	mg/Kg	06/20/2005 18:15	



CAM 17 Metals

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Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Batch QC Report

Prep(s): 3050B Test(s): 6010B

Laboratory Control Spike

Soil

QC Batch # 2005/06/20-02.15

LCS

2005/06/20-02.15-055

Extracted: 06/20/2005

Analyzed: 06/20/2005 12:40

LCSD 2005/06/20-02.15-056

Extracted: 06/20/2005

Analyzed: 06/20/2005 12:44

Compound	Conc.	mg/Kg	Exp.Conc.	Reco	very %	RPD	Ctrl.Lin	nits %	Fla	ags
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Antimony	100	110	100.0	100.0	110.0	9.5	80-120	20		
Arsenic	113	113	100.0	113.0	113.0	0.0	80-120	20		
Barium	113	113	100.0	113.0	113.0	0.0	80-120	20		
Beryllium	110	111	100.0	110.0	111.0	0.9	80-120	20		
Cadmium	110	109	100.0	110.0	109.0	0.9	80-120	20		
Chromium	110	110	100.0	110.0	110.0	0.0	80-120	20		
Cobalt	110	109	100.0	110.0	109.0	0.9	80-120	20		
Copper	110	109	100.0	110.0	109.0	0.9	80-120	20		
Lead	109	109	100.0	109.0	109.0	0.0	80-120	20		
Molybdenum	112	112	100.0	112.0	112.0	0.0	80-120	20		
Nickel	110	110	100.0	110.0	110.0	0.0	80-120	20		
Selenium	110	110	100.0	110.0	110.0	0.0	80-120	20		
Silver	108	108	100.0	108.0	108.0	0.0	80-120	20		
Thallium	110	109	100.0	110.0	109.0	0.9	80-120	20		
Vanadium	110	111	100.0	110.0	111.0	0.9	80-120	20		
Zinc	109	108	100.0	109.0	108.0	0.9	80-120	20		



CAM 17 Metals

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Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

			[Batch QC R	eport						
Prep(s)	7471A									Test(s):	7471A
Laboratory Control Spike			Soil				QC Batch # 2005/06/20-04.16				
LCS	2005/06/20-0	4.16-066		Extracted: 06/20/2005			Analyzed: 06/20/2005 18				5 18:16
LCSD	2005/06/20-0	4.16-067		Extracted:	06/20/20	005	Analyzed: 06/20/2005 18:17				
Compound		Conc.	mg/Kg	Exp.Conc.	Reco	very %	RPD	Ctrl.Lin	nits %	Fla	ags
LCS		LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD	
Mercury		0.495	0.509	0.500	99.0	101.8	2.8	85-115	20		



Volatile Organic Compounds by 8260B (Low Level)

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200 San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Samples Reported

Sample Name	Date Sampled	Matrix	Lab#
WO-1@30`	06/10/2005 10:14	Soil	3



Volatile Organic Compounds by 8260B (Low Level)

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200 San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Prep(s):

5035

Test(s):

8260B

Sample ID: WO-1@30`

Lab ID:

2005-06-0339 - 3

Sampled:

06/10/2005 10:14

Extracted:

6/22/2005 19:13

Matrix:

Soil

QC Batch#: 2005/06/22-01.70

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
MTBE	ND	5.0	ug/Kg	1.00		<u> </u>
Acetone	ND	50	ug/Kg	1.00		
Benzene	ND	5.0	ug/Kg	1.00	1	
Bromodichloromethane	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
Bromobenzene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
Bromochloromethane	ND	20	ug/Kg	1.00	06/22/2005 19:13	ĺ
Bromoform	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
Bromomethane	ND	10	ug/Kg	1.00	06/22/2005 19:13	
2-Butanone(MEK)	ND	50	ug/Kg	1.00	06/22/2005 19:13	
n-Butylbenzene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
sec-Butylbenzene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
tert-Butylbenzene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
Carbon disulfide	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
Carbon tetrachloride	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
Chlorobenzene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
Chloroethane	ND	10	ug/Kg	1.00	06/22/2005 19:13	
Chloroform	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
Chloromethane	ND	10	ug/Kg	1.00	06/22/2005 19:13	
2-Chlorotoluene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
4-Chlorotoluene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
Dibromochloromethane	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
1,2-Dichlorobenzene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
1,3-Dichlorobenzene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
1,4-Dichlorobenzene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
1,3-Dichloropropane	ND		ug/Kg	1.00	06/22/2005 19:13	
2,2-Dichloropropane	ND		ug/Kg	1.00	06/22/2005 19:13	
1,1-Dichloropropene	ND		ug/Kg	1.00	06/22/2005 19:13	
1,2-Dibromo-3-chloropropane	ND :	50	ug/Kg	1.00	06/22/2005 19:13	
1,2-Dibromoethane	ND	10	ug/Kg	1.00	06/22/2005 19:13	



Volatile Organic Compounds by 8260B (Low Level)

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200 San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Prep(s): 5035 Test(s): 8260B

Sample ID: **WO-1@30** Lab ID: 2005-06-0339 - 3
Sampled: 06/10/2005 10:14 Extracted: 6/22/2005 19:13

Matrix: Soil QC Batch#: 2005/06/22-01.70

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Dibromomethane	ND	10	ug/Kg	1.00	06/22/2005 19:13	
Dichlorodifluoromethane	ND	10	ug/Kg	1.00	06/22/2005 19:13	
1,1-Dichloroethane	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
1,2-Dichloroethane	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
1,1-Dichloroethene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
1,2-Dichloropropane	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
Ethylbenzene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
Hexachlorobutadiene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
2-Hexanone	ND	50	ug/Kg	1.00	06/22/2005 19:13	
Isopropylbenzene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
p-Isopropyltoluene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
Methylene chloride	ND	10	ug/Kg	1.00	06/22/2005 19:13	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/Kg	1.00	06/22/2005 19:13	
Naphthalene	ND	10	ug/Kg	1.00	06/22/2005 19:13	
n-Propylbenzene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
Styrene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
Tetrachloroethene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
Toluene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
1,2,3-Trichlorobenzene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
1,2,4-Trichlorobenzene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
1,1,1-Trichloroethane		The state of the s	ug/Kg	1.00	06/22/2005 19:13	
1,1,2-Trichloroethane	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
Trichloroethene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	



Volatile Organic Compounds by 8260B (Low Level)

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200

San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Prep(s):

5035

Test(s):

8260B

Sample ID: WO-1@30`

Lab ID:

2005-06-0339 - 3

Sampled:

06/10/2005 10:14

Extracted:

6/22/2005 19:13

Matrix:

Soil

QC Batch#: 2005/06/22-01.70

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Trichlorofluoromethane	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
Trichlorotrifluoroethane	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
1,2,4-Trimethylbenzene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
1,3,5-Trimethylbenzene	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
Vinyl acetate	ND	50	ug/Kg	1.00	06/22/2005 19:13	
Vinyl chloride	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
Total xylenes	ND	5.0	ug/Kg	1.00	06/22/2005 19:13	
Surrogate(s)						
4-Bromofluorobenzene	102.4	60-130	%	1.00	06/22/2005 19:13	
1,2-Dichloroethane-d4	106.5	60-140	%	1.00	06/22/2005 19:13	
Toluene-d8	98.9	70-130	%	1.00	06/22/2005 19:13	



Volatile Organic Compounds by 8260B (Low Level)

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200 San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Batch QC Report

