RECEIVED
7:50 am, Apr 03, 2007
Alameda County
Environmental Health

ExxonMobil Refining & Supply Company
Global Remediation – US Retail
4096 Piedmont Avenue #194
Oakland, California 94611
510.547.8196
510.547.8706 Fax
jennifer.c.sedlachek@exxonmobil.com

Jennifer C. Sedlachek
Project Manager

ExxonMobil
Refining & Supply

March 28, 2007

Mr. Jerry Wickham, P.G., C.E.G.
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

RE: Former Exxon RAS #7-3567/3192 Santa Rita Road, Pleasanton, California.

Dear Mr. Wickham:

Attached for your review and comment is a letter report entitled ***Agency Response and Work Plan for Additional Assessment,*** dated March 28, 2007, for the above-referenced site. The report was prepared by Environmental Resolutions, Inc. (ERI) of Petaluma, California, and details proposed activities at the subject site.

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

If you have any questions or comments, please contact me at (510)547-8196.

Sincerely,

Jennifer C. Sedlachek
Project Manager

Attachment: ERI's Agency Response and Work Plan for Additional Assessment, dated March 28, 2007

cc: w/ attachment
Mr. Eddy So, California Regional Water Quality Control Board, San Francisco Bay Region
Ms. Colleen Morf, Zone 7 Water Agency
Mr. Robert C. Ehlers, M.S., P.E., The Valero Companies, Environmental Liability Management

w/o attachment
Ms. Paula Sime, Environmental Resolutions, Inc.

VALUE, QUALITY, RESPONSE

Southern California
Northern California
Pacific Northwest
Southwest
Texas
Montana

March 28, 2007
ERI 243103.W03

Ms. Jennifer C. Sedlachek
ExxonMobil Refining & Supply – Global Remediation
4096 Piedmont Avenue #194
Oakland, California 94611

SUBJECT Agency Response and Work Plan for Additional Assessment
Former Exxon Service Station 7-3567
3192 Santa Rita Road, Pleasanton, California

Ms. Sedlachek:

At the request of Exxon Mobil Corporation (Exxon Mobil), Environmental Resolutions, Inc. (ERI) prepared this work plan to assess soil and groundwater conditions beneath the subject site. The work was requested by the Alameda County Health Care Services Agency Environmental Health Services (ACEH) in a letter dated September 5, 2006 (Attachment A), to address data gaps identified in ERI's *Site Conceptual Model and Recommendation for Case Closure* (SCM) dated July 10, 2006 (ERI, 2006).

BACKGROUND

The site (Assessor's Parcel Number 946-1105-38-4) is located on the southeastern corner of Las Positas Boulevard and Santa Rita Road in Pleasanton, California, as shown on the Site Vicinity Map (Plate 1). The locations of former and existing underground storage tanks (USTs), dispenser islands, groundwater monitoring wells, and select site features are shown on the Generalized Site Plan (Plate 2). The site lies at an elevation of approximately 341 feet above mean sea level.

The site existed as a gasoline service station as early as 1969. Exxon Mobil owned the property as early as 1986. Property ownership was transferred from Exxon Mobil to Valero Energy Corporation (Valero) in June 2000. Currently, the property is owned by BNY Western Trust Company, and an independent dealer, Steve Asmann Incorporated, operates the site as a Valero-branded gasoline service station (ERI, 2002). Properties in the vicinity of the site are commercial and residential.

Currently, there are eight groundwater monitoring wells (MW1 through MW8) at the subject site. Well construction details are summarized on Table 1. Cumulative monitoring and sampling data are summarized on Tables 2A and 2B.

SUMMARY OF ENVIRONMENTAL INVESTIGATIONS

UST Removal and Replacement

On December 20 and 21, 1988, Applied GeoSystems observed Telstar Constructors, Inc., of Houston, Texas, excavate and remove four USTs at the subject site. Tank removal and replacement activities were part of Exxon Mobil's planned remodel of the service station. A 1986 Application for Permit to Operate Underground Storage Tanks on file with the Livermore-Pleasanton Fire Department indicates that the tanks were installed in 1969. The USTs consisted of one 10,000-gallon unleaded tank (T1), one 8,000-gallon regular leaded tank (T2), one 6,000-gallon super unleaded tank (T3), and one 500-gallon used-oil tank. The four tanks were constructed of single-wall carbon steel.

Applied GeoSystems visually examined the tanks and observed the following (Applied GeoSystems, 1989):

- The four tanks were "moderately rusted."
- The tanks had "slight to moderate corrosion along seams at tank ends."
- Holes were not observed in gasoline tanks.
- Two ½-inch diameter holes were observed in the east end of the used-oil tank approximately 2 inches above the base of the tank.

Following tank examination, Applied GeoSystems observed the soil at the base of the UST excavation to have "moderate discoloration" near tanks T2 and T3 (Applied GeoSystems, 1989). Groundwater was not observed in the UST excavations. On December 20, 1988, Applied GeoSystems collected six soil samples from the UST excavations and submitted them for laboratory analyses of total petroleum hydrocarbons as gasoline (TPHg); benzene, toluene, ethylbenzene, and total xylenes (BTEX); total petroleum hydrocarbons as diesel (TPHd); total oil and grease (TOG); select volatile organic compounds (VOCs); and total organic lead. Residual TPHg was present in soil at a maximum concentration of 2,901 milligrams per kilogram (mg/kg). Concentrations of BTEX were present at maximum concentrations of 18 mg/kg, 78 mg/kg, 116 mg/kg, and 803 mg/kg, respectively. Concentrations of TPHd, TOG, VOCs, and lead were not present at reportable concentrations. On December 30, 1988, the UST pit was over-excavated to an approximate depth of 14 to 17 feet below ground surface (fbgs), and three additional soil samples were collected from the base of the excavation. Constituent concentrations were below laboratory reporting limits in these additional soil samples. Analytical results of the soil samples collected during UST removal are summarized in Table 3 and shown on Plate 3.

Following over-excavation and soil sampling activities, the gasoline UST excavation was extended to the north to accommodate new USTs. The new USTs included one 12,000-gallon and one 10,000-gallon unleaded tank, one 10,000-gallon premium unleaded tank, one 6,000-gallon diesel tank, and one 1,000-gallon used-oil tank. The five new USTs are constructed of double-walled fiberglass.

More than 340 cubic yards of soil were excavated from the old and new UST excavations. Unknown quantities of soil were re-used to backfill around the new USTs. The remaining soil was reportedly sent to a Class III landfill (Applied GeoSystems, 1989).

Unauthorized Release – Surface Spill

On March 6, 1990, at approximately 4:00 pm, approximately 20 gallons of product were spilled during tank filling operations (Gibson, 1990). The product drained west off the site and into the gutter along Santa Rita Road where it traveled approximately 380 feet south to a storm drain inlet. The product entered the storm drain inlet and traveled further south where it emptied into the Arroyo Mocho Canal. The spill was reported to authorities at approximately 8:30 am on March 7, 1990. At that time, it appeared that absorbent material had been applied to the product in the gutter immediately adjacent to the subject site. Exxon Mobil summoned International Technology Corporation (IT) to the site at 9:30 am to commence cleanup activities. Cleanup activities were conducted from approximately 12:20 pm on March 7, 1990, to 11:00 am on March 8, 1990. Cleanup activities included digging a trench around the storm drain effluent pond and applying absorbent booms to the trench, installing of three rows of booms downstream on Arroyo Mocho, street and gutter cleaning, washing out of the storm drain inlet and lines leading to Arroyo Mocho, and venting of the storm drain line to clear out lingering vapors (IT, 1990). Water samples were collected prior to and following cleaning activities. A concentration of TPHg was present at 94,000 micrograms per liter (µg/L) in the storm drain effluent near Arroyo Mocho, 1,200 µg/L at 100 feet downstream in Arroyo Mocho, and 2,400 µg/L at 400 feet downstream. Following cleanup activities, TPHg was present at a concentration of 1,200 µg/L in the storm drain effluent and 64 µg/L at 400 feet downstream in Arroyo Mocho.

Used-Oil Piping Replacement and Abandonment

Between November 16, 1995 and December 16, 1995, Dan Brenton Construction, Inc., of San Jose, California, conducted used-oil piping replacement and abandonment activities (CPFD, 1995). Approximately 30 linear feet of used-oil drain line beneath the floor of the service bay were replaced with new line, and approximately 28 linear feet of used-oil drain line were abandoned in place after being pressure tested, rinsed, drained, and slurry-filled. The drain line was replaced because secondary containment was allowing water from an outside source to enter into the containment sump.

Hoist Removal

On October 14, 1998, Delta Environmental Consultants, Inc. (Delta) of Rancho Cordova, California, observed the excavation and removal of one fiberglass-coated hoist and one fiberglass-coated 50-gallon underground hydraulic oil reservoir (Delta, 1998). Upon inspection, the hoist and reservoir appeared to be in relatively good condition. Holes and cracks were not observed. Two soil samples were collected from beneath the hoist at approximately 7.5 fbgs, and one soil sample was collected from beneath the reservoir at 5.5 fbgs. The two soil samples from beneath the hoist contained concentrations of total recoverable petroleum hydrocarbons (TRPH) at 1,700 mg/kg and 1,500 mg/kg. A concentration of TRPH was present at 56 mg/kg in the soil sample collected from beneath the reservoir. Approximately 18 cubic yards of soil were generated during excavation associated with hoist and hydraulic oil reservoir removal and disposed of at the BFI-Vasco Road Sanitary Landfill in Livermore, California.

Product Line Removal and Replacement

On August 9, 2002, ERI observed dispenser island and product line replacement activities at the subject site (Horizon, 2002). The work was conducted by Horizon Environmental Inc. (Horizon) of El Dorado Hills, California, for Ultramar Ltd. (Ultramar), a wholly owned subsidiary of Valero. Work included replacement of single-walled product lines with double-walled product lines and installation of dispenser pans under dispensers. Horizon and ERI each collected 19 soil samples from beneath the dispenser islands and the base of the excavated product line trenches. Horizon submitted the 19 samples for analysis while ERI submitted 8 soil samples for analysis and 11 were submitted on hold. Seven of the eight samples submitted by ERI contained reportable concentrations of methyl tertiary butyl ether (MTBE) ranging from 0.0072 mg/kg to 0.189 mg/kg. Toluene and total xylenes were present at reportable concentrations (both 0.0023 mg/kg) in one sample. Concentrations of TPHd, TPHg, benzene, and VOCs were not present at reportable concentrations. Depths of analyzed soil samples ranged from 4 to 6.5 fbgs. Pea gravel excavated from the product line trenches was aerated and used to fill the trenches once the new product lines were installed. Analytical results of soil samples collected by ERI during product line removal are included in Table 3 and summarized on Plate 3.

Environmental Assessment Activities

In November 1998, ERI installed four groundwater monitoring wells (MW1 through MW4) at the site (ERI, 1998a).

On April 13, 2000, ERI observed soil boring activities at the subject site (ERI, 2000a). The work was conducted by Environ Corporation (Environ) for Valero in conjunction with the transfer of ownership of the property. Work included the advancement of three soil borings (SB1 through SB3) to total depths of approximately 52 to 55 fbgs. Environ and ERI collected groundwater samples for laboratory analysis from 52 fbgs in soil boring SB1 and 55 fbgs in soil boring SB3. Free groundwater was not encountered in soil boring SB2. Soil samples were not collected from the soil borings. Analytical results of groundwater samples collected by ERI are summarized in Table 4. Locations of soil borings SB1 through SB3 are shown on Plate 2.

Groundwater monitoring wells MW5 through MW7 were installed by ERI in July 2000 (ERI, 2000b).

In March 2001, ERI installed groundwater monitoring well MW8 at the site (ERI, 2001).

Groundwater Monitoring

Groundwater monitoring began at the site in November 1998 (ERI, 1998a). Cumulative groundwater monitoring and sampling data are provided in Tables 2A and 2B.

PREVIOUS CASE CLOSURE AND RE-OPENING

Exxon Mobil received notice of case closure from the ACEH in a letter dated November 25, 1997 ACEH, 1997). The letter confirmed completion of a site investigation and remedial action for the USTs removed in 1988 and indicated "no further action".

In a letter from the ACEH dated February 28, 2000, Exxon Mobil was given a "Notice of Responsibility" and named as a responsible party (ACEH, 2000a). The case was re-opened based on the discovery of MTBE in shallow groundwater in wells at the site on November 17, 1998, and the site's proximity to municipal water supply wells (ACEH, 2000b).

SUMMARY OF SITE CONDITIONS

Geology and Hydrogeology

Regional Geology

The City of Pleasanton (the City) is underlain by Quaternary valley sediments. Helley and Graymer (1997) identified both floodplain and basin deposits under the City and floodplain deposits under the subject site. Graymer et al (1996) mapped sediments beneath the City and subject site as undivided surficial deposits. The Livermore Formation underlies the valley alluvium (LLNL, 1995).

The City lies in the Amador Valley, which trends approximately northeast-southwest from Pleasanton Ridge, part of the Diablo Range, in the southwest to the Livermore Valley in the east. A right-lateral strike-slip fault trending northwest-southeast is mapped at the base of Pleasanton Ridge, on the western edge of the Amador Valley (Graymer et al, 1996). The subject site lies approximately 2.75 miles east of this strike-slip fault. A concealed oblique fault with thrust or reverse motion is mapped northeast of the site along the northeast edge of the Amador Valley (Graymer et al, 1996), approximately 1.33 miles northeast of the site. Additionally, a concealed fault with undesignated motion is mapped approximately 0.72 mile west of the site, trending northwest-southeast through the Amador Valley (Graymer et al, 1996).

Regional Hydrogeology

The site is located within the Livermore Valley Groundwater Basin. This basin was designated as having the following existing or potential beneficial uses: agriculture, industrial service water supply, industrial process water supply, and municipal and domestic supply (Regional Board, 2000). Groundwater is produced from the valley alluvium sediments, which extend from the surface to approximately 500 fbgs (Regional Board, 2000).

The Arroyo Mocho canal is located approximately 1,020 feet south of the site, Tassajara Creek is located approximately 1,830 feet west of the site, the Pleasanton Canal is located approximately 3,180 feet southwest of the site, and an unnamed canal is located approximately 3,770 feet northeast of the site. The unnamed canal flows south and merges into Arroyo Mocho approximately 3,770 feet northeast of the site. Tassajara Creek flows southwest and merges into Arroyo Mocho approximately 4,215 feet southwest of the subject site. Arroyo Mocho and the Pleasanton canal flow southwest and eventually merge into Arroyo de la Laguna, which flows south out of the Amador Valley.

Site Hydrostratigraphy

Based on review of the boring logs and field observations, ERI has identified two hydrostratigraphic units underlying the site and vicinity. Geologic cross sections drawn along traces A-A' and B-B' (Plate 4)

showing the distribution of sediments and hydrostratigraphic units are included as Plates 5 and 6, respectively.

From surface grade to depth, the identified units are:

1. UPPER CLAY UNIT: A sequence of interbedded clayey sediments composed primarily of clay with varying amounts of silt and sand, with layers of clayey sand, silty sand, and clayey silt occurs at surface grade. This unit is predominately characterized by clay and is laterally homogeneous. In several borings, the entire sequence from surface grade to total depth is logged as clay with silt. Thickness of this unit is relatively consistent across the site, ranging from total depth in select borings (31 to 41.5 feet) to approximately 43 feet, and is present in the drilled locations. In the western and southern areas of the site, the upper clay unit is underlain by a 3- to 4-foot thick clayey silt layer. In addition, a 7-foot thick clayey sand layer was observed above this clayey silt layer in the boring for MW7. Groundwater saturation levels in this unit are variable. Free water was encountered in select borings between 25 and 39 fbgs.

2. LOWER SAND AND GRAVEL UNIT: A unit consisting of interbedded sand and gravel layers with varying amounts of clay and silt underlies the upper clay unit. This unit is predominately characterized by fine-grained sand and is laterally homogeneous. Layers are composed of clayey sand, silty sand, gravelly sand, and sandy gravel. The first-encountered depth of this unit is relatively consistent across the site ranging from 41 to 50.5 fbgs. Groundwater saturation levels in this unit are moist to wet. Free water in this unit was encountered in select borings at 50 and 62 fbgs.

Based on differences in depth to water measurements in wells screened exclusively in the upper clay unit (approximately 20 to 28.5 fbgs) and lower sand and gravel unit (approximately 55.5 fbgs), these two units do not appear to be hydraulically connected.

Occurrence of Groundwater

Groundwater elevations fluctuate seasonally up to 7 feet with highest elevations occurring during the first quarter of the year and lowest elevations occurring during the second quarter.

Groundwater in the upper clay unit has historically been measured in groundwater monitoring wells MW1, MW2, and MW5, and typically occurs at depths ranging between approximately 20 and 28.5 fbgs; however, groundwater in these wells has been as shallow as 14.12 fbgs and as deep as 29.37 fbgs.

Groundwater in the lower sand and gravel unit has historically been measured in groundwater monitoring well MW8, and typically occurs at an average depth of approximately 55.5 fbgs; however, groundwater in well MW8 has been as shallow as 46.63 fbgs and as deep as 65.15 fbgs.

Groundwater monitoring wells MW3, MW4, and MW6 are screened across both the upper clay unit and the lower sand and gravel unit. Depth to groundwater in these wells is typically between approximately 37 and 41 fbgs. Historically, groundwater in monitoring wells MW3, MW4, and MW6 has been as shallow as 29.34 fbgs and as deep as 50.20 fbgs. These wells have historically been contoured as lower water-bearing zone wells.

