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April 14, 2006

Jerry Wickham
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Site Conceptual Model
Shell-branded Service Station
285 Hegenberger Road
Oakland, California
SAP Code 135691
Incident No. 98995749
ACHCSA Case #RO-0220

Dear Mr. Wickham:

Attached for your review and comment is a copy of the *Site Conceptual Model* for the above referenced site. Upon information and belief, I declare, under penalty of perjury, that the information contained in the attached document is true and correct.

If you have any questions or concerns, please call me at (707) 865-0251.

Sincerely,

Denis L. Brown
Sr. Environmental Engineer

CAMBRIA

April 14, 2006

Jerry Wickham
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA, 94502-6577

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Re: **Site Conceptual Model**
Shell-branded Service Station
285 Hegenberger Road
Oakland, California
SAP # 135691
Incident # 98995749
Cambria Project #248-0734-010
ACHCSA Case # RO-0220

Dear Mr. Wickham:

Cambria Environmental Technology, Inc. (Cambria) prepared this site conceptual model (SCM) on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell). Cambria recommended preparing an SCM in our June 30, 2005 *Additional Interim DPE Report*, and Alameda County Health Care Services Agency (ACHCSA) concurred in a letter dated December 20, 2005.

SITE BACKGROUND

Location and Current Use

This operating Shell-branded service station is located at the Hegenberger Road and Leet Drive intersection in Oakland, California (Figures 1 and 2). Shell has owned and operated this gasoline station since 1966. The surrounding area is of mixed commercial and industrial use. Oakland International Airport is located approximately 1 mile west of the site. The property was purchased prior to 1960, and the service station was built between 1966 and 1967. Prior to 1966, no buildings existed on site. Aerial photographs prior to 1960 indicate that the area was reclaimed wetlands starting in 1947.

Three underground storage tanks (USTs), two product dispenser islands, a station building, and a car wash are present on site. Eight groundwater monitoring wells (MW-1 through MW-4, MW-6, and MW-8 through MW-10) are currently located on site, and three groundwater monitoring wells (MW-11 through MW-13) are located in the Hegenberger Road median, to the south of the site. One soil vapor extraction (SVE) well (VEW-1), three dual-completion soil vapor extraction

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and air sparge (SVE/AS) wells (VEW-2 through VEW-4), and three co-axial SVE/AS wells (VEW-5 through VEW-7) are also located on site. Well construction details are summarized in Table 1, and available boring logs are presented as Attachment A.

Local Hydrogeology

According to the *East Bay Plain Groundwater Basin Beneficial Use Evaluation Report,* (California Regional Water Quality Control Board – San Francisco Bay Region, June 1999), the site is located within the Oakland Sub-Area of the San Francisco Basin of the East Bay Plain. The Oakland Sub-Area contains a sequence of alluvial fans. The alluvial fill thickness ranges from 300 to 700 feet deep. There are no well-defined aquitards such as the estuarine muds. The largest and deepest wells in this Sub-Area historically pumped 1 to 2 million gallons per day at depths greater than 200 feet. Overall, sustainable yields are low due to low recharge potential. The Merritt sand in west Oakland was an important part of the early water supply for Oakland. It is shallow (up to 60 feet), and before the turn of the century, septic systems contaminated the water supply wells.

Throughout most of the Alameda County portion of the East Bay Plain, from Hayward north to Albany, water level contours show that the direction of groundwater flow is from east to west or from the Hayward Fault to San Francisco Bay. Groundwater flow direction generally correlates to topography. Flow direction and velocity are also influenced by buried stream channels that typically are oriented in an east-west direction. The site elevation is approximately 10 feet above mean sea level. Depth to groundwater in the vicinity is approximately 2 and 8 feet below grade (fbg). Based on quarterly groundwater monitoring data, local groundwater generally flows toward the southeast. The nearest natural drainage is San Leandro Creek, located approximately 200 feet south of the site.

According to the *East Bay Plain Groundwater Basin Beneficial Use Evaluation Report*, the City of Oakland does not have "any plans to develop local groundwater resources for drinking water purposes, because of existing or potential saltwater intrusion, contamination, or poor or limited quantity." However, the San Francisco Bay Regional Water Quality Control Board's (SFBRWQCB) basin plan denotes existing beneficial uses of municipal and domestic supply (MUN), industrial process supply (PROC), industrial service supply (IND), and agricultural supply (AGR) for the East Bay Plain groundwater basin.

Soil Lithology

The site is located within the Oakland Sub-Area of the East Bay Plain in Alameda County, approximately 3 miles west of the Hayward Fault, and sits on approximately 5 to 10 feet of non-native fill, overlying Bay Mud. The East Bay Plain is characterized by Quaternary age Bay Mud

composed of unconsolidated plastic clay and silty clay, rich in organic material with some lenses of silt and sand. Beneath the Bay Mud deposits lay unconsolidated younger and older alluvial deposits. Lithology consists primarily of silty sand, clayey sand, and gravel, underlain by silty clay, sandy clay, and clay. Attachment A presents all available boring logs.

Previous Work

1984 UST Replacement: In 1984, the on-site USTs were replaced with single-wall fiberglass tanks.

1989 Site Investigations: Between February 13 and November 16, 1989, Converse Environmental West (CEW) of San Francisco, California, supervised the installation of 10 groundwater monitoring wells (MW-1 through MW-10) and 13 soil borings (SB-1 through SB-13). The maximum total petroleum hydrocarbons as gasoline (TPHg) concentration detected was 31,000 parts per million (ppm) in a soil sample collected from boring SB-5 at approximately 2 fbg. The maximum benzene concentration detected was 14 ppm in a soil sample collected from well MW-7 at approximately 5 fbg. Soil analytical data and a figure showing monitoring well and soil boring locations are presented in Attachment B. Site investigation results are presented in CEW's quarterly activities reports dated April 10, June 29, September 21, and December 30, 1989.

1990 Off-Site Investigation: During August and September 1990, CEW advanced soil borings SG-1 through SG-17 at the off-site and adjacent property (295 Hegenberger Road) occupied by Rollins Trucking. Maximum TPHg and benzene concentrations of 4,000 ppm and 22 ppm, respectively, were detected in soil samples collected from boring SG-2 at approximately 5.5 fbg. Soil analytical data and a figure showing soil boring locations are presented in Attachment B. Off-site site investigation results are presented in CEW's September 28, 1990 *Report of Activities - Quarter 3, 1990.*

1991 Soil Gas Survey: In July 1991, CEW conducted a soil gas survey along Hegenberger Road to investigate the presence of hydrocarbons in the City of Oakland utility trench (see Figure 2). TPHg in soil gas was detected in samples collected from three of the five soil gas sampling points, at concentrations ranging from 32 to 62 ppm. Benzene was detected in samples from all five soil gas sampling points at concentrations ranging from 0.005 to 0.89 ppm. Soil gas survey results are presented in CEW's September 30, 1991 *Report of Activities – Quarter 3, 1991.*

November 1991 SVE Test: On November 21, 1991, CEW installed soil SVE well VEW-1 and soil vapor monitoring points VM-2, VM-3, and VM-4. On November 22, 1991, CEW conducted a series of short-term SVE tests from VEW-1 at varying extraction flow rates. Vacuum influence was monitored in VM-2, VM-3, VM-4, MW-1, MW-6, and MW-9. The SVE test results

indicated a measurable radius of influence of 30 to 35 feet from well VEW-1, with heterogeneous vapor permeability in subsurface soils. Using the average TPHg concentration of 49 ppm observed during the pilot test and an average vapor extraction rate of 80 cubic feet per minute, the hydrocarbon removal rate was estimated to be approximately 14.5 pounds per hour. Detailed results are presented in CEW's January 31, 1992 report, entitled *Results of Soil Vapor Extraction Pilot Test.* No soil samples were collected during well installation. A figure showing SVE well and soil vapor monitoring point locations is presented in Attachment B. Soil vapor analytical and vacuum influence data is presented in Attachment C.

1992 Equipment Removal: On February 12, 1992, Gettler-Ryan Inc. of Dublin, California sampled the excavations of the former oil/water separator and at the three former hydraulic lifts. Additional excavation was performed in April and May 1992, and additional samples were collected by Pacific Engineering Group, Inc. (PEG) of San Jose, California. Post-excavation soil samples contained up to 1,800 ppm TPHg, 7,600 ppm total petroleum hydrocarbons as diesel (TPHd), 6,800 ppm total oil and grease (TOG), and 1.9 ppm benzene. The laboratory noted that the positive results for TPHd appear to be a combination of heavier and lighter hydrocarbons, rather than diesel. Groundwater samples were collected from one of the hydraulic lift excavations and a canopy footing excavation. Soil analytical data are presented in Table 2. Groundwater analytical data is included in Attachment D. Soil and groundwater sampling locations are shown on figures included in Attachment B. A detailed account of equipment removal activities is presented in PEG's July 17, 1992 report.

1993 Site Investigation: On June 8, 9, and 10, 1993, PEG supervised the installation of three groundwater monitoring wells (MW-11 through MW-13) and four dual-completion SVE/AS wells (VEW-2 through VEW-5). The well borings were advanced to a depth of 15.5 fbg. The SVE/AS well borings were advanced to depths ranging from 8.5 to 10 fbg. Soil samples collected from groundwater monitoring well borings did not contain petroleum hydrocarbon constituents except for the 5.5 fbg sample from MW-11, which contained 0.008 ppm toluene. The SVE/AS well borings contained maximum concentrations of 1,900 ppm TPHg and 560 ppm TPHd from VEW-3 at 5 fbg. The laboratory noted that the compounds detected and calculated as TPHd are due to a non-diesel mix. The maximum benzene concentration was 6.4 ppm in the sample collected from VEW-2 at 5 fbg. Well locations are shown on Figures 2 and 3, and soil analytical data is presented in Attachment B. The boring logs are included in Attachment A. Detailed site investigation results are presented in PEG's November 5, 1993 report.

1993 to 1995 SVE System Operation: SVE system operation began on August 30, 1993. System operation was discontinued in February 1995 after influent TPHg and benzene concentrations reached asymptotic levels, corresponding to negligible hydrocarbon removal. The SVE system extracted soil vapors from wells VEW-1 through VEW-5 using a 7.5-horsepower vacuum blower and treated the vapors by catalytic oxidation. Treated air was then discharged to the atmosphere

in accordance with a Bay Area Air Quality Management Department permit to operate SVE equipment. Based on calculations using flow rate and concentration data, the SVE system removed approximately 707 pounds of TPHg and 6.9 pounds of benzene from the subsurface. A February 9, 1995 letter from PEG states that the SVE system was shut down due to low influent concentrations and high groundwater conditions. PEG's June 20, 1995 quarterly report states that the system would remain shut down until the groundwater elevations decreased to approximately 5 to 6 fbg. SVE system performance and analytical data is presented in Attachment C.

1995 Well Destruction: On September 14, 1995, well VEW-5 was destroyed by over-drilling to accommodate car wash construction. This information is presented in PEG's October 25, 1995 *Quarterly Report – Third Quarter 1995.* Wells MW-5 and MW-7 were last sampled on July 18, 1995, prior to car wash construction, and are no longer present at the site. These wells were likely damaged during construction activities and subsequently destroyed, but Cambria's files do not contain any documentation of their proper destruction.

1998 UST and Dispenser Upgrade: In July 1998, Paradiso Mechanical, Inc. (Paradiso) of San Leandro, California upgraded UST and dispenser equipment. On July 30, 1998, Cambria collected soil samples from native soil beneath dispenser #1 and dispenser #2 at depths of approximately 1.5 and 2 fbg, respectively. Samples were not collected beneath dispenser #3 and dispenser #4 because only rocky fill material, and not native soil, was encountered at 3 fbg. The dispenser numbering system has changed since these samples were collected. Dispenser #1, discussed above, corresponds to dispensers #3 and #4, as shown on the current site plan. Similarly, dispenser #2 corresponds to dispensers #1 and #2 on the current site plan (Figures 2 and 3). The maximum TPHg, TPHd, and benzene concentrations detected were 790, 400, and 2.0 ppm, respectively, in sample D-1. Soil analytical data is presented in Table 2. Cambria's October 13, 1998 *Dispenser Soil Sampling Report* presents results.

1999 Site Investigation, Utility Survey, and SVE Test: On March 18, 1999, Cambria supervised the advancement of three soil borings by means of a hand auger and Geoprobe®. Borings SB-1, SB-2, and SB-3 were advanced to total depths of 11.5, 12 and 17 fbg, respectively. A hand auger was used to advance the first 9.5 feet of SB-1, which was advanced within the backfill of the concrete sewer vault southwest of the subject site. The borings were located between the site and the 54-inch storm drain running along the westbound lanes of Hegenberger Road (see Figure 2). The maximum TPHg and TPHd concentrations identified in soil during this investigation were 43.3 and 35.8 ppm, respectively, in boring SB-3 at a depth of 10.5 fbg. No benzene or methyl tertiary-butyl ether (MTBE) was detected in soil from any of the three borings. The maximum TPHg, TPHd, and benzene concentrations identified in groundwater were 16,500 parts per billion (ppb), 5,080 ppb and 268 ppb, respectively, in boring SB-3. Although MTBE was detected in groundwater from all three borings, up to a maximum concentration of 180 ppb in

SB-3 by EPA Method 8020, analysis of the same sample by EPA Method 8260 did not confirm the presence of MTBE. No TPHg, or benzene, toluene, ethylbenzene, and total xylenes (BTEX) were detected in groundwater from SB-1. Boring locations are shown on Figures 2 and 3, and boring logs are presented in Attachment A. Soil analytical data is presented in Table 2, and groundwater analytical data is included in Attachment D.

City utility maps indicate that sanitary sewers run beneath the southern corner of the site, while a 54-inch storm drain runs parallel to the southeast property line under the southwest-bound lanes of Hegenberger Road. Site reconnaissance conducted by Cambria revealed a pressurized 8-inch sanitary sewer line running from the open water channel (southwest of the site) that slopes away from the channel. Because of this discovery, the boring locations were revised, with the focus shifting to the area between the site and the 54-inch storm drain. No hydrocarbons were detected in backfill soil collected from boring SB-1 near the vault connecting two 8-inch sanitary sewer lines. Low TPHd and MTBE concentrations were detected in groundwater collected from SB-1. However, it did not appear that this 8-inch sewer pipe serves as a conduit for contaminant transport to the water channel since the line is pressurized and slopes toward the site.

Soil boring and groundwater monitoring data suggested that either the storm drain intercepts and diverts groundwater flow or the plume has stabilized before it reaches the downgradient monitoring wells. The mass transport of contaminants of concern within the utility corridors was estimated using a protocol established by the SFRWQCB for a similar situation at the San Francisco International Airport. The final discharge concentrations for benzene and MTBE were estimated at 23 and 13 ppb, respectively. These estimated concentrations are at or below the SFIA Order No. 95-136 saltwater ecological protection zone Tier 1 standard of 71 ppb for benzene, and the proposed guideline of 13 ppb for MTBE. The final discharge concentration for TPHg was estimated at 2,680 ppb, which exceeded the SFIA Order No. 95-136 saltwater ecological protection zone Tier 1 standard of 100 ppb for TPHg. However, Cambria anticipated the amount of TPHg that reaches the Bay would be significantly less, in consideration of the dilution expected from upstream along the creek and the significant distance (over 1 mile) to the Bay.