Prep(s): 5035 **Method Blank** MB: 2005/06/22-01.70-024

Soil

Test(s): 8260B QC Batch # 2005/06/22-01.70

Date Extracted: 06/22/2005 17:24

Compound	Conc.	RL	Unit	Analyzed	Flag
MTBE	ND	5.0	ug/Kg	06/22/2005 17:24	
Acetone	ND	50	ug/Kg	06/22/2005 17:24	
Benzene	ND	5.0	ug/Kg	06/22/2005 17:24	
Bromodichloromethane	ND	5.0	ug/Kg	06/22/2005 17:24	
Bromobenzene	ND	5.0	ug/Kg	06/22/2005 17:24	
Bromochloromethane	ND	20	ug/Kg	06/22/2005 17:24	
Bromoform	ND	5.0	ug/Kg	06/22/2005 17:24	
Bromomethane	ND	10	ug/Kg	06/22/2005 17:24	
2-Butanone(MEK)	ND	50	ug/Kg	06/22/2005 17:24	
n-Butylbenzene	ND	5.0	ug/Kg	06/22/2005 17:24	
sec-Butylbenzene	ND	5.0	ug/Kg	06/22/2005 17:24	
tert-Butylbenzene	ND	5.0	ug/Kg	06/22/2005 17:24	
Carbon disulfide	ND	5.0	ug/Kg	06/22/2005 17:24	
Carbon tetrachloride	ND	5.0	ug/Kg	06/22/2005 17:24	
Chlorobenzene	ND	5.0	ug/Kg	06/22/2005 17:24	
Chloroethane	ND	10	ug/Kg	06/22/2005 17:24	
Chloroform	ND	5.0	ug/Kg	06/22/2005 17:24	
Chloromethane	ND	10	ug/Kg	06/22/2005 17:24	
2-Chlorotoluene	ND	5.0	ug/Kg	06/22/2005 17:24	
4-Chlorotoluene	ND	5.0	ug/Kg	06/22/2005 17:24	
Dibromochloromethane	ND	5.0	ug/Kg	06/22/2005 17:24	
1,2-Dichlorobenzene	ND	5.0	ug/Kg	06/22/2005 17:24	
1,3-Dichlorobenzene	ND	5.0	ug/Kg	06/22/2005 17:24	
1,4-Dichlorobenzene	ND	5.0	ug/Kg	06/22/2005 17:24	
1,3-Dichloropropane	ND	5.0	ug/Kg	06/22/2005 17:24	
2,2-Dichloropropane	ND	5.0	ug/Kg	06/22/2005 17:24	
1,1-Dichloropropene	ND	5.0	ug/Kg	06/22/2005 17:24	
1,2-Dibromo-3-chloropropane	ND	50	ug/Kg	06/22/2005 17:24	
1,2-Dibromoethane	ND	10	ug/Kg	06/22/2005 17:24	



Volatile Organic Compounds by 8260B (Low Level)

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200

San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Batch QC Report

Prep(s): 5035 **Method Blank**MB: 2005/06/22-01.70-024

Soil

Test(s): 8260B QC Batch # 2005/06/22-01.70

Date Extracted: 06/22/2005 17:24

Compound	Conc.	RL	Unit	Analyzed	Flag
Dibromomethane	ND	10	ug/Kg	06/22/2005 17:24	
Dichlorodifluoromethane	ND	10	ug/Kg	06/22/2005 17:24	
1,1-Dichloroethane	ND	5.0	ug/Kg	06/22/2005 17:24	
1,2-Dichloroethane	ND	5.0	ug/Kg	06/22/2005 17:24	
1,1-Dichloroethene	ND	5.0	ug/Kg	06/22/2005 17:24	
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	06/22/2005 17:24	
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	06/22/2005 17:24	
1,2-Dichloropropane	ND	5.0	ug/Kg	06/22/2005 17:24	
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	06/22/2005 17:24	
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	06/22/2005 17:24	
Ethylbenzene	ND	5.0	ug/Kg	06/22/2005 17:24	
Hexachlorobutadiene	ND	5.0	ug/Kg	06/22/2005 17:24	
2-Hexanone	ND	50	ug/Kg	06/22/2005 17:24	
Isopropylbenzene	ND	5.0	ug/Kg	06/22/2005 17:24	
p-Isopropyltoluene	ND	5.0	ug/Kg	06/22/2005 17:24	
Methylene chloride	ND	10	ug/Kg	06/22/2005 17:24	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/Kg	06/22/2005 17:24	
Naphthalene	ND	10	ug/Kg	06/22/2005 17:24	
n-Propylbenzene	ND	5.0	ug/Kg	06/22/2005 17:24	
Styrene	ND	5.0	ug/Kg	06/22/2005 17:24	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/Kg	06/22/2005 17:24	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/Kg	06/22/2005 17:24	
Tetrachloroethene	ND	5.0	ug/Kg	06/22/2005 17:24	
Toluene	ND	5.0	ug/Kg	06/22/2005 17:24	
1,2,3-Trichlorobenzene	ND	5.0	ug/Kg	06/22/2005 17:24	
1,2,4-Trichlorobenzene	ND	5.0	ug/Kg	06/22/2005 17:24	
1,1,1-Trichloroethane	ND	5.0	ug/Kg	06/22/2005 17:24	
1,1,2-Trichloroethane	ND	5.0	ug/Kg	06/22/2005 17:24	
Trichloroethene	ND	5.0	ug/Kg	06/22/2005 17:24	



Volatile Organic Compounds by 8260B (Low Level)

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200

San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Batch QC Report

Prep(s): 5035
Method Blank

Soil

Test(s): 8260B QC Batch # 2005/06/22-01.70

MB: 2005/06/22-01.70-024

Date Extracted: 06/22/2005 17:24

Compound	Conc.	RL	Unit	Analyzed	Flag
Trichlorofluoromethane	ND	5.0	ug/Kg	06/22/2005 17:24	
Trichlorotrifluoroethane	ND	5.0	ug/Kg	06/22/2005 17:24	
1,2,4-Trimethylbenzene	ND	5.0	ug/Kg	06/22/2005 17:24	
1,3,5-Trimethylbenzene	ND	5.0	ug/Kg	06/22/2005 17:24	
Vinyl acetate	ND	50	ug/Kg	06/22/2005 17:24	
Vinyl chloride	ND	5.0	ug/Kg	06/22/2005 17:24	
Total xylenes	ND	5.0	ug/Kg	06/22/2005 17:24	
Surrogates(s)					-
4-Bromofluorobenzene	98.5	60-130	%	06/22/2005 17:24	
1,2-Dichloroethane-d4	97.6	60-140	%	06/22/2005 17:24	
Toluene-d8	106.2	70-130	%	06/22/2005 17:24	



Volatile Organic Compounds by 8260B (Low Level)

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Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Batch QC Report

Prep(s): 5035

Test(s): 8260B

Laboratory Control Spike

Soil

QC Batch # 2005/06/22-01.70

LCS

2005/06/22-01.70-048

Extracted: 06/22/2005

Analyzed: 06/22/2005 16:48

LCSD

Commound	Conc.	Conc. ug/Kg		Recov	Recovery %		Ctrl.Limits %		Fla	igs
Compound	LCS	LCSD		LCS	LCS LCSD		Rec.	RPD	LCS	LCSD
Benzene Chlorobenzene 1,1-Dichloroethene Toluene Trichloroethene	92.3 97.5 99.9 100.0 98.7		100.0 100.0 100.0 100.0 100.0	92.3 97.5 99.9 100.0 98.7			69-129 61-121 65-125 70-130 74-134			
Surrogates(s) 4-Bromofluorobenzene 1,2-Dichloroethane-d4 Toluene-d8	483 517 536		500 500 500	96.6 103.4 107.2			60-130 60-140 70-130			



Volatile Organic Compounds by 8260B (Low Level)

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200 San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

Prep(s):

MS:

98995840

5035

2005/06/22-01.70-049

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

		-								
								2		
								100	101	8260B
									151	OZDUD:
									., .,.	0-00-

Matrix Spike (MS / MSD) Soil QC Batch # 2005/06/22-01.70

Batch QC Report

WO-1@30` >> MS Lab ID: 2005-06-0339 - 003

Extracted: 06/22/2005

Dilution: 1.00

MSD: 2005/06/22-01.70-026 Extracted: 06/22/2005 Analyzed: 06/22/2005 20:26

Dilution:

06/22/2005 19:49

1.00

Analyzed:

Compound	Conc.	Conc. ug/Kg		Spk.Leve	R	Recovery %			Limits %		Flags	
	MS	MSD	Sample	ug/Kg	MS	MSD	RPD	Rec.	RPD	MS	MSD	
Benzene	83.0	84.3	ND	89.6	92.6	95.8	3.4	69-129	20			
Chlorobenzene	85.5	84.4	ND	89.6	95.4	95.9	0.5	61-121	20			
1,1-Dichloroethene	91.9	93.6	ND	89.6	102.6	106.4	3.6	65-125	20			
Toluene	82.0	84.5	ND	89.6	91.5	96.0	4.8	70-130	20			
Trichloroethene	82.9	87.8	ND	89.6	92.5	99.8	7.6	74-134	20			
Surrogate(s)						ĺ	1					
4-Bromofluorobenzene	504	505	ł	500	100.7	101.0		60-130				
1,2-Dichloroethane-d4	518	520		500	103.5	104.0		60-140				
Toluene-d8	497	517		500	99.5	103.3		70-130				



Semi-volatile analysis by GC/MS - EPA8270C

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200 San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Samples Reported

Sample Name	Date Sampled	Matrix	Lab#
WO-1@30`	06/10/2005 10:14	Soil	3



Semi-volatile analysis by GC/MS - EPA8270C

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200

San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Prep(s):

3550B/8270C

Test(s):

8270C

Sample ID: WO-1@30`

Lab ID:

Extracted:

2005-06-0339 - 3

Sampled:

06/10/2005 10:14

6/15/2005 14:27

Matrix:

Soil

QC Batch#: 2005/06/15-01.11

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Phenol	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
Bis(2-chloroethyl)ether	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
2-Chlorophenol	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
1,3-Dichlorobenzene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	·
1,4-Dichlorobenzene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
Benzyl alcohol	ND	0.17	mg/Kg	1.00	06/23/2005 22:14	
1,2-Dichlorobenzene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
2-Methylphenol	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
Bis(2-chloroisopropyl) ether	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
4-Methylphenol	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
N-Nitroso-di-n-propylamine	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	i
Hexachloroethane	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
Nitrobenzene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
Isophorone	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
2-Nitrophenol	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
2,4-Dimethylphenol	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
Bis(2-chloroethoxy) methane	ND	0.17	mg/Kg	1.00	06/23/2005 22:14	
2,4-Dichlorophenol	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
1,2,4-Trichlorobenzene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
Naphthalene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
4-Chloroaniline	ND	0.33	mg/Kg	1.00	06/23/2005 22:14	
Hexachlorobutadiene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
4-Chloro-3-methylphenol	ND	0.17	mg/Kg	1.00	06/23/2005 22:14	
2-Methylnaphthalene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
Hexachlorocyclopentadiene	ND	0.17	mg/Kg	1.00	06/23/2005 22:14	
2,4,6-Trichlorophenol	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
2,4,5-Trichlorophenol	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
2-Chloronaphthalene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
2-Nitroaniline	ND	0.33	mg/Kg	1.00	06/23/2005 22:14	



Semi-volatile analysis by GC/MS - EPA8270C

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200 San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Prep(s): 3550B/8270C Test(s): 8270C

Sample ID: **WO-1@30**` Lab ID: 2005-06-0339 - 3
Sampled: 06/10/2005 10:14 Extracted: 6/15/2005 14:27

Matrix: Soil QC Batch#: 2005/06/15-01.11

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Dimethyl phthalate	ND	0.17	mg/Kg	1.00	06/23/2005 22:14	
Acenaphthylene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
3-Nitroaniline	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
Acenaphthene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
2,4-Dinitrophenol	ND	0.33	mg/Kg	1.00	06/23/2005 22:14	
4-Nitrophenol	ND	0.33	mg/Kg	1.00	06/23/2005 22:14	
Dibenzofuran	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
2,4-Dinitrotoluene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
2,6-Dinitrotoluene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
Diethyl phthalate	ND	0.17	mg/Kg	1.00	06/23/2005 22:14	
4-Chlorophenyl phenyl ether	ND	0.17	mg/Kg	1.00	06/23/2005 22:14	
Fluorene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
4-Nitroaniline	ND	0.33	mg/Kg	1.00	06/23/2005 22:14	
2-Methyl-4,6-dinitrophenol	ND	0.33	mg/Kg	1.00	06/23/2005 22:14	
N-Nitrosodiphenylamine	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
4-Bromophenyl phenyl ether	ND	0.17	mg/Kg	1.00	06/23/2005 22:14	
Hexachlorobenzene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
Pentachlorophenol	ND	0.33	mg/Kg	1.00	06/23/2005 22:14	
Phenanthrene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
Anthracene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
Di-n-butyl phthalate	ND	0.17	mg/Kg	1.00	06/23/2005 22:14	
Fluoranthene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
Pyrene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
Butyl benzyl phthalate	ND	0.17	mg/Kg	1.00	06/23/2005 22:14	
3,3-Dichlorobenzidine	ND	0.17	mg/Kg	1.00	06/23/2005 22:14	
Benzo(a)anthracene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
ois(2-Ethylhexyl) phthalate	ND	0.33	mg/Kg	1.00	06/23/2005 22:14	
Chrysene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
Di-n-octyl phthalate	ND	0.17	mg/Kg	1.00	06/23/2005 22:14	



Semi-volatile analysis by GC/MS - EPA8270C

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200 San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Prep(s): 3550B/8270C Test(s): 8270C

 Sample ID: WO-1@30`
 Lab ID: 2005-06-0339 - 3

 Sampled: 06/10/2005 10:14
 Extracted: 6/15/2005 14:27

Matrix: Soil QC Batch#: 2005/06/15-01.11

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Benzo(b)fluoranthene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
Benzo(k)fluoranthene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
Benzo(a)pyrene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
Indeno(1,2,3-c,d)pyrene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
Dibenzo(a,h)anthracene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
Benzo(g,h,i)perylene	ND	0.067	mg/Kg	1.00	06/23/2005 22:14	
Benzoic acid	ND	0.33	mg/Kg	1.00	06/23/2005 22:14	
Surrogate(s)						
Nitrobenzene-d5	66.4	23-120	%	1.00	06/23/2005 22:14	
2-Fluorobiphenyl	74.5	30-115	%	1.00	06/23/2005 22:14	
p-Terphenyl-d14	90.8	18-137	%	1.00	06/23/2005 22:14	
2-Fluorophenol	67.4	25-121	%	1.00	06/23/2005 22:14	
Phenol-d5	64.5	24-113	%	1.00	06/23/2005 22:14	
2,4,6-Tribromophenol	73.5	19-122	%	1.00	06/23/2005 22:14	



Semi-volatile analysis by GC/MS - EPA8270C

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200 San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Batch QC Report

Prep(s): 3550B/8270C **Method Blank**

MB: 2005/06/15-01.11-001

Soil

Test(s): 8270C QC Batch # 2005/06/15-01.11

Date Extracted: 06/15/2005 14:27

Compound	Conc.	RL	Unit	Analyzed	Flag
Phenol	ND	0.067	mg/Kg	06/23/2005 21:09	
Bis(2-chloroethyl)ether	ND	0.067	mg/Kg	06/23/2005 21:09	
2-Chlorophenol	ND	0.067	mg/Kg	06/23/2005 21:09	
1,3-Dichlorobenzene	ND	0.067	mg/Kg	06/23/2005 21:09	
1,4-Dichlorobenzene	ND	0.067	mg/Kg	06/23/2005 21:09	
Benzyl alcohol	ND	0.17	mg/Kg	06/23/2005 21:09	
1,2-Dichlorobenzene	ND	0.067	mg/Kg	06/23/2005 21:09	
2-Methylphenol	ND	0.067	mg/Kg	06/23/2005 21:09	
Bis(2-chloroisopropyl) ether	ND	0.067	mg/Kg	06/23/2005 21:09	
4-Methylphenol	ND	0.067	mg/Kg	06/23/2005 21:09	
N-Nitroso-di-n-propylamine	ND	0.067	mg/Kg	06/23/2005 21:09	
Hexachloroethane	ND	0.067	mg/Kg	06/23/2005 21:09	
Nitrobenzene	ND	0.067	mg/Kg	06/23/2005 21:09	
Isophorone	ND	0.067	mg/Kg	06/23/2005 21:09	
2-Nitrophenol	ND	0.067	mg/Kg	06/23/2005 21:09	
2,4-Dimethylphenol	ND	0.067	mg/Kg	06/23/2005 21:09	
Bis(2-chloroethoxy) methane	ND	0.17	mg/Kg	06/23/2005 21:09	
2,4-Dichlorophenol	ND	0.067	mg/Kg	06/23/2005 21:09	
1,2,4-Trichlorobenzene	ND	0.067	mg/Kg	06/23/2005 21:09	
Naphthalene	ND	0.067	mg/Kg	06/23/2005 21:09	
4-Chloroaniline	ND	0.330	mg/Kg	06/23/2005 21:09	
Hexachlorobutadiene	ND	0.067	mg/Kg	06/23/2005 21:09	
4-Chloro-3-methylphenol	ND	0.17	mg/Kg	06/23/2005 21:09	
2-Methylnaphthalene	ND	0.067	mg/Kg	06/23/2005 21:09	
Hexachlorocyclopentadiene	ND	0.17	mg/Kg	06/23/2005 21:09	
2,4,6-Trichlorophenol	ND	0.067	mg/Kg	06/23/2005 21:09	
2,4,5-Trichlorophenol	ND	0.067	mg/Kg	06/23/2005 21:09	
2-Chloronaphthalene	ND	0.067	mg/Kg	06/23/2005 21:09	
2-Nitroaniline	ND	0.33	mg/Kg	06/23/2005 21:09	



Semi-volatile analysis by GC/MS - EPA8270C

Delta Env. Consultants San Jose

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175 Bernal Road, Suite 200 San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Batch QC Report