Groundwater monitoring well MW7 is screened across clayey sand, silty clay, and clayey silt layers in the upper clay unit. Average depth to water in MW7 is approximately 26 fbgs; however, groundwater in monitoring well MW7 has been as shallow as 22.46 fbgs and as deep as 29.74 fbgs. This well has historically been included in the groundwater contour maps for the lower water-bearing zone.

Groundwater monitoring well MW8 is screened entirely within the lower sand and gravel unit; however due to anomalous dry conditions encountered in the well from October 2000 to August 2004, it was excluded from the contour maps in the lower water bearing zone. Since August 2004, groundwater has occurred at depths ranging from 46.63 to 65.15 fbgs.

Well construction details are provided in Table 1.

Groundwater Flow and Hydraulic Gradient

The regional groundwater flow in the Livermore Valley Groundwater Basin is westerly, toward the Arroyo de la Laguna, and then flows south into the Sunol Valley Groundwater Basin; however, subsurface flow has not continued into the Sunol Valley Groundwater Basin since 1945 due to groundwater pumping in the Livermore Valley Groundwater Basin (LLNL, 1995).

Historical groundwater elevation maps for the site depict the groundwater flow direction in the upper clay unit as east to east-southeast, with hydraulic gradients of 0.123 to 0.267. The groundwater flow direction in the lower sand and gravel unit have historically been southwest with hydraulic gradients of 0.039 to 0.238.

Aquifer Characteristics

Based on review of boring logs, groundwater saturation levels within the upper clay unit are variable. Sediments were logged as dry, slightly damp, damp, moist, and wet. Free water was encountered in select borings between 25 and 39 fbgs. Groundwater saturation levels within the lower sand and gravel unit are consistent across the site. With the exception of one unit logged as dry to moist, sand and gravel layers in this unit were logged as wet. Free water in this unit was encountered in select borings at 50 and 62 fbgs. Based on sediment size and groundwater saturation levels included on the boring logs, hydraulic conductivity in the lower sand and gravel unit is likely higher than that of the upper clay unit.

Distribution of Chemicals of Concern in Soil and Groundwater

Residual Hydrocarbons in Soil

Cumulative results of laboratory analyses of soil samples collected at the subject site are summarized on Table 3. The concentrations and areal distribution of gasoline-range hydrocarbons (as TPHg), benzene, and MTBE are summarized on Plate 3 and indicate the following:

- Residual TPHg, benzene, and MTBE are spatially associated with the UST pit and dispenser islands. Residual TPHg, benzene, and MTBE were not present in soil samples collected from the soil borings for groundwater monitoring wells MW1 through MW8, except for MTBE in the sample from 21 fbgs in the soil boring for MW7 (0.001 mg/kg).
- Soil containing residual TPHg and benzene underlying the UST excavation were removed during over-excavation activities.
- Residual MTBE was present in soil samples collected by ERI and Horizon during product line and dispenser replacement. Maximum concentrations of residual MTBE are spatially associated with dispensers D5 and D8. Concentrations of BTEX were not present at reportable concentrations in the 19 soil samples collected by Horizon. Toluene (0.0023 mg/kg) and xylenes (estimated at 0.0032 mg/kg) were present in one of eight samples collected by ERI.

Dissolved-Phase Hydrocarbons in Groundwater

Cumulative groundwater monitoring and sampling data are summarized on Tables 2A and 2B. Grab groundwater samples are summarized in Table 4. The distribution and concentration trends of dissolved-phase constituents indicate the following:

- Maximum current concentrations of dissolved-phase TPHg and MTBE are spatially associated with groundwater monitoring wells MW3, MW4, and MW5 on the eastern edge of the site.
- MTBE concentrations are at or near reporting limits in the southern portion of the site (wells MW2, MW7, and MW8).
- Concentrations of MTBE are present in well MW1 west of the USTs but below reporting limits in well MW6.

- Dissolved-phase constituent concentrations, particularly MTBE, in wells MW1, MW3, MW4, MW6, and MW7 show decreasing trends since first quarter 2005. Dissolved-phase MTBE in well MW2 appears to have episodic fluctuations, possibly associated with groundwater elevation fluctuations. Dissolved-phase MTBE in well MW5 shows an increasing trend since fourth quarter 2004. Dissolved-phase MTBE has not been present in reportable concentrations in well MW8 since its initial sampling in fourth quarter 2004, except for one sample (analyzed using EPA Method 8021B) at a concentration of 0.58 µg/L.

The presence of dissolved-phase MTBE in groundwater monitoring wells MW3, MW4, and MW5 suggests that MTBE is present in the upper and clay transitional clayey sand hydrostratigraphic units. Concentrations of MTBE do not appear to be present in the lower sand and gravel unit (MW8).

Non-Aqueous Phase Liquids

Non-aqueous phase liquids (NAPL) have not historically been observed in soil or on groundwater at the subject site. Dissolved-phase and residual-phase hydrocarbon concentrations in groundwater and soil samples collected at the site do not suggest the presence of NAPL.

SENSITIVE RECEPTORS

Five active municipal water supply wells (Mocho #1 through Mocho #4 and Stoneridge) have been identified within 1,500 meters (4,925 feet) of the site. According to records from Zone 7 Water Agency, 11 inactive but not destroyed water supply wells (both domestic and municipal), and 18 "supplemental" water supply wells (primarily domestic) exist within 1,500 meters (4,925 feet) of the site. Four surface water bodies (Arroyo Mocho Canal, Tassajara Creek, Pleasanton Canal, and an unnamed canal) exist within 1,500 meters (4,925 feet) meters of the site. Additionally, 23 utility vaults, four storm drains, and five irrigation control boxes are present on the site property. Surface water bodies, wetlands, and private water supply wells are not present within 300 meters (984 feet) of the site. Five multi-unit residential buildings and two medical offices are located within 100 meters (328 feet) of the site. Basements, tunnels or subways, and other public use areas are not present within 100 meters (328 feet) of the site (ERI, 2006). The Sensitive Receptor Survey is updated annually.

AGENCY RESPONSE AND WORK PLAN FOR ADDITIONAL ASSESSMENT

TPH Source in the Tank Pit Area

In the September 5, 2006, letter, the ACEH requested collection of soil and groundwater samples in the area surrounding the new USTs and collection of groundwater samples from the existing tank pit wells (ACEH, 2006).

The existing USTs were installed in 1988 and operated by Exxon Mobil from 1988 to 2000. Exxon Mobil's environmental case at the site was closed in 1997. During a divestment investigation conducted in 1998, MTBE was detected in shallow groundwater at the site, and the case was reopened, with responsibility assigned to Exxon Mobil. Approximately two years after reopening the environmental case, Exxon Mobil sold the service station to Valero Energy Company (Valero), who subsequently sold it to a private party. The USTs have been operated by others since 2000. Because Exxon Mobil has not operated the USTs at the site for seven years, sampling soil and groundwater in the vicinity of the existing UST system does not necessarily provide information relevant to Exxon Mobil's release at the site. Concerns about soil and groundwater conditions in the current UST cavity should be addressed to the current operator of the USTs.

Potential Leaks from Dispensers

The ACEH requested collection of groundwater samples from the area east/southeast of the dispenser islands in the upper water-bearing zone. Plans for this investigation are detailed in the following subsections.

Groundwater Flow Direction Evaluation

Groundwater monitoring well MW7 is screened across clayey sand, silty clay, and clayey silt layers in the upper clay unit. Average depth to water in well MW7 is approximately 26 fbgs; however, groundwater in well MW7 has been as shallow as 22.46 fbgs and as deep as 29.74 fbgs. This well has historically been included in the groundwater contour maps for the lower water-bearing zone.

Groundwater monitoring well MW8 is screened entirely within the lower sand and gravel unit; however due to anomalous dry conditions encountered in the well from October 2000 to August 2004, it was excluded from the contour maps in the lower water bearing zone. Since August 2004, groundwater has occurred at depths ranging from 46.63 to 65.15 fbgs.

After review of the cross sections and historical groundwater elevation data for the site and discussions with the ACEH, ERI concurs that well MW7 should be contoured with the upper water-bearing zone wells and well MW8 should be contoured with the lower water-bearing zone wells. These changes will be reflected in the first quarter 2007 monitoring and sampling report for the site and may alter the historical groundwater flow direction and hydraulic gradient at the site.

Soil and Groundwater Assessment

To investigate soil and groundwater conditions downgradient (east southeast) of the dispenser area, ERI proposes four paired direct-push/Hydropunch® borings (DP1 through DP4) for collection of soil and groundwater samples from shallow and deep zone sediments.

Additionally, to define the extent of petroleum hydrocarbons in soil and groundwater downgradient of the USTs, ERI proposes to advance two paired direct-push/Hydropunch® borings at the northeastern boundary of the site (DP5 and DP6).

Proposed soil boring locations are shown on Plate 7.

Investigation Tasks

ERI and its subcontractors will perform field work in accordance with this work plan, ERI's Field Protocol (Attachment B), and a site-specific health and safety plan. Details of the work scope are described in the following subsections.

Task 1: Permitting

ERI will obtain soil boring permits from the Alameda County Public Works Department (Public Works) prior to advancing the borings.

Task 2: Subsurface Clearance

To avoid conflicts with existing underground utilities during the advancement of soil borings, ERI will:

- Mark the boring locations and contact Underground Service Alert (USA) at least 48 hours before field work begins.
- Obtain the services of a private utility locator to clear the boring locations for utilities.
- Clear each boring location using hand tools or vacuum excavation equipment to at least 4 fbgs.

Task 3: Soil Borings for Collection of Soil and Groundwater Samples

For collection of soil samples using dual-wall, direct-push equipment, ERI will:

- Obtain the services of a licensed well driller and observe the advancement of borings DP1 through DP6 using dual-wall, direct-push equipment. Soil borings will be advanced to a maximum depth of approximately 65 fbgs.
- Collect and visually examine soil samples from each boring to construct a boring log and screen soil samples with a photo-ionization detector (PID). Soil samples will be identified using visual and manual methods and classified according to the Unified Soil Classification System (USCS). Soil samples will be collected continuously and retained for laboratory analysis at approximately 5-foot intervals.
- Fill the borings with cement/bentonite grout and restore the surface to match the surrounding ground conditions upon completion of sampling.
- Submit soil samples collected from the borings for analysis to a California state-certified analytical laboratory, under Chain-of-Custody protocol. Samples will be analyzed for TPHd and TPHg using EPA Method 8015B and BTEX, oxygenated compounds (MTBE, tertiary butyl alcohol [TBA], tertiary amyl methyl ether [TAME], ethyl tertiary butyl ether [ETBE], and di-isopropyl ether [DIPE]), and lead scavengers (1,2-dichloroethane [1,2-DCA] and 1,2-dibromoethane [EDB]) using EPA Method 8260B.

For collection of depth-discrete groundwater samples, ERI will:

- Collect depth-discrete grab groundwater samples from water-bearing intervals using a Hydropunch® (or similar) sampling device in an adjacent borehole.
- Fill the borings with cement/bentonite grout and restore the surface to match the surrounding ground conditions upon completion of sampling.
- Submit grab groundwater samples collected from the borings for analysis to a California state-certified analytical laboratory, under Chain-of-Custody protocol. Samples will be analyzed for TPHd and TPHg using EPA Method 8015B and BTEX, oxygenated compounds (MTBE, TBA, TAME, ETBE, DIPE), and lead scavengers (1,2-DCA and EDB) using EPA Method 8260B.

Task 4: Waste Disposal

Soil and rinsate water generated during the field work will be stored in 55-gallon metal drums at the station. ERI will collect one composite soil sample (four brass sleeves) from the drums for laboratory analysis. Upon receipt of the laboratory analytical results, ERI will evaluate disposal options and coordinate with Exxon Mobil for disposal of the soil and water at an appropriate disposal facility.

Task 5: Report Preparation and Submittal

After reviewing the results of the field investigation, ERI will prepare a report documenting the results. The report will include tabulated soil and groundwater analytical data, cross sections depicting soil stratigraphy, groundwater occurrence, analytical results, and ERI's conclusions and recommendations.

DOCUMENT DISTRIBUTION

ERI recommends forwarding copies of this report to:

Mr. Jerry Wickham, P.G., C.E.G.
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502-6577

Mr. Eddy So
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

Ms. Colleen Morf
Zone 7 Water Agency
100 North Canyon Parkway
Livermore, California 94551

Mr. Robert C. Ehlers, M.S., P.E.
The Valero Companies
Environmental Liability Management
685 West Third Street
Hanford, California 93230

LIMITATIONS

This report was prepared in accordance with generally accepted standards of environmental practice in California at the time this investigation was performed. This report has been prepared for Exxon Mobil, and any reliance on this report by third parties shall be at such party's sole risk.

Please call Ms. Paula Sime, ERI's project manager for this site, at (707) 766-2000 with questions regarding this report.

Sincerely,
Environmental Resolutions, Inc.

Paula Sime
Project Manager

Heidi L. Dieffenbach-Carle
P.G. 6793

SCANNED IMAGE

Attachments: References

Table 1:	Well Construction Details
Table 2A:	Cumulative Groundwater Monitoring and Sampling Data
Table 2B:	Additional Cumulative Groundwater Monitoring and Sampling Data
Table 3:	Cumulative Analytical Results of Soil Samples
Table 4:	Analytical Results of Grab Groundwater Samples
Plate 1:	Site Vicinity Map
Plate 2:	Generalized Site Plan
Plate 3:	Residual Hydrocarbon Concentrations in Soil
Plate 4:	Cross Section Location Map
Plate 5:	Cross Section A-A'
Plate 6:	Cross Section B-B'
Plate 7:	Proposed Boring Locations
Attachment A:	Agency Correspondence
Attachment B:	Field Protocol

REFERENCES

Alameda County Health Care Services (ACEH). November 25, 1997. Remedial Action Completion Certification, Re: Exxon Station #7-3567, 3192 Santa Rita Road, Pleasanton.

Alameda County Health Care Services (ACEH). February 28, 2000a. Notice of Responsibility, StID#: 1932, Exxon Station #7-3567, 3192 Santa Rita Road, Pleasanton, CA 94566.

Alameda County Health Care Services (ACEH). March 28, 2000b. Re: Exxon Station #7-3567, 3192 Santa Rita Road, Pleasanton.

Alameda County Health Care Services (ACEH). September 5, 2006. Fuel Leak Case No. RO0002426, Former Exxon Service Station 7-3567, 3192 Santa Rite Road, Pleasanton.

Applied GeoSystems. May 27, 1989. *Limited Subsurface Environmental Investigation Related to Tank Removal and Soil Aeration at Exxon Service Station 7-3567, 3192 Santa Rita Road, Pleasanton, California.*

City of Pleasanton Fire Department (CPFD). 1995. UST Piping Installation Permit 95-003.

Delta Environmental Consultants, Inc. (Delta). November 25, 1998. *Soil Excavation, Hoist Removal, and Soil Sampling Results, Exxon Service Station No. 7-3567, 3192 Santa Rita Road, Pleasanton, California, Delta Project No. D098-855.*

Environmental Resolutions, Inc. (ERI). December 26, 1998a. *Report for a Baseline Environmental Investigation at Exxon Station 7-3567, 3192 Santa Rita Road, Pleasanton, California.*

Environmental Resolutions, Inc. (ERI). April 13, 2000a. *Subsurface Investigation at Exxon Service Station 7-3567, 3192 Santa Rita Road, Pleasanton, California.*

Environmental Resolutions, Inc. (ERI). October 9, 2000b. *Soil and Groundwater Investigation and Quarterly Groundwater Monitoring for Third Quarter 2000, Former Exxon Service Station 7-3567, 3192 Santa Rita Road, Pleasanton, California.*

Environmental Resolutions, Inc. (ERI). July 11, 2001. *Groundwater Investigation and Quarterly Groundwater Monitoring Report, Second Quarter 2001, Former Exxon Service Station 7-3567, 3192 Santa Rita Road, Pleasanton, California.*

Environmental Resolutions, Inc. (ERI). November 12, 2002. *Response to Comments, Former Exxon Service Station 7-3567, 3192 Santa Rita Road, Pleasanton, California.*

Environmental Resolutions, Inc. (ERI). July 10, 2006. *Site Conceptual Model and Recommendation for Case Closure, Former Exxon Service Station 7-3567, 3192 Santa Rita Road, Pleasanton, California.*

Gibson, G.D. March 12, 1990. Letter from Exxon Company U.S.A. to Mr. Hossain Kazemi of California Regional Water Quality Control Board.

Graymer, R.W., D.L. Jones, and E.E. Brabb. 1996. Preliminary Geologic Map Emphasizing Bedrock Formations in Alameda County, California: Derived from the Digital Database Open-File 96-252.

Helley, E.J., and R.W. Graymer. 1997. Quaternary Geology of Alameda County and Surrounding Areas, California: Derived from the Digital Database Open-File 97-97.

Horizon Environmental, Inc. (Horizon). September 18, 2002. *Results of Fuel Pipeline and Dispenser Soil Sampling, Valero Service Station No. 3827, Former Exxon Service Station 7-3567, 3192 Santa Rita Road, Pleasanton, California.*

International Technology Corporation (IT). March 9, 1990. Emergency Response Activities, Exxon Station #7-3567, 3192 Santa Rita Road, Pleasanton, California.

Lawrence Livermore National Laboratory (LLNL). 1995. LLNL Environmental Report for 1995, Chapter 9.

San Francisco Bay Regional Water Quality Control Board (Regional Board). April 10, 2000. Final Draft – Proposed Changes to the Water Quality Control Plan for the San Francisco Bay Region.