On November 3, 1999, Cambria performed short-term SVE testing of four existing SVE wells (VW-1 through VW-4) for approximately 2 hours each, followed by a long-term test of wells VW-1 and VW-4 for approximately 5 days. Granular activated carbon (GAC) was used for vapor abatement. Influent TPHg concentrations ranged from 259 to 1,410 parts per million by volume (ppmv). Benzene concentrations ranged from 2.3 to 32.3 ppmv. MTBE concentrations ranged from 3.47 to 129 ppmv, as reported by EPA Method 8020. During short-term testing, vapor extraction flow rates ranged from 0 to 26 standard cubic feet per minute (scfm) per well based on applied vacuum ranging from 45 to 60 inches of water, resulting in a TPHg removal rate of 0.95 to 2.1 pounds per day (lbs/day) per well. During long-term testing, vapor extraction flow

rates ranged from 18.0 to 22.7 scfm (combined extraction from wells VW-1 and VW-4). The TPHg removal rate during the long-term test ranged from 2.13 to 5.95 lbs/day. The total estimated mass of TPHg, MTBE, and benzene removed during SVE testing is 18.7, 2.3, and 0.97 pounds, respectively. Cambria's May 12, 2000 *Subsurface Investigation Report and Vapor Extraction Test Report* presents the results of the off-site soil borings and on-site SVE testing. In this report, Cambria also proposes installing an SVE/AS system to remediate hydrocarbons within soil and groundwater. SVE test data is presented in Attachment C.

2000 SVE/AS Well Installation: Cambria's proposal for installing the SVE/AS system was approved by ACHCSA in a letter dated June 21, 2000. On June 28, 2000, Cambria supervised the installation of three additional co-axial SVE/AS wells (VEW-5/AS-1, VEW-6/AS-2, and VEW-7/AS-3) along the southeast side of the site, to facilitate remediation. The maximum TPHg concentration identified during this investigation was 1,800 ppm in boring VEW-7/AS-3 from a depth of 6.5 fbg. The maximum MTBE and benzene concentrations were 2.93 ppm and 13.2 ppm, respectively, in VEW-6/AS-2 at 5.5 fbg. Soil analytical data is presented in Table 2 (samples designated VE-5, VE-6, and VE-7), and well locations are shown on Figures 2 and 3. Cambria's September 12, 2000 *Soil Vapor and Air Sparge Well Installation Report* details remediation well installation.

SVE/AS 2002-2003: The SVE/AS system operated between March 25, 2002 and February 14, 2003, using wells SVE-5/AS-1, SVE-6/AS-2, and/or SVE-7/AS-3. It was shut down due to asymptotic TPHg, MTBE, and benzene influent concentrations, corresponding to negligible hydrocarbon removal rates, and consistently high groundwater elevations in the vapor extraction wells. During operation, vapor extraction flow rates ranged from 4.7 to 39.4 scfm. The TPHg removal rate ranged from 0.0 to 0.49 lbs/hour. The SVE/AS system removed an estimated total 99.3, 0.18, and 0.48 pounds of TPHg, MTBE, and benzene, respectively, from the subsurface. Cambria presents SVE/AS system analytical and operational data in the quarterly monitoring reports corresponding to the period of operation. SVE/AS system data is presented in Attachment C.

2004 Well Survey: Cambria conducted a well survey in March 2004 at Shell's request. Review of the California State Department of Water Resources well logs and the California State Water Resources Control Board Geotracker system identified six water-producing wells within a ½-mile radius of the site. Figure 1 shows the locations of the identified wells. Of the six identified wells, three were agricultural/irrigation, one was industrial, and two are of unidentified use. Table 3 presents a summary of known well information. The locations of all six wells could not be verified in the field.

2004 Fuel System Upgrade and Over-Excavation: Paradiso upgraded fuel dispensers and piping in late June through early July 2004. Paradiso upgraded under-dispenser containment to the

dispenser locations adjacent to product, vapor and vent lines. Paradiso also removed and replaced all fuel and vent piping from the dispensers to the UST complex and installed enhanced vapor recovery equipment on the UST fuel fill port sumps. On June 29, 2004, nine soil samples (P-1-5' through P-5-5' and D-1-5' through D-4-5') were collected from beneath the dispensers and product piping at approximately 5 fbg. Maximum concentrations of 7,200 ppm TPHg, 1,800 ppm TPHd, 3.3 ppm benzene, and 40 ppm MTBE were detected in the compliance soil samples.

On July 6, 2004, after Paradiso removed additional soil from the piping trenches at Shell's request, Cambria collected seven additional soil samples (P-6-6.5' through P-12-6.5') from approximately 6.5 fbg. Maximum concentrations of 6,500 ppm TPHg, 170 ppm TPHd, 3.6 ppm benzene, and 21 ppm MTBE were detected in the over-excavation soil samples. Cambria's August 4, 2004 *Dispenser and Piping Upgrade Sampling Report* presents the results of fuel system upgrade activities. Soil analytical data is presented in Table 2. Sample locations and the area of additional soil removal are shown on Figure 3.

November 2004 Dual-Phase Extraction (DPE) Test: As proposed in our October 26, 2004 *Interim Remediation Work Plan*, Cambria implemented interim DPE from wells MW-1, MW-9, and MW-10 between November 15 and November 24, 2005. During 163.2 hours of DPE from well MW-10, an average flow rate of approximately 6.6 scfm was obtained with a measured wellhead vacuum level ranging from 90.1 to 218.1 inches. The total estimated vapor-phase TPHg, benzene and MTBE mass removed from well MW-10 is 93.6, 1.37, and 0.389 pounds, respectively. During 25.4 hours of DPE from well MW-9, an average flow rate of approximately 2.4 scfm was obtained with a measured wellhead vacuum level ranging from 32.8 to 191.7 inches WC. The total estimated vapor-phase TPHg, benzene, and MTBE mass removed from well MW-9 is 0.009, 0.0002 and 0.00003 pounds, respectively. During 24.4 hours of DPE from well MW-1, an average flow rate of approximately 5.0 scfm was obtained at a measured wellhead vacuum level ranging from 26.5 to 199.1 inches WC. The total estimated vapor-phase TPHg, benzene and MTBE mass removed from well MW-1 is 4.38, 0.068, and 0.004 pounds, respectively. Vacuum influence was monitored, but not detected, in surrounding wells. The groundwater yield during this test was low, totaling approximately 950 gallons during 213 hours of DPE. Cambria's March 31, 2005 *Interim Remediation Report* presents detailed results of interim DPE performed in November 2004, and Attachment C presents the data tables.

March 2005 SVE/AS Equipment Removal: On March 28, 2005, the remediation container and enclosed SVE/AS system components were removed from the site. The underground remediation piping remains, and all conduits are capped above grade in the northern corner of the site.

April 2005 DPE Test: As proposed in Cambria's March 31, 2005 *Interim Remediation Report*, Cambria implemented additional interim DPE from well MW-10 between April 18 and April 24, 2005. During 148.5 hours of DPE from well MW-10, an average flow rate of

approximately 11.9 scfm was obtained with a measured wellhead vacuum level ranging from 6.5 to 233.0 inches. The total vapor-phase TPHg, benzene and MTBE mass removed from well MW-10 is estimated at 2.19, 0.157, and 0.425 pounds, respectively. Vacuum influence was monitored in surrounding wells, but was either minimal or not detected. A total of approximately 1,000 gallons of groundwater was extracted during 148.5 hours of DPE, for an average extraction rate of 0.11 gallons per minute (gpm). By comparison, a total of approximately 190 gallons of groundwater as extracted during 163.2 hours of DPE from well MW-10 in November 2004, for an average extraction rate of 0.02 gpm from this well. Cambria's June 30, 2005 *Additional Interim Remediation Report* presents the results of interim DPE performed in April 2005, and Attachment C presents the data tables.

Groundwater Monitoring Program: Groundwater has been monitored on site since February 1989 in wells MW-1, MW-2, and MW-3. Since then, 10 more monitoring wells have been installed and monitored. SVE/AS wells VEW-5/AS-1, VEW-6/AS-2, and VEW-7/AS-3 were added to the quarterly monitoring program in September 2000. As suggested in ACHCSA's December 20, 2005 letter to Shell, groundwater monitoring frequency has been reduced to semi-annually in the first and third quarters, as of the first quarter 2006. The current groundwater monitoring program consists of semi-annual gauging and sampling of wells MW-1 through MW-4, MW-6, MW-8 through MW-13, VEW-5, VEW-6, and VEW-7. All groundwater samples are analyzed for TPHg, TPHd, total petroleum hydrocarbons as motor oil, BTEX, MTBE, and tertiary-butanol (TBA). Samples from wells MW-1, MW-2, MW-3, MW-4, MW-6, MW-9, MW-10, VEW-5, VEW-6, and VEW-7 are also analyzed for additional fuel oxygenates during the third quarter. Bio-attenuation parameters nitrate, sulfate, ferrous iron, dissolved oxygen, and oxidation-reduction potential were periodically monitored between June 1998 and January 2003.

Maximum historical chemical concentrations in groundwater are 140,000 ppb TPHg (MW-7, April 1991), 22,000 ppb TPHd (MW-7, August 1989), 29,000 ppb benzene (MW-7, October 1991), 32,000 ppb MTBE (MW-1, June 1998 and MW-10, July 2005), and 9,800 ppb TBA (MW-10, July 2005). During the most recent groundwater monitoring event on January 4, 2006, maximum concentrations of 114,000 ppb TPHg, 5,690 ppb TPHd, 15,000 ppb benzene, 3,720 ppb MTBE and 1,150 ppb TBA were detected in monitoring well MW-10. Attachment D presents historical groundwater monitoring data.

SITE CONCEPTUAL MODEL

Site Address:	285 Hegenberger Road	**Incident Number:**	98995749
City:	Oakland, CA	**Regulator:**	Alameda County Health Care Services Agency

Item	Evaluation Criteria	Comments/Discussion
1	**Hydrocarbon Source**	
1.1	Identify/Describe Release Source and Volume (if known)	Release source and volume are unknown. The site has been an operating Shell-owned gasoline station since 1966. The on-site USTs were replaced with single-wall fiberglass tanks in 1984, but no soil data is available. Site investigation was implemented in 1989 in response to soil data from the adjacent site, 295 Hegenberger Road, indicating hydrocarbon impact near the Shell property line.
1.2	Discuss Steps Taken to Stop Release	N/A.
2	**Site Characterization**	
2.1	Current Site Use/Status	The site is an operating Shell-branded service station located at the Hegenberger Road and Leet Drive intersection in Oakland, California. The surrounding area is of mixed commercial and industrial use.
2.2	Soil Definition Status	TPHg, TPHd, and BTEX components are defined in soil laterally in the downgradient direction by wells MW-11, MW-12, and MW-13 (with the exception of toluene in MW-11 at 5.5 fbg). TPHg, TPHg, and total xylenes are defined crossgradient in soil by wells MW-4 and MW-6. Benzene and toluene were detected in MW-6 and 5 at 10 fbg. Toluene and ethylbenzene were detected in MW-4 at 5 and 10 fbg, respectively. BTEX components are defined upgradient in soil by MW-2, MW-3, and VEW-4. TPHg was detected in wells MW-2 and MW-3 at 6 and 5 fbg, respectively. MTBE is defined downgradient in soil by MW-11, MW-12, and MW-13. Soil samples from previous wells and borings were not analyzed for MTBE. TPHg, TPHd, BTEX, and MTBE are not defined vertical beneath the site or off site. Historical soil samples have been collected from maximum depths of 14 fbg on site, and 17 fbg off site.
2.3	Separate-Phase Hydrocarbon Definition Status	No SPH has been reported at the site.

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Item	Evaluation Criteria	Comments/Discussion
2.4	Groundwater Definition Status (BTEX)	In groundwater, TPHg and benzene are defined in the downgradient direction by wells MW-11, MW-12, and MW-13, and crossgradient to the south by wells MW-4 and MW-8. Benzene is partially defined crossgradient to the north by well MW-6.
2.5	BTEX Plume Stability and Concentration Trends	The maximum historical TPHg and benzene concentrations in groundwater are 140,000 and 29,000 ppb, respectively, in MW-7 in 1991. TPHg and benzene were detected in MW-7 at concentrations of 95,000 and 24,000 ppb, respectively, in 1995, before this well was destroyed. TPHg and benzene concentrations have fluctuated over time, and although elevated levels remain in some on-site wells, the current maximum TPHg and benzene concentrations are 114,000 and 15,000 ppb, respectively, in well MW-10. These concentrations are significantly lower than the historical maximum concentrations, indicating an overall decreasing trend at the site.
2.6	Groundwater Definition Status (MTBE)	In groundwater, MTBE is defined in the downgradient direction by wells MW-11, MW-12, and MW-13. MTBE is also partially defined crossgradient to the south by well MW-8, and partially defined crossgradient to the north by well MW-9.
2.7	MTBE Plume Stability and Concentration Trends	With the exception of well MW-10, MTBE concentrations have generally decreased in site wells since MTBE was first analyzed in 1995. MTBE in well MW-10 increased steadily for three quarters in 2005, following two phases of interim DPE from this well. 32,000 ppb MTBE was detected in MW-10 on July 20, 2005, equaling the historical maximum MTBE concentration for the site, previously detected in MW-1 on June 8, 1998. Elevated concentrations are often observed as a temporary after-effect of DPE, because constituent mass remaining in the subsurface is pulled toward the extraction points. The most recent quarterly monitoring results (January 6, 2006) indicate an order of magnitude reduction in MTBE concentration in this well since July 2005, to 3,720 ppb. As of January 1, 2003, MTBE is no longer included in the formulation of Shell gasoline. The decreasing MTBE concentration trend observed across the site over time, and very recently in MW-10, is expected to continue.
2.8	Groundwater Flow Direction, Depth Trends and Gradient Trends	Groundwater depths have historically ranged between approximately 2 and 8 fbg. Groundwater flow direction is southeast with a gradient of approximately 0.3 feet/foot. Regional groundwater flow is to the west-southwest toward San Francisco Bay.