Prep(s): 3550B/8270C

Method Blank

MB: 2005/06/15-01.11-001

Soil

Test(s): 8270C QC Batch # 2005/06/15-01.11

Date Extracted: 06/15/2005 14:27

Compound	Conc.	RL	Unit	Analyzed	Flag
Dimethyl phthalate	ND	0.17	mg/Kg	06/23/2005 21:09	
Acenaphthylene	ND	0.067	mg/Kg	06/23/2005 21:09	
3-Nitroaniline	ND	0.067	mg/Kg	06/23/2005 21:09	
Acenaphthene	ND	0.067	mg/Kg	06/23/2005 21:09	
2,4-Dinitrophenol	ND	0.33	mg/Kg	06/23/2005 21:09	
4-Nitrophenol	ND	0.33	mg/Kg	06/23/2005 21:09	
Dibenzofuran	ND	0.067	mg/Kg	06/23/2005 21:09	
2,4-Dinitrotoluene	ND	0.067	mg/Kg	06/23/2005 21:09	
2,6-Dinitrotoluene	ND	0.067	mg/Kg	06/23/2005 21:09	
Diethyl phthalate	ND	0.17	mg/Kg	06/23/2005 21:09	
4-Chlorophenyl phenyl ether	ND	0.17	mg/Kg	06/23/2005 21:09	
Fluorene	ND	0.067	mg/Kg	06/23/2005 21:09	
4-Nitroaniline	ND	0.33	mg/Kg	06/23/2005 21:09	
2-Methyl-4,6-dinitrophenol	ND	0.33	mg/Kg	06/23/2005 21:09	
N-Nitrosodiphenylamine	ND	0.067	mg/Kg	06/23/2005 21:09	
4-Bromophenyl phenyl ether	ND	0.17	mg/Kg	06/23/2005 21:09	
Hexachlorobenzene	ND	0.067	mg/Kg	06/23/2005 21:09	
Pentachlorophenol	ND	0.33	mg/Kg	06/23/2005 21:09	
Phenanthrene	ND	0.067	mg/Kg	06/23/2005 21:09	
Anthracene	ND	0.067	mg/Kg	06/23/2005 21:09	
Di-n-butyl phthalate	ND	0.17	mg/Kg	06/23/2005 21:09	
Fluoranthene	ND	0.067	mg/Kg	06/23/2005 21:09	
Pyrene	ND	0.067	mg/Kg	06/23/2005 21:09	
Butyl benzyl phthalate	ND	0.17	mg/Kg	06/23/2005 21:09	
3,3-Dichlorobenzidine	ND	0.17	mg/Kg	06/23/2005 21:09	
Benzo(a)anthracene	ND	0.067	mg/Kg	06/23/2005 21:09	
bis(2-Ethylhexyl) phthalate	ND	0.33	mg/Kg	06/23/2005 21:09	
Chrysene	ND	0.067	mg/Kg	06/23/2005 21:09	
Di-n-octyl phthalate	ND	0.17	mg/Kg	06/23/2005 21:09	



Semi-volatile analysis by GC/MS - EPA8270C

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200 San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Batch QC Report	
Prep(s): 3550B/8270C	Test(s): 8270C
Method Blank Soil	QC Batch # 2005/06/15-01.11
MB: 2005/06/15-01 11-001	Date Extracted: 06/15/2005 14:27

Compound	Conc.	RL	Unit	Analyzed	Flag
Benzo(b)fluoranthene	ND	0.067	mg/Kg	06/23/2005 21:09	
Benzo(k)fluoranthene	ND	0.067	mg/Kg	06/23/2005 21:09	
Benzo(a)pyrene	ND	0.067	mg/Kg	06/23/2005 21:09	
Indeno(1,2,3-c,d)pyrene	ND	0.067	mg/Kg	06/23/2005 21:09	
Dibenzo(a,h)anthracene	ND	0.067	mg/Kg	06/23/2005 21:09	
Benzo(g,h,i)perylene	ND	0.067	mg/Kg	06/23/2005 21:09	
Benzoic acid	ND	0.33	mg/Kg	06/23/2005 21:09	
Surrogates(s)			İ		
Nitrobenzene-d5	67.4	23-120	%	06/23/2005 21:09	
2-Fluorobiphenyl	65.6	30-115	%	06/23/2005 21:09	
p-Terphenyl-d14	76.6	18-137	%	06/23/2005 21:09	
2-Fluorophenol	65.7	25-121	%	06/23/2005 21:09	
Phenol-d5	68.0	24-113	%	06/23/2005 21:09	}
2,4,6-Tribromophenol	66.1	19-122	%	06/23/2005 21:09	



Semi-volatile analysis by GC/MS - EPA8270C

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200 San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

	Batch QC Report	
Prep(s): 3550B/8270C		Test(s): 8270C
Laboratory Control Spike	Soil	QC Batch # 2005/06/15-01.11
LCS 2005/06/15-01.11-002 LCSD 2005/06/15-01.11-003	Extracted: 06/15/2005 Extracted: 06/15/2005	Analyzed: 06/23/2005 21:31 Analyzed: 06/23/2005 21:52

Compound	Conc.	mg/Kg	Exp.Conc.	Reco	very %	RPD	Ctrl.Lin	nits %	Fla	ags
•	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Phenol	1.11	1.28	1.67	66.5	76.6	14.1	20-90	35		
2-Chlorophenol	1.12	1.22	1.67	67.1	73.1	8.6	27-123	35		1
1,4-Dichlorobenzene	1.09	1.10	1.67	65.3	65.9	0.9	28-104	30		
N-Nitroso-di-n-propylamine	1.20	1.15	1.67	71.9	68.9	4.3	25-114	39		
1,2,4-Trichlorobenzene	1.21	1.17	1.67	72.5	70.1	3.4	38-107	35		ł
4-Chloro-3-methylphenol	1.19	1.21	1.67	71.3	72.5	1.7	26-103	33		
Acenaphthene	1.19	1.11	1.67	71.3	66.5	7.0	49-102	30		
4-Nitrophenol	1.36	1.40	1.67	81.4	83.8	2.9	17-109	35		
2,4-Dinitrotoluene	1.29	1.31	1.67	77.2	78.4	1.5	39-139	38		
Pentachlorophenol	1.37	1.39	1.67	82.0	83.2	1.5	11-114	35		
Pyrene	1.37	1.30	1.67	82.0	77.8	5.3	25-117	35		
Surrogates(s)										
Nitrobenzene-d5	18.1	16.6	25	72.4	66.4		23-120			
2-Fluorobiphenyl	16.8	16.2	25	67.3	64.7		30-115			
p-Terphenyl-d14	21.8	22.9	25	87.4	91.6	ļ	18-137	1		
2-Fluorophenol	31.9	34.9	50	63.8	69.9	ł	25-121	- 1		
Phenol-d5	34.6	37.9	50	69.2	75.9	l	24-113	- 1		
2,4,6-Tribromophenol	39.8	38.0	50	79.6	76.1		19-122			

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Semi-volatile analysis by GC/MS - EPA8270C

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200 San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

	Batch QC Report		
Prep(s): 3550B/8270C			Test(s): 8270C
Matrix Spike (MS / MSD)	Soil	QC Bat	ch # 2005/06/15-01.11
WO-1@30` >> MS		Lab ID:	2005-06-0339 - 003
MS: 2005/06/15-01.11-005	Extracted: 06/15/2005	Analyzed:	06/24/2005 05:27
		Dilution:	1.00
MSD: 2005/06/15-01.11-006	Extracted: 06/15/2005	Analyzed:	06/24/2005 05:48
		Dilution:	1.00

Compound	Conc.	m	g/Kg	Spk.Leve	l F	Recovery	, %	Limits	s %	F	lags
	MS	MSD	Sample	mg/Kg	мѕ	MSD	RPD	Rec.	RPD	MS	MSD
Phenol	1.11	1.07	ND	1.67	66.5	64.1	3.7	20-90	35		
2-Chlorophenol	1.12	1.01	ND	1.67	67.1	60.5	10.3	27-123	35		
1,4-Dichlorobenzene	1.02	0.870	ND	1.67	61.1	52.1	15.9	28-104	30		1
N-Nitroso-di-n-propylamine	1.12	1.04	ND	1.67	67.1	62.3	7.4	25-114	39		
1,2,4-Trichlorobenzene	1.06	0.940	ND.	1.67	63.5	56.3	12.0	38-107	35	i	
4-Chloro-3-methylphenol	1.18	1.14	ND	1.67	70.7	68.3	3.5	26-103	33	1	
Acenaphthene	1.01	1.19	ND	1.67	60.5	71.3	16.4	49-102	30		
4-Nitrophenol	1.18	1.24	ND	1.67	70.7	74.3	5.0	17-109	35		
2,4-Dinitrotoluene	1.17	1.28	ND	1.67	70.1	76.6	8.9	39-139	38		
Pentachlorophenol	1.30	1.42	ND	1.67	77.8	85.0	8.8	11-114	35		
Pyrene	1.21	1.49	ND	1.67	72.5	89.2	20.7	25-117	35		
Surrogate(s)											
Nitrobenzene-d5	15.9	15.6		25	63.4	62.4		23-120			
2-Fluorobiphenyl	15.7	16.5		25	62.6	66.0		30-115	1		
p-Terphenyl-d14	22.4	26.2		25	89.4	104.6		18-137			
2-Fluorophenol	32.0	29.0		50	64.0	58.1		25-121			
Phenol-d5	32.9	31.1		50	65.8	62.1		24-113			
2,4,6-Tribromophenol	36.9	40.6		50	73.8	81.2		19-122	ļ		



Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200 San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Samples Reported

Sample Name	Date Sampled	Matrix	Lab#
WO-1@10`	06/10/2005 09:34	Soil	1
WO-1@20`	06/10/2005 09:45	Soil	2
WO-1@30`	06/10/2005 10:14	Soil	3



Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200 San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Prep(s):

5030B

Test(s):

8260B

Sample ID: WO-1@10`

Lab ID:

2005-06-0339 - 1

Sampled: 06/10/2005 09:34

6/24/2005 10:11

Matrix:

Soil

Extracted:

QC Batch#: 2005/06/24-1B.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	1.00	06/24/2005 10:11	
Benzene	ND	0.0050	mg/Kg	1.00	06/24/2005 10:11	
Toluene	ND	0.0050	mg/Kg	1.00	06/24/2005 10:11	
Ethyl benzene	ND ·	0.0050	mg/Kg	1.00	06/24/2005 10:11	
Total xylenes	ND	0.0050	mg/Kg	1.00	06/24/2005 10:11	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	1.00	06/24/2005 10:11	
Surrogate(s)						
1,2-Dichloroethane-d4	101.4	76-124	%	1.00	06/24/2005 10:11	
Toluene-d8	95.7	75-116	%	1.00	06/24/2005 10:11	



Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200

San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Prep(s):

5030B

Test(s):

8260B

Sample ID: WO-1@20`

Lab ID:

2005-06-0339 - 2

Sampled: 06/10/2005 09:45

Extracted:

6/24/2005 09:45

Matrix:

Soil

QC Batch#: 2005/06/24-1B.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	1.00	06/24/2005 09:45	
Benzene	ND	0.0050	mg/Kg	1.00	06/24/2005 09:45	
Toluene	ND	0.0050	mg/Kg	1.00	06/24/2005 09:45	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	06/24/2005 09:45	
Total xylenes	ND	0.0050	mg/Kg	1.00	06/24/2005 09:45	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	1.00	06/24/2005 09:45	
Surrogate(s)						
1,2-Dichloroethane-d4	105.9	76-124	%	1.00	06/24/2005 09:45	
Toluene-d8	82.3	75-116	%	1.00	06/24/2005 09:45	



Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200 San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Prep(s):

5030B

Test(s):

8260B

Sample ID: WO-1@30`

Lab ID:

2005-06-0339 - 3

Sampled:

06/10/2005 10:14

Extracted:

6/23/2005 16:52

Matrix:

Soil

QC Batch#: 2005/06/23-1A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	1.00	06/23/2005 16:52	
Surrogate(s)						
1,2-Dichloroethane-d4	95.4	76-124	%	1.00	06/23/2005 16:52	
Toluene-d8	90.6	75-116	%	1.00	06/23/2005 16:52	



Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

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Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Batch QC Report

 Prep(s): 5030B
 Test(s): 8260B

 Method Blank
 Soil
 QC Batch # 2005/06/23-1A.69

 MB: 2005/06/23-1A.69-009
 Date Extracted: 06/23/2005 13:09

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	06/23/2005 13:09	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	06/23/2005 13:09	
Benzene	ND	0.0050	mg/Kg	06/23/2005 13:09	
Toluene	ND	0.0050	mg/Kg	06/23/2005 13:09	
Ethyl benzene	ND	0.0050	mg/Kg	06/23/2005 13:09	
Total xylenes	ND	0.0050	mg/Kg	06/23/2005 13:09	
Surrogates(s)					
1,2-Dichloroethane-d4	105.2	76-124	%	06/23/2005 13:09	j
Toluene-d8	97.2	75-116	%	06/23/2005 13:09	



Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200 San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Batch QC Repo	
Prep(s): 5030B	Test(s): 8260B
Method Blank Soil	QC Batch # 2005/06/24-1B.62
MB: 2005/06/24-1B.62-012	Date Extracted: 06/24/2005 09:12

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	1.0	mg/Kg	06/24/2005 09:12	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	06/24/2005 09:12	
Benzene	ND	0.0050	mg/Kg	06/24/2005 09:12	
Toluene	ND	0.0050	mg/Kg	06/24/2005 09:12	
Ethyl benzene	ND	0.0050	mg/Kg	06/24/2005 09:12	
Total xylenes	ND	0.0050	mg/Kg	06/24/2005 09:12	
Surrogates(s)	Į				
1,2-Dichloroethane-d4	101.6	76-124	%	06/24/2005 09:12	
Toluene-d8	96.4	75-116	%	06/24/2005 09:12	



Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200 San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike

Soil

QC Batch # 2005/06/23-1A.69

LCS

2005/06/23-1A.69-051

Extracted: 06/23/2005

Analyzed: 06/23/2005 12:51

LCSD

Compound	Conc.	mg/Kg	Exp.Conc.	Recov	ery %	RPD	Ctrl.Lin	nits %	Fla	ags
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	0.0530		0.05	106.0			65-165	20		
Benzene	0.0479		0.05	95.8			69-129	20		
Toluene	0.0481		0.05	96.2			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	529		500	105.8			76-124			
Toluene-d8	514		500	102.8			75-116			



Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200 San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1 98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike

Soil

QC Batch # 2005/06/24-1B.62

LCS

2005/06/24-1B.62-046

Extracted: 06/24/2005

Analyzed: 06/24/2005 08:46

LCSD

Compound	Conc.	mg/Kg	Exp.Conc.	Recov	ery %	RPD	Ctrl.Lin	nits %	Fla	ags
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	0.0414		0.049309	84.0			65-165	20		
Benzene	0.0399		0.049309	80.9			69-129	20		
Toluene	0.0435	-	0.049309	88.2			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	500		500	100.0			76-124			
Toluene-d8	489		500	97.8			75-116			



Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200 San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

		Batch QC Report		
Prep(s): 5030B			Test(s): 8260B
Matrix	(Spike (MS / MSD)	Soll	QC Bate	ch # 2005/06/23-1A.69
WO-1	@30` >> MS		Lab ID:	2005-06-0339 - 003
MS:	2005/06/23-1A.69-011	Extracted: 06/23/2005	Analyzed:	06/23/2005 17:11
			Dilution:	1.00
MSD:	2005/06/23-1A.69-029	Extracted: 06/23/2005	Analyzed:	06/23/2005 17:29
			Dilution:	1.00

Compound	Conc. mg/Kg S		Spk.Level Recovery %			Limits %		Flags			
	MS	MSD	Sample	mg/Kg	MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	0.0415	0.0477	ND	0.049019	84.7	97.9	14.5	65-165	20		
Benzene	0.0361	0.0446	ND	0.049019	73.7	91.5	21.5	69-129	20		R1
Toluene	0.0415	0.0493	ND	0.049019	84.7	101.2	17.8	70-130	20		
Surrogate(s)	1										
1,2-Dichloroethane-d4	458	444		500	91.7	88.8		76-124			
Toluene-d8	470	478		500	94.0	95.6		75-116			



Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200 San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

		Batch QC Report		
Prep(s	s): 5030B			Test(s): 8260B
Matri	x Spike (MS / MSD)	Soil	QC Bate	ch # 2005/06/24-1B.62
MS/M	ISD		Lab ID:	2005-06-0366 - 011
MS:	2005/06/24-1B.62-005	Extracted: 06/24/2005	Analyzed:	06/24/2005 14:05
			Dilution:	1.00
MSD:	2005/06/24-1B.62-031	Extracted: 06/24/2005	Analyzed:	06/24/2005 14:31
			Dilution:	1.00

Compound	Conc. mg/Kg s		Spk.Level Recovery %			Limits %		Flags			
	MS	MSD	Sample	mg/Kg	MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	0.0411	0.0433	ND	0.045289	90.7	89.3	1.6	65-165	20		
Benzene	0.0312	0.0323	ND	0.045289	68.9	66.6	3.4	69-129	20	M5	M5
Toluene	0.0314	0.0334	ND	0.045289	69.3	68.9	0.6	70-130	20	M5	M5
Surrogate(s)											
1,2-Dichloroethane-d4	630	639		500	126.0	127.8		76-124		S7	S7
Toluene-d8	477	473		500	95.4	94.6		75-116			



Submission: 2005-06-0339

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Delta Env. Consultants San Jose

Attn.: Debbie Arnold

175 Bernal Road, Suite 200 San Jose, CA 95119

Phone: (408) 224-4724 Fax: (408) 224-4518

Project: SJ42-26F-1

98995840

Received: 06/13/2005 12:35

Site: 4226 First Street, Pleasanton, CA

Legend and Notes

Result Flag

M5

MS/MSD spike recoveries were below acceptance limits. See blank spike (LCS).

R1

Analyte RPD was out of QC limits.