TABLE 1

WELL CONSTRUCTION DETAILS

Former Exxon Service Station 7-3567
3192 Santa Rita Road
Pleasanton, California
(Page 1 of 1)

Well ID	Date Well Installed	Top of Casing Elevation (feet)	Borehole Diameter (inches)	Total Depth of Boring (feet)	Well Depth (feet)	Well Casing Diameter (inches)	Well Casing Material	Screened Interval (feet)	Slot Size (inches)	Filter Pack Interval (feet)	Filter Pack Material
MW1	11/12/98	340.86	8	36.5	35	2	NS	20-35	0.200	19-36.5	#3 Sand
MW2	11/12/98	340.16	8	41.5	35	2	NS	20-35	0.020	19-35	#3 Sand
MW3	11/11/98	342.95	8	51.5	50	2	NS	35-50	0.020	34-51.5	#3 Sand
MW4	11/11/98	342.96	8	51.5	50	2	NS	35-50	0.020	34-51.5	#3 Sand
MW5	07/18/00	342.87	8	31	30	2	NS	20-30	0.020	19-31	#3 Sand
MW6	07/19/00	341.05	8	54	53	2	NS	43-53	0.020	42-54	#3 Sand
MW7	07/18/00	341.73	8	50	49	2	NS	39-49	0.020	38-50	#3 Sand
MW8	03/16/01	341.44	8	70	70	2	NS	55-70	0.020	55-70	#3 Sand

Notes:
fbgs = Feet below ground surface.
NS = Not specified.

TABLE 2A
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-3567
3192 Santa Rita Road
Pleasanton, California

Well ID	Sampling Date	TOC (feet)	DTW (feet)	GW Elev. (feet)	SUBJ (µg/L)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW1	11/17/98	340.86	21.90	318.96	NLPH	<50	<50	<2.5	---	<0.5	<0.5	<0.5	<0.5
MW1	03/15/99	340.86	21.15	319.71	NLPH	<50	<50	<2.5	---	<0.5	<0.5	<0.5	<0.5
MW1	06/25/99	340.86	20.34	320.52	NLPH	a	<50	<2.0	---	<0.5	<0.5	<0.5	<0.5
MW1	09/24/99	340.86	20.42	320.44	NLPH	<50	<50	24.6	---	<0.5	<0.5	<0.5	<0.5
MW1	12/22/99	340.86	21.11	319.75	NLPH	<61	<50	<2	---	<0.5	<0.5	<0.5	<0.5
MW1	03/07/00	340.86	14.12	326.74	NLPH	57	<50	220	---	<0.5	<0.5	<0.5	<0.5
MW1	06/06/00	340.86	17.79	323.07	NLPH	<50	<50	5.4	---	<0.5	<0.5	<0.5	<0.5
MW1	06/16/00	340.86	Property transferred to Valero Refining Company.										
MW1	07/31/00	340.86	19.02	321.84	NLPH	<50	<50	51	38	<0.5	<0.5	<0.5	<0.5
MW1	10/10/00	340.86	18.56	322.30	NLPH	<50	<50	63	---	<0.5	<0.5	<0.5	<0.5
MW1	01/11/01	340.86	21.43	319.43	NLPH	<50	<50	110	98	<0.5	<0.5	<0.5	<0.5
MW1	04/11/01	340.86	19.83	321.03	NLPH	960e	<50	29	33	<0.5	<0.5	<0.5	<0.5
MW1	07/20/01	340.86	20.50	320.36	NLPH	<50	<50	27	20	<0.5	<0.5	<0.5	<0.5
MW1	10/19/01	340.86	19.48	321.38	NLPH	<50	<50	390	420	<0.5	<0.5	<0.5	<0.5
MW1	Nov-2001	340.86	Well surveyed in compliance with AB 2886 requirements.										
MW1	01/28/02	340.86	19.72	321.14	NLPH	<100	178	196	---	<0.50	<0.50	<0.50	<0.50
MW1	04/17/02	340.86	22.17	318.69	NLPH	<50	124	116.1	131	<0.5	<0.50	<0.50	<0.50
MW1	07/17/02	340.86	22.51	318.35	NLPH	<50	<50.0	5.1	8.76	<0.5	<0.5	<0.5	<0.5
MW1	10/24/02	340.86	22.51	318.35	NLPH	<50	217	574	302	<0.5	<0.5	<0.5	<0.5
MW1	03/21/03	340.86	21.32	319.54	NLPH	<50	70.9	---	83.4	<0.50	<0.5	<0.5	<0.5
MW1	04/10/03	340.86	21.27	319.59	NLPH	<51	67.2	---	71.0	<0.50	<0.5	<0.5	<0.5
MW1	07/17/03	340.86	21.13	319.73	NLPH	<50	88.9	---	44.6	<0.50	<0.5	<0.5	<0.5
MW1	10/09/03	340.86	21.55	319.31	NLPH	<50	<50.0	32.3	41.2	<0.50	<0.5	<0.5	<0.5
MW1	01/21/04	340.86	19.96	320.90	NLPH	<50	625	970	974	<0.50	<0.5	<0.5	<0.5
MW1	05/25/04	340.86	22.11	318.75	NLPH	<50	196	234	204	<0.50	<0.5	<0.5	<0.5
MW1	08/26/04	340.86	21.28	319.58	NLPH	57	148	153	153	<0.50	<0.5	<0.5	<0.5
MW1	12/07/04 j	340.86	21.43	319.43	NLPH	<50	966	789	1,130	<0.50	<0.5	<0.5	<0.5
MW1	03/17/05	340.86	17.99	322.87	NLPH	57k	1,720	---	2,600	<0.50	<0.5	<0.5	<0.5
MW1	06/20/05	340.86	21.26	319.60	NLPH	<50	74.4	102	103	<0.50	<0.5	<0.5	1.0
MW1	09/20/05	340.86	17.33	323.53	NLPH	228k	<50.0	15.4	15.3	<0.50	<0.50	<0.50	<0.50
MW1	12/22/05	340.86	17.49	323.37	NLPH	<50.0	<50.0	12.0	14.6	<0.50	<0.50	<0.50	<0.50
MW1	03/23/06	340.86	16.81	324.05	NLPH	<47	<50	14	10.4	<0.50	<0.50	<0.50	<0.50
MW1	05/30/06	340.86	17.02	323.84	NLPH	<47	<50	5.2	4.6	<0.50	<0.50	<0.50	<0.50
MW1	09/18/06	340.86	19.55	321.31	NLPH	<47.2	<50.0	0.54	2.15	<0.50	<0.50	<0.50	<0.50
MW1	12/11/06	340.86	20.56	320.30	NLPH	<47	<50	<2.5	2.3	<0.50	<0.50	<0.50	<0.50
MW1	**02/20/07**	**340.86**	**20.04**	**320.82**	**NLPH**	**<47**	**<50.0**	**1.60**	**1.31**	**<0.50**	**<0.50**	**<0.50**	**<0.50**
MW2	11/17/98	340.61	20.42	320.19	NLPH	91	<50	17	23	1.5	<0.5	0.98	2.6
MW2	03/15/99	340.61	28.35	312.26	NLPH	90	<50	12	12.5	0.73	1.1	2.4	2.2
MW2	06/25/99	340.61	25.20	315.41	NLPH	a	<50	<2.0	---	<0.5	<0.5	<0.5	<0.5

TABLE 2A
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-3567
3192 Santa Rita Road
Pleasanton, California

Well ID	Sampling Date	TOC (feet)	DTW (feet)	GW Elev. (feet)	SUBJ (µg/L)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW2	09/24/99	340.61	23.93	316.68	NLPH	<50	<50	3.06	---	<0.5	<0.5	<0.5	<0.5
MW2	12/22/99	340.61	23.39	317.22	NLPH	<56	<50	<2	---	<0.5	<0.5	<0.5	<0.5
MW2	03/07/00	340.61	17.08	323.53	NLPH	52	<50	<2	---	<0.5	0.80	<0.5	<0.5
MW2	06/06/00	340.61	21.01	319.60	NLPH	<50	<50	<2	---	<0.5	<0.5	<0.5	<0.5
MW2	06/16/00	340.61	Property transferred to Valero Refining Company.										
MW2	07/31/00	340.61	22.08	318.53	NLPH	<50	<50	6.8	<5	<0.5	<0.5	<0.5	<0.5
MW2	10/10/00	340.61	22.35	318.26	NLPH	<50	<50	<2	---	<0.5	<0.5	<0.5	<0.5
MW2	01/11/01	340.61	23.74	316.87	NLPH	<50	<50	<2	---	0.54	<0.5	<0.5	<0.5
MW2	04/11/01	340.61	22.34	318.27	NLPH	760e	<50	<2	---	<0.5	1.4	<0.5	<0.5
MW2	07/20/01	340.61	23.74	316.87	NLPH	<50	<50	<2	---	<0.5	<0.5	<0.5	<0.5
MW2	10/19/01	340.61	22.68	317.93	NLPH	<50	<50	<2	---	<0.5	<0.5	<0.5	<0.5
MW2	Nov-2001	340.16	Well surveyed in compliance with AB 2886 requirements.										
MW2	01/28/02	340.16	20.79	319.37	NLPH	<50.0	<50.0	0.70	---	<0.50	<0.50	<0.50	<0.50
MW2	04/17/02	340.16	25.52	314.64	NLPH	<50	<50.0	4.20	4.35	<0.5	0.90	<0.50	<0.50
MW2	07/17/02	340.16	28.18	311.98	NLPH	<50	<50.0	9.4	10.3	<0.5	0.6	2.4	2.0
MW2	10/24/02	340.16	28.42	311.74	NLPH	<50	<50.0	8.6	9.30	<0.5	<0.5	<0.5	<0.5
MW2	03/21/03	340.16	23.54	316.62	NLPH	<50	<50.0	---	<0.50	1.10	0.5	1.3	2.2
MW2	04/10/03	340.16	28.19	311.97	NLPH	<50	<50.0	---	2.10	0.60	0.5	0.8	1.0
MW2	07/17/03	340.16	24.13	316.03	NLPH	<50	<50.0	---	<0.50	<0.50	<0.5	<0.5	<0.5
MW2	10/09/03	340.16	26.21	313.95	NLPH	90	<50.0	0.6	0.60	<0.50	<0.5	<0.5	<0.5
MW2	01/21/04	340.16	22.40	317.76	NLPH	<50	<50.0	<0.5	<0.50	0.50	<0.5	<0.5	<0.5
MW2	05/25/04	340.16	25.17	314.99	NLPH	<50	<50.0	1.2	1.8	<0.50	<0.5	0.8	1.3
MW2	08/26/04	340.16	27.56	312.60	NLPH	<50	<50.0	<0.5	<0.50	<0.50	<0.5	<0.5	<0.5
MW2	12/07/04 j	340.16	25.36	314.80	NLPH	<50	<50.0	8.0	8.6	<0.50	<0.5	<0.5	<0.5
MW2	03/17/05	340.16	20.28	319.88	NLPH	<50	57.8	---	1.10	<0.50	<0.5	<0.5	<0.5
MW2	06/20/05	340.16	23.48	316.68	NLPH	<53	<50.0	<0.5	<0.50	<0.50	<0.5	<0.5	1.0
MW2	09/20/05	340.16	23.11	317.05	NLPH	<50.0	<50.0	3.50	2.31	<0.50	<0.50	<0.50	<0.50
MW2	12/22/05	340.16	23.96	316.20	NLPH	<50.0	<50.0	<0.50	<0.500	<0.50	<0.50	<0.50	<0.50
MW2	03/23/06	340.16	21.11	319.05	NLPH	<47	<50	<2.5	1.82	<0.50	<0.50	<0.50	<0.50
MW2	05/30/06	340.16	20.15	320.01	NLPH	<47	<50	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	09/18/06	340.16	22.51	317.65	NLPH	<47.2	<50.0	<0.50	<0.500	<0.50	<0.50	<0.50	<0.50
MW2	12/11/06	340.16	24.80	315.36	NLPH	<47	<50	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	**02/20/07**	**340.16**	**25.41**	**314.75**	**NLPH**	**<47**	**<50.0**	**<0.50**	**<0.500**	**<0.50**	**0.57**	**<0.50**	**2.06**
MW3	11/17/98	342.95	36.58	306.37	NLPH	120	<50	180	220	<0.5	<0.5	<0.5	<0.5
MW3	03/15/99	342.95	40.01	302.94	NLPH	180	<50	290	314	<0.5	<0.5	<0.5	<0.5
MW3	06/25/99	342.95	46.83	296.12	NLPH	a	<50	107	113	<0.5	<0.5	<0.5	<0.5
MW3	09/24/99	342.95	47.71	295.24	NLPH	---	---	---	---	---	---	---	---
MW3	12/22/99	342.95	43.82	299.13	NLPH	140	<50	65	---	<0.5	<0.5	<0.5	<0.5
MW3	03/07/00	342.95	32.75	310.20	NLPH	<50	<50	82	---	<0.5	0.88	<0.5	<0.5

TABLE 2A
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-3567
3192 Santa Rita Road
Pleasanton, California

Well ID	Sampling Date	TOC (feet)	DTW (feet)	GW Elev. (feet)	SUBJ (µg/L)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW3	06/06/00	342.95	36.05	306.90	NLPH	<50	<50	140	---	<0.5	<0.5	0.82	<0.5
MW3	06/16/00	342.95	Property transferred to Valero Refining Company.										
MW3	07/31/00	342.95	36.77	306.18	NLPH	<50	<50	230	160	<0.5	<0.5	<0.5	<0.5
MW3	10/10/00	342.95	35.82	307.13	NLPH	<50	<50	200	---	<0.5	<0.5	<0.5	<0.5
MW3	01/11/01	342.95	38.08	304.87	NLPH	<50	<50	280	230	<0.5	<0.5	<0.5	<0.5
MW3	04/11/01	342.95	36.03	306.92	NLPH	1,000e	<50	240	280	<0.5	<0.5	<0.5	<0.5
MW3	07/20/01	342.95	36.05	306.90	NLPH	<50	270	240	190	<0.5	<0.5	<0.5	<0.5
MW3	10/19/01	342.95	34.58	308.37	NLPH	<50	<50	180	190	<0.5	<0.5	<0.5	<0.5
MW3	Nov-2001	342.95	Well surveyed in compliance with AB 2886 requirements.										
MW3	01/28/02	342.95	34.96	307.99	NLPH	<100	167	179	---	<0.50	<0.50	<0.50	<0.50
MW3	04/17/02	342.95	38.21	304.74	NLPH	<50	194	179.3	216	<0.5	<0.50	<0.50	<0.50
MW3	07/17/02	342.95	g	g	g	<50h	163h	185	198h	<0.5h	<0.5h	<0.5h	<0.5h
MW3	10/24/02	342.95	38.68	304.27	NLPH	<50	128	163	183	<0.5	<0.5	<0.5	<0.5
MW3	03/21/03	342.95	36.50	306.45	NLPH	<50	119	---	141	<0.50	<0.5	<0.5	<0.5
MW3	04/10/03	342.95	36.82	306.13	NLPH	<53	119	---	130	<0.50	<0.5	<0.5	<0.5
MW3	07/17/03	342.95	37.98	304.97	NLPH	---	---	---	---	---	---	---	---
MW3	07/18/03	342.95	---	---	NLPH	<50	142	---	123	<0.50	<0.5	<0.5	<0.5
MW3	10/09/03	342.95	38.5	304.45	NLPH	<50	120	122	147	<0.50	<0.5	<0.5	<0.5
MW3	01/21/04	342.95	35.45	307.50	NLPH	94	90.6	118	148	<0.50	<0.5	<0.5	<0.5
MW3	05/25/04	342.95	38.07	304.88	NLPH	<0.50	139	170	146	<0.50	<0.5	<0.5	<0.5
MW3	08/26/04	342.95	36.00	306.95	NLPH	112	163	169	165	<0.50	<0.5	<0.5	<0.5
MW3	12/07/04 j	342.95	37.97	304.98	NLPH	<50	174	143	186	<0.50	<0.5	<0.5	<0.5
MW3	03/17/05	342.95	31.44	311.51	NLPH	<50	516	---	740	<0.50	<0.5	<0.5	<0.5
MW3	06/20/05	342.95	37.29	305.66	NLPH	<50	134	183	241	<0.50	<0.5	<0.5	0.5
MW3	09/20/05	342.95	36.11	306.84	NLPH	72.3e	129	116	125	<0.50	<0.50	<0.50	<0.50
MW3	12/22/05	342.95	34.52	308.43	NLPH	<50.0	87.5	73.0	92.9	<0.50	<0.50	<0.50	<0.50
MW3	03/23/06	342.95	32.04	310.91	NLPH	<47	63o	76	72.0	<0.50	<0.50	<0.50	<0.50
MW3	05/30/06	342.95	32.57	310.38	NLPH	120k,o	<50	46	44	<0.50	<0.50	<0.50	<0.50
MW3	09/18/06	342.95	34.62	308.33	NLPH	102k	<50.0	38.5	53.8	<0.50	<0.50	<0.50	<0.50
MW3	12/11/06	342.95	34.48	308.47	NLPH	<47	<50	44	54	<0.50	<0.50	<0.50	<0.50
MW3	**02/20/07**	**342.95**	**31.58**	**311.37**	**NLPH**	**<47**	**<50.0**	**39.4**	**38.5**	**<0.50**	**<0.50**	**<0.50**	**<0.50**
MW4	11/17/98	342.96	50.20	292.76	NLPH	72	<50	4.1	3.5	<0.5	<0.5	<0.5	<0.5
MW4	03/15/99	342.96	47.93	295.03	NLPH	91	<50	280	260	<0.5	<0.5	<0.5	<0.5
MW4	06/25/99 b	342.96	48.15	294.81	NLPH	---	---	---	---	---	---	---	---
MW4	09/24/99 b	342.96	49.29	293.67	NLPH	---	---	---	---	---	---	---	---
MW4	12/22/99	342.96	49.33	293.63	NLPH	b	---	---	---	---	---	---	---
MW4	03/07/00	342.96	49.05	293.91	NLPH	190	<50	710	---	<0.5	0.84	<0.5	<0.5
MW4	06/06/00	342.96	49.02	293.94	NLPH	110	<50	460	---	<0.5	<0.5	<0.5	<0.5
MW4	06/16/00	342.96	Property transferred to Valero Refining Company.										