Site Address:	285 Hegenberger Road	**Incident Number:**	98995749
City:	Oakland, CA	**Regulator:**	Alameda County Health Care Services Agency

Item	Evaluation Criteria	Comments/Discussion
2.9a	Regional Geology	The site is located within the Oakland Sub-Area of the East Bay Plain in Alameda County, approximately 3 miles west of the Hayward Fault. The East Bay Plain area is characterized by Quaternary age Bay Mud composed of unconsolidated plastic clay and silty clay, rich in organic material with some lenses of silt and sand. Beneath the Bay Mud deposits lay unconsolidated younger and older alluvial deposits.
2.9b	Topography	The site is approximately 10 feet above mean sea level, and is relatively flat.
2.9c	Stratigraphy and Hydrogeology	The lithology is composed of approximately 5 to 10 feet of non-native fill (consisting primarily of silty sand, clayey sand, and gravel), underlain by silty clay, sandy clay, and clay.

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City:	Oakland, CA	**Regulator:**	Alameda County Health Care Services Agency

Item	Evaluation Criteria	Comments/Discussion
2.10	Preferential Pathways Analysis	City utility maps indicate that sanitary sewers run beneath the site, and a 54-inch storm drain runs parallel to the southeast property line under the southwest-bound lanes of Hegenberger Road. Cambria performed a site reconnaissance, which revealed that the 8-inch sanitary sewer running from the open water channel (southwest of the site) is a pressurized pipeline that does not slope toward the channel as previously thought. Soil samples collected from boring SB-1, near the vault connecting two 8-inch sanitary sewer lines, did not contain hydrocarbons or MTBE. A groundwater sample collected from SB-1 contained 182 ppb TPHd and 86.3 ppb MTBE (by EPA Method 8020). Since the sanitary sewer line is pressurized and slopes toward the site, it is not likely to serve as a conduit for contaminant transport to the water channel. Soil samples from borings SB-2 and SB-3 did not contain benzene or MTBE, but did contain up to 43.3 ppm TPHg and 35.8 ppm TPHd. Groundwater samples from SB-2 and SB-3 contained TPHg, TPHd, BTEX, and MTBE (by EPA Method 8260). Soil boring and groundwater monitoring data suggests that either the plume stabilizes before it reaches the downgradient monitoring wells (MW-11, MW-12, and MW-13) or the storm drain intercepts and diverts groundwater flow. The mass transport of contaminants of concern within the utility corridors was estimated using a protocol established by the SFBRWQCB for a similar situation at the San Francisco International Airport. The final discharge concentrations for benzene and MTBE were estimated at 23 and 13 ppb, respectively. These estimated concentrations are at or below the SFIA Order No. 95-136 saltwater ecological protection zone Tier 1 standard of 71 ppb for benzene, and the proposed guideline of 13 ppb for MTBE. The final discharge concentration for TPHg was estimated at 2,680 ppb, which exceeded the SFIA Order No. 95-136 saltwater ecological protection zone Tier 1 standard of 100 ppb for TPHg. However, Cambria anticipated the amount of TPHg that reaches the bay would be significantly less, in consideration of the dilution expected from upstream along the creek and the significant distance (over 1 mile) to the Bay.

Site Address:	285 Hegenberger Road	**Incident Number:**	98995749
City:	Oakland, CA	**Regulator:**	Alameda County Health Care Services Agency

Item	Evaluation Criteria	Comments/Discussion
2.11	Other Pertinent Issues	Extensive below-grade work in Hegenberger Road was observed by Cambria employees during interim DPE activities in April 2005. The underground utility information presented in this report may not reflect current conditions.
3	**Remediation Status**	
3.1	Remedial Actions Taken	***1991 SVE Pilot Testing:*** On November 22, 1991, CEW conducted a series of short-term SVE pilot tests from VEW-1. ***1993-1995 SVE System:*** An SVE system operated at the site between August 1993 and February 1995, extracting from wells VEW-1 through VEW-5. ***1999 SVE Testing:*** On November 3, 1999, Cambria performed short-term SVE testing of four SVE wells (VW-1 through VW-4) for approximately 2 hours each. Long-term SVE tests were then performed on wells VW-1 and VW-4 for approximately 5 days. ***2002-2003 SVE/AS System:*** SVE/AS system operated at the site between March 2002 and February 2003, extracting soil vapors from and injecting air into wells SVE-5/AS-1, SVE-6/AS-2, and/or SVE-7/AS-3. ***2004 Over-Excavation:*** Limited over-excavation was implemented beneath the former dispensers and product piping during fuel system upgrade activities in July 2004. ***2004 Interim DPE:*** Interim DPE was conducted from wells MW-1, MW-9, and MW-10 between November 15 and November 24, 2004. ***2005 Interim DPE:*** Interim DPE was conducted from well MW-10 between April 18 and 24, 2005.
3.2	Area Remediated	Extensive remediation has been conducted, targeting the eastern corner of the site (MW-9, VEW-1, VM-1 through VM-4), the southeast edge of the property (VEW-2, VEW-3, VEW-5/AS-1, VEW-6/AS-2, VEW-7/AS-3), the north corner of the site (VEW-4 and VEW-5), and the central area of the site (MW-1, MW-10, dispensers, and product piping).
3.3	Remediation Effectiveness	***1991 SVE Pilot Testing:*** A radius of influence of 30 to 35 feet was observed during SVE pilot testing from well VEW-1. ***1993-1995 SVE System:*** The SVE system removed

Site Address:	285 Hegenberger Road	**Incident Number:**	98995749
City:	Oakland, CA	**Regulator:**	Alameda County Health Care Services Agency

Item	Evaluation Criteria	Comments/Discussion
		approximately 707 pounds of TPHg and 6.9 pounds of benzene from the subsurface. The system was shut down due to low influent concentrations and high groundwater levels in the target wells. ***1999 SVE Testing:*** SVE testing from wells VW-1 through VW-4 removed approximately 18.7 pounds TPHg, 0.97 pounds benzene, and 2.3 pounds MTBE. ***2002-2003 SVE/AS System:*** The SVE/AS system removed approximately 99.3 pounds TPHg, 0.48 pounds benzene, and 0.18 pounds MTBE. The system was shut down after influent concentrations reached asymptotic levels, corresponding to negligible mass removal. ***2004 Over-Excavation:*** A total of approximately 65 cubic yards of soil and pea gravel was removed from the site as a result of fuel system upgrade activities. Although some impacted soil was removed, the vertical extent of hydrocarbon impact in this area could not be addressed without compromising the structural integrity of the canopy. ***2004 Interim DPE:*** Interim DPE from wells MW-1, MW-9 and MW-10 removed approximately 98.0 pounds TPHg, 1.44 pounds benzene, and 0.393 pounds MTBE in November 2004. Vapor influence was not detected in surrounding wells. ***2005 Interim DPE:*** Interim DPE from well MW-10 removed approximately 2.2 pounds TPHg, 0.16 pounds benzene, and 0.43 pounds MTBE in April 2005. Vapor influence was not detected in surrounding wells.
4	**Well and Sensitive Receptor Survey**	
4.1	Designated Beneficial Water Use	Based on the Final Report, June 1999 East Bay Plain Groundwater Basin Beneficial Use Evaluation Report by the California Regional Water Quality Control Board San Francisco Bay Region Groundwater Committee, the City of Oakland does not have "any plans to develop local groundwater resources for drinking water purposes, because of existing or potential saltwater intrusion, contamination, or poor or limited quantity."
4.2	Shallow Groundwater Use	There are no known municipal or domestic wells within a half-mile of the site.

Site Address:	285 Hegenberger Road	**Incident Number:**	98995749
City:	Oakland, CA	**Regulator:**	Alameda County Health Care Services Agency

Item	Evaluation Criteria	Comments/Discussion
4.3	Deep Groundwater Use	Deep groundwater use in the site vicinity is unknown.
4.4	Well Survey Results	Review of the California State Department of Water Resources well logs and the California State Water Resources Control Board Geotracker system identified six water-producing wells within a 1/2 –mile radius of the site. Of the six wells identified, three are agricultural/irrigation, one is industrial, and two are of unidentified use. Cambria could not verify any of the well locations in the field.
4.5	Likelihood of Impact to Wells	Due to either distance or location (crossgradient of the site), it is unlikely that chemicals originating from the site will impact any other identified wells.
4.6	Likelihood of Impact to Surface Water	Although mass transport calculations have suggested that constituents of concern originating at the subject site do not pose a significant threat to the Bay (over 1 mile away), it is not clear whether utility conduits in Hegenberger Road are acting as preferential pathways for groundwater migration.
5	**Risk Assessment**	
5.1	Site Conceptual Exposure Model (current and future uses)	The site is an active Shell station surrounded by mixed commercial and industrial property. The site land use is not expected to change. Petroleum hydrocarbons, BTEX, and MTBE have been identified as chemicals of concern (COCs) for this site.
5.2	Exposure Pathways	Potential exposure pathways include inhalation of COCs volatilized to indoor and outdoor air from impacted groundwater and soil on site by the commercial occupants of the site and/or the occupants of the adjacent properties.
5.3	Risk Assessment Status	A formal risk assessment has not been performed for this site.
5.4	Identified Human Exceedances	No human exceedances have been studied or identified.
5.5	Identified Ecological Exceedances	No ecological exceedances have been studied or identified.
6	**Additional Recommended Data or Tasks**	
6.1	Conduct a site visit to determine whether VM-1, VM-2, VM-3, and VM-4 still exist.	
6.2	Conduct a file review to obtain well destruction documentation for MW-5, MW-7, and VM-1 through VM-4, if applicable. In addition, investigate the historical concentrations and current status of the environmental investigation at the adjacent property 295 Hegenberger Road.	
6.3	Obtain current utility maps for Hegenberger Road and provide geologic cross-sectional drawings of the subject site, including the nearby utilities.	

CLOSING

If you have any questions regarding the contents of this document, please call Cynthia Vasko at (510) 420-3344.

Sincerely,
Cambria Environmental Technology, Inc.

Cynthia Vasko
Project Engineer

Aubrey K. Cool, P.G.
Senior Project Geologist

Figures:
1 - Vicinity/Area Well Survey Map
2 - Underground Utility Location Map
3 - Groundwater Elevation Contour Map

Tables:
1 - Existing Well Data
2 - Historical Soil Analytical Data
3 - Well Survey Results

Attachments:
A - Available Boring Logs
B - Additional Soil Data and Soil Sample Location Maps
C - Soil Vapor Analytical Results and Remediation Data
D - Historical Groundwater Data

cc: Denis Brown, Shell Oil Products US, 20945 S. Wilmington Ave., Carson, CA 90810
J.T., Elizabeth G., W.T., and Jeanette Watters, Tr., 600 Caldwell Road, Oakland, CA 94611

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12/27/04

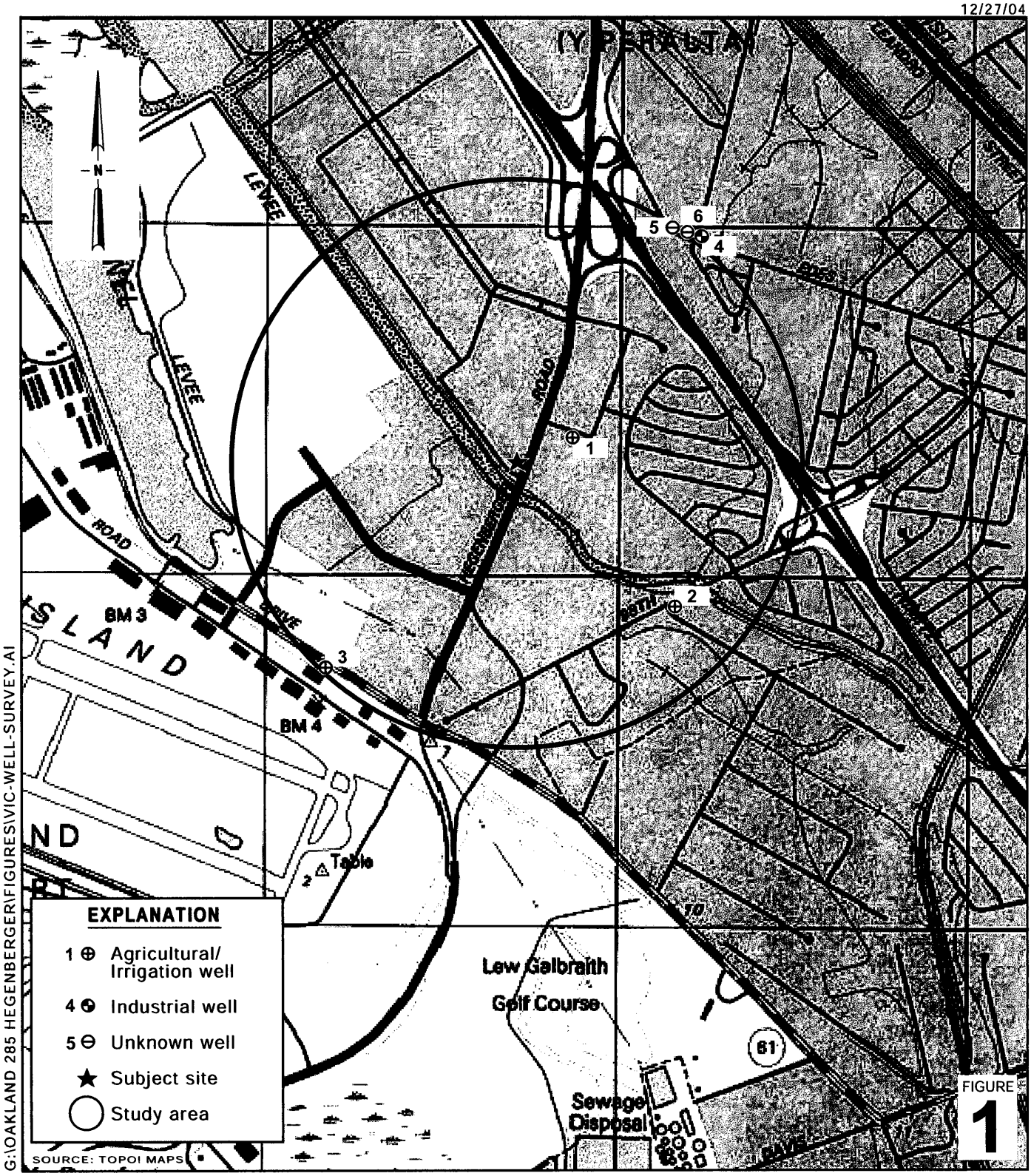

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FIGURE 1

0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

Shell-branded Service Station
285 Hegenberger Road
Oakland, California
Incident #98995749

CAMBRIA

Vicinity/Area Well Survey Map
(1/2-Mile Radius)

04/10/06

Underground Utility Location Map

EXPLANATION

VEW-5/AS-1	Co-axial vapor and sparge well; air-sparge well not monitored or sampled
MW-1	Groundwater monitoring well location
VEW-1	Soil vapor extraction well
VEW-2	Dual completion air sparging/soil vapor extraction well
VEW-5	Abandoned well
P-6-6.5'	Soil sample location (07/06/04)
D-1-5'	Soil sample location (06/29/04)
D-1	Dispenser soil sample location (1998)
SB-1	Soil boring location
	Sanitary sewer line (SS)
	Storm drain line (SD)
	Electrical line (E)
	Gas line (G)
	Manhole (MH)
	Utility vault
	Product dispenser number
	Over-excavation areas (7/04)