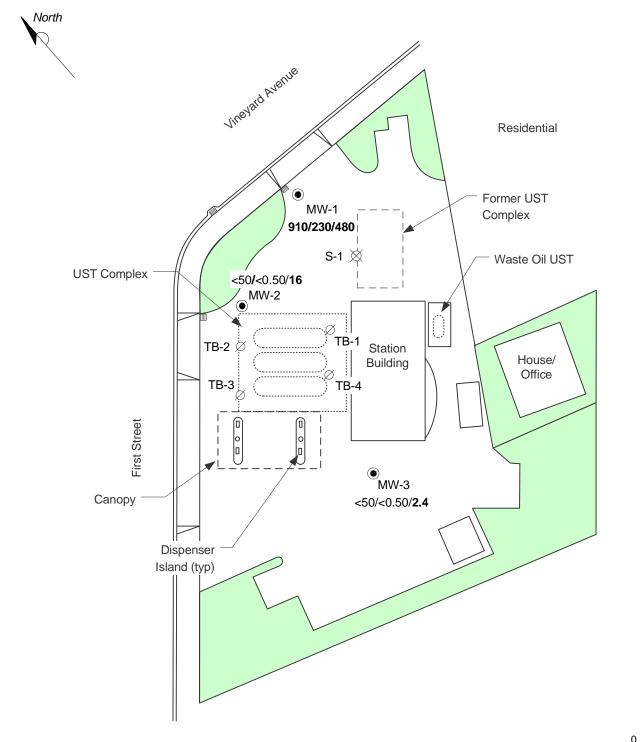
S7

Surrogate recoveries higher than acceptance limits.

STL-San Francisco **EQUIVA Services LLC Chain Of Custody Record** Equiva Project Manager to be invoiced: INCIDENT NUMBER (SSE ONLY) 1220 Quarry Large M SCIENCE A CHICAGORICAN Cenis Brown 9 5 8 4 0 Pleasanton, CA DATE 01305 Unterment services SAP OF CRMT NUMBER (TS/CRMT) CENT SCUSTON (925)484-1919 (925)484-1096 fax Delta Environmental Consultants 4226 First Street, Pleasanton, CA T0600101259 175 Bernal Rd #200, San Jose, CA 95119 CHILIANTEROX From Edition (A) From the production of the Vera Fischer Debbie Arnalod Asher@detservican SJ42-26F-1 SAMPLER NAME(S) (PEN) HELD YORK LAD USE ONLY (408) 224-4724 14031225-asea discrebbility to be noticed Heather Buckingham TUSHANOUNCE THAT (BUDNESS DAYS) D 10 DAYS G 1 DAYS D 22 HOLES D 40 HD 429 HOURS ☐ LESS THAN 24 HOURS REQUESTED ANALYSIS O LA - ENGCE REPORT FORMAT O LIST AGREEN DEALER MEDIE CONFIRMANTIQUE PROPERTY _HO-557 per CORNO SPECIAL INSTRUCTIONS OR NOTES: FIELD NOTES: OPECK BOX IF ELIGIS NEEDED [2] Container/Preservative or PID Readings or Laboratory Notes VDCs Halogeneted/Aromatic (20218) Vapor VOC* STEX / MTGE | 110-15) (#015#) SPA 5035 Extraction for Valuties SAMPLING Full Line (70-12) TEMPERATURE OF NECESTRE MT0C (82008 - 0.5ppb RL) Oxygenates (6) by (87%03) MTDE (80219 - Sppb 71.) Vapor TPH (ASTAI 3416m) TP11 - Diesel, Extractable M . Col and George (1854A) 508 & 1,2-DCA (M75/10) Title 22 Metals by 6010B TPM - Gass, Pungeable Sem! VOCS by #2780 Field Sample Identification 240.00 MATRIX COST DATE Ethanol (8250B) TIME Vocs by excus THPH (418.1) Vapor VODS LAB USZ WO-1810 6/10/2005 9.34 Х 501 X X WO-1@20' 6/10/2005 2.45 403 X X X X X WC-1@30 6/10/2005 10.14 X soil X X X χ

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APPROX. SCALE

LEGEND

MW-2 • GROUNDWATER MONITORING WELL LOCATION

S-1

DESTROYED WELL

TB-1 Ø ABANDONED TANK BACKFILL WELL LOCATION

<50/<0.50/<0.50 TPH-G/BENZENE/MTBE CONCENTRATION MAP, 8/5/05

BaseMap from: Cambria Environmental Technology, Inc. and Toxichem Management Systems, Inc.

FIGURE 3

TPH-G, BENZENE, AND MTBE CONCENTRATION MAP, AUGUST 5, 2005

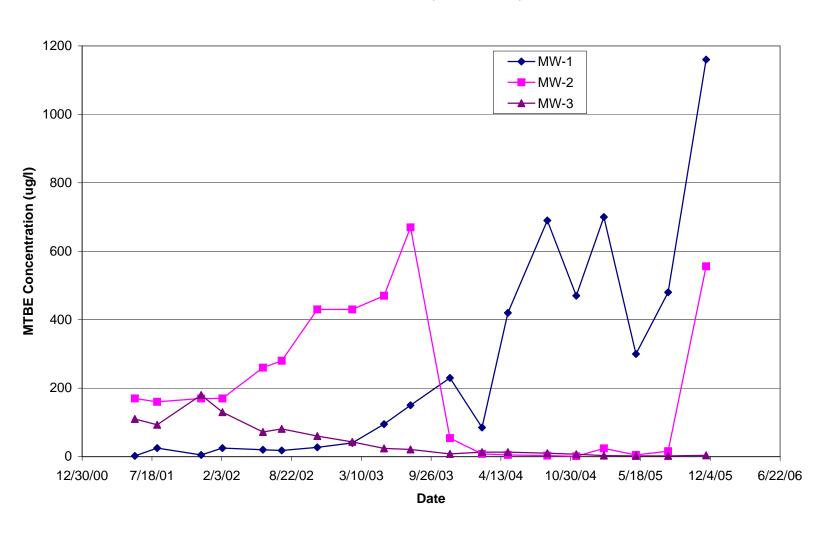
SHELL-BRANDED SERVICE STATION 4226 First Street

Pleasanton, California

	,	_
PROJECT NO. SJ42-26F-1.2005	DRAWN BY V.F. 5/9/05	
3J42-26F-1.2003	V.F. 3/9/03	l
FILE NO. SJ42-26F-1.2005	PREPARED BY	
SJ42-26F-1.2005	J.1.	l
REVISION NO.	REVIEWED BY	
1 2		



MTBE Concentrations
Wells MW-1, MW-2, and MW-3
Shell-branded Service Station
4226 First Street, Pleasanton, California



5500 Shellmound Street, Emeryville, CA 94608-2411

Fax: 510-547-5043 Phone: 510-450-6000

Sile <u>つい</u>(-ゆ(38-6363 Proj. 日 Rem.日 Rpt. 図 Biii 口 December 21, 1995 1日 2日 3日 4日 6日 6日 6日

Scott Seery Senior Hazardous Materials Specialist Alameda County Health Care Services Agency 1131 Harbor Bay Parkway Alemeda, California 94502-6577

PROJECT COPY

RE: Dispenser Replacement Sampling

Shell Service Station WIC #204-6138-0303 4226 First Street Pleasanton, California WA Job #81-0571-008

Dear Mr. Seery:

On behalf of Shell Oil Products Company (Shell), Weiss Associates (WA) submits this report documenting soil sampling and excavation for the recent fuel dispenser and product piping replacements at the above referenced service station (Figure 1 and 2). The former dispensers and piping were used to pump gasoline from the sites underground storage tanks. The objective of this sampling was to assess whether hydrocarbons are in soil beneath these structures. WA's scope of work, the site background, and the soil sampling results are presented below.

SCOPE OF WORK

WA's scope of work for this investigation was to:

- Collect soil samples from beneath the former dispensers and product piping joints for laboratory analysis;
- Analyze the soil samples for petroleum hydrocarbons;
- Direct overexcavation of hydrocarbon-bearing soil;
- Sample and dispose of the excavated soil; and
- Report the results.

Scott Seerv December 21, 1995 Weiss Associates

SITE BACKGROUND

The operating Shell service station is located at the southeast Location:

corner of First Street and Vineyard Avenue in Pleasanton,

California (Figure 1).

Residential and commercial development. Surroundings:

According to Chris Boykin of the Pleasanton Fire Ground Water Depth:

Department (PFD), ground water is about 60 ft below

ground surface at this site.

INITIAL SAMPLING RESULTS

WA Geologist Faith Daverin collected the soil samples. Parties Present:

> PFD Inspector Chris Boykin observed and directed the soil sampling. Paradiso Mechanical of San Leandro, California excavated the trenches, removed the product lines, assisted with the sampling and replaced the dispensers and piping.