TABLE 2A
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-3567
3192 Santa Rita Road
Pleasanton, California

Well ID	Sampling Date	TOC (feet)	DTW (feet)	GW Elev. (feet)	SUBJ (µg/L)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW4	07/31/00	342.96	49.13	293.83	NLPH	<50	<50	480	490	<0.5	<0.5	<0.5	<0.5
MW4	10/10/00	342.96	40.08	302.88	NLPH	c	c	c	c	c	c	c	c
MW4	01/11/01	342.96	36.41	306.55	NLPH	110	<50	27	21	<0.5	<0.5	<0.5	<0.5
MW4	04/11/01	342.96	36.43	306.53	NLPH	870e	<50	3.6	14	<0.5	0.56	<0.5	<0.5
MW4	07/20/01	342.96	---	---	f	---	---	---	---	---	---	---	---
MW4	10/19/01	342.96	33.67	309.29	NLPH	71	<50	15	16	<0.5	<0.5	<0.5	<0.5
MW4	Nov-2001	342.96	Well surveyed in compliance with AB 2886 requirements.										
MW4	01/28/02	342.96	33.11	309.85	NLPH	148	<50.0	18.7	---	<0.50	<0.50	<0.50	<0.50
MW4	04/17/02	342.96	36.03	306.93	NLPH	<50	<50.0	19.10	23.4	<0.5	<0.50	<0.50	<0.50
MW4	07/17/02	342.96	37.65	305.31	NLPH	<50	<50.0	16.7	15.8	<0.5	<0.5	<0.5	<0.5
MW4	10/24/02	342.96	37.41	305.55	NLPH	<50	<50.0	8.7	8.90	<0.5	<0.5	<0.5	<0.5
MW4	03/21/03	342.96	36.18	306.78	NLPH	<56	<50.0	---	14.2	<0.50	<0.5	<0.5	<0.5
MW4	04/10/03	342.96	36.55	306.41	NLPH	<51	<50.0	---	15.3	<0.50	<0.5	<0.5	<0.5
MW4	07/17/03	342.96	36.45	306.51	NLPH	<50	<50.0	---	11.4	<0.50	<0.5	<0.5	<0.5
MW4	10/09/03	342.96	37.7	305.26	NLPH	<50	<50.0	8.5	6.90	<0.50	<0.5	<0.5	<0.5
MW4	01/21/04	342.96	35.78	307.18	NLPH	<50	<50.0	8.4	9.40	<0.50	<0.5	<0.5	<0.5
MW4	05/25/04	342.96	35.88	307.08	NLPH	<50	<50.0	18.0	14.40	<0.50	<0.5	<0.5	<0.5
MW4	08/26/04	342.96	i	i	i	<50i	<50.0i	8.3	11.1i	<0.50i	<0.5i	<0.5i	<0.5i
MW4	12/07/04 j	342.96	35.65	307.31	NLPH	f	f	f	f	f	f	f	f
MW4	03/17/05	342.96	29.34	313.62	NLPH	67k	<50.0	---	63.0	<0.50	<0.5	<0.5	<0.5
MW4	06/20/05	342.96	34.61	308.35	NLPH	<50	70.4	97.1	116	<0.50	<0.5	<0.5	<0.5
MW4	09/20/05	342.96	33.73	309.23	NLPH	159k	71.2	85.1	87.4	<0.50	<0.50	<0.50	<0.50
MW4	12/22/05	342.96	31.99	310.97	NLPH	<50.0	74.9	62.1	78.9	<0.50	<0.50	<0.50	<0.50
MW4	03/23/06	342.96	31.63	311.33	NLPH	<47	53o	64	57.1	<0.50	<0.50	<0.50	<0.50
MW4	05/30/06	342.96	30.87	312.09	NLPH	<47	<50	53	45	<0.50	<0.50	<0.50	<0.50
MW4	09/18/06	342.96	32.81	310.15	NLPH	<47.2	<50.0	16.2	20.4	<0.50	<0.50	<0.50	<0.50
MW4	12/11/06	342.96	37.54	305.42	NLPH	<47	<50	27	32	<0.50	<0.50	<0.50	<0.50
MW4	**02/20/07**	**342.96**	**37.86**	**305.10**	**NLPH**	**f**	**f**	**f**	**f**	**f**	**f**	**f**	**f**
MW5	06/16/00	342.87	Property transferred to Valero Refining Company.										
MW5	07/31/00 b	342.87	---	---	---	---	---	---	---	---	---	---	---
MW5	10/10/00	342.87	29.12	313.75	NLPH	150	<50	4.2	---	<0.5	<0.5	<0.5	<0.5
MW5	01/11/01	342.87	28.89	313.98	NLPH	b	b	b	---	b	b	b	b
MW5	04/11/01	342.87	28.23	314.64	NLPH	b	b	b	---	b	b	b	b
MW5	07/20/01 f	342.87	---	---	---	---	---	---	---	---	---	---	---
MW5	10/19/01	342.87	27.62	315.25	NLPH	86	<50	3.4	5	<0.5	<0.5	<0.5	<0.5
MW5	Nov-2001	342.87	Well surveyed in compliance with AB 2886 requirements.										
MW5	01/28/02	342.87	28.04	314.83	NLPH	<100	<50.0	5.90	---	<0.50	<0.50	<0.50	<0.50
MW5	04/17/02	342.87	29.10	313.77	NLPH	85	<50.0	5.60	6.7	<0.5	<0.50	<0.50	<0.50
MW5	07/17/02	342.87	29.37	313.50	NLPH	b	b	b	b	b	b	b	b

TABLE 2A
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-3567
3192 Santa Rita Road
Pleasanton, California

Well ID	Sampling Date	TOC (feet)	DTW (feet)	GW Elev. (feet)	SUBJ (µg/L)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW5	10/24/02	342.87	29.36	313.51	NLPH	b	b	b	b	b	b	b	b
MW5	03/21/03	342.87	28.55	314.32	NLPH	b	57.8	---	8.70	2.50	1.0	3.5	5.9
MW5	04/10/03	342.87	29.10	313.77	NLPH	b	56.1	---	7.20	5.50	3.0	2.9	4.3
MW5	07/17/03	342.87	28.91	313.96	NLPH	b	<0.50	---	12.0	1.00	<0.50	0.7	1.2
MW5	10/09/03	342.87	29.17	313.70	NLPH	<100	<50.0	5.5	4.50	<0.50	<0.5	<0.5	<0.5
MW5	01/21/04	342.87	28.75	314.12	NLPH	<50	<50.0	3.7	4.00	1.30	1.40	<0.5	2.4
MW5	05/25/04	342.87	28.95	313.92	NLPH	---	<50.0	3.6	2.90	0.70	0.7	1.8	2.9
MW5	08/26/04	342.87	i	i	i	<50i	<50.0i	5.1	5.20i	<0.50i	<0.5i	<0.5i	<0.5i
MW5	12/07/04 j	342.87	28.29	314.58	NLPH	106k,l	<50.0	1.9	2.00	0.70	<0.5	0.5	1.6
MW5	03/17/05	342.87	26.39	316.48	NLPH	143k	<50.0	---	4.40	<0.50	<0.5	<0.5	<0.5
MW5	06/20/05	342.87	28.01	314.86	NLPH	<59	<50.0	10.9	13.0	<0.50	<0.5	<0.5	0.5
MW5	09/20/05	342.87	28.61	314.26	NLPH	1,730k	75.3	8.06	6.38	<0.50	<0.50	<0.50	<0.50
MW5	12/22/05	342.87	28.67	314.20	NLPH	70.3k	104	8.76	9.00	4.95	4.69	2.34	39.0
MW5	03/23/06	342.87	28.03	314.84	NLPH	140k	<50	20	18.5	<0.50	<0.50	<0.50	<0.50
MW5	05/30/06	342.87	26.91	315.96	NLPH	130k,o	<50	29	28	<0.50	<0.50	<0.50	0.75
MW5	09/18/06	342.87	29.04	313.83	NLPH	120k	<50.0	12.4	14.7	<0.50	<0.50	<0.50	<0.50
MW5	12/11/06	342.87	28.72	314.15	NLPH	b	54	22	26	3.6	<0.50	2.8	3.0
MW5	**02/20/07**	**342.87**	**28.94**	**313.93**	**NLPH**	**<47**	**<50.0**	**10.8**	**11.5**	**0.53**	**0.94**	**0.77**	**4.18**
MW6	06/16/00	341.05	Property transferred to Valero Refining Company.										
MW6	07/31/00	341.05	39.72	301.33	NLPH	<50	<50	<2	<5	<0.5	<0.5	<0.5	<0.5
MW6	10/10/00	341.05	40.12	300.93	NLPH	<50	c	c	---	c	c	c	c
MW6	01/11/01	341.05	46.13	294.92	NLPH	<50	<50	<2	---	<0.5	<0.5	<0.5	<0.5
MW6	04/11/01	341.05	45.40	295.65	NLPH	b	b	b	---	b	b	b	b
MW6	07/20/01	341.05	41.75	299.30	NLPH	<50	<50	<5	---	<0.3	<0.3	<0.6	<0.6
MW6	10/19/01	341.05	44.10	296.95	NLPH	<50	<50	<2	---	<0.5	<0.5	<0.5	<0.5
MW6	Nov-2001	341.05	Well surveyed in compliance with AB 2886 requirements.										
MW6	01/28/02	341.05	39.57	301.48	NLPH	<100	<50.0	<0.50	---	<0.50	<0.90	<0.50	<0.50
MW6	04/17/02	341.05	41.84	299.21	NLPH	52	<50.0	<0.50	---	<0.5	<0.50	<0.50	<0.50
MW6	07/17/02	341.05	42.85	298.20	NLPH	<50	<50.0	<0.5	---	<0.5	<0.5	<0.5	<0.5
MW6	10/24/02	341.05	42.10	298.95	NLPH	<50	<50.0	<0.5	---	<0.5	<0.5	<0.5	<0.5
MW6	03/21/03	341.05	44.81	296.24	NLPH	107	<50.0	<0.5	---	<0.50	<0.5	<0.5	<0.5
MW6	04/10/03	341.05	44.28	296.77	NLPH	60	<50.0	---	0.80	<0.50	<0.5	<0.5	<0.5
MW6	07/17/03	341.05	41.56	299.49	NLPH	<50	<50.0	---	<0.50	<0.50	<0.5	<0.5	<0.5
MW6	10/09/03	341.05	41.54	299.51	NLPH	452	<50.0	0.50	0.60	<0.50	<0.5	<0.5	<0.5
MW6	01/21/04	341.05	38.20	302.85	NLPH	<50	<50.0	<0.5	<0.50	<0.50	<0.5	<0.5	<0.5
MW6	05/25/04	341.05	40.35	300.70	NLPH	<50	<50.0	<0.5	<0.50	<0.50	<0.5	<0.5	<0.5
MW6	08/26/04	341.05	i	i	i	314i	<50.0i	0.6	1.00i	2.10i	0.9i	0.8i	2.9i
MW6	12/07/04 j, m	341.05	---	---	---	---	---	---	---	---	---	---	---
MW6	03/17/05	341.05	37.44	303.61	NLPH	<50	<50.0	---	0.60	<0.50	<0.5	<0.5	<0.5

TABLE 2A
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-3567
3192 Santa Rita Road
Pleasanton, California

Well ID	Sampling Date	TOC (feet)	DTW (feet)	GW Elev. (feet)	SUBJ (µg/L)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW6	06/20/05	341.05	40.42	300.63	NLPH	<50	<50.0	<0.5	0.60	<0.50	<0.5	<0.5	<0.5
MW6	09/20/05	341.05	38.00	303.05	NLPH	117k	<50.0	0.66	0.570	<0.50	<0.50	<0.50	<0.50
MW6	12/22/05	341.05	37.55	303.50	NLPH	331k	<50.0	0.65	<0.500	0.86	1.39	<0.50	<0.50
MW6	03/23/06	341.05	35.72	305.33	NLPH	<47	<50	<2.5	<1.00	<0.50	<0.50	<0.50	<0.50
MW6	05/30/06	341.05	33.52	307.53	NLPH	<47	<50	<2.5	0.88	1.6	0.59	0.77	1.2
MW6	09/18/06	341.05	38.05	303.00	NLPH	80.0k	<50.0	<0.50	0.560	<0.50	<0.50	<0.50	<0.50
MW6	12/11/06	341.05	37.04	304.01	NLPH	<47	<50	<2.5	0.76	<0.50	<0.50	<0.50	<0.50
MW6	**02/20/07**	**341.05**	**38.01**	**303.04**	**NLPH**	**<47**	**<50.0**	**0.54**	**0.510**	**<0.50**	**<0.50**	**<0.50**	**<0.50**
MW7	06/16/00	341.73	Property transferred to Valero Refining Company.										
MW7	07/31/00	341.73	24.22	317.51	NLPH	150	<50	13	8	<0.5	<0.5	<0.5	<0.5
MW7	10/10/00	341.73	24.09	317.64	NLPH	1,500	c	c	c	c	c	c	c
MW7	01/11/01	341.73	25.86	315.87	NLPH	330	<50	6.9	7	0.55	<0.5	<0.5	<0.5
MW7	04/11/01	341.73	24.28	317.45	NLPH	980e	<250	<10	---	<2.5	<2.5	<2.5	<2.5
MW7	07/20/01	341.73	25.52	316.21	NLPH	300	<50	8.2	6	<0.5	<0.5	<0.5	<0.5
MW7	10/19/01	341.73	24.99	316.74	NLPH	120	<50	4.9	<5	<0.5	<0.5	<0.5	<0.5
MW7	Nov-2001	341.73	Well surveyed in compliance with AB 2886 requirements.										
MW7	01/28/02	341.73	23.84	317.89	NLPH	<100	<50.0	8.50	---	<0.50	<0.50	<0.50	<0.50
MW7	04/17/02	341.73	28.19	313.54	NLPH	55	<50.0	9.70	11.6	<0.5	2.10	<0.50	<0.50
MW7	07/17/02	341.73	29.74	311.99	NLPH	69	<50.0	9.7	9.0	<0.5	<0.5	<0.5	<0.5
MW7	10/24/02	341.73	29.50	312.23	NLPH	262	<50.0	5.4	6.0	<0.5	<0.5	<0.5	<0.5
MW7	03/21/03	341.73	26.07	315.66	NLPH	<50	<50.0	6.00	---	<0.50	0.8	<0.5	<0.5
MW7	04/10/03	341.73	26.06	315.67	NLPH	<50	<50.0	---	9.00	<0.50	<0.5	<0.5	<0.5
MW7	07/17/03	341.73	27.18	314.55	NLPH	<50	<50.0	---	9.10	<0.50	<0.5	<0.5	<0.5
MW7	10/09/03	341.73	28.27	313.46	NLPH	<50	<50.0	12.5	5.60	<0.50	<0.5	<0.5	<0.5
MW7	01/21/04	341.73	24.51	317.22	NLPH	140	<50.0	15.1	17.6	<0.50	<0.5	<0.5	<0.5
MW7	05/25/04	341.73	28.87	312.86	NLPH	---	<50.0	17.6	13.10	<0.50	<0.5	<0.5	<0.5
MW7	08/26/04	341.73	i	i	i	322i	<50.0i	20.4	19.9i	<0.50i	<0.5i	<0.5i	<0.5i
MW7	12/07/04 j	341.73	27.68	314.05	NLPH	469k	<50.0	4.4	5.30	<0.50	<0.5	<0.5	<0.5
MW7	03/17/05	341.73	22.80	318.93	NLPH	131k	<50.0	---	16.5	<0.50	<0.5	<0.5	<0.5
MW7	06/20/05	341.73	26.73	315.00	NLPH	68k	<50.0	9.4	11.1	<0.50	<0.5	<0.5	<0.5
MW7	09/20/05	341.73	24.28	317.45	NLPH	4,690k	<5,000n	<50.0n	<0.500	<50.0n	<50.0n	<50.0n	<50.0n
MW7	12/22/05	341.73	24.54	317.19	NLPH	799k	<50.0	<0.50	<0.500	<0.50	0.76	<0.50	0.64
MW7	03/23/06	341.73	22.46	319.27	NLPH	190k	<50	<2.5	<1.00	<0.50	<0.50	<0.50	<0.50
MW7	05/30/06	341.73	21.86	319.87	NLPH	<48	<50	3.1	2.7	<0.50	<0.50	<0.50	<0.50
MW7	09/18/06	341.73	24.35	317.38	NLPH	140k	<50.0	1.23	5.97	<0.50	<0.50	<0.50	<0.50
MW7	12/11/06	341.73	26.01	315.72	NLPH	<47	<50	6.7	8.1	<0.50	<0.50	<0.50	<0.50
MW7	**02/20/07**	**341.73**	**24.46**	**317.27**	**NLPH**	**<47**	**<50.0**	**3.97**	**4.89**	**<0.50**	**<0.50**	**<0.50**	**0.76**

TABLE 2A
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-3567
3192 Santa Rita Road
Pleasanton, California