San Leandro Channel

bike path

LEET DRIVE

SS

SS

E

Truck storage area
(City of Oakland property)

W/O UST

MW-3

MW-5

VEW-4

MW-2

former remediation system location

planter

MW-8

Shell Station
285 Hegenberger

former USTs

canopy

D-2-5'

D-1-5'

P-2-5'

P-1-5'

USTs

VEW-5

car wash

MW-6

12" SS

P-7-6.5'

P-6-6.5'

P-3-5'

P-4-5'

D-4-5'

D-2

D-3-5'

D-1

P-5-5'

P-11-6.5'

MW-10

E

8" SS

4" SS

MW-1

VEW-1

planter

planter

VEW-7/
AS-3

VEW-3

VEW-6/
AS-2

VEW-2

VEW-5/
AS-1

MW-9

MW-4

MW-7

E

SS
Pump
Station

8" Forced Pressure SS

SB-1

SB-2

SB-3

15" SS

54" SD

SD
Outlet

66" SD

MH
(paved-over)

42" SS INTERCEPTOR

E

E

MW-11

MW-13

median

MW-12

HEGENBERGER ROAD

12" SS

48" SD

0 20 40 80

Scale (ft)

G:\OAKLAND 285 HEGENBERGER\FIGURES\UTILITIES 12-05.DWG

CAMBRIA

Shell-branded Service Station
285 Hegenberger Road
Oakland, California
Incident No.98995749

FIGURE
2

03/06/06

Groundwater Elevation Contour Map

January 4, 2006

EXPLANATION

- VEW-5/AS-1 — Co-axial vapor and sparge well; air-sparge well not monitored or sampled
- MW-1 — Groundwater monitoring well location
- VEW-1 — Soil vapor extraction well
- VEW-2 — Dual completion air sparging/soil vapor extraction well
- VEW-5 — Abandoned well
- SB-1 — Soil boring location
- ❶ — Product dispenser number
- * — Data anomalous, not used for contouring
- X.XX — Groundwater flow direction and gradient
- XX.XX — Groundwater elevation contour, in feet above mean sea level (msl), approximately located, dashed where inferred

Well
ELEV
Benzene
MTBE

- Well designation
- Groundwater elevation, in feet above msl
- Benzene and MTBE concentrations are in parts per billion and are analyzed by EPA Method 8260.

San Leandro Channel

bike path

LEET DRIVE

planter

MW-8
8.31
<0.500
<0.500

8.00

8.00

MW-3
7.78
<0.500
<0.500

W/O UST

Truck storage area
(City of Oakland property)

Shell-branded
Service Station
285 Hegenberger Rd.

MW-5
Ø

VEW-4

MW-2
7.72
<0.500
<0.500

former remediation system location

former USTs

canopy

USTs

VEW-5
Ø
car wash

MW-1
7.45
562
99.2

MW-6
5.78*
<0.500
11.3

MW-10
7.25
15,000
3,720

VEW-7
7.50
<0.500
7.68

VEW-6
7.37
2.67
23.8

7.00

MW-4
6.38
<0.500
2.90

planter

AS-3

VEW-3

AS-2

VEW-2

VEW-5
7.51
1.69
<0.500

AS-1

VEW-1

planter

7.00

MW-9
6.94
5,800
73.1

6.00

6.00

SB-1

SB-2

SB-3

5.00

5.00

4.00

4.00

median

MW-11
3.51
<0.500
<0.500

MW-13
4.08
<0.500
<0.500

MW-12
3.57
<0.500
<0.500

HEGENBERGER ROAD

0 20 40 80

Scale (ft)

G:\OAKLAND 285 HEGENBERGER\FIGURES\10M06.DWG

FIGURE

3

Shell-branded Service Station

285 Hegenberger Road
Oakland, California
Incident No.98995749

CAMBRIA

Table 1. Existing Well Data, Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, Oakland, California

Name	Type/ Drilling Method	Date Installed	TOC[1] (ft msl)	Total Boring Depth (fbg)	Soil Sample Interval (ft)	First Encountered GW Depth (fbg)	First Encountered GW Elev (ft msl)	Screen Diam. (in)	Screen Depth (fbg) Top	Screen Depth (fbg) Bottom	Comments
MW-1	Monitoring Well/HSA	14-Feb-89	9.37	16.5	5	6	3.37	4	5	10	
MW-2	Monitoring Well/HSA	15-Feb-89	10.07	16.5	5	6	4.07	4	5	10	
MW-3	Monitoring Well/HSA	14-Feb-89	10.58	16.5	5	6	4.58	4	5	10	
MW-4	Monitoring Well/HSA	28-Apr-89	9.83	14	5	7	2.83	4	5	10	
MW-6	Monitoring Well/HSA	28-Apr-89	9.14	12	5	5.5	3.64	4	5	10	
MW-8	Monitoring Well/HSA	28-Apr-89	-	12	5	9	-	4	5	10	
MW-9	Monitoring Well/HSA	13-Jul-89	10.04	10.5	5	6	4.04	4	5	10	
MW-10	Monitoring Well/HSA	16-Nov-89	9.78	13	5	6.5	3.28	4	5	10	
MW-11	Monitoring Well/HSA	8-Jun-93	10.06	15.5	5	8.5	1.56	4	4	14	
MW-12	Monitoring Well/HSA	8-Jun-93	9.09	15.5	5	8.5	0.59	4	5	15	
MW-13	Monitoring Well/HSA	10-Jun-93	9.62	15.5	5	8.5	1.12	4	5	15	
VEW-1	Vapor Ext. Well/HA	21-Nov-91	-	7	5	6	-	4	3.5	6.5	
VEW-2	Vapor Ext. Well/HSA	9-Jun-93	8.87	8.5	5	4.5	4.37	2	3.5	6.5	
VEW-2	Sparge Well/HSA	9-Jun-93	-	8.5	5	4.5	-	2	7.5	8.5	
VEW-3	Vapor Ext. Well/HSA	9-Jun-93	9.21	10	5	4.5	4.71	2	3.5	6.5	
VEW-3	Sparge Well/HSA	9-Jun-93	-	10	5	4.5	-	2	7.5	8.5	
VEW-4	Vapor Ext. Well/HSA	9-Jun-93	9.26	9.5	5	5	4.26	2	3.5	6.5	
VEW-4	Sparge Well/HSA	9-Jun-93	-	9.5	5	5	-	2	8	9	
VEW-5	Vapor Ext. Well/HSA	28-Jun-00	8.79	10	5	4	4.79	4	3	10	
AS-1	Sparge Well/HSA		-	15			-	2	13	15	
VEW-6	Vapor Ext. Well/HSA	28-Jun-00	9.22	10	5	4	5.22	4	3	10	
AS-2	Sparge Well/HSA		-	15			-	2	13	15	
VEW-7	Vapor Ext. Well/HSA	28-Jun-00	9.43	10	5	4	5.43	4	3	10	
AS-3	Sparge Well/HSA		-	15			-	2	13	15	

Abbreviations:

HSA = Hollow stem auger

Ext. = Extraction

HA = Hand auger

TOC = Top of casing

ft msl = Feet referenced to mean sea level

fbg = Feet below grade

ft = Feet

in = Inches

GW = Groundwater

Table 1. Existing Well Data, Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, Oakland, California

Name	Type/ Drilling Method	Date Installed	TOC[1] (ft msl)	Total Boring Depth (fbg)	Soil Sample Interval (ft)	First Encountered GW Depth (fbg)	First Encountered GW Elev (ft msl)	Screen Diam. (in)	Screen Depth (fbg) Top	Screen Depth (fbg) Bottom	Comments

Diam. = Diameter

1. TOC elevations from October 11, 2005 monitoring well survey report, Virgil Chavez Land Surveying.

Table 2. Historical Soil Analytical Data - Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, Oakland, California

Sample ID	Date Sampled	Depth (fbg)	TPHg (ppm)	TPHd (ppm)	TOG (ppm)	TPHmo (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Total Xylenes (ppm)	MTBE (ppm)
1992 Waste Oil Tank Removal											
SOW-1	2/12/1992	5	**1,900**	**400**	**830**	--	**2.2**	**2.6**	**25**	**82**	--
SL-3	2/12/1992	6.5	--	**1,100**	**15,000**	--	--	--	--	--	--
SLH-1A	4/21/1992	5.5	**690**	**550**	**550**	--	<2.5	<2.5	**2.4**	**19**	--
SLH-1B	4/21/1992	5.5	**1,500**	**1,700**	**1,700**	--	<2.5	<2.5	<2.5	**32**	--
SLH-1C	4/21/1992	5.5	**1,000**	**2,200**	**5,800**	--	<2.5	<2.5	**1.6**	**23**	--
SLH-2A	4/21/1992	5.5	**610**	**250**	**340**	--	<2.5	<2.5	<2.5	**3.7**	--
SLH-2B	4/21/1992	6	**70**	**80**	**170**	--	<2.5	**0.16**	**0.38**	**1.6**	--
SLH-2C	4/21/1992	6	**1,300**	**150**	**290**	--	<2.5	<2.5	**6.7**	**20**	--
SLH-3A	4/21/1992	6.5	**54**	**130**	**280**	--	**0.05**	**0.14**	**0.44**	**3.6**	--
SLH-3B	4/21/1992	6.5	**250**	**140**	**90**	--	<2.5	<2.5	**1.5**	**3.1**	--
SOW-1A	4/21/1992	4	**19**	**250**	**500**	--	**0.055**	<2.5	**0.14**	**0.7**	--
SOW-1B	4/21/1992	4	**1,800**	**7,600**	**6,800**	--	**1.9**	<2.5	**15**	**72**	--
DS-1	5/20/1992	1	**260**	--	--	--	<2.5	<2.5	<2.5	<2.5	--
1998 Dispenser Upgrades											
D-1	7/30/1998	1.5	**790**	**400**	--	--	**2.0**	**17**	**12**	**57**	**8.5 (22)**
D-2	7/30/1998	2	**160**	**190**	--	--	**0.090**	**0.27**	**0.14**	**1.7**	**4.7**
1999 Site Investigation											
SB-1-5.5	3/18/1999	5.5	<0.400	<5.00	--	--	<0.00200	<0.00200	<0.00200	<0.00400	<0.0100
SB-1-10	3/18/1999	10	<0.400	<5.00	--	--	<0.00200	<0.00200	<0.00200	<0.00400	<0.0100
SB-2-5.0	3/18/1999	5	**0.777**	**15.2**	--	--	<0.00200	<0.00200	<0.00200	<0.00400	<0.0100
SB-2-6.0	3/18/1999	6	**3.33**	**19.3**	--	--	<0.00200	**0.00598**	**0.00977**	**0.0259**	<0.0100
SB-2-7.5	3/18/1999	7.5	<0.400	<5.00	--	--	<0.00200	<0.00200	<0.00200	<0.00400	<0.0100
SB-2-10.0	3/18/1999	10	<0.400	<15.0	--	--	<0.00200	<0.00200	<0.00200	<0.00400	<0.0100
SB-2-10.5	3/18/1999	10.5	<0.400	<15.0	--	--	<0.00200	<0.00200	<0.00200	<0.00400	<0.0100
SB-2-12.0	3/18/1999	12	<0.400	<5.00	--	--	<0.00200	<0.00200	<0.00200	<0.00400	<0.0100
SB-3-7.5	3/18/1999	7.5	**5.94**	**14.8**	--	--	<0.00200	<0.00200	**0.0501**	**0.0548**	<0.0100
SB-3-9.0	3/18/1999	9	**27.6**	**13.1**	--	--	<0.0100	<0.0100	**0.0502**	**0.0948**	<0.0500
SB-3-10.5	3/18/1999	10.5	**43.3**	**35.8**	--	--	<0.0100	<0.0100	**0.354**	**0.548**	<0.0500
SB-3-11.5	3/18/1999	11.5	**9.90**	**27.6**	--	--	<0.0100	<0.0100	**0.0628**	**0.0973**	<0.0500
SB-3-15.0	3/18/1999	15	**23.5**	**26.5**	--	--	<0.0100	<0.0100	**0.291**	**0.424**	<0.0500
SB-3-17.0	3/18/1999	17	**0.508**	<5.00	--	--	<0.00200	<0.00200	**0.0269**	**0.0393**	<0.0100

Table 2. Historical Soil Analytical Data - Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, Oakland, California

Sample ID	Date Sampled	Depth (fbg)	TPHg (ppm)	TPHd (ppm)	TOG (ppm)	TPHmo (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Total Xylenes (ppm)	MTBE (ppm)
2000 Site Investigation											
VE-5-5.5	6/28/2000	5.5	**578**	--	--	--	**9.76**	**28.8**	**11.8**	**63.1**	**0.359**
VE-5-10.5	6/28/2000	10.5	**1.18**	--	--	--	**0.0205**	**0.0449**	**0.0181**	**0.099**	<0.0500
VE-5-14.0	6/28/2000	14	<1.00	--	--	--	**0.00500**	**0.0122**	<0.00500	**0.0220**	<0.0500
VE-6-5.5	6/28/2000	5.5	**1,290**	--	--	--	**13.2**	**44.9**	**28.5**	**123**	**2.93**
VE-6-10.5	6/28/2000	10.5	**25**	--	--	--	**0.364**	**0.700**	**0.610**	**2.87**	**0.154**
VE-6-14.0	6/28/2000	14	<1.00	--	--	--	<0.00500	**0.00830**	**0.00730**	**0.0360**	<0.0500
VE-7-6.5	6/28/2000	6.5	**1,800**	--	--	--	**11.6**	**60.8**	**34.6000**	**173**	**2.61**
VE-7-10.5	6/28/2000	10.5	**1,260**	--	--	--	**5.68**	**32.5**	**24.5**	**124**	**0.73**
VE-7-14.0	6/28/2000	14	<1.00	--	--	--	<0.00500	**0.132**	<0.00500	**0.00680**	<0.0500
2004 Fuel System Upgrades [1]											
P-1-5'	6/29/2004	5	**7,200**	**1,800**	--	<500	<5.0	**9.6**	**61**	**540**	<5.0
P-2-5'	6/29/2004	5	**890**	**810**	--	<250	<0.50	<0.50	**3.3**	**27**	<0.50
P-3-5'	6/29/2004	5	<50	**7.4**	--	<50	**0.51**	<0.50	**1.5**	**1.4**	**3.3**
P-4-5'	6/29/2004	5	**120**	**32**	--	<50	**2.2**	<0.50	**8.2**	**1.5**	**40**
P-5-5'	6/29/2004	5	**1,600**	**140**	--	<50	**3.3**	**0.83**	**38**	**60**	**3.0**
D-1-5'	6/29/2004	5	<1.0	**8**	--	<50	<0.0050	<0.0050	**0.0052**	**0.020**	**0.031**
D-2-5'	6/29/2004	5	<1.0	**2.1**	--	<50	<0.0050	**0.0056**	<0.0050	**0.005**	**0.0052**
D-3-5'	6/29/2004	5	**130**	**24**	--	<50	<0.50	<0.50	**2.2**	**2**	<0.50
D-4-5'	6/29/2004	5	**850**	**190**	--	<50	<0.50	**0.96**	**7.6**	**58**	**1.5**
P-6-6.5'	7/6/2004	6.5	**380**	**86**	--	<50	**3.6**	**14**	**7.2**	**38**	**4.4**
P-7-6.5'	7/6/2004	6.5	**490**	**17**	--	<50	**1.0**	**2.5**	**8.2**	**42**	**1.2**
P-8-6.5'	7/6/2004	6.5	**6,500**	**170**	--	<100	<5.0	**38**	**61**	**500**	<5.0
P-9-6.5'	7/6/2004	6.5	**380**	**37**	--	<50	<1.0	**1.6**	**4.7**	**26**	**21**
P-10-6.5'	7/6/2004	6.5	**120**	**16**	--	<50	<1.0	<1.0	**1.9**	**2.6**	**7.1**
P-11-6.5'	7/6/2004	6.5	<100	**12**	--	<50	**1.4**	<1.0	**2.9**	**1.7**	**3.3**
P-12-6.5'	7/6/2004	6.5	**1,100**	**38**	--	<50	**2.2**	<1.0	**23**	**30**	**2.8**