September 8 and 11, 1995. Sampling Dates:

Six: Four dispenser samples DP-1(3.0), DP-2(7.5), DP-Number of Initial Samples:

> 3(8.0) and DP-4(8.5) were collected at various depths beneath the former dispensers. Product line samples PT-1 and PT-2 were collect beneath former piping joints at 4.0 and 4.5 ft below ground surface (bgs), respectively. PFD inspector Chris Boykin requested that "stained, odorous soil" that she observed be excavated to the extent feasible from beneath the former dispensers. Sample locations are

presented on Figure 3.

Soil samples were collected by driving clean brass tubes into Soil Sampling Method:

undisturbed soil from the backhoe bucket. All sample tubes were immediately sealed with Teflon sheeting and plastic caps and placed on ice in a cooler for transport to the state-

certified analytical laboratory.

Seguoia Analytical in Redwood City, California. Analytical Laboratory:

Scott Seery December 21, 1995

Soil samples were analyzed for total petroleum hydrocarbons Analytical Methods:

3

as gasoline (TPH-G) by modified EPA Method 8015 and benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Method 8020. The certified analytical reports and chain-of-

custody forms are included in Attachment A.

Only one sample contained more than 3 parts per million Analytic Results:

(ppm) TPH-G: 120 ppm TPH-G was detected in soil at 8 ft beneath the former eastern dispenser. No benzene was detected in any samples, except one where benzene was

slightly above the laboratory method detection limit.

SOIL OVEREXCAVATION AND CONFIRMATION SAMPLING

Overexcavation Objective: To remove hydrocarbon-bearing soil to the maximum extent

practical beneath the former dispensers.

Overexcavation Dates: September 8 and 11, 1995.

Volume Excavated: About 40 cubic yards of soil were excavated as shown in

> Figure 2. About 20 cubic yards of soil were removed in association with the dispenser and piping replacements. Approximately 20 cubic yards of hydrocarbon-bearing soil, including soil removed during the initial soil sampling, were

overexcavated as shown in Figure 3.

Based on the average TPH-G concentration of the excavated Hydrocarbons Removed:

soil, about 3.4 pounds of hydrocarbons were removed from

beneath the site.

8.5 ft below ground surface. Maximum Excavation Depth:

Sandy clay to about 8.5 ft depth. Lithology Encountered:

No ground water was encountered. Ground Water Depth:

September 8 and 11, 1995. Sampling Date:

Number of Confirmation Samples: Two: Samples DP-1(6.0) and DP-2-SW(4.0).

No benzene and less than 3 ppm TPH-G were detected in the Analytic Results:

confirmation samples.

Scott Seery December 21, 1995

Veiss Associates

SOIL DISPOSAL

Stockpile Sampling:

The soil stockpile was sampled by driving clean brass tubes at least 12 inches below the stockpile surface. The tubes were immediately capped and sealed with Teflon tape and refrigerated for transport to the analytical laboratory. The laboratory composited and analyzed the samples for TPH-G, BTEX and total characteristic leaching potential for metals by EPA Method 6010. The certified analytic report and chain-of-custody form are included in Attachment B.

Soil Transport and Disposal:

On September 29, 1995, Manley and Sons Inc. of Sacramento, California transported about 40 cubic yards of soil to Forward Incorporated in Stockton, California for disposal. The soil disposal confirmation sheet is presented in Attachment B.

CONCLUSIONS

Based on the sampling results, WA concludes that:

- Only one of six soil samples collected from beneath the six former dispensers contained more than 3 ppm TPH-G. No benzene was detected in any of the samples.
- Most of the hydrocarbon-bearing soil was removed from the site. About 20 cubic yards of soil were overexcavated from the dispenser areas.
- 120 ppm TPH-G was left 8.0 ft beneath the south dispensers on the east fuel island. Benzene, however was below laboratory method detection limits in this sample. Further overexcavation was not possible due to the foundation of the canopy support column.
- Soil samples from beneath the product piping collected adjacent to the west fuel island contained 0.01 ppm benzene. Therefore, the former product piping was probably not a hydrocarbon source to the subsurface.
- Depth to ground water in the site vicinity is about 60 ft below ground surface. Due to the localized and shallow extent of hydrocarbons in soil, it is unlikely that hydrocarbons detected during this sampling event have impacted ground water.

Scott Seery December 21, 1995

WA trusts that this submittal meets your needs. Please call if you have any questions.

No HOSTIT OF THE STREET OF THE

Sincerely, Weiss Associates

Faith Morris Daverin

Staff Geologist

James W. Carmody, CHG Senior Project Hydrogeologist

Faith Mores Daveni

FMD/JWC:fmd

ESHELL/0571/DISPENS.DOC Attachments:

Figures Table

A - Certified Analytical Reports and Chain-of-Custody Forms for Soil

B - Soil Disposal Confirmation and Certified Analytical Report for Stockpile Samples

R. Jeff Granberry, Shell Oil Products Company, PO Box 4023, Concord, CA 94524
 Jeff Byram, Shell Oil Products Company, PO Box 4023, Concord, CA 94524
 Kevin Graves, Regional Water Quality Control Board - San Francisco Bay, 2101 Webster Street, Suite 500, Oakland, CA 94612

Chris Boykin, Pleasanton Fire Department, P.O. Box 520, Pleasanton, CA 94566

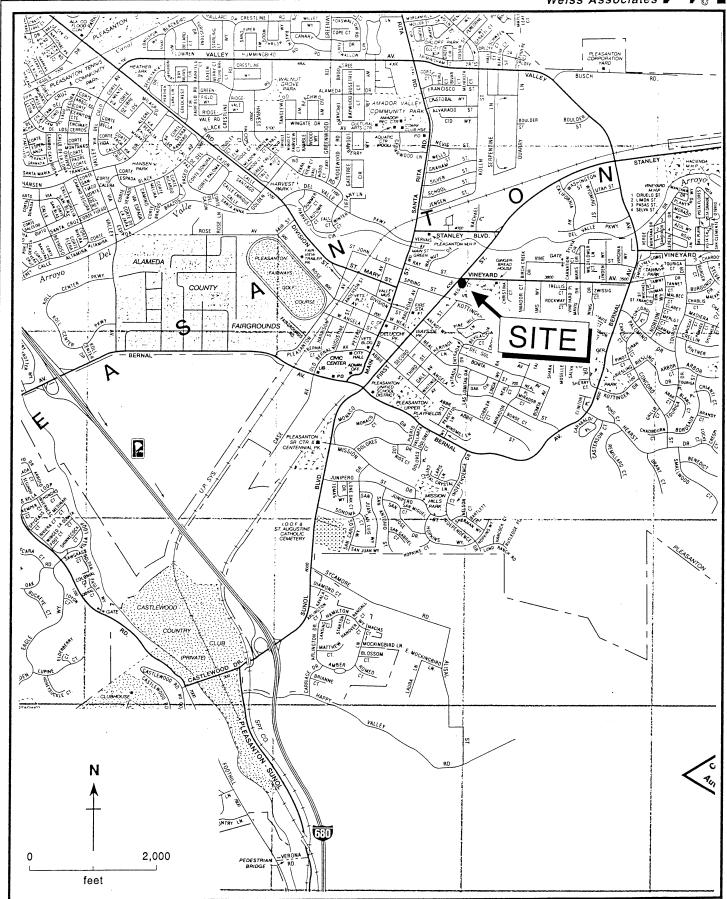


Figure 1. Site Location Map - Shell Service Station WIC #204-6138-0303, 4226 First Street, Pleasanton, California



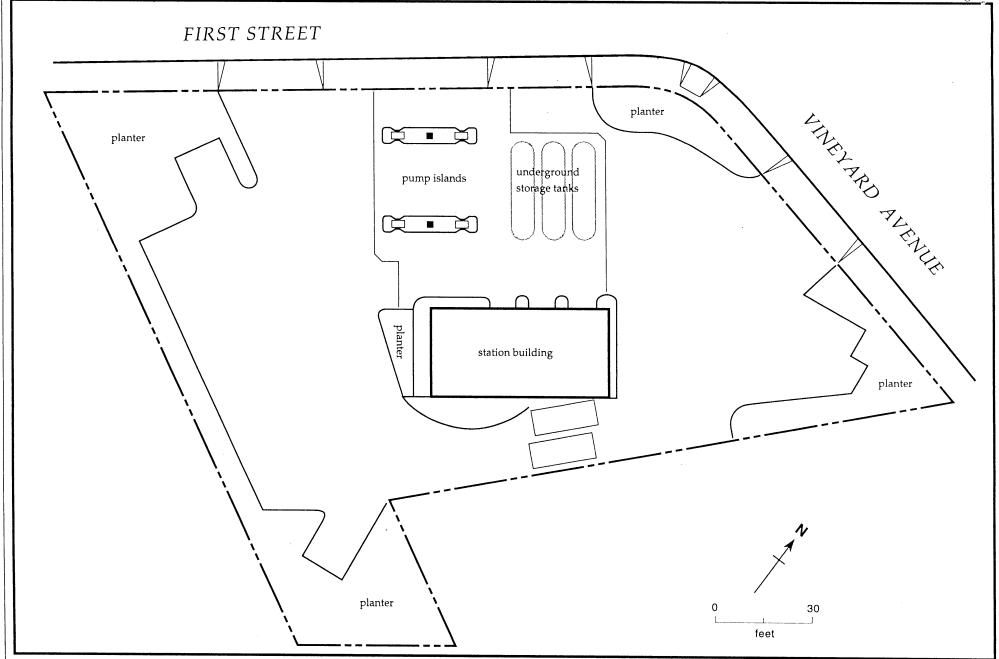


Figure 2. Site Layout - Shell Service Station WIC #204-6138-0303 - 4226 First Street, Pleasanton, California