Well ID	Sampling Date	TOC (feet)	DTW (feet)	GW Elev. (feet)	SUBJ (µg/L)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW8	06/16/00	341.44	Property transferred to Valero Refining Company.										
MW8	10/10/00 - 08/26/04	Well dry.											
MW8	12/07/04 h, j	341.44	65.15	276.29	NLPH	b	<50.0	7.6	2.40	<0.50	<0.5	<0.5	<0.5
MW8	03/17/05	341.44	59.75	281.69	NLPH	<50	<50.0	---	<0.50	<0.50	<0.5	<0.5	<0.5
MW8	06/20/05	341.44	55.15	286.29	NLPH	<50	<50.0	<0.5	<0.50	<0.50	<0.5	<0.5	<0.5
MW8	09/20/05	341.44	55.39	286.05	NLPH	229k	<50.0	0.58	<0.500	<0.50	<0.50	<0.50	0.52
MW8	12/22/05	341.44	51.96	289.48	NLPH	<50.0	<50.0	<0.50	<0.500	<0.50	<0.50	<0.50	<0.50
MW8	03/23/06	341.44	46.63	294.81	NLPH	100k	<50	<2.5	<1.00	1.4	<0.50	0.83	<0.50
MW8	05/30/06	341.44	43.09	298.35	NLPH	70k	<50	<2.5	0.66	<0.50	<0.50	<0.50	<0.50
MW8	09/18/06	341.44	44.87	296.57	NLPH	<47.2	<50.0	<0.50	<0.500	<0.50	<0.50	<0.50	<0.50
MW8	12/11/06	341.44	43.55	297.89	NLPH	<47	<50	<2.5	<0.50	<0.50	<0.50	<0.50	<0.50
MW8	**02/20/07**	**341.44**	**38.48**	**302.96**	**NLPH**	**57k**	**<50.0**	**<0.50**	**<0.500**	**<0.50**	**<0.50**	**<0.50**	**0.54**

TABLE 2A
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-3567
3192 Santa Rita Road
Pleasanton, California

Notes:

TOC	=	Top of well casing elevation; datum is mean sea level.
SUBJ	=	Results of subjective evaluation, liquid-phase hydrocarbon thickness (HT) in feet.
NLPH	=	No liquid-phase hydrocarbons present in well.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is mean sea level.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using modified EPA Method 8015/8015B.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using modified EPA Method 5030/8015/8015B.
MTBE 8021B	=	Methyl tertiary butyl ether analyzed using EPA Method 8020 or 8021B.
MTBE 8260B	=	Methyl tertiary butyl ether analyzed using EPA Method 8260B.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B.
ETBE	=	Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
TAME	=	Tertiary amyl methyl ether analyzed using EPA Method 8260B.
TBA	=	Tertiary butyl alcohol analyzed using EPA Method 8260B.
EDB	=	1,2-dibromoethane analyzed using EPA Method 8260B.
1,2-DCA	=	1,2-dichloroethane analyzed using EPA Method 8260B.
DIPE	=	Di-isopropyl ether analyzed using EPA Method 8260B.
µg/L	=	Micrograms per liter.
<	=	Not detected at or above the stated laboratory method reporting limit.
---	=	Not analyzed/Not applicable/Not sampled/Not measured.
a	=	No result because of sample loss during laboratory fire.
b	=	Not enough water to gauge and/or sample.
c	=	Samples were damaged during transportation to laboratory.
d	=	Analyzed using EPA Method 8260.
e	=	Diesel-range hydrocarbons detected in bailer blank; result is suspect.
f	=	Well inaccessible.
g	=	DTW was not measured due to equipment failure.
h	=	Grab sample.
i	=	Groundwater elevation data invalidated; analytical results suspect.
j	=	Incorrect date recorded on the Chain-of-Custody form and/or laboratory analytical report. The correct date is shown.
k	=	Diesel-range organic compounds reported in sample; however, chromatogram pattern is not representative of diesel fuel.
l	=	Analyte detected in laboratory method blank; result is suspect.
m	=	Incorrect well monitored and sampled. Results invalidated.
n	=	Elevated reporting limit used due to sample matrix effects.
o	=	Result elevated due to single analyte peak in quantitation range.

TABLE 2B
ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-3567
3192 Santa Rita Road
Pleasanton, California

Well ID	Sampling Date	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	Ethanol (µg/L)
MW1	11/17/98 - 06/16/00	Not analyzed for these analytes.						
MW1	07/31/00	<10	<10	<500	<5	<5	<10	---
MW1	10/10/00 - 10/24/02	Not analyzed for these analytes.						
MW1	03/21/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW1	04/10/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW1	07/17/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW1	10/09/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW1	01/21/04	<0.50	2.20	57.9	<0.50	<0.50	<0.50	---
MW1	05/25/04	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW1	08/26/04	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW1	12/07/04 j	<0.50	2.00	49.6	<0.50	<0.50	<0.50	---
MW1	03/17/05	<0.50	7.60	201	<0.50	<0.50	<0.50	---
MW1	06/20/05	<0.50	<0.50	135	<0.50	<0.50	<0.50	---
MW1	09/20/05	<0.500	<0.500	30.6	<0.500	<0.500	<0.500	---
MW1	12/22/05	<0.500	<0.500	114	<0.500	<0.500	<0.500	---
MW1	03/23/06	<1.00	<1.00	93.8	<1.00	<1.00	<1.00	<100
MW1	05/30/06	<0.50	<0.50	31	<0.50	<0.50	<0.50	<100
MW1	09/18/06	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---
MW1	12/11/06	<0.50	<0.50	59	<0.50	<0.50	<0.50	---
MW1	**02/20/07**	**<0.500**	**<0.500**	**26.2**	**<0.500**	**<0.500**	**<0.500**	**---**
MW2	11/17/98 - 06/16/00	Not analyzed for these analytes.						
MW2	07/31/00	<10	<10	<500	<5	<5	<10	---
MW2	10/10/00 - 10/24/02	Not analyzed for these analytes.						
MW2	03/21/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW2	04/10/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW2	07/17/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW2	10/09/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW2	01/21/04	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW2	05/25/04	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW2	08/26/04	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW2	12/07/04 j	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW2	03/17/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW2	06/20/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW2	09/20/05	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---
MW2	12/22/05	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---
MW2	03/23/06	<1.00	<1.00	<10.0	<1.00	<1.00	<1.00	<100
MW2	05/30/06	<0.50	<0.50	<12	<0.50	<0.50	<0.50	<100
MW2	09/18/06	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---

TABLE 2B
ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-3567
3192 Santa Rita Road
Pleasanton, California

Well ID	Sampling Date	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	Ethanol (µg/L)
MW2	12/11/06	<0.50	<0.50	<12	<0.50	<0.50	<0.50	---
MW2	**02/20/07**	**<0.500**	**<0.500**	**<10.0**	**<0.500**	**<0.500**	**<0.500**	**---**
MW3	11/17/98 - 06/16/00	Not analyzed for these analytes.						
MW3	07/31/00	<10	<10	<500	<5	<5	<10	---
MW3	10/10/00 - 10/24/02	Not analyzed for these analytes.						
MW3	03/21/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW3	04/10/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW3	07/17/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW3	07/18/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW3	10/09/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW3	01/21/04	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW3	05/25/04	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW3	08/26/04	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW3	12/07/04 j	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW3	03/17/05	<0.50	<0.50	22.7	<0.50	<0.50	<0.50	---
MW3	06/20/05	<0.50	<0.50	13.3	<0.50	<0.50	<0.50	---
MW3	09/20/05	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---
MW3	12/22/05	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---
MW3	03/23/06	<1.00	<1.00	<10.0	<1.00	<1.00	<1.00	---
MW3	05/30/06	<0.50	<0.50	<12	<0.50	<0.50	<0.50	<100
MW3	09/18/06	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---
MW3	12/11/06	<0.50	<0.50	<12	<0.50	<0.50	<0.50	---
MW3	**02/20/07**	**<0.500**	**<0.500**	**<10.0**	**<0.500**	**<0.500**	**<0.500**	**---**
MW4	11/17/98 - 06/16/00	Not analyzed for these analytes.						
MW4	07/31/00	<10	<10	<500	<5	<5	<10	---
MW4	10/10/00 - 10/24/02	Not analyzed for these analytes.						
MW4	03/21/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW4	04/10/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW4	07/17/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW4	10/09/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW4	01/21/04	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW4	05/25/04	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW4	08/26/04	<0.50i	<0.50i	<10.0i	<0.50i	<0.50i	<0.50i	---
MW4	12/07/04 f, j	---	---	---	---	---	---	---
MW4	03/17/05	<0.50	0.70	<10.0	<0.50	<0.50	<0.50	---
MW4	06/20/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW4	09/20/05	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---

TABLE 2B
ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-3567
3192 Santa Rita Road
Pleasanton, California

Well ID	Sampling Date	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	Ethanol (µg/L)
MW4	12/22/05	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---
MW4	03/23/06	<1.00	<1.00	<10.0	<1.00	<1.00	<1.00	---
MW4	05/30/06	<0.50	<0.50	<12	<0.50	<0.50	<0.50	<100
MW4	09/18/06	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---
MW4	12/11/06	<0.50	<0.50	<12	<0.50	<0.50	<0.50	---
MW4	**02/20/07 f**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
MW5	06/16/00	---	---	---	---	---	---	---
MW5	07/31/00	<10	<10	<500	<5	<5	<10	---
MW5	10/10/00 - 10/24/02	Not analyzed for these analytes.						
MW5	03/21/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW5	04/10/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW5	07/17/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW5	10/09/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW5	01/21/04	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW5	05/25/04	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW5	08/26/04	<0.50i	<0.50i	<10.0i	<0.50i	<0.50i	<0.50i	---
MW5	12/07/04 j	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW5	03/17/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW5	06/20/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW5	09/20/05	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---
MW5	12/22/05	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---
MW5	03/23/06	<1.00	<1.00	<10.0	<1.00	<1.00	<1.00	---
MW5	05/30/06	<0.50	<0.50	<12	<0.50	<0.50	<0.50	<100
MW5	09/18/06	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---
MW5	12/11/06	<0.50	<0.50	25	<0.50	<0.50	<0.50	---
MW5	**02/20/07**	**<0.500**	**<0.500**	**<10.0**	**<0.500**	**<0.500**	**<0.500**	**---**
MW6	06/16/00	---	---	---	---	---	---	---
MW6	07/31/00	<10	<10	<500	<5	<5	<10	---
MW6	10/10/00 - 10/24/02	Not analyzed for these analytes.						
MW6	03/21/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW6	04/10/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW6	07/17/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW6	10/09/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW6	01/21/04	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW6	05/25/04	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW6	08/26/04	<0.50i	<0.50i	<10.0i	<0.50i	<0.50i	<0.50i	---
MW6	12/07/04 j,m	---	---	---	---	---	---	---

TABLE 2B
ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-3567
3192 Santa Rita Road
Pleasanton, California

Well ID	Sampling Date	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	Ethanol (µg/L)
MW6	03/17/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW6	06/20/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW6	09/20/05	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---
MW6	12/22/05	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---
MW6	03/23/06	<1.00	<1.00	<10.0	<1.00	<1.00	<1.00	---
MW6	05/30/06	<0.50	<0.50	<12	<0.50	<0.50	<0.50	<100
MW6	09/18/06	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---
MW6	12/11/06	<0.50	<0.50	<12	<0.50	<0.50	<0.50	---
MW6	**02/20/07**	**<0.500**	**<0.500**	**<10.0**	**<0.500**	**<0.500**	**<0.500**	**---**
MW7	06/16/00 - 10/24/02 Not analyzed for these analytes.							
MW7	03/21/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW7	04/10/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW7	07/17/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW7	10/09/03	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW7	01/21/04	<0.50	<0.50	<10	<0.50	<0.50	<0.50	---
MW7	05/25/04	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW7	08/26/04	<0.50i	<0.50i	<10.0i	<0.50i	<0.50i	<0.50i	---
MW7	12/07/04 j	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW7	03/17/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW7	06/20/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW7	09/20/05	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---
MW7	12/22/05	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---
MW7	03/23/06	<1.00	<1.00	<10.0	<1.00	<1.00	<1.00	<100
MW7	05/30/06	<0.50	<0.50	<12	<0.50	<0.50	<0.50	<100
MW7	09/18/06	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---
MW7	12/11/06	<0.50	<0.50	<12	<0.50	<0.50	<0.50	---
MW7	**02/20/07**	**<0.500**	**<0.500**	**<10.0**	**<0.500**	**<0.500**	**<0.500**	**---**
MW8	07/31/00	<10	<10	<500	<5	<5	<10	---
MW8	10/10/00 - 08/26/04 Well dry.							
MW8	12/07/04 h, j	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW8	03/17/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW8	06/20/05	<0.50	<0.50	<10.0	<0.50	<0.50	<0.50	---
MW8	09/20/05	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---
MW8	12/22/05	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---
MW8	03/23/06	<1.00	<1.00	<10.0	<1.00	<1.00	<1.00	<100
MW8	05/30/06	<0.50	<0.50	<12	<0.50	<0.50	<0.50	<100
MW8	09/18/06	<0.500	<0.500	<10.0	<0.500	<0.500	<0.500	---

TABLE 2B
ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-3567
3192 Santa Rita Road
Pleasanton, California

Well ID	Sampling Date	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	DIPE (µg/L)	Ethanol (µg/L)
MW8	12/11/06	<0.50	<0.50	<12	<0.50	<0.50	<0.50	---
MW8	**02/20/07**	**<0.500**	**<0.500**	**<10.0**	**<0.500**	**<0.500**	**<0.500**	**---**

Notes:

TOC	=	Top of well casing elevation; datum is mean sea level.
SUBJ	=	Results of subjective evaluation, liquid-phase hydrocarbon thickness (HT) in feet.
NLPH	=	No liquid-phase hydrocarbons present in well.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is mean sea level.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using modified EPA Method 8015/8015B.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using modified EPA Method 5030/8015/8015B.
MTBE 8021B	=	Methyl tertiary butyl ether analyzed using EPA Method 8020 or 8021B.
MTBE 8260B	=	Methyl tertiary butyl ether analyzed using EPA Method 8260B.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B.
ETBE	=	Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
TAME	=	Tertiary amyl methyl ether analyzed using EPA Method 8260B.
TBA	=	Tertiary butyl alcohol analyzed using EPA Method 8260B.
EDB	=	1,2-dibromoethane analyzed using EPA Method 8260B.
1,2-DCA	=	1,2-dichloroethane analyzed using EPA Method 8260B.
DIPE	=	Di-isopropyl ether analyzed using EPA Method 8260B.
µg/L	=	Micrograms per liter.
<	=	Not detected at or above the stated laboratory method reporting limit.
---	=	Not analyzed/Not applicable/Not sampled/Not measured.
a	=	No result because of sample loss during laboratory fire.
b	=	Not enough water to gauge and/or sample.
c	=	Samples were damaged during transportation to laboratory.
d	=	Analyzed using EPA Method 8260.
e	=	Diesel-range hydrocarbons detected in bailer blank; result is suspect.
f	=	Well inaccessible.
g	=	DTW was not measured due to equipment failure.
h	=	Grab sample.
i	=	Groundwater elevation data invalidated; analytical results suspect.
j	=	Incorrect date recorded on the Chain-of-Custody form and/or laboratory analytical report. The correct date is shown.
k	=	Diesel-range organic compounds reported in sample; however, chromatogram pattern is not representative of diesel fuel.
l	=	Analyte detected in laboratory method blank; result is suspect.
m	=	Incorrect well monitored and sampled. Results invalidated.
n	=	Elevated reporting limit used due to sample matrix effects.
o	=	Result elevated due to single analyte peak in quantitation range.