Abbreviations and Notes:

TPHg = Total petroleum hydrocarbons as gasoline

TPHd = Total petroleum hydrocarbons as diesel

TOG = Total oil and grease

TPHmo = Total petroleum hydrocarbons as motor oil

MTBE = Methyl tertiary-butyl ether

fbg = Feet below grade

ppm = Parts per million, equivalent to mg/L

Table 2. Historical Soil Analytical Data - Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, Oakland, California

Sample ID	Date Sampled	Depth (fbg)	TPHg (ppm)	TPHd (ppm)	TOG (ppm)	TPHmo (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Total Xylenes (ppm)	MTBE (ppm)

mg/L = Miligrams per liter

-- = Not analyzed

<x = Not detected at laboratory reporting limit x

TPHg analyzed by EPA Method 5030 in 1992, EPA Method 8015M in 1998 and 1999, DHS LUFT in 2000, and EPA Method 8260B in 2004.

TPHd analyzed by EPA Method 3550 in 1992, EPA Method 8015M in 1998, 1999, and 2004.

TOG analyzed by EPA Method 5520D.

TPHmo analyzed by EPA Method 8015M.

Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8020 in 1992, 1998, and 1999, by DHS LUFT in 2000, and by EPA Method 8260B in 2004.

MTBE analyzed by EPA Method 8020 in 1998 and 1999, and by EPA Method 8260B in 2000 and 2004. 1998 results in parentheses analyzed by EPA Method 8260B.

1. Shading indicates that the data represents soil that has been removed from the site.

Table 3. Well Survey Results - Shell-branded Service Station, 285 Hegenberger Road, Oakland, California

Map ID	State Well ID	Owner Well ID	Distance from Site (feet)	Direction From Site	Use	Well Status	Installation Date	Depth (fbg)	Screened Interval (fbg)	Sealed Interval (fbg)	Comments
1	02S/03W-28B1		550	NE	AG	Unknown	10/7/1977	48	28-48	0-12	
2	02S/03W-28G2		1,900	SE	AG	Unknown	6/2/1988	305	25-305	0-25	
3	02S/03W-29H1	No. 3	2,575	SW	AG	Unknown	4/1/1942	350	156-173, 187-199, 267-273, 282-283, 305-312	NA	Well appears to be in Section 28 not 29.
4	02S/03W-21J/R		2,600	NE	IND	Unknown	10/14/1952	600	200-584	NA	
5	02S/03W-21R		2,600	NE	UNK	Unknown	NA	91	NA	NA	Actual location of well unknown due to vague description on the DWR log
6	02S/03W-21R		2,600	NE	UNK	Unknown	NA	70	NA	NA	Actual location of well unknown due to vague description on the DWR log

Notes and Abbreviations:

Well information provided by the California Department of Water Resources (DWR).

Map ID number refers to map location on Figure 1.

State Well ID = California State well identification number as recorded by the Department of Water Resources in Sacramento, California

Well locations are approximate and have not been field verified unless otherwise noted. The well locations are plotted on Figure 1 based on the information provided on the DWR form.

Well use is based on the information on the DWR form. This information may not be current. Unless otherwise noted, this information has not been confirmed by a field visit.

Monitoring wells were not included in the table or mapped.

fbg = feet below grade

AG = Agricultural

DOM = Domestic

GEO = Geotechnical

IND = Industrial

UNK = Unknown

NA = Not Available

ATTACHMENT A

Available Boring Logs

LOG OF BORING NO. MW-1

DATE DRILLED: 2/14/89 | ELEVATION: | WL TAKEN: 2-14-89 | EQUIPMENT: Hollow Stem Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION		WELL CONSTRUCTION	TOTAL PETROLEUM HYDROCARBONS mg/kg	TESTS
					hard		0-2" ASPHALT, 2"-12" BASE ROCK				
				dry	firm	brown to black	SANDY SILT	ML			
							CLAYEY SAND and GRAVEL (Fill)	SP/GP			
5	D			wet	loose	gray-black	CLAYEY fine SAND (Bay Mud) Some gasoline odor	SW			
								SP			
10	D			moist	soft to medium	gray-black	CLAY (Bay Mud) No gasoline odor	CH			
15	D			slightly damp	medium	gray-black	SANDY CLAY Trace of gravel	CH/CL			
20							Bottom of Hole at 16.5 ft.				

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Project No.
88-44-359-01

Converse Environmental Consultants California

Drawing No.
A-3

LOG OF BORING NO. MW-2

DATE DRILLED: 2/15/89 | ELEVATION: | WL TAKEN: 2-15-89 | EQUIPMENT: Hollow Stem Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	WELL CONSTRUCTION	TOTAL PETROLEUM HYDROCARBONS Mg/Kg	TESTS
					hard		0-2" ASPHALT; 2-6" BASEROCK			
				dry	medium dense	brown	SILTY SAND and GRAVEL (Fill) SM/GM			
				slightly damp	soft to medium	gray	SANDY CLAY (Fill) CL			
5	D	▽		wet	soft	dark gray	CLAYEY SAND (Bay Mud) Trace of gravel SP/CL			
							SANDY CLAY (Bay Mud) CL			
10	D			moist	soft, firmer with depth	gray	CLAY (Bay Mud) CH			
15	D						SANDY CLAY			
							Bottom of Hole at 16.5 ft.			
20										

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Drawing No.
A-4

LOG OF BORING NO. MW-3

DATE DRILLED: 2/14/89 | ELEVATION: | ML TAKEN: 2-14-89 | EQUIPMENT: Hollow Stem Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION		WELL CONSTRUCTION	TOTAL PETROLEUM HYDROCARBONS mg/kg	TESTS
					hard		0-2" ASPHALT; 2-12" BASE ROCK				
				moist	medium dense	brown to black	CLAYEY SAND and GRAVEL (Fill)	SP/GP			
								CH			
5	D			moist	soft	brown	SILTY SAND and GRAVEL (Fill)	SW/GP			
				wet	soft	black	CLAYEY SAND (Fill)	CL			
							SILTY CLAY (Bay Mud) Some fine sand				
10	D			sat.	soft, firmer with depth		CLAY (Bay Mud)	CH			
15	D			moist	medium	gray-black					
							Bottom of Hole at 16.5 ft.				
20											

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Drawing No.
A-5

LOG OF BORING NO. MW-4

DATE DRILLED: 4/28/89 | ELEVATION: | WL TAKEN: 4-28-89 | EQUIPMENT: Hollow Stem Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	WELL CONSTRUCTION	BLOWS/FT.	T.P.H mg/kg	TESTS
0				moist	medium	brown	Import Top Soil				
				moist	medium	brown	CLAYEY SAND and rock fragment (Fill) SC				
				moist	medium	brown-gray	Mix SILTS and SANDS Trace dry Bay Mud ML-SM				
5	D			very moist			Lenses and pockets silts, sand, clayey silt, trace organics		7		
	D								12		
				wet	loose		Lenses and layers of silts, fine sands				
	D			very moist					3		
					soft	light gray	BAY MUD CH				
10	D								1		
						dark gray					
	D				medium		Calcareous, trace vertical organics		8		
	D				stiff						
						gray	Calcareous SILTY CLAY CL		20		
15							Bottom of Hole at 14 ft.				
20											

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Drawing No.
A-1

LOG OF BORING NO. MW-5

DATE DRILLED: 4/27/89 | ELEVATION: N/A | WL TAKEN: 4-27-89 | EQUIPMENT: Hollow Stem Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION		WELL CONSTRUCTION	BLOWS/FT.	T.P.H Mg/Kg	TESTS
				slightly moist			ASPHALT: 1-1/2", base: 6"					
					medium dense	light brown to yellow-brown	CLAYEY SAND Little rock fragments	SC				
				slightly moist	stiff	gray	SILTY CLAY Pocket of bay mud	CL				
				slightly moist	medium dense	brown	Fine to coarse SAND	SP				
5	D						Layer coarse sand to pea gravels			23		
	D			wet			Lenses fine to medium sand					
				very moist	soft	gray	CLAYEY SILT	ML		8		
	D			wet			Sand lens					
							CLAYEY SILT			7		
	D						Fine sandy silt					
10	D						SILTY CLAY (Bay Mud)	CH		1		
	D					dark gray	Trace vertical organics			4		
	D						Trace of calcareous SILTY CLAY			10		
15							Bottom of Hole at 14 ft.					
20												

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Drawing No.
A-2

LOG OF BORING NO. MW-6

DATE DRILLED: 4/28/89 | ELEVATION: N/A | WL TAKEN: 4-28-89 | EQUIPMENT: Hollow Stem Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	WELL CONSTRUCTION	BLOWS/FT.	T.P.H mg/kg	TESTS
				moist	loose	brown	Import Top Soil				
				moist	loose	yellow-brown	CLAYEY SAND SC and rock fragments Trace cobble size fragments				
	D						Sandy clay, trace rock fragments				
5	D	▽		very moist	soft	gray	CLAYEY SILTS ML Layer pea gravel possible floating product Fine to medium sand Layer coarse sand, pea gravel Fine to medium SAND SP-ML		23 8 7		
10	D			wet			Clayey silt, trace fine sands		1		
	D						Fine sandy silts Bay Mud, trace organics CH		4		
15							Bottom of Hole at 12 ft.		10		
20											

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Drawing No.
A-3

LOG OF BORING NO. MW-7

DATE DRILLED: 4/27/89	ELEVATION: N/A	WL TAKEN: 4-27-89	EQUIPMENT: Hollow Stem Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION		WELL CONSTRUCTION	BLOWS/FT.	T.P.H Mg/Kg	TESTS
				very moist	stiff	brown	SILTY CLAY (Fill)	CL				
				wet	stiff		Zone of coarse size rock fragment	GP				
				very moist	stiff	black	SILTY CLAY Mix with sandy clays	CL				
						gray-brown						
5	D			very moist	soft to medium	gray	SILT & SAND, SILTY CLAY Strong odor	ML-CL		5		
	D	▼		wet			Fine SANDY SILT	ML		9		
				v. moist			Fine SANDY SILT to fine SAND Trace silt					
	D			wet		dark gray	CLAYEY SILT	ML				
				very moist to wet		brown	Bay Mud, some peat. Grades to Bay Mud	CH		2		
10	D					dark gray						
	D					gray	Calcareous SILTY CLAY Trace vertical organics	CL		10		
	D									12		
15							Bottom of Hole at 14 ft.					
20												

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Drawing No.
A-4

LOG OF BORING NO. MW-8

DATE DRILLED: 4/28/89	ELEVATION:	WL TAKEN: 4-28-89	EQUIPMENT: Hollow Stem Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	WELL CONSTRUCTION	BLOWS/FT.	T.P.H Mg/Kg	TESTS
				moist	medium	brown	Import Top Soil Silt and Clay with fine Sand CL				
				moist	medium dense	yellow-brown	CLAYEY SAND SC With rock fragments (Fill)				
						brown	SANDY CLAY With rock fragments (Fill)				
5	D			moist	medium dense	gray	CLAYEY SILT ML Pockets and lenses of silts, fine sands, and clayey silts		11		
	D	▼		wet	loose	dk.gray	SILTY Fine SAND SM				
10	D			wet	soft	gray	BAY MUD CH Trace organics		5		
	D					dark gray			5		
							Bottom of Hole at 12 ft.				
15											
20											

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Drawing No.
A-5

LOG OF BORING NO. MW-9

DATE DRILLED: 7-13-89	ELEVATION:	WL TAKEN: 7-13-89	EQUIPMENT: 6-1/4"x 10" Hollow Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	CONSISTENCY	COLOR	DESCRIPTION	WELL CONSTRUCTION	BLOWS/FT.	O.V.M. (ppm)	T.P.H. (ppm)
							Crush ROCK 2" Plastic, [topsoil]				
				slightly moist to moist	medium	brown	Silty CLAY Clayey SILT ML/CL [topsoil]				
				moist	stiff	grey	Silty CLAY CL				
	1			s. moist	medium	light gray	Clayey SILT ML Strong odor		7	320	
5	2			moist					8	450	
				wet		grey	Fine Sandy SILT ML				
							Silty SAND				
	3			wet		mottled gray	Bay Mud (tidial zone) CH/OH		6	112	
10	4						Trace calcareous with depth		5	40	
							Bottom of Hole at 10.5 ft.				
15											
20											

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Drawing No.
A-7

LOG OF BORING NO. MW-10

DATE DRILLED: 11-16-89	ELEVATION:	WL TAKEN: n/a	EQUIPMENT: 3 3/4"x 8" Hollow-Stem Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	CONSISTENCY	COLOR	DESCRIPTION		WELL CONSTRUCTION	BLOWS/FT.	O.V.H. (ppm)	T.P.H. (ppm)
				sl moist	m dense	gray	GRAVEL sub-base. (Fill)	GM				
				moist		yellow brown	Silty SAND. (Fill)	ML				
					medium	green	Sandy CLAY, trace Gravel.	SC			0	
						black	Silty CLAY, trace Gravel. (Fill) Odor.	CL			2	
								SM				
	1			very moist	medium dense	dark gray	Silty SAND, trace Clay.			6	35	
5					medium	gray	Silty CLAY, wet Sandy SP lenses. Green staining. Odor.	CL		11		
				wet	soft		Silty CLAY, trace brown organics.			11	50	
										5		
					soft	black	Silty CLAY, trace organincs. Bay Mud.	CH		7	3	
10										4		
						black mottled gray				4	0	
										4		
										7	0	
							Total Depth of Boring: 13 ft Below Ground Surface.					
15												
20												