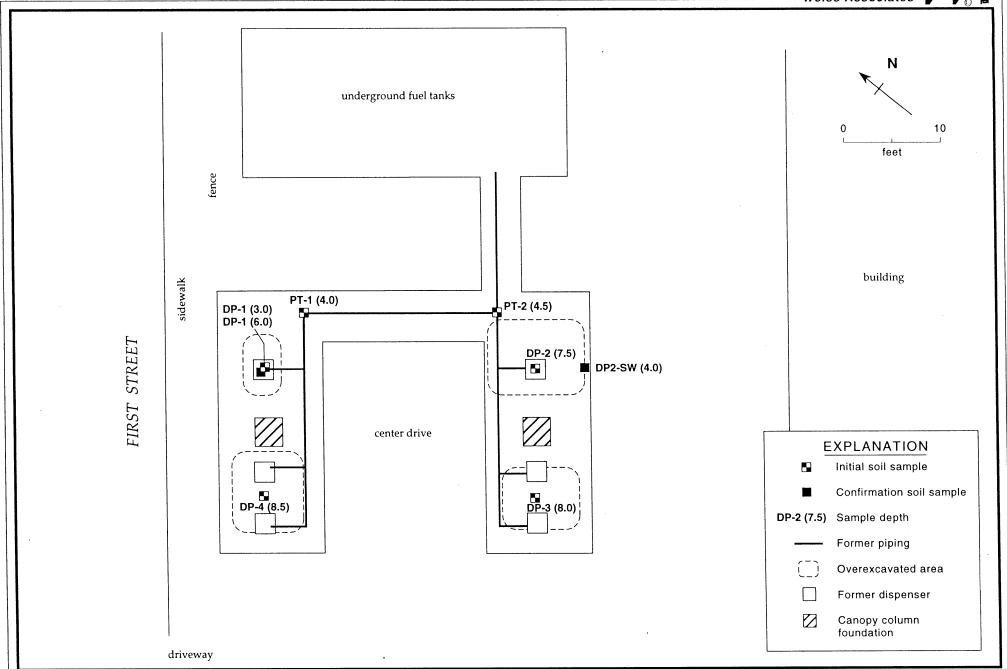


Figure 3. Soil Sample Locations - Shell Service Station WIC #204-6138-0303, 4226 First Street, Pleasanton, California

Weiss
Associate
S

Sample	Sample	Date	TPH-G	В	T	E	X
ID	Depth (ft)	Sampled	<	parts per million (mg/kg)			
nitial Soil Samp	oles						
OP-1	3.0	09/08/95	1.3	< 0.005	< 0.005	< 0.005	< 0.005
OP-2	7.5	09/08/95	< 1.0	< 0.005	< 0.005	< 0.005	< 0.005
OP-3	8.0	09/08/95	120	< 0.12	< 0.12	< 0.12	< 0.12
DP-4	8.5	09/08/95	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
PT-1	4.0	09/08/95	2.5	0.0080	< 0.005	0.038	0.19
PT-2	4.5	09/08/95	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
Confirmation So	oil Samples						
DP-1	6.0	09/11/95	2.5	< 0.005	< 0.005	0.020	0.035
DP-2-SW	4.0	09/08/95	1.7	< 0.005	< 0.005	0.0075	0.017

Abbreviations

Analytical Laboratory:

TPH-G = Total petroleum hydrocarbons as gasoline by Modified EPA Method 8015

Sequoia Analytical of Redwood City, California

B = Benzene by EPA Method 8020

= Toluene by EPA Method 8020

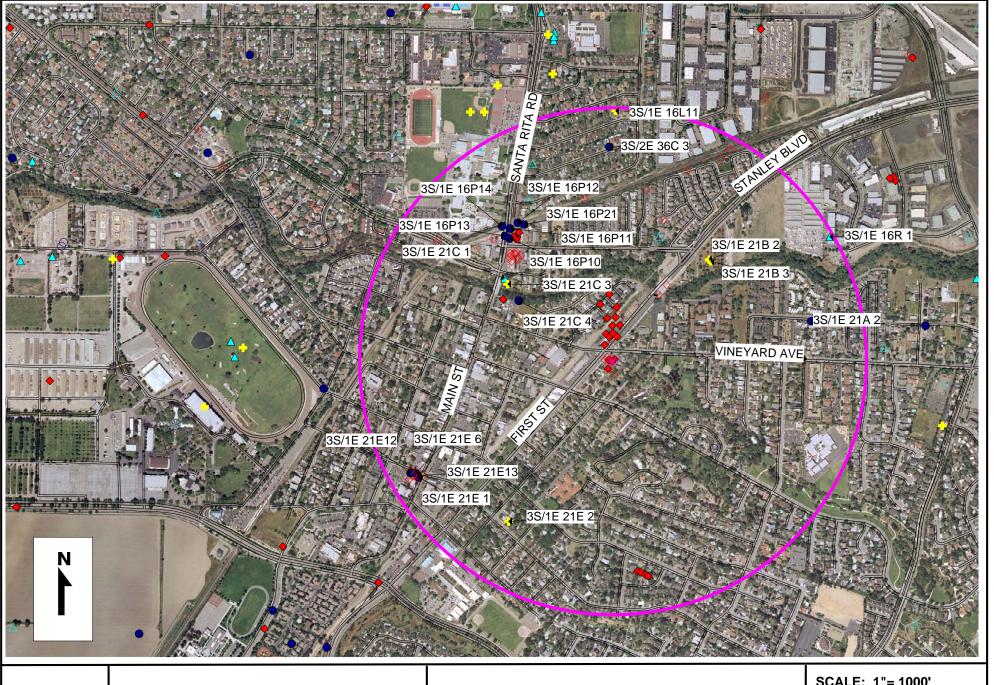
= Ethylbenzene by EPA Method 8020

X = Xylenes by EPA Method 8020

< n = Not detected at detection limit of n ppm

DP = Soil Sample collected beneath former dispenser

= Soil Sample collected beneath former product line PT



ZONE 7 WATER AGENCY 100 NORTH CANYONS PARKWAY LIVERMORE, CA 94551

WELL LOCATION MAP

SCALE: 1"= 1000'

RADIUS = 1/2 mi

4226 FIRST ST

H:\FLOOD\REFERALLS\REFERALLS.WOR

WORK PLAN 1-24-06 Shell-branded Service Station 4226 First Street Pleasanton, California

Description of Methods

Delta proposes to further define hydrogeologic conditions in the area by drilling two deep off-site borings.

Delta will obtain drilling permits from the Zone 7 Water District for all proposed borings. Delta will also need to obtain an encroachment from the City of Pleasanton in order drill within First Street. Shell will need to obtain an access agreement from the owner of the property located on the western corner of First and Ray Streets.

Prior to conducting any field work at the site, Delta will prepare a site specific Health and Safety Plan (HASP). The Delta field geologist on-site will review the HASP with site subcontractors at the start of each work day.

Borings CPT-1 and CPT-2

Delta proposes to two cone penetration test (CPT) borings to define the vertical of extent of petroleum hydrocarbons and fuel oxygenates detected in perched groundwater beneath the site. The borings will also define the lateral and vertical extent of a silt layer encountered beneath the site at a depth of approximately 60 feet. The locations of the CPT borings (CPT-1 and CPT-2) are shown on attached site area map. 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. CPT borings will be advanced to a depth of approximately 100 feet bg. Grout will be pumped into the borehole behind the cone by using a grout collar (retraction grouting).

A second CPT borehole will be drilled at each location for collection of depth discrete groundwater samples. Sand layers throughout the stratigraphic profile will be targeted for sampling. Collection of groundwater samples will be attempted both above and below the silt layer encountered in deep on-site Boring SB-7. 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 should flow hydrostatically from the formation into the sampler. The predominance of silt and clay may prevent collection of groundwater samples from some depth intervals. 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, and TBA by EPA Method 8260B.