TABLE 3
CUMULATIVE ANALYTICAL RESULTS OF SOIL SAMPLES
Former Exxon Service Station 7-3567
3192 Santa Rita Road
Pleasanton, California

Sample ID	Depth (fbgs)	Date	TPHd (mg/kg)	TPHg (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	Total Lead (mg/kg)	TRPH (mg/kg)	HVOCs (mg/kg)	SVOCs (µg/kg)	VOCs (µg/kg)	TOG (mg/kg)
UST Replacement															
S-13-T1E	13	12/20/88	—	169	---	3.08	10.06	3.33	26.52	---	---	---	---	---	---
S-13-T1W	13	12/20/88	---	16	---	0.42	0.39	0.33	0.61	---	---	---	---	---	---
S-13-T2E	13	12/20/88	---	8	---	0.70	0.69	0.26	1.70	<0.16	---	---	---	---	---
S-13-T2W	13	12/20/88	—	117	—	0.96	0.92	2.85	17.03	<0.16	—	—	---	---	—
S-13-T3E	13	12/20/88	---	19	—	0.72	1.02	1.02	3.95	---	---	---	---	---	—
S-13-T3W	13	12/20/88	---	2,901	---	18	78	116	803	---	—	---	---	---	---
S-16-T1E	16	12/30/88	---	<2	—	<0.05	<0.05	<0.05	<0.05	---	---	—	---	—	---
S-13-T2E	13	12/30/88	---	---	—	---	---	---	---	---	---	---	---	---	---
S-14-T2W	14	12/30/88	---	<2	—	<0.05	<0.05	<0.05	<0.05	<0.2	---	---	---	—	---
S-17-T3W	17	12/30/88	---	<2	—	<0.05	<0.05	<0.05	<0.05	<0.2	---	—	---	---	---
S-10-WOT (T4)	10	12/20/88	<10	<1	—	---	---	---	---	---	---	---	---	—	<30
Monitoring Well Installation															
S-10-B1	10	11/11/98	<1.0	<1.0	<0.025	<0.005	<0.005	<0.005	<0.005	—	<50	—	ND	ND	—
S-15-B1	15	11/11/98	5.3	<1.0	<0.025	<0.005	<0.005	<0.005	<0.005	—	<50	—	ND	ND	—
S-35-B1	35	11/11/98	<1.0	<1.0	<0.025	<0.005	<0.005	<0.005	<0.005	—	<50	—	ND	ND	—
S-15-B2	15	11/11/98	<1.0	<1.0	<0.025	<0.005	<0.005	<0.005	<0.005	—	—	—	—	—	—
S-35-B2	35	11/11/98	<1.0	<1.0	<0.025	<0.005	<0.005	<0.005	<0.005	—	—	—	—	—	—
S-15-B3	15	11/12/98	1.3	<1.0	<0.025	<0.005	<0.005	<0.005	<0.005	—	—	—	—	—	—
S-25-B3	25	11/12/98	19	<1.0	<0.025	<0.005	<0.005	<0.005	<0.005	—	—	—	—	—	—
S-15-B4	15	11/12/98	<1.0	<1.0	<0.025	<0.005	<0.005	<0.005	<0.005	—	—	—	—	—	—
S-25-B4	25	11/12/98	<1.0	<1.0	<0.025	<0.005	<0.005	<0.005	<0.005	—	—	—	—	—	—
S-16-MW5	16	07/18/00	<2	<1	<0.001	<0.001	<0.001	<0.001	<0.001	—	—	—	—	—	—
S-30-MW5	30	07/18/00	3.8	<1	<0.001	<0.001	<0.001	<0.001	<0.001	—	—	—	—	—	—
S-18-MW6	18	07/19/00	<2	<1	<0.001	<0.001	<0.001	<0.001	<0.001	—	—	—	—	—	—
S-30-MW6	30	07/19/00	<2	<1	<0.001	<0.001	<0.001	<0.001	<0.001	—	—	—	—	—	—
S-15-MW7	15	07/18/00	<2	<1	<0.001	<0.001	<0.001	<0.001	<0.001	—	—	—	—	—	—
S-21-MW7	21	07/18/00	<2	<1	0.001	<0.001	<0.001	<0.001	0.001	—	—	—	—	—	—
S-15-MW8	15	03/16/01	<2	<1	<0.001	<0.001	<0.001	<0.001	<0.001	—	—	—	—	—	—
S-30-MW8	30	03/16/01	<2	<1	<0.0017	<0.001	<0.001	<0.001	<0.001	—	—	—	—	—	—
Product Line and Dispenser Replacement															
S-5.5-D1	5.5	08/09/02	<9.84	<25.0	0.0073	<0.0020	<0.0020	<0.0020	<0.0020	—	—	—	—	ND	—
S-6.5-PL1	6.5	08/09/02	<9.96	<25.0	0.0098	<0.0020	<0.0020	<0.0020	<0.0020	—	—	—	—	ND	—
S-4-PL3	4	08/09/02	<9.88	<25.0	0.0072	<0.0020	<0.0020	<0.0020	<0.0020	—	—	—	—	ND	—
S-5-D5	5	08/09/02	<9.96	<25.0	0.0625	<0.0020	<0.0020	<0.0020	<0.0020	—	—	—	—	ND	—
S-4-PL5	4	08/09/02	<9.84	<25.0	0.0222	<0.0020	<0.0020	<0.0020	<0.0020	—	—	—	—	ND	—
S-4.5-PL7	4.5	08/09/02	<10.0	<25.0	0.0148	<0.0020	<0.0020	<0.0020	<0.0020	—	—	—	—	ND	—
S-5-PL8	5	08/09/02	<10.0	<25.0	0.189	<0.0020	0.0023	<0.0020	0.0032b	—	—	—	—	ND	—
S-6-PL10	6	08/09/02	<9.92	<25.0	<0.0200	<0.0020	<0.0020	<0.0020	<0.0020	—	—	—	—	ND	—

TABLE 3
CUMULATIVE ANALYTICAL RESULTS OF SOIL SAMPLES
Former Exxon Service Station 7-3567
3192 Santa Rita Road
Pleasanton, California

Sample ID	Depth (fbgs)	Date	TPHd (mg/kg)	TPHg (mg/kg)	MTBE (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	Total Lead (mg/kg)	TRPH (mg/kg)	HVOCs (mg/kg)	SVOCs (µg/kg)	VOCs (µg/kg)	TOG (mg/kg)
Stockpile Samples															
SP1-1 (1-4)	1	11/12/98	11	<1.0	<0.025	<0.005	<0.005	<0.005	<0.005	<5	<50	ND	---	---	---
SP-1-1	1	07/19/00	<2	<1	---	<0.001	<0.001	<0.001	<0.001	5.64	---	0.0023a	---	---	---
SP-1-(1-4)	1	03/16/01	<2	<1	<0.0022	<0.001	<0.001	<0.001	0.001	8.11	---	ND	---	---	---

Notes:

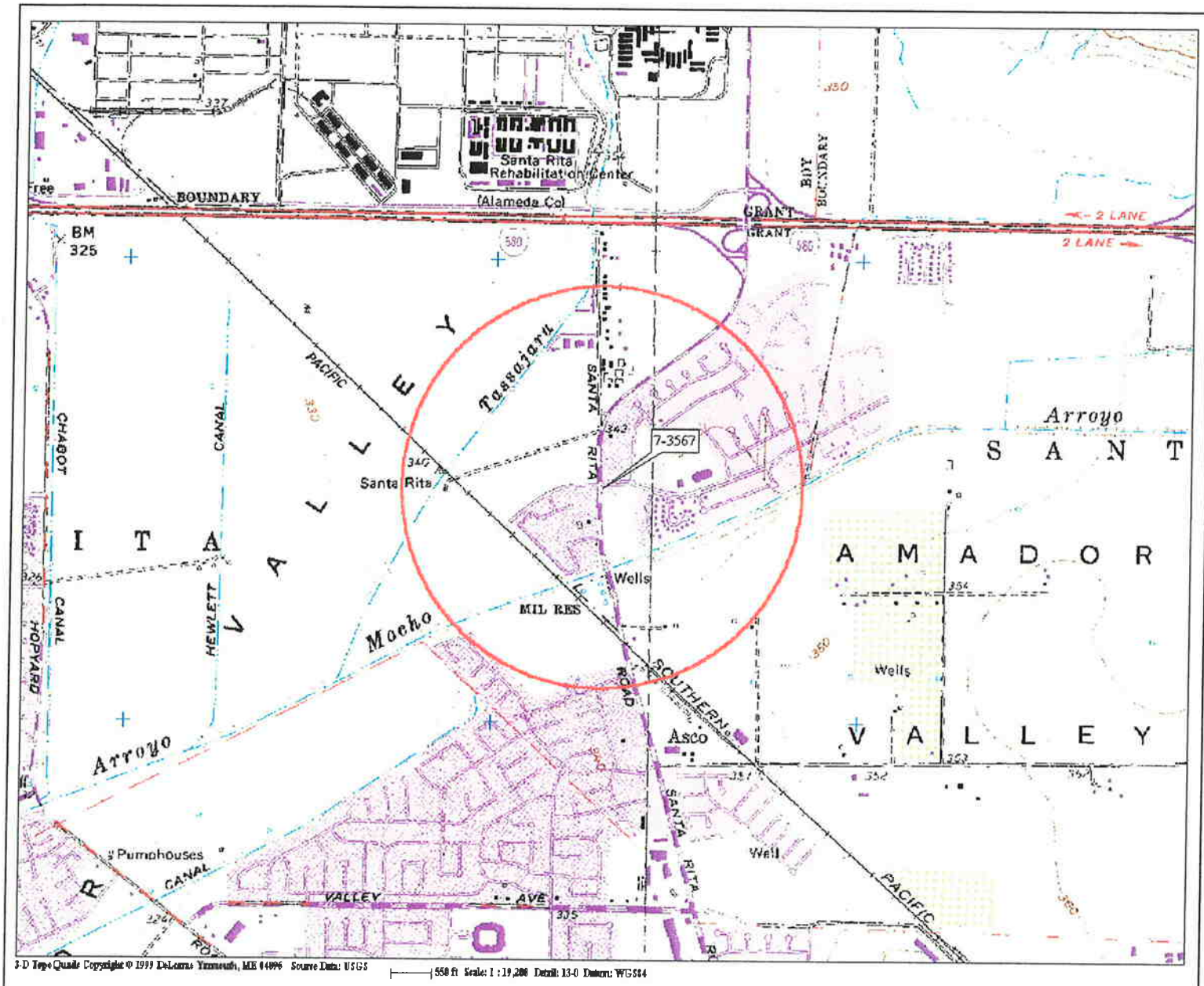
S-10-B1	=	Soil sample-depth in feet below ground surface-boring number.
SP1-1(1-4)	=	Stockpile soil sample-depth in feet below ground surface.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015M.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015M.
MTBE	=	Methyl tertiary butyl ether analyzed using EPA Method 8021B or 8260B.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B.
TRPH	=	Total recoverable petroleum hydrocarbons analyzed using EPA Method 5520 E and F.
Total Lead	=	Total lead analyzed using EPA Method 6010B.
HVOCs	=	Halogenated volatile organic compounds analyzed using EPA Method 8010B.
SVOCs	=	Semi-volatile organic compounds analyzed using EPA Method 8270.
VOCs	=	Volatile organic compounds analyzed using EPA Method 8240 or 8260B.
TOG	=	Total oil and grease.
fbgs	=	Feet below ground surface.
ND	=	Not detected (various detection limits).
mg/kg	=	Milligrams per kilogram.
µg/kg	=	Micrograms per kilogram.
<	=	Less than the detection limit indicated.
---	=	Not analyzed/Not Applicable.
a	=	Methelyne Chloride.
b	=	Estimated value below reported limit.

TABLE 4
ANALYTICAL RESULTS OF GRAB GROUNDWATER SAMPLES
Former Exxon Service Station 7-3567
3192 Santa Rita Road
Pleasanton, California

Sample ID	Sampling Date	Depth (fbgs)	TPHd (µg/L)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
W-52-7-3567SB1	04/13/00	52	a	68	56	<0.5	<0.5	<0.5	<0.5
W-55-7-3567SB3	04/13/00	52	190	<50	290	<0.5	<0.5	<0.5	<0.5

Notes:

Sample ID	=	Water-Depth-Site ID-Soil Boring Number.
Depth	=	Depth of sample below ground surface.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using modified EPA Method 8015.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using modified EPA Method 5030/8015 (modified).
MTBE	=	Methyl tertiary butyl ether analyzed using EPA Method 8260B.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B.
µg/L	=	Micrograms per liter.
fbgs	=	Feet below ground surface.
<	=	Not detected at or above the stated laboratory method reporting limit.
---	=	Not analyzed/Not applicable.
a	=	There was insufficient sample quantity to perform analysis.



FN 2431Topo

EXPLANATION

1/2-mile radius circle

N

APPROXIMATE SCALE

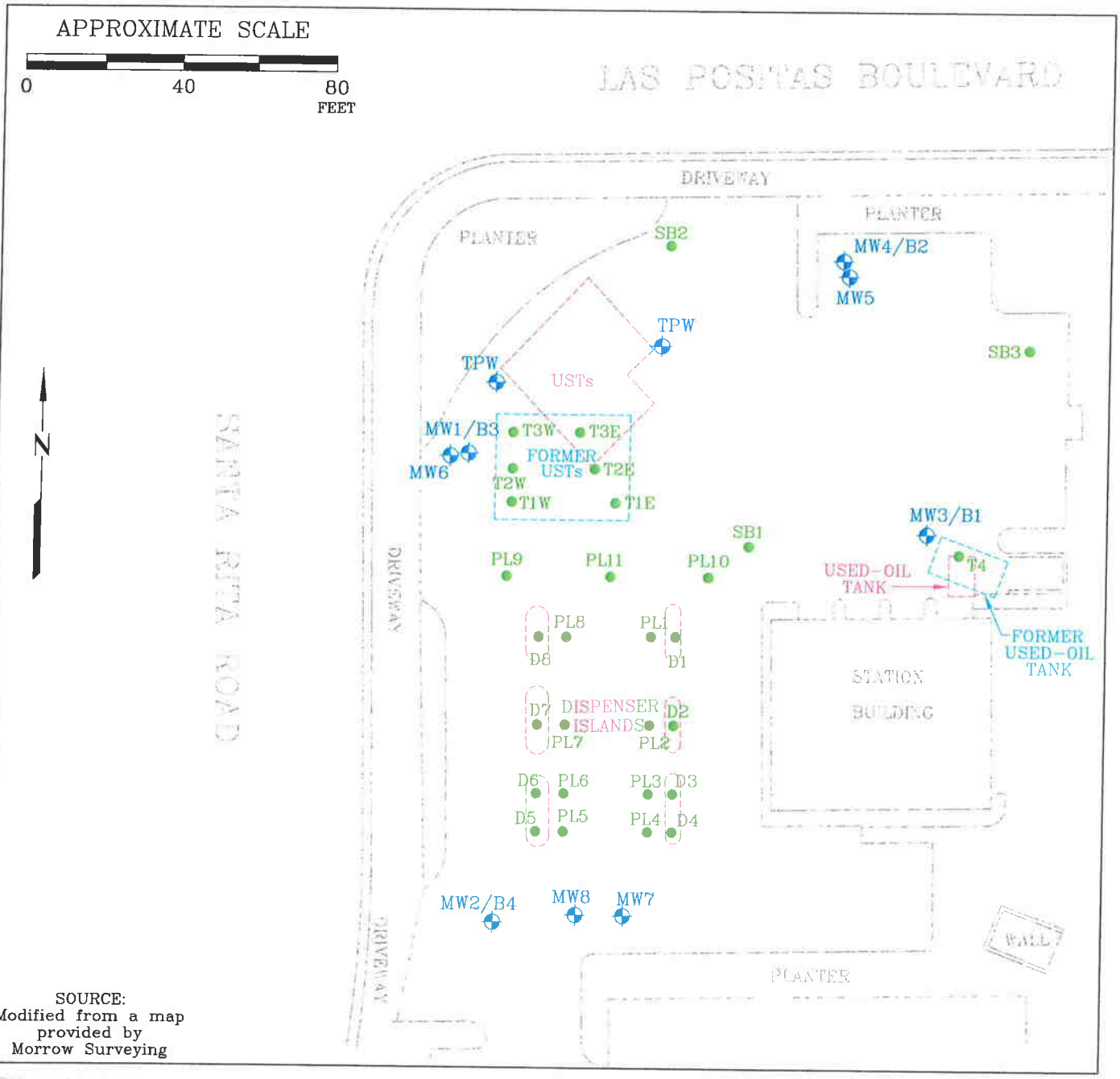
0 0.5 1 mile

SOURCE:
Modified from a map
provided by
DeLorme 3-D TopoQuads

SITE VICINITY MAP

FORMER EXXON SERVICE STATION 7-3567
3192 Santa Rita Road
Pleasanton, California

PROJECT NO.
2431
PLATE
1



SOURCE:
Modified from a map
provided by
Morrow Surveying

FN 24310003

EXPLANATION

MW8 — Groundwater Monitoring Well

TPW — Tank Pit Well

SB3 — Boring Location

ERI
VALUE, QUALITY, RESPONSE

GENERALIZED SITE PLAN

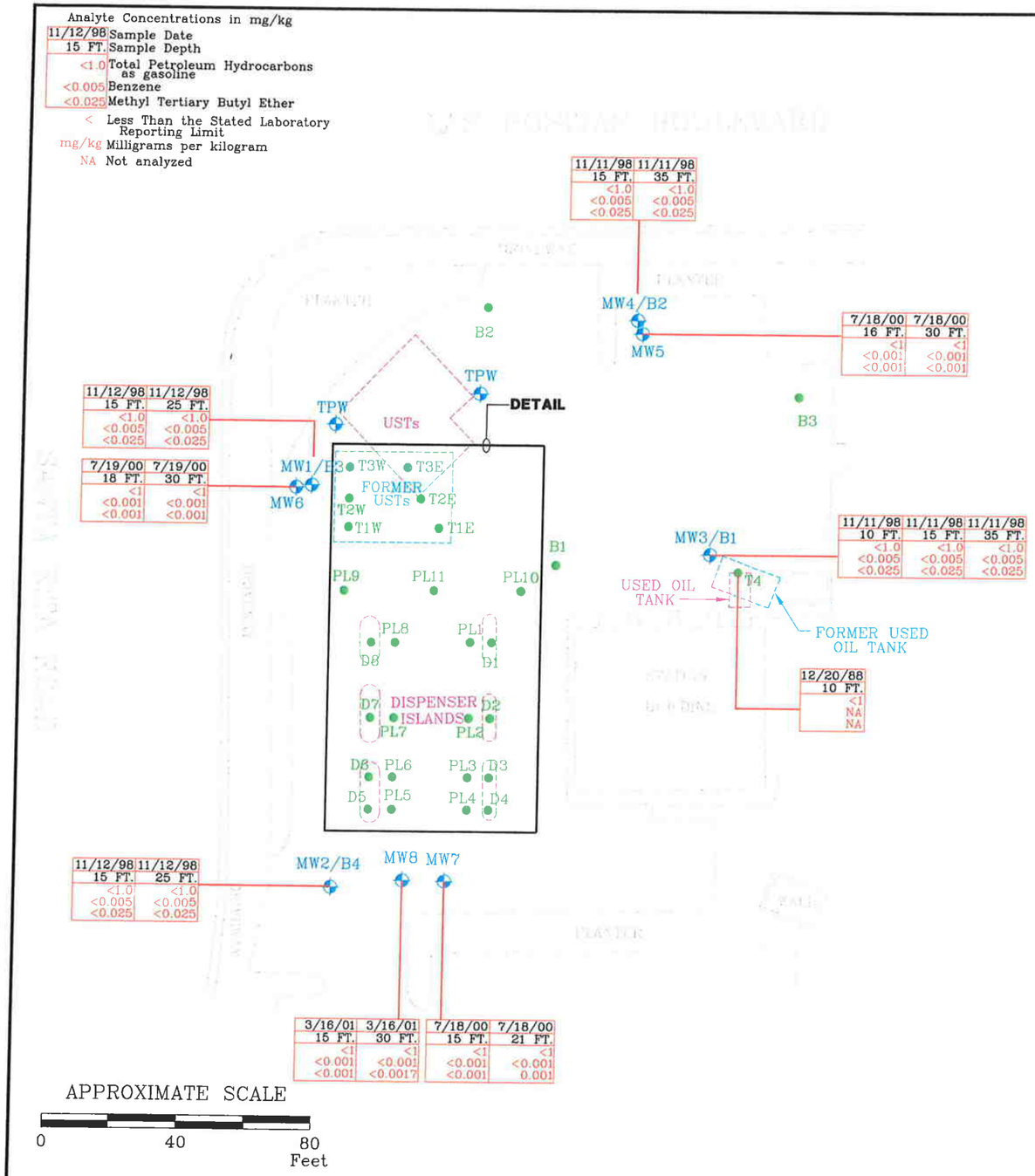
FORMER EXXON SERVICE STATION 7-3567
3192 Santa Rita Road
Pleasanton, California