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Project No.
88-44-359-01

Converse Environmental West

Drawing No.
A-4

LOG OF BORING NO. VEW-1

Start: *11/21/91* Completion: *11/21/91* Water Measure: *N/A*	Geologist: *P. A. Fuller* Assistant Geol.: *N/A* Drilling Co.: *Kvilhaug*	Driller/Helper: Drilling Method: *Hand Auger* Auger/Bit Dia.:

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	WELL CONSTRUCT.	DESCRIPTION		MOISTURE	SOIL CONSISTENCY OR ROCK HARDNESS	COLOR	BLOWS / 6"	PERCENT RECOVERY
					Asphalt and Base						
					Silty Clay	CL	slightly moist		gray/black		
					Sandy Clay	CL	moist		gray/black		
5					Clayey pebbly Sand	SC	very moist		black		
					Total Depth of Boring: 7 ft. Casing: Blank 4" ID Sch. 40 PVC Screen: Slotted 4" ID Sch. 40 PVC, 0.020" slots Filter Pack: 2/12 sand						
10											
15											
20											

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Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-2

LOG OF BORING NO. VM-2

Start: *11/21/91* Completion: *11/21/91* Water Measure: *N/A*	Geologist: *P. A. Fuller* Assistant Geol.: *N/A* Drilling Co.: *Kvilhaug*	Driller/Helper: Drilling Method: *Hand Auger* Auger/Bit Dia.:

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	WELL CONSTRUCT.	DESCRIPTION		MOISTURE	SOIL CONSISTENCY OR ROCK HARDNESS	COLOR	BLOWS / 6"	PERCENT RECOVERY
					Asphalt and Base						
					Silty Clay	CL	slightly moist		gray/black		
					Medium Sand	SP	very moist		gray/black		
5		▽			Clayey fine Sand	SC	very moist		black		
					Total Depth of Boring: 7 ft. Casing: Blank 1" ID Sch. 40 PVC Screen: Slotted 1" ID Sch. 40 PVC, 0.020" slots Filter Pack: 2/12 sand						
10											
15											
20											

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Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-3

LOG OF BORING NO. VM-3

Start: *11/21/91* Completion: *11/21/91* Water Measure: *N/A*	Geologist: *P. A. Fuller* Assistant Geol.: *N/A* Drilling Co.: *Kvilhaug*	Driller/Helper: Drilling Method: *Hand Auger* Auger/Bit Dia.:

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	WELL CONSTRUCT.	DESCRIPTION		MOISTURE	SOIL CONSISTENCY OR ROCK HARDNESS	COLOR	BLOWS / 6"	PERCENT RECOVERY
					Asphalt and Base						
					Silty Clay	CL	slightly moist		gray green		
					Fine Sand	SW			black		
5		▽			Clayey fine Sand	SC	very moist		gray		
					Total Depth of Boring: 7 ft.						
					Casing: Blank 1" ID Sch. 40 PVC Screen: Slotted 1" ID Sch. 40 PVC, 0.020" slots Filter Pack: 2/12 sand						
10											
15											
20											

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Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-4

LOG OF BORING NO. VM-4

Start: *11/21/91* Completion: *11/21/91* Water Measure: *N/A*	Geologist: *P. A. Fuller* Assistant Geol.: *N/A* Drilling Co.: *Kvilhaug*	Driller/Helper: Drilling Method: *Hand Auger* Auger/Bit Dia.:

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	WELL CONSTRUCT.	DESCRIPTION		MOISTURE	SOIL CONSISTENCY OR ROCK HARDNESS	COLOR	BLOWS / 6"	PERCENT RECOVERY
					Asphalt and Base						
					Silty Clay, some organics	CL	slightly moist		black		
					Clay with organics	CL	moist		black		
5					Sandy Clay	CL	very moist		black		
					Total Depth of Boring: 7 ft. Casing: Blank 1" ID Sch. 40 PVC Screen: Slotted 1" ID Sch. 40 PVC, 0.020" slots Filter Pack: 2/12 sand						
10											
15											
20											

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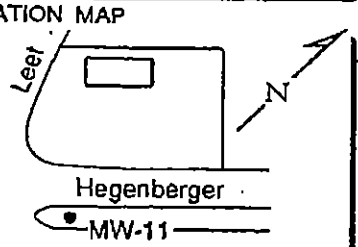
Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-5

LOCATION MAP



NORTHING EASTING ELEVATION
847.72 998.93 10.56TOC

PACIFIC ENVIRONMENTAL GROUP, INC.

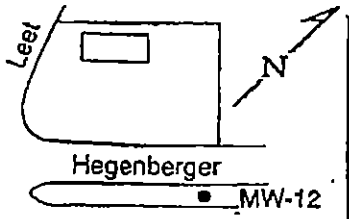
WELL NO. MW-11
PAGE 1 OF 1

PROJECT NO. 305-79.01
LOGGED BY: CM
DRILLER: GREGG
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2X12

CLIENT: SHELL
DATE DRILLED: 6-8-93
LOCATION: 285 Hegenberger Rd.
HOLE DIAMETER: 10"
HOLE DEPTH: 15.5'
WELL DIAMETER: 4"
WELL DEPTH: 14'
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	SOIL TYPE	LITHOLOGY / REMARKS
GROUT				1	SM	SILTY SAND
					GM	SANDY GRAVEL - FILL: strong brown; angular large chunks of brick and rock; some rusted metal.
				2		
				3		
				4	SM	SILTY SAND: dark brown; 25-30% sill; fine to medium sand; no product odor.
	Mst	2	13			
			25	5	SC	CLAYEY SAND: dark brown; 20-25% clay; fine sand.
BENTONITE				6	CH	CLAY: black; high plasticity; mottled with grey patches; very stiff; no product odor.
SAND				7		
				8		
				9		
	Sat	2	2	10		@10': grey to black; high plasticity; large 3-5 mm open rootholes and cracks filled with water; iron oxide stain along fractures; reeds and roots; firm; no product odor.
			5	11		
				12		
				13		
	Sat	0	3	14		@14': dark grey; high plasticity; water filled rootholes; roots; stiff; no product odor.
			11	15		
				16		BOTTOM OF BORING AT 15.5'
				17		
				18		
				19		
				20		
				21		
				22		

LOCATION MAP



NORTHING 995.66 | EASTING 1088.10 | ELEVATION 9.56TOC

ACIFIC ENVIRONMENTAL GROU , INC.

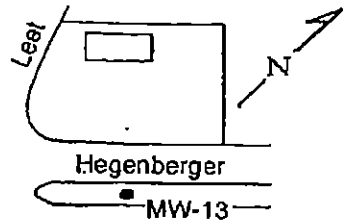
WELL NO. MW-12
PAGE 1 OF 1

PROJECT NO. 305-79.01
LOGGED BY: CM
DRILLER: GREGG
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2X12

CLIENT: SHELL
DATE DRILLED: 6-8-93
LOCATION: 285 Hegenberger Rd.
HOLE DIAMETER: 10"
HOLE DEPTH: 15.5'
WELL DIAMETER: 4"
WELL DEPTH: 15'
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	SOIL TYPE	LITHOLOGY / REMARKS
GROUT				0	SM	SILTY SAND
	Dp			1–3	GM	SANDY GRAVEL - FILL: large angular chuncks of iron oxide stained chert.
	Mst	3	P	4–7	ML	CLAYEY SILT: sandy; dark greyish brown; 20-25% clay; 15-20% very fine sand; iron oxide staining along tiny rools; no product odor.
BENTONITE				8	CH	CLAY: black; high plasticity; roots; rootholes; rootholes filled with water; soft; no product odor.
SAND	Sat	4	3 2	9–10		
	Sat	0	9 10	12.5–15		@12.5': greenish grey; high plasticity; 0-5% silt; calcite nodules; roots and water filled rootholes; stiff; no product odor.
				15.5		BOTTOM OF BORING AT 15.5'

LOCATION MAP



NORTHING 914.88 EASTING 1039.19 ELEVATION 10.10TOC

PACIFIC ENVIRONMENTAL GROUP, INC.

WELL NO. MW-13
PAGE 1 OF 1

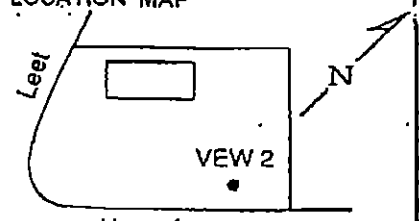
PROJECT NO. 305-79.01
LOGGED BY: CM
DRILLER: GREGG
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2X12

CLIENT: SHELL
DATE DRILLED: 6-10-93
LOCATION: 285 Hegenberger Rd.
HOLE DIAMETER: 10"
HOLE DEPTH: 15.5'
WELL DIAMETER: 4"
WELL DEPTH: 15'
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	SOIL TYPE	LITHOLOGY / REMARKS
GROUT				1–3	SM	SILTY SAND
					GW	SANDY GRAVEL - FILL: large angular chuncks of iron oxide stained cherl; no product odor.
				4	SC	CLAYEY SAND: silty; olive brown; 30-35% clay; 20-25% silt; very fine sand; roots; loose; no product odor.
BENTONITE	Mst	0	8 4	5–6		
				7–8		
				9	CL	CLAY: dark greyish brown; moderate plasticity; 10-15% silt; iron oxide stain along roots; no product odor.
SAND	Mst	0	3 3	10	CH	CLAY: black; high plasticity; roots; odor of decaying organics; firm; no product odor.
				11–13		
	Mst	0	8 6	14–15		CLAY: dark greenish grey; high plasticity; calcite nodules and caliche; roots; stiff; no product odor.
				16–22		BOTTOM OF BORING AT 15.5'

RECOVERY / SAMPLE INTERVAL / GRAPHIC

LOCATION MAP



NORTHING EASTING ELEVATION

CIFIC ENVIRONMENTAL GROU NC.

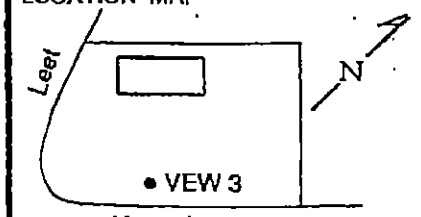
WELL NO. VEW 2
PAGE 1 OF 1

PROJECT NO. 305-79.01
LOGGED BY: CM
DRILLER: GREGG
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2X12

CLIENT: SHELL
DATE DRILLED: 6-9-93
LOCATION: 285 Hegenberger Rd
HOLE DIAMETER: 10"
HOLE DEPTH: 8.5'
WELL DIAMETER: 2"
WELL DEPTH: 8.5' and 6.5'
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
GROUT	Dp			1			SC	ASPHALT 2" CLAYEY SAND - FILL: gravelly; strong brown; 20-25% clay; fine to coarse sand; 15-20% angular gravel.
				2			CL	CLAY: dark greenish grey to black; moderate plasticity; moderate product odor becoming strong product odor at 3 feet; roots.
	Mst			3				
SAND	Wet	100	5 4	4			SM	SILTY SAND: dark grey; 30-35% silt; very fine sand; roots; loose; strong product odor.
				5				
	Mst			6			CH	CLAY: black; high plasticity; roots; strong product odor.
				7			ML	CLAYEY SILT: with sand lenses; dark grey to black; moderate plasticity; horizontal laminae; roots; sand lenses of fine to medium sand up to 2 inches thick; soft; strong product odor.
	Sat	80	1 4	8				
SAND				9			CL	CLAY: dark grey; moderate plasticity; moderate product odor.
BENTONITE				10				
				11				BOTTOM OF BORING AT 8.5'
				12				
				13				
				14				
				15				
				16				
				17				
				18				
				19				
				20				
				21				
				22				

LOCATION MAP



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GRO , INC.

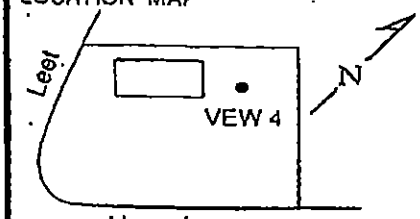
WELL NO. VEW 3
PAGE 1 OF 1

PROJECT NO. 305-79.01
LOGGED BY: CM
DRILLER: GREGG
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2X12

CLIENT: SHELL
DATE DRILLED: 6-10-93
LOCATION: 265 Hegenberger Road
HOLE DIAMETER: 10"
HOLE DEPTH: 10'
WELL DIAMETER: 2"
WELL DEPTH: 8.5' and 6'
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
GROUT				1			GW	ASPHALT 2" SANDY GRAVEL - FILL: strong brown.
	Mst			2			CL	SILTY CLAY: black; moderate plasticity; 20-25% silt; roots; no product odor.
				3				
				4			CH	CLAY: black; high plasticity; roots; stiff; strong product odor.
SAND	Mst	120	8 6	5				
				6				
				7			SM	SILTY SAND: dark blue grey; 5-10% clay; 15-20% silt; very fine sand; roots; separate phase hydrocarbon sheen along roots; soft; strong product odor.
	Sat	80	2 2	8				
SAND				9			CH	CLAY: dark greenish grey to black; high plasticity; abundant roots; at 9.5'; 3-4" thick peat horizon; soft; moderate product odor.
	Mst	15	3 2	10				
BENTONITE				11				BOTTOM OF BORING AT 10'
				12				
				13				
				14				
				15				
				16				
				17				
				18				
				19				
				20				
				21				
				22				

LOCATION MAP



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

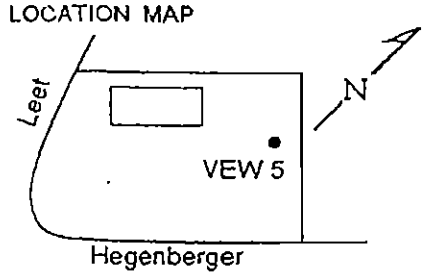
WELL NO. VEW 4
PAGE 1 OF 1

PROJECT NO. 305-79.01
LOGGED BY: CM
DRILLER: GREGG
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2X12

CLIENT: SHELL
DATE DRILLED: 6-9-93
LOCATION: 285 Hegenberger Rd.
HOLE DIAMETER: 10"
HOLE DEPTH: 9.5'
WELL DIAMETER: 2"
WELL DEPTH: 9' and 6.5'
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	SOIL TYPE	LITHOLOGY / REMARKS
GROUT				1	SC	ASPHALT 2"
				2		CLAYEY SAND - FILL: gravelly; strong brown; 25-30% clay; fine to medium sand; 15-20% gravel; no product odor.
				3	CL	CLAY: dark grey to black; moderate plasticity; faint product odor.
SAND	Wet	14	12	4	CL/ SW	SILTY SAND with CLAY: (interbedded); silty sand: dark grey; 15-20% silt; fine to medium sand; faint product odor; clay: dark grey; moderate plasticity; some rootlets; very stiff; faint product odor.
			12	5		
				6		
	Sat	7	7	7		
			4	8		@7.5': firm; faint product odor.
	Sat	0	8	9	SM ML	SILTY SAND: dark grey; 15-20% silt; very fine sand; faint to no product odor.
			4			CLAYEY SILT: dark grey; 25-30% clay; 10-15% very fine sand; firm; faint to no product odor.
SAND				10		BOTTOM OF BORING AT 9.5'
BENTONITE				11		
				12		
				13		
				14		
				15		
				16		
				17		
				18		
				19		
				20		
				21		
				22		