PROJECT NO. 2431

PLATE 2

Analyte Concentrations in mg/kg

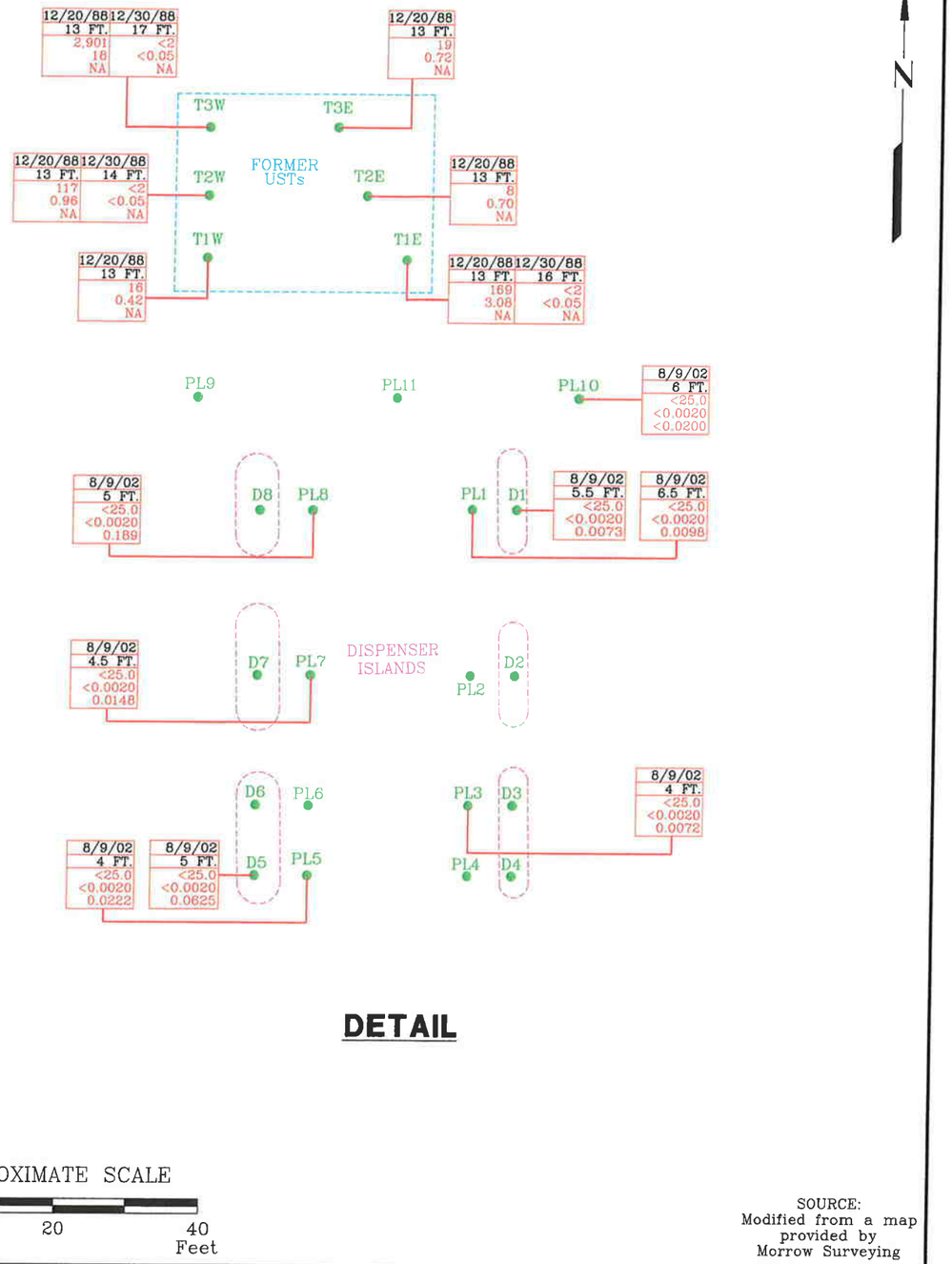
11/12/98	Sample Date
15 FT.	Sample Depth
<1.0	Total Petroleum Hydrocarbons as gasoline
<0.005	Benzene
<0.025	Methyl Tertiary Butyl Ether
<	Less Than the Stated Laboratory Reporting Limit
mg/kg	Milligrams per kilogram
NA	Not analyzed



APPROXIMATE SCALE

0 40 80 Feet

FN 24310004_SP



DETAIL

APPROXIMATE SCALE

0 20 40 Feet

SOURCE: Modified from a map provided by Morrow Surveying

ERI

VALUE, QUALITY, RESPONSE

RESIDUAL HYDROCARBON CONCENTRATIONS IN SOIL

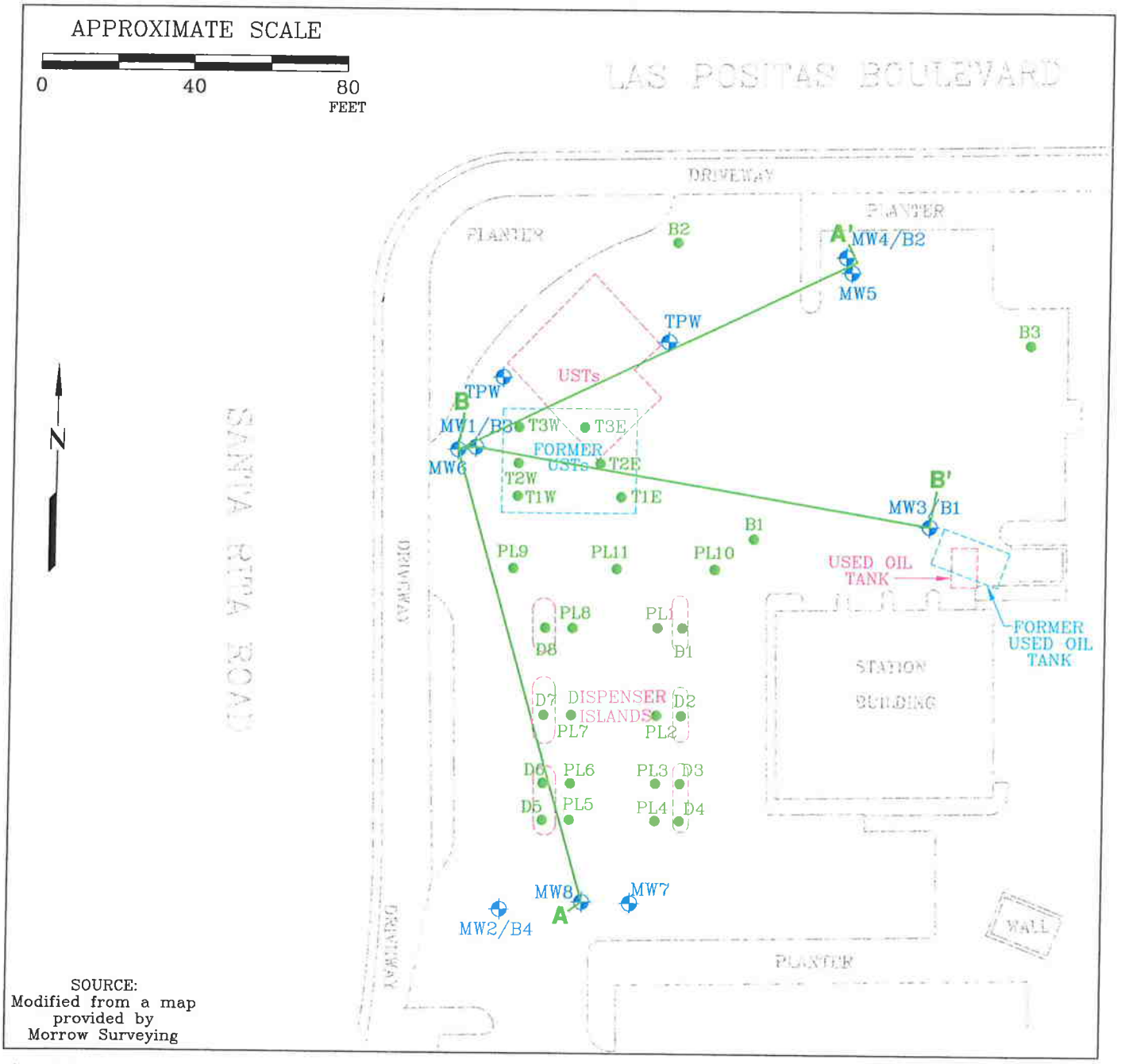
FORMER EXXON SERVICE STATION 7-3567
3192 Santa Rita Road
Pleasanton, California

EXPLANATION

- MW8 — Groundwater Monitoring Well
- TPW — Tank Pit Well
- S — Boring Location

PROJECT NO. 2431

PLATE 3



SOURCE:
Modified from a map provided by Morrow Surveying

FN 24310003_SP

EXPLANATION

MW8 — Groundwater Monitoring Well

TPW — Tank Pit Well

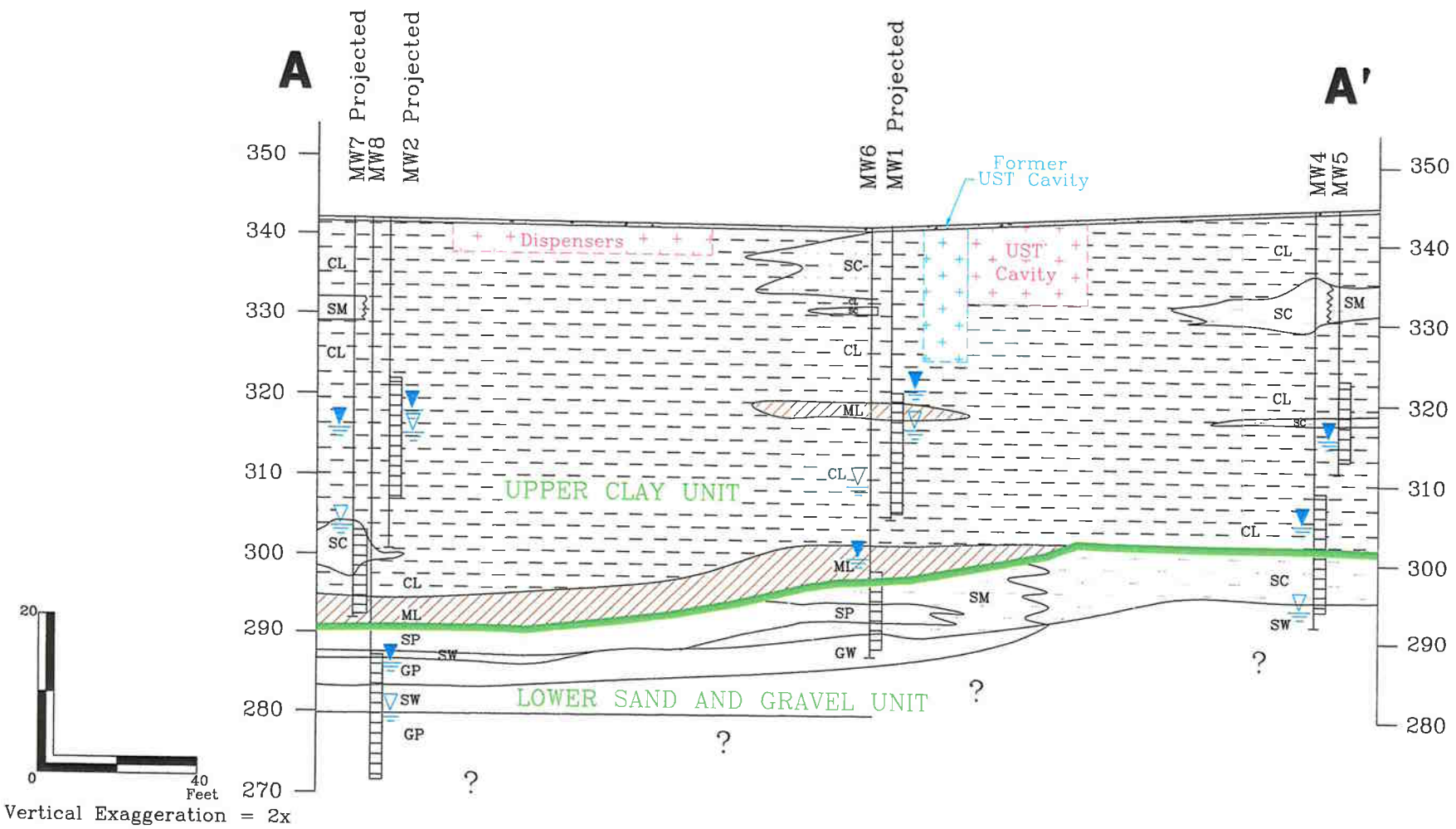
B3 — Boring Location

B B' — Cross Section

CROSS SECTION LOCATION MAP

FORMER EXXON SERVICE STATION 7-3567
3192 Santa Rita Road
Pleasanton, California

PROJECT NO.
2431
PLATE
4



FN 2431SXAA

ERI
VALUE, QUALITY, RESPONSE

CROSS-SECTION A-A'

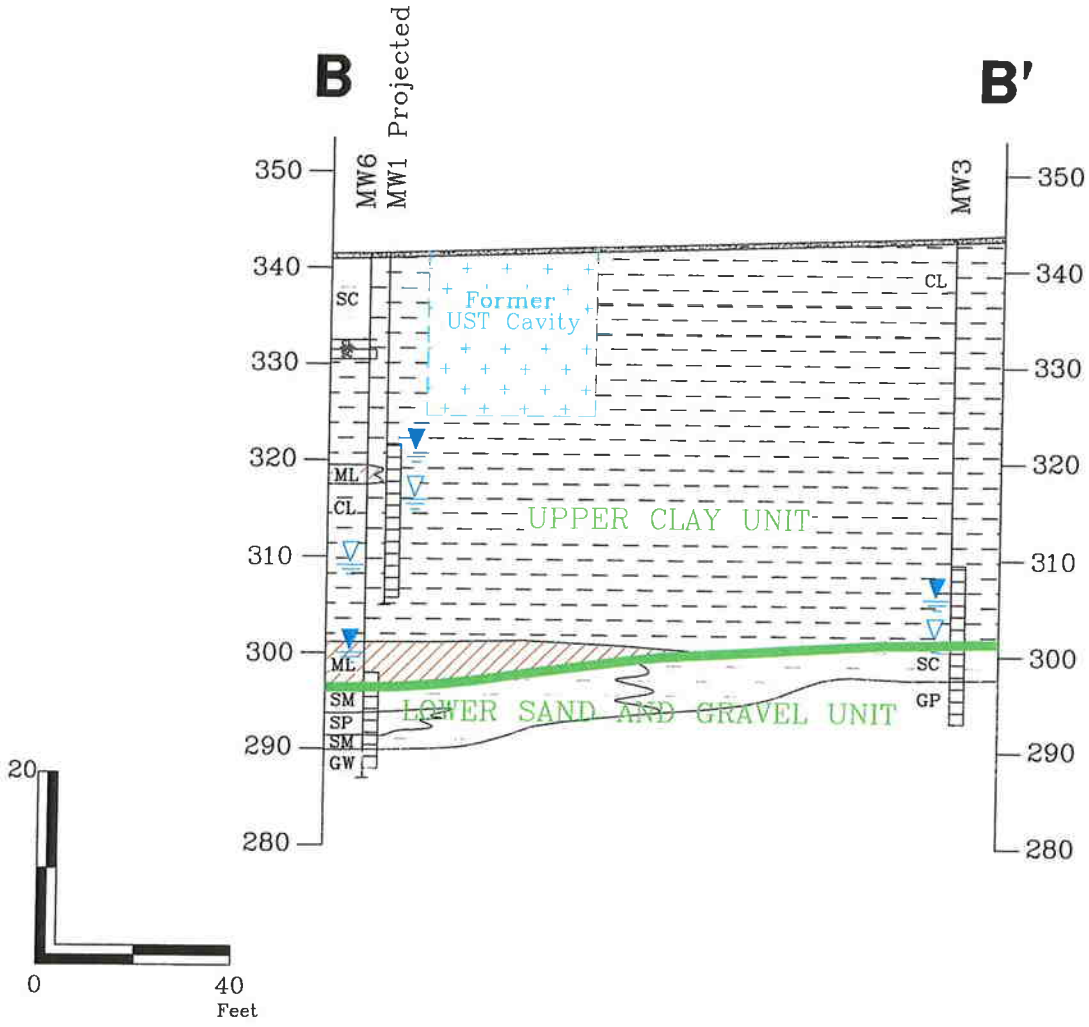
FORMER
EXXON SERVICE STATION 7-3567
3192 Santa Rita Road
Pleasanton, California