LOCATION MAP



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

WELL NO. VEW 5
PAGE 1 OF 1

PROJECT NO. 305-79.01
LOGGED BY: CM
DRILLER: GREGG
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2X12

CLIENT: SHELL
DATE DRILLED: 6-9-93
LOCATION: 285 Hegenberger Rd.
HOLE DIAMETER: 10"
HOLE DEPTH: 9'
WELL DIAMETER: 2"
WELL DEPTH: 8.5' and 6.5'
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
								Note: 1st hole had 2 1" pipes and 1.5'. Broke one line but it appears abandoned.
GROUT				1			SW	ASPHALT 2" GRAVELLY SAND - FILL: clayey; strong brown; 20-25% clay; 25-30% large angular rocks; no product odor.
				2			CL	CLAY: mottled grey and brown; moderate plasticity; 5-10% fine to medium sand; staining (grey) and moderate to strong product odor begins at 3.5'.
SAND	Sat	150	9 8	4 5			CH/SW	CLAY and SAND: (interbedded); clay: dark greenish grey; high plasticity; strong product odor; sand: dark greenish grey; 5-10% silt; fine to medium sand; stiff; strong product odor.
				6 7				
SAND	Sat	30	2 2	8 9			CH	CLAY: soft; moderate to faint product odor.
BENTONITE				10 11 12 13 14 15 16 17 18 19 20 21 22				BOTTOM OF BORING AT 9'

Cambria Environmental Technology, Inc.
1144 - 65th St.
Oakland, CA 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	Equiva Services LLC	**BORING/WELL NAME**	VE-5
JOB/SITE NAME	Shell-branded service station	**DRILLING STARTED**	28-Jun-00
LOCATION	285 Hegenberger Road, Oakland, California	**DRILLING COMPLETED**	28-Jun-00
PROJECT NUMBER	241-0734	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	10"	**SCREENED INTERVAL**	NA; NA
LOGGED BY	J. Loetterle	**DEPTH TO WATER (First Encountered)**	4.0 ft (28-Jun-00)
REVIEWED BY	S. Bork, RG# 5620	**DEPTH TO WATER (Static)**	NA
REMARKS	Hand augered to 5 fbg. Located at the south end of the south east pumps, adjacent to the planter on Hegenberger Rd.		

TPHg (mg/kg)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)
							ASPHALT	0.3
					ML		**FILL**; brown; moist; 35% silt, 50% fine to medium sand, 15% gravel; no plasticity; high estimated permeability.	1.0
							Clayey Silt (ML); grey; moist; 35% clay, 55% silt, 10% sand; high plasticity; low estimated permeability; contains organics.	3.0
					SP		@ 2' - damp.	4.0
	2 2 3	VE-5- 5.5		5	ML		**Gravelly SAND** (SM); grey; damp; 20% silt, 55% fine to medium sand, 25% fine gravel; no plasticity; high estimated permeability.	6.0
					SM		**Sandy Silt** (ML); wet; grey. @ 5' - dark grey; loose; 15% clay, 65% silt, 20% sand; medium plasticity; low estimated permeability; contains organics.	
							Silty SAND (SM); dark grey; wet; 5% clay, 20% silt, 75% fine sand; no plasticity; moderate permeability.	
	2 2 3	VE-5- 10.5		10	ML		**Clayey SILT** (ML); grey; loose; damp; 30% clay, 60% silt, 10% fine sand; high plasticity; low estimated permeability; contains rootlets.	10.0
	3 4 7	VE-5- 14.0		15			@ 13' green/grey; medium dense; 5% clay, 55% silt, 40% fine to medium sand with trace coarse sand; low plasticity; moderate estimated permeability.	15.0

WELL DIAGRAM

- Portland Type I/II
- Bentonite Seal
- Monterey Sand #2/12
- 4"-diam., 0.020" Slotted Schedule 40 PVC
- Bentonite Seal
- Monterey Sand #2/12
- 1"-diam., 0.020" Slotted Schedule 40 PVC

Bottom of Boring @ 15 ft

WELL LOG (COAXIAL/TPHG) G:\OA191C-11\GINTOKLND285.GPJ DEFAULT.GDT 7/8/00

Cambria Environmental Technology, Inc.
1144 - 65th St.
Oakland, CA 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	Equiva Services LLC	**BORING/WELL NAME**	VE-6
JOB/SITE NAME	Shell-branded service station	**DRILLING STARTED**	28-Jun-00
LOCATION	285 Hegenberger Road, Oakland, California	**DRILLING COMPLETED**	28-Jun-00
PROJECT NUMBER	241-0734	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	10"	**SCREENED INTERVAL**	NA; NA
LOGGED BY	J. Loetterle	**DEPTH TO WATER (First Encountered)**	4.0 ft (28-Jun-00) ▽
REVIEWED BY	S. Bork, RG# 5620	**DEPTH TO WATER (Static)**	NA ▼
REMARKS	Hand augered to 5 fbg. Located adjacent to the planter on Hegenberger Rd. by the southeast pumps.		

TPHg (mg/kg)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
							ASPHALT	0.3	Portland Type I/II
							FILL; brown; moist; 35% silt, 50% fine to medium sand, 15% gravel; no plasticity; high estimated permeability.	1.0	
					MH		Clayey SILT (MH); grey; moist; 35% clay, 55% silt, 10% sand; high plasticity; low estimated permeability; contains organics.	3.0	Bentonite Seal
					SM		Silty SAND (SM); blue/grey; loose; wet; 3% clay, 27% silt, 70% fine sand; no plasticity; moderate estimated permeability. ▽		Monterey Sand #2/12
	2 4 5	VE-6- 5.5		5			@ 4' - 20% silt, 60% fine to coarse sand, 20% fine gravel; high estimated permeability.	5.0	4"-diam., 0.020" Slotted Schedule 40 PVC
							Sandy SILT (ML); light grey; loose; damp; 5% clay, 75% silt, 20% sand, low plasticity; moderate estimated permeability; contains organics.		
					ML		@ 6' - 25% clay, 60% silt, 15% sand; medium plasticity; low estimated permeability.		
	1 2 3	VE-6- 10.5		10			@ 10' - grey; 15% clay, 65% silt, 20% sand.		Bentonite Seal
							@ 11' - grey/brown; 20% clay, 50% silt, 30% fine to coarse sand; moderate estimated permeability.		Monterey Sand #2/12
	4 6 7	VE-6- 14.0		15			@ 14' - light grey; medium dense; moist; 30% clay, 50%silt, 20% sand; low estimated permeability.	15.0	1"-diam., 0.020" Slotted Schedule 40 PVC
									Bottom of Boring @ 15 ft

WELL LOG (COAXIAL/TPHG) G:\OA191C~1\GINT\OKLND285.GPJ DEFAULT.GDT 7/8/00

Cambria Environmental Technology, Inc.
1144 - 65th St.
Oakland, CA 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	Equiva Services LLC	**BORING/WELL NAME**	VE-7
JOB/SITE NAME	Shell-branded service station	**DRILLING STARTED**	28-Jun-00
LOCATION	285 Hegenberger Road, Oakland, California	**DRILLING COMPLETED**	28-Jun-00
PROJECT NUMBER	241-0734	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	10"	**SCREENED INTERVAL**	NA; NA
LOGGED BY	J. Loetterle	**DEPTH TO WATER (First Encountered)**	4.0 ft (28-Jun-00) ▽
REVIEWED BY	S. Bork, RG# 5620	**DEPTH TO WATER (Static)**	NA ▼
REMARKS	Hand augered to 5 fbg. Located in the middle of the exit driveway of the car wash.		

TPHg (mg/kg)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
							ASPHALT	0.3	Portland Type I/II
					ML		FILL; brown; moist; 35% silt, 50% fine to medium sand, 15% gravel; no plasticity; high estimated permeability.	1.0	Bentonite Seal
							Clayey SILT (ML); black; damp; 30% clay, 60% silt, 10% sand; high plasticity; low estimated permeability.	3.0	Monterey Sand #2/12
							@ 2' - grey.		
							Silty SAND (ML); blue/grey; wet. ▽		
	4 4 5	VE-7-6.5		5	SM		@ 6.5' - grey/brown; loose; 5% clay, 30%silt, 60% fine to medium sand, 5% fine gravel; low plasticity; moderate estimated permeability.	7.0	4"-diam., 0.020" Slotted Schedule 40 PVC
							Silty CLAY (CH)		
	2 2 4	VE-7-10.5		10	CH		@ 10.5' - dark grey; medium stiff; moist; 65% clay, 30% silt, 5% sand; high plasticity; very low estimated permeability; contains organics.		Bentonite Seal
									Monterey Sand #2/12
	5 7 9	VE-7-14.0		15	ML		@ 13.5' - light grey/green; 60% clay, 30% silt, 10% sand.	14.0	1"-diam., 0.020" Slotted Schedule 40 PVC
							Clayey SILT (ML); light grey; very stiff; moist; 30% clay, 50% silt, 20% fine sand; medium plasticity; low estimated permeability.	15.0	Bottom of Boring @ 15 ft

WELL LOG (COAXIAL/TPHG) G:\OA181C-1\GINT\OKLND285.GPJ DEFAULT.GDT 7/6/00

LOG OF BORING NO. 1 (SB-1)

DATE DRILLED: 2/13/89	ELEVATION:	WL TAKEN: None	EQUIPMENT: Hand Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS/FT.	DRY WEIGHT %	DRY DENSITY lb/ft³	TESTS
							0-2" ASPHALT, 2-6" BASE ROCK SP				
				damp moist	firm	brown	CLAY (Fill) CL Some sand and gravel				
	D			damp	firm to soft	black dark gray	SILTY CLAY CL/GP Some gravel				
				damp			SILTY SAND AND GRAVEL SP/	23			
5	D			wet			Fine SAND SW/GW	8			
							Bottom of Boring at 6.5 FT. Water seeping into hole				
10											
15											
20											

REGISTERED PROFESSIONAL GEOLOGIST
Douglas W. Charlton
No. 4110
STATE OF CALIFORNIA

SHELL OIL COMPANY
258 Hegenberger Road
Oakland, California

Project No.
88-44-359-01

Converse Environmental Consultants California

Drawing No.
A-1

LOG OF BORING NO.2 (SB-2)

DATE DRILLED: 2/13/89 | ELEVATION: | WL TAKEN: None | EQUIPMENT: Hand Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS/FT.	DRY WEIGHT %	DRY DENSITY lb/ft³	TESTS
					hard		0-2" ASPHALT, 2-12" BASE ROCK				
				slightly damp	firm	gray	SILTY AND SANDY CLAY (Fill) CL/CH Some gravel				
5	D			moist	firm	gray	CLAYEY SAND SP/GP Some gravel. Odor of gasoline	27			
							Bottom of Boring at 6 ft. Water in hole at 6 ft.				
10											
15											
20											

REGISTERED PROFESSIONAL GEOLOGIST
Douglas W. Charlton
No. 4110
STATE OF CALIFORNIA

SHELL OIL COMPANY
258 Hegenberger Road
Oakland, California

Project No.
88-44-359-01

Converse Environmental Consultants California

Drawing No.
A-2

LOG OF BORING NO. SB-A (SB-3)

DATE DRILLED: 5/24/89	ELEVATION:	WL TAKEN: 5/24/89	EQUIPMENT:

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS/FT.	MOISTURE CONTENT	DRY DENSITY lb/ft³	TESTS
				slightly moist	loose	tan	SANDY GRAVEL (Fill)	12			
	D			moist	medium	black	SILTY CLAY CL				
	D			very moist	loose	grey	SANDY GRAVEL GM Strong odor	16			
5		▼		wet	loose	black	SILTY CLAY and SAND CL				
							Bottom of Hole at 6 ft.				
10											
15											
20											

REGISTERED GEOLOGIST
Douglas W. [illegible]
No. [illegible]

SHELL OIL COMPANY
285 Hagenberger Road
Oakland, California

Project No.
88-44-359-02

Converse Environmental Consultants California

Drawing No.
A-6

LOG OF BORING NO. SB-B (SB-4)

DATE DRILLED: 5/24/89	ELEVATION:	WL TAKEN: N/A	EQUIPMENT:

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS/FT.	MOISTURE CONTENT	DRY DENSITY lb/ft³	TESTS
				moist	loose	brown	SANDY GRAVEL (Fill)				
	D				medium	black	SILTY CLAY and fine SAND CL	9			
							Odor				
	D			very moist			Gravelly clay and sand	5			
5							Bottom of Hole at 4 ft.				
10											
15											
20											

REGISTERED PROFESSIONAL ENGINEER
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SHELL OIL COMPANY
285 Hagenberger Road
Oakland, California

Project No.
88-44-359-02

Converse Environmental Consultants California

Drawing No.
A-7

LOG OF BORING NO. SB-C (SB-5)

DATE DRILLED: 5/24/89	ELEVATION:	WL TAKEN: 5/24/89	EQUIPMENT:

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS/FT.	MOISTURE CONTENT	DRY DENSITY lb/ft³	TESTS
				very moist		black	SILTY CLAY and SAND CL				
	D					gray	SILTY fine SAND SM	13			
						black	SILTY CLAY and SAND CL Strong odor				
5	D	▼		wet				4			
							Bottom of Hole at 6 ft.				
10											
15											
20											

REGISTERED PROFESSIONAL ENGINEER
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SHELL OIL COMPANY
285 Hagenberger Road
Oakland, California

Project No.
88-44-359-02

Converse Environmental Consultants California

Drawing No.
A-8

LOG OF BORING NO. SB-6

DATE DRILLED: 7-13-89	ELEVATION:	WL TAKEN: 7-13-89	EQUIPMENT: 3-1/4"x 6" Hollow Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	CONSISTENCY	COLOR	DESCRIPTION	BLOWS/FT.	O.V.M. (ppm)	DRY DENSITY lb/ft³	TESTS
							ASPHALT 3" CONC. SLAB. 6"				
				dry	loose	gray	GRAVEL backfill				
5							Filter fabric				
	1	▼		wet	medium	light gray	Lenses-layers SILT and fine SAND ML Odor	9			
							Bottom of Hole at 7 ft.				
10											
15											
20											

REGISTERED PROFESSIONAL GEOLOGIST
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SHELL OIL COMPANY
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-01