EXPLANATION

- Clay
- Silty Sand
- Sand
- Clayey Sand
- Sandy Gravel
- Sandy/Clayey Silt
- First encountered groundwater
- Static groundwater
- Screened Interval of Well

PROJECT NO. 2431

PLATE 5



Vertical Exaggeration = 2x

FN 2431SXBB

EXPLANATION

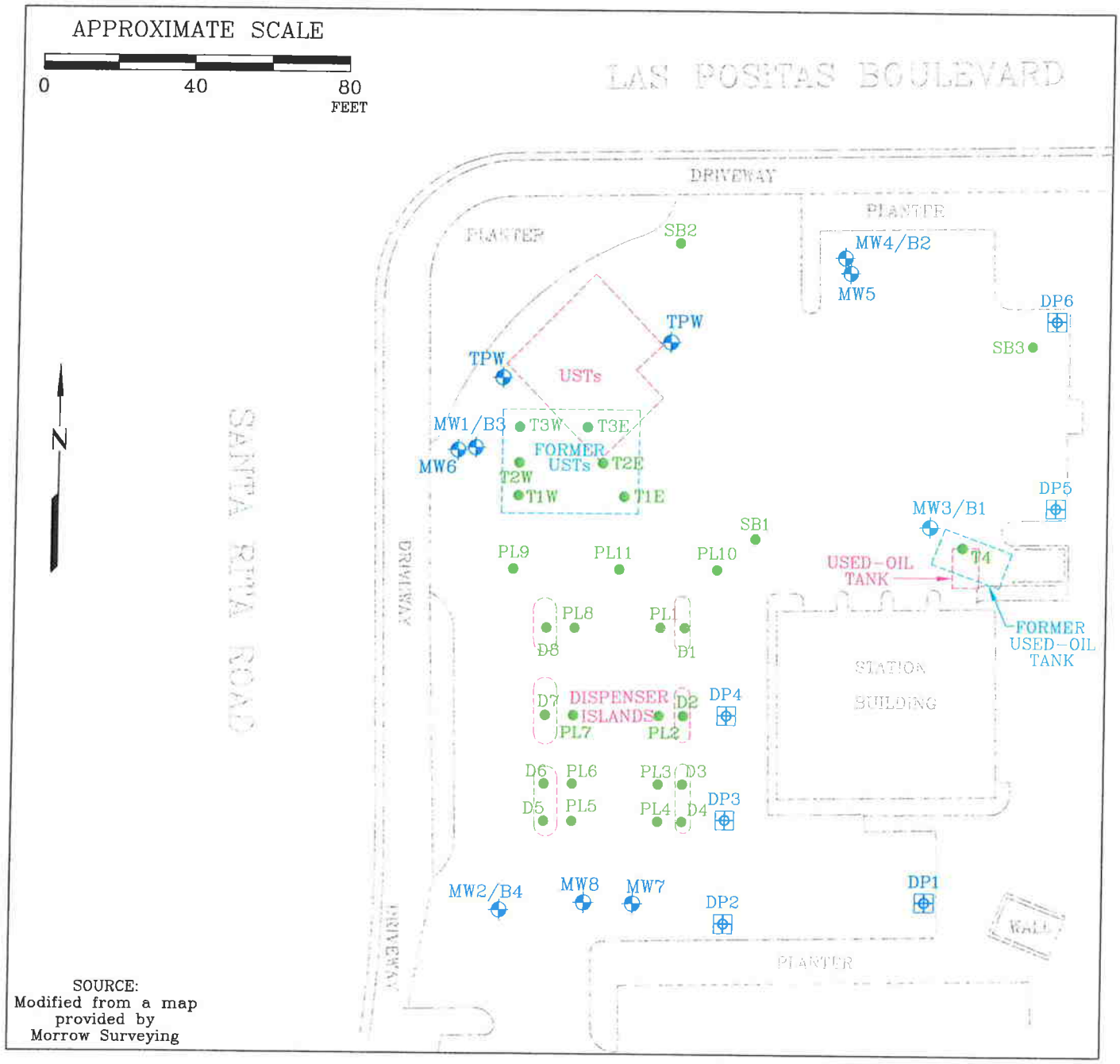
- Clay
- Sandy/Clayey Silt
- Clayey Sand
- Silty Sand
- Gravelly Sand
- Sand
- Static Groundwater
- First Encountered Groundwater
- Screened Interval of Well

CROSS SECTION B-B'

FORMER EXXON SERVICE STATION 7-3567
3192 Santa Rita Road
Pleasanton, California

PROJECT NO. 2431

PLATE 6



FN 24310003

EXPLANATION

MW8 — Groundwater Monitoring Well

DP6 — Proposed Direct-Push/ Hydropunch Boring

TPW — Tank Pit Well

SB3 — Boring Location

PROPOSED BORING LOCATIONS

FORMER EXXON SERVICE STATION 7-3567
3192 Santa Rita Road
Pleasanton, California

PROJECT NO. 2431

PLATE 7

ATTACHMENT A

AGENCY CORRESPONDENCE

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RECEIVED
SEP 07 2006
BY:_____

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

September 5, 2006

Ms. Jennifer Sedlacheck
Exxon Mobil
4096 Piedmont, #194
Oakland, CA 94611

BNY Western Trust Company
C/o Ad Valorem Tax Dept.
1 Valero Place
San Antonio, TX 78212

Mr. Robert Ehlers
Valero Energy Corporation
685 West Third Street
Hanford, CA 93230

Subject: Fuel Leak Case No. RO0002426, Former Exxon Station #7-3567, 3192 Santa Rita Road, Pleasanton, CA

Dear Ms. Sedlacheck and Mr. Ehlers:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site and the documents entitled, "Site Conceptual Model and Recommendation for Case Closure," dated July 10, 2006 but received by ACEH on August 15, 2006 and "Groundwater Monitoring Report, Second Quarter 2006," dated August 4, 2006. The Site Conceptual Model (SCM) summarizes existing information for the site and recommends case closure. The site is located within the Livermore-Amador Groundwater Basin approximately 425 feet north of several municipal water supply wells. The potential for discharges from the site to affect the water supply wells is a major concern. The concentrations of MTBE, TBA, and TPHd detected in groundwater at the site exceed drinking water toxicity criteria. The lower sand and gravel unit encountered at the site has significantly lower water levels than the overlying fine-grained unit, possibly reflecting the effects of pumping within the sand and gravel unit. Although the SCM indicates that groundwater concentrations are decreasing, review of the concentration graphs indicates that concentrations have decreased within the past year in several wells, but long-term trends over the past seven years appear to be stable or upward. Based on the potential for the site to affect municipal supply wells and the issues identified in our technical comments below, the case cannot be closed at this time.

This decision is subject to appeal to the State Water Resources Control Board (SWRCB), pursuant to Section 25299.39(b) of the Health and Safety Code (Thompson-Richter Underground Storage Tank Reform Act - Senate Bill 562). Please contact the SWRCB Underground Storage Tank Program at (916) 341-5851 for information regarding the appeal process.

We request that you address the following technical comments, perform the proposed work, and send us the reports described below.

TECHNICAL COMMENTS

1. **Trends in Dissolved Phase Concentrations.** The SCM indicates that dissolved-phased concentrations of TPHd, TPHg, BTEX, and MTBE show declining or stable trends at concentrations near the reporting limits, except for well MW-5, which shows fluctuating concentrations. Although dissolved phase concentrations have decreased in several wells over the last five monitoring events, the long-term trends may still be upward in several wells. As an example, the concentration of MTBE detected in groundwater from well MW-1 has decreased from 2,600 micrograms per liter (µg/L) in March 2005 to 4.6 µg/L in May 2006. However, the trend in MTBE concentrations in well MW-1 is upward over the approximately seven-year period from November 1998 to March 2005. Therefore, the long-term trend continues to be upward. The detection of 2,600 µg/L of MTBE in March 2005 was the maximum MTBE concentration detected since monitoring began at the site in November 1998. TBA concentrations in well MW-1 have increased from less than 10 µg/L in March 2003 to 114 µg/L in December 2005. MTBE concentrations detected recently in well MW-4 are higher than MTBE concentrations detected during the period from 2001 to 2004. Based on these results, the degree to which natural attenuation is reducing dissolved-phase concentrations at the site is not clear.

2. **TPH Source in Tank Pit Area.** The SCM concludes that a release most likely occurred from the old USTs prior to 1998 and a second release occurred from the dispensers, product piping, or new USTs between 1988 and 1998. The only soil samples collected in the area of the USTs were the tank pit soil samples collected from the old tank pit in 1988. No soil samples appear to have been collected in the area of the USTs installed in 1988. Due to the potential for a TPH source to exist in soil in the area of the UST tank pit, we request that you collect soil samples in the area of the new tank pit. We also request that you collect water samples from the tank pit wells to assess whether a significant release has occurred to shallow groundwater within the area of the tank pit. Please present plans to conduct this sampling in the Work Plan requested below.

3. **Potential Leaks from Dispensers.** In August 2002, MTBE was detected in soil at concentrations exceeding Environmental Screening Levels (ESLs) for groundwater protection at locations beneath the dispensers and product piping. No groundwater samples have been collected in the dispenser area or downgradient (east southeast) of the dispenser area, based on the hydraulic gradient for the upper water-bearing zone shown on Plate 3. Please present plans to collect groundwater samples to assess whether dissolved phase hydrocarbons are migrating from the dispenser area.

4. **Hydraulic Gradient.** Plate 4 (Groundwater Elevation Map, Lower Water-Bearing Zone) of the SCM and the Groundwater Monitoring Report, Second Quarter 2006, depicts a hydraulic gradient to the north for the lower zone. We do not believe Plate 4 accurately represents the hydraulic gradient within the lower zone. Well MW-7 is screened entirely within the upper fine-grained soils at the site and water levels from this well should not be included on Plate 4.

If water levels from well MW-8, which is screened entirely within the lower sand and gravel unit, are used for contouring instead of water levels from MW-7, the hydraulic gradient in the lower zone is generally to the south, towards the water supply wells. Please correct future Groundwater Elevation Maps in the reports requested below.

5. **Risk Assessment.** The risk assessment evaluated exposure pathways for direct dermal contact and ingestion of soil, volatilization from soil and transport into indoor air, and volatilization from groundwater and transport into indoor air. The baseline carcinogenic risk, expressed as an Individual Excess Lifetime Cancer Risk and baseline toxicity effects expressed as a hazard index, do not exceed target risk values for these pathways. The risk assessment does not consider the most significant exposure pathway for the site, groundwater ingestion. Please include the groundwater ingestion pathway in any future risk assessments that review cumulative risk.

6. **Well Location Maps.** The Regional Area Map (Plate 12) and Zone 7 Water Agency Well Location Map are not legible in the electronic document submitted. Please improve the quality of these maps within the electronic document or submit separate paper color copies of these documents. Please submit the revised Well Locations Maps in the Work Plan requested below.

7. **Quarterly Groundwater Monitoring**. We request that quarterly groundwater monitoring be continued at the site. Please continue to analyze the groundwater samples for TPHd, TPHg, BTEX, and fuel oxygenates and present the results in the groundwater monitoring reports requested below.

TECHNICAL REPORT REQUEST

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

- **November 15, 2006** – Quarterly Monitoring Report for the Third Quarter 2006
- **November 20, 2006** – Work Plan
- **February 15, 2007** – Quarterly Monitoring Report for the Fourth Quarter 2006

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

ELECTRONIC SUBMITTAL OF REPORTS

Effective **January 31, 2006**, the Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and

will be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program ftp site are provided on the attached "Electronic Report Upload (ftp) Instructions." Please do not submit reports as attachments to electronic mail.

Submission of reports to the Alameda County ftp site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. Submission of reports to the Geotracker website does not fulfill the requirement to submit documents to the Alameda County ftp site. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitor wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all necessary reports was required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

PERJURY STATEMENT

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

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

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

UNDERGROUND STORAGE TANK CLEANUP FUND

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

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including

the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

If you have any questions, please call me at (510) 567-6791.

Sincerely,

Jerry Wickham
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Paula Sime
Environmental Resolutions, Inc.
601 North McDowell Boulevard
Petaluma, CA 94954

Donna Drogos, ACEH
Jerry Wickham, ACEH
File

ATTACHMENT B

FIELD PROTOCOL

FIELD PROTOCOL

Site Safety Plan

Field work will be performed by ERI personnel in accordance with a Site Safety Plan developed for the site. This plan describes the basic safety requirements for the subsurface investigation and the drilling of soil borings at the work site. The Site Safety Plan is applicable to personnel and subcontractors of ERI. Personnel at the site are informed of the contents of the Site Safety Plan before work begins. A copy of the Site Safety Plan is kept at the work site and is available for reference by appropriate parties during the work. The ERI geologist will act as the Site Safety Officer.

Drilling of Soil Borings

Prior to the drilling of soil borings, ERI will acquire necessary permits from the appropriate agency(ies). ERI will also contact Underground Service Alert (USA) and a private underground utility locator (per ExxonMobil protocol) before drilling to help locate public utility lines at the site. ERI will clear the proposed locations to a depth of approximately 4 or 8 feet (depending on the location), before drilling to reduce the risk of damaging underground structures.

The soil borings will be advanced using dual-tube or direct-push technology. A dual tube system consists of a large diameter (up to 3.5 inches) outer rod which serves as a temporary drive casing nested with an inner sample rods and sample barrel (up to 2.6 inches) used to obtain and retrieve the soil cores. The dual tubes are simultaneously pushed, pounded, or vibrated into the ground.

As the rods are advanced, soil is forced up inside of a three-foot sample barrel that is attached to the end of the inner rods. Soil samples are collected in stainless steel or clear plastic sample liners inside the sample barrel as both rods are advanced. After being driven three feet, the inner rods and sample barrel are retrieved, and the sample liners are removed from the sample barrel and are either package for chemical analysis or visually inspected for lithologic identification. Clean empty liners are placed into a new three foot sample barrel and attached to the rods and lowered to the bottom of the hole and the process is repeated until the total depth of the borehole is reached.

The larger outer diameter rods are left in place while the inner rod and sample barrel is retrieved. This prevents the borehole from collapsing and ensures that the soil samples are collected from the targeted depth rather than potentially be contaminated with slough from higher up in the borehole.

The drive casing, sampling rods, sample barrels, and tools will be steam-cleaned before use and between boreholes to minimize the possibility of cross-hole contamination. The rinsate will be contained in drums and stored on site. ERI will coordinate with Exxon Mobil for appropriate disposal of the rinsate.

Drilling will be performed under the observation of a field geologist, and the earth materials in the borings will be identified using visual and manual methods, and classified as drilling progresses using the Unified Soil Classification System.

Soil samples will be monitored with a photo-ionization detector (PID), which measures hydrocarbon concentrations in the ambient air or headspace above the soil sample. Field instruments such as the PID are useful for indicating relative levels of hydrocarbon vapors, but do not detect concentrations of hydrocarbons with the same precision as laboratory analyses. Soil samples selected for possible chemical analysis will be sealed promptly with Teflon® tape and plastic caps. The samples will be labeled and placed in iced storage for transport to the laboratory. Chain-of-Custody records will be initiated by the geologist in the field, updated throughout handling of the samples, and sent with the samples to the laboratory. Copies of these records will be in the final report. Cuttings generated during drilling will be placed on plastic sheeting and covered and left at the site. ERI will coordinate with Exxon Mobil for the soil to be removed to an appropriate disposal facility.

Grab Groundwater Sample Collection through Direct Push Rods

At first encountered groundwater, the sample barrel and inner rods will be removed from the borehole. Small diameter well casing with 0.010" slotted well screen may be installed to facilitate the collection of groundwater samples. The temporary well is lowered through the drive casing and then the drive casing is pulled up approximately 0.5 feet to 2 feet to expose the slotted interval and allow groundwater to flow into the borehole. Groundwater samples may then be collected from within the drive casing with a new disposable bailer or peristaltic pump. When using dual-wall direct-push technology, the outer rods seal off upper portions of the aquifer while coring to the lower depths. Groundwater samples from lower depths can be collected by removing the inner coring rods while the outer rods remain in place, and attaching drive rods to a groundwater sampling probe such as the HydroPunch II® (HP II), which is then inserted inside the outer rods of the dual-wall equipment. A 5-foot long disposable screen and tip is inserted into the HP-II, the HP-II is pushed to the desired depth and the outer body of the HP-II is retracted. The disposable screen is exposed to the ground water and a ¾-inch inner-diameter bailer is lowered through the rods and into the screened zone for sample collection.

Grab Groundwater Sampling

The Hydropunch® sampler (or similar) provides a method for collecting groundwater samples at multiple depths in the same borehole. To sample groundwater, the sample tool is pushed to the selected depth beneath the water table, then withdrawn to expose an inlet screen. Alternatively, a temporary casing is placed within the casing. A water sample is then collected and promptly transported in iced storage in a thermally-insulated ice chest, accompanied by a Chain of Custody Record, to a California-certified laboratory.

Borehole Grouting

After soil and grab groundwater sampling have been completed, all boreholes will be backfilled with cement grout containing less that 5 percent pure sodium bentonite. The grout will be pumped through a tremie pipe positioned at the bottom of the boreholes.