Converse Environmental Consultants California

Drawing No.
A-1

LOG OF BORING NO. SB-7

DATE DRILLED: 7-13-89	ELEVATION:	WL TAKEN: 7-13-89	EQUIPMENT: 3-1/4"x 6" Hollow Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	CONSISTENCY	COLOR	DESCRIPTION	BLOWS/FT.	O.V.M. (ppm)	DRY DENSITY lb/ft3	TESTS
							ASPHALT 4" BASE 6"				
							GRAVEL backfill				
5		▼		wet			No odor				
							Bottom of Hole at 7 ft.				
10											
15											
20											

REGISTERED PROFESSIONAL ENGINEER
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SHELL OIL COMPANY
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-01

Converse Environmental Consultants California

Drawing No.
A-2

LOG OF BORING NO. SB-8

DATE DRILLED: 7-13-89	ELEVATION:	WL TAKEN: 7-13-89	EQUIPMENT: 3-1/4"x 6" Hollow Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	CONSISTENCY	COLOR	DESCRIPTION	BLOWS/FT.	O.V.M. (ppm)	DRY DENSITY lb/ft³	TESTS
							ASPHALT 2" BASE 6"				
							Mix Bay Mud, SAND SP Odor				
5	1			moist v. moist	loose	grey	Silty fine SAND trace shells fragments SM Strong odor	5	260		
	2	▼		wet	loose			5	260		
10							Bottom of Hole at 6.5 ft.				
15											
20											

REGISTERED PROFESSIONAL GEOLOGIST
Douglas W. Charlton
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SHELL OIL COMPANY
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-01

Converse Environmental Consultants California

Drawing No.
A-3

LOG OF BORING NO. SB-9

DATE DRILLED: 7-13-89	ELEVATION:	WL TAKEN: 7-13-89	EQUIPMENT: 3-1/4"x 6" Hollow Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	CONSISTENCY	COLOR	DESCRIPTION		BLOWS/FT.	O.V.M. (ppm)	DRY DENSITY lb/ft³	TESTS
					medium dense	black brown	ASPHALT 2" BASE 6"					
				moist	medium	dark gray	Silty CLAY Odor	CL				
5	1			moist v. moist	loose	gray	Fine Sandy SILT Odor	ML	6	280		
	2	▼		wet	firm to stiff		Silty CLAY Bay Mud Slight odor Clayey SILT rootlets	CH	8	15		
							Bottom of Hole at 7 ft.					
10												
15												
20												

REGISTERED PROFESSIONAL GEOLOGIST
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SHELL OIL COMPANY
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-01

Converse Environmental Consultants California

Drawing No.
A-4

LOG OF BORING NO. SB-10

DATE DRILLED: 7-13-89	ELEVATION:	WL TAKEN: 7-13-89	EQUIPMENT: 3-1/4"x 6" Hollow Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	CONSISTENCY	COLOR	DESCRIPTION	BLOWS/FT.	O.V.M. (ppm)	DRY DENSITY lb/ft³	TESTS
							ASPHALT 2" BASE 6"				
						gray	Silty CLAY CL Odor		50		
						light gray	Fine SAND trace SILT SP/SM		80		
						dark gray	Silty CLAY and Clayey SILT. Strong odor ML/CL		500		
5	1	▼		wet			Coarse SAND and pea GRAVEL SP/GP	7			
	2					—		11		—	
							Bottom of Hole at 6.5 ft.				
10											
15											
20											

REGISTERED PROFESSIONAL GEOLOGIST
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SHELL OIL COMPANY
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-01

Converse Environmental Consultants California

Drawing No.
A-5

LOG OF BORING NO. SB-11

DATE DRILLED: 7-13-89	ELEVATION:	WL TAKEN: 7-13-89	EQUIPMENT: 3-1/4"x 6" Hollow Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	CONSISTENCY	COLOR	DESCRIPTION	BLOWS/FT.	O.V.M. (ppm)	DRY DENSITY lb/ft³	TESTS
							ASPHALT 2" BASE 6" Pavement badly cracked in this area. Surface infiltration				
				moist	stiff	gray	Silty CLAY CL/CH		60		
							trace concrete rubble				
							Silty CLAY increase moisture		30		
	1			very moist	medium		Clayey SILT ML trace fine SAND Odor	6	280		
5		▼									
	2					black	Saturated fine SAND SP	9	30		
						gray	SILT trace fine SAND ML				
							Bottom of Hole at 7 ft.				
10											
15											
20											

SHELL OIL COMPANY
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-01

Converse Environmental Consultants California

Drawing No.
A-6

LOG OF BORING NO. SB-12

DATE DRILLED: 11-16-89	ELEVATION:	WL TAKEN: n/a	EQUIPMENT: 3 3/4"x 8" Hollow-Stem Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	CONSISTENCY	COLOR	DESCRIPTION	BLOWS/FT.	O.V.M. (ppm)	DRY DENSITY lb/ft3	TESTS
				very moist	soft	dark brown	Sandy SILT. (Topsoil) ML				
					soft	dark gray	Silty CLAY, trace Gravel. CL				
5	1				medium	dark gray	Silty CLAY, trace organics. Trace green staining.	10	0		
	2						Trace to little Sand.	12	0		
	3	▽		wet			Silty CLAY, little Sand.	13	0		
10							Total Depth of Boring: 9 ft Below Ground Surface.				
15											
20											

REGISTERED PROFESSIONAL GEOLOGIST
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SHELL OIL COMPANY
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-01

Converse Environmental West

Drawing No.
A-2

LOG OF BORING NO. SB-13

DATE DRILLED: 11-16-89	ELEVATION:	WL TAKEN: n/a	EQUIPMENT: 3 3/4"x 8" Hollow-Stem Auger

DEPTH (ft)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	CONSISTENCY	COLOR	DESCRIPTION	BLOWS/FT.	O.V.M. (ppm)	DRY DENSITY lb/ft³	TESTS
				moist	medium dense	dark gray	Sandy GRAVEL. (sub-base) GP				
				very moist	medium	green	Sandy CLAY, some Cobble, little Rubble. (Fill) Gravelly lens 4". CL		0		
				wet	m dense						
				very moist	medium	black	Silty CLAY, increased Sand, trace Gravel. Slight odor. CL		0		
	1			moist		gray green	Gravelly rounded SAND. Strong odor. SP	40	215		
5				wet		dark gray					
	2	▽		wet	medium dense		Fine to medium SAND. SP	29	142		
							Total Depth of Boring: 7 ft Below Ground Surface.				
10											
15											
20											

REGISTERED PROFESSIONAL GEOLOGIST
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STATE OF CALIFORNIA

SHELL OIL COMPANY
285 Hegenberger Road
Oakland, California

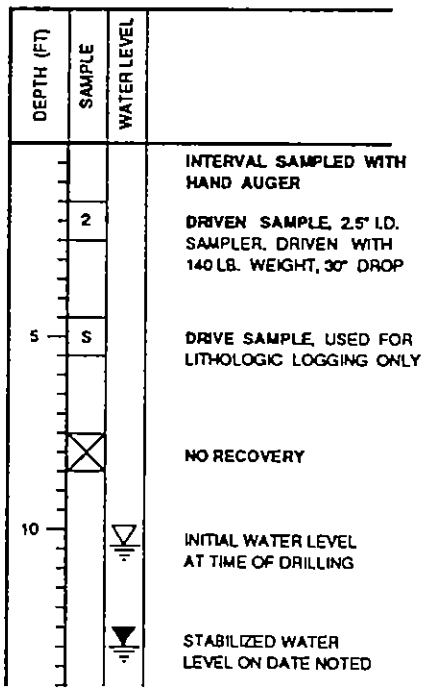
Project No.
88-44-359-01

Converse Environmental West

Drawing No.
A-3

MAJOR DIVISIONS			SYMBOLS	TYPICAL NAMES
COARSE GRAINED SOILS MORE THAN HALF IS LARGER THAN NO. 200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE	CLEAN GRAVELS WITH LITTLE OR NO FINES	GW	WELL GRADED GRAVELS, GRAVEL-SAND MIXTURES
			GP	POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES
		GRAVELS WITH OVER 12 % FINES	GM	SILTY GRAVELS, POORLY GRADED GRAVEL-SAND-SILT MIXTURES
			GC	CLAYEY GRAVELS, POORLY GRADED GRAVEL-SAND-CLAY MIXTURES
	SANDS MORE THAN HALF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE	CLEAN SANDS WITH LITTLE OR NO FINES	SW	WELL GRADED SANDS, GRAVELLY SANDS
			SP	POORLY GRADED SANDS, GRAVELLY SANDS
		SANDS WITH OVER 12 % FINES	SM	SILTY SANDS, POORLY GRADED SAND-SILT MIXTURES
			SC	CLAYEY SANDS, POORLY GRADED SAND-CLAY MIXTURES
FINE GRAINED SOILS MORE THAN HALF IS SMALLER THAN NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR,SILTY OR CLAYEY FINE SANDS, OR CLAYEY SILTS WITH SLIGHT PLASTICITY
			CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAY
			OL	ORGANIC CLAYS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY.
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE, SANDY OR SILTY SOILS, ELASTIC SILTS
			CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS			Pt	PEAT AND OTHER HIGHLY ORGANIC SOILS

SAMPLE TYPE



NOTE:

SOIL CONDITIONS INDICATED BY BORING LOGS APPLY ONLY AT THE LOCATION OF THE PARTICULAR BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THE BORING LOCATION WITH THE PASSAGE OF TIME. DATA PRESENTED IN THE LOGS REPRESENT A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED.

UNIFIED SOIL CLASSIFICATION, BORING LOG AND WELL CONSTRUCTION SYMBOLS

Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-1

LOG OF BORING NO. SG-1

DATE DRILLED : 8/6/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / FOOT	O.V.M. (ppm)	DRY DENSITY (lb / ft³)	TEST
				dry		dark brown tan	Top soil. Gravelly Silts and fine Sands with abundant roots and other organic material				
				moist		gray	Sandy Gravelly Clay GC/CL				
5							Fine to coarse Sand SP				
				wet		black	Silty Clay (last 2") CL				
							Total Depth of Boring at 6 ft - B.G.S.				
10											
15											
20											

CERTIFIED ENGINEERING GEOLOGIST
CHARLES R. COMSTOCK
No. 1010
STATE OF CALIFORNIA

Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-2

LOG OF BORING NO. SG-2

DATE DRILLED : 8/6/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / FOOT	O.V.M. (ppm)	DRY DENSITY (lb / ft^3)	TEST
				moist		tan gray	Top soil. Gravelly Silts and fine Sands				
							Very fine Sand grading into Silty Clay — SM/CL				
5				moist			Silty Clay — CL Silty Clay grading to Silty very fine Sand — SM				
							Total Depth of Boring at 5.5 ft - B.G.S.				
10											
15											
20											

CERTIFIED ENGINEERING GEOLOGIST
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STATE OF CALIFORNIA

Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-3

LOG OF BORING NO. SG-3

DATE DRILLED : 8/6/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / FOOT	O.V.M. (ppm)	DRY DENSITY (lb / ft^3)	TEST
							Planter, top soil				
	X			dry to moist		tan	Clayey Sand SC				
5	X			wet		dark gray	Silty Clay CL				
							Total Depth of Boring at 6 ft - B.G.S.				
10											
15											
20											

CERTIFIED ENGINEERING GEOLOGIST
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Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-4

LOG OF BORING NO. SG-4

DATE DRILLED : 8/6/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / FOOT	O.V.M. (ppm)	DRY DENSITY (lb/ft^3)	TEST
							Top soil, Sandy Gravel				
				dry		red brown	Fine Sands, trace Clay SM				
5				moist		black	Fine Sandy Silts SM				
							Total Depth of Boring at 6 ft - B.G.S.				
10											
15											
20											

CERTIFIED ENGINEERING GEOLOGIST
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Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-5

LOG OF BORING NO. SG-5

DATE DRILLED : *8/6/90*	ELEVATION :	W.L. TAKEN :	EQUIPMENT : *Hand Auger*

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / FOOT	O.V.H. (ppm)	DRY DENSITY (lb/ft³)	TEST
							Top soil - Gravel				
	X			dry		brown	Gravelly Clay GC/CL				
5	X			moist		gray black	Silty Clay SM/CL				
							Total Depth of Boring at 6 ft - B.G.S.				
10											
15											
20											

CERTIFIED ENGINEERING GEOLOGIST
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Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-6

LOG OF BORING NO. SG-6

DATE DRILLED : 8/6/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / FOOT	O.V.M. (ppm)	DRY DENSITY (lb / ft³)	TEST
							Top soil				
				dry		brown	Sandy Gravel GP				
							Coarse Gravel some Sand (cuttings)				
5				very moist		gray	Coarse Sand (angular) SP				
							Total Depth of Boring at 6 ft - B.G.S.				
10											
15											
20											

CERTIFIED ENGINEERING GEOLOGIST
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Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-7

LOG OF BORING NO. SG-7

DATE DRILLED : 8/7/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / FOOT	O.V.M. (ppm)	DRY DENSITY (lb / ft³)	TEST
				dry			Top soil - Gravelly Sand				
	X			moist		dark gray	Gravelly Silt some Sand and Clay SM/GM				
5	X			moist		black	Clay Silty Sand, trace Gravel SM/SC				
							Total Depth of Boring at 6 ft - B.G.S.				
10											
15											
20											

CERTIFIED ENGINEERING GEOLOGIST
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Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-8

LOG OF BORING NO. SG-8

DATE DRILLED : 8/7/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION		BLOWS / FOOT	O.V.M. (ppm)	DRY DENSITY (lb / ft^3)	TEST
				dry		brown	Top soil - Sandy Gravel					
	X			slightly moist		brown	Sandy Silts some Clay	SM				
5	X			moist		black	Silty Sands trace Clay	SP				
							Total Depth of Boring at 6 ft - B.G.S.					
10												
15												
20												

CERTIFIED ENGINEERING GEOLOGIST
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STATE OF CALIFORNIA

Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-9

LOG OF BORING NO. SG-9

DATE DRILLED : 8/7/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / FOOT	O.V.M. (ppm)	DRY DENSITY (lb / ft³)	TEST
						brown	Top soil - fine Sand				
	X			slightly moist		dark brown	Gravelly Sand some Silt trace Clay SP/SM		28		
5	X			moist		dark gray	Silty Sand some Clay SC		10		
							Total Depth of Boring at 6 ft - B.G.S.				
10											
15											
20											

CERTIFIED ENGINEERING GEOLOGIST
CHARLES R. COMSTOCK
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STATE OF CALIFORNIA

Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-10

LOG OF BORING NO. SG-10

DATE DRILLED : 8/7/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / FOOT	O.V.M. (ppm)	DRY DENSITY (lb/ft^3)	TEST
				dry		brown	Top soil - Sandy Gravel				
	X			molst		brown	Fine Sand. Chunk of wood SP				
5	X			moist		black	Clayey Silt trace Sand SC				
							Total Depth of Boring at 6 ft - B.G.S.				
10											
15											
20											

CERTIFIED ENGINEERING GEOLOGIST
CHARLES B. COMSTOCK
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Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-11

LOG OF BORING NO. SG-11

DATE DRILLED : 8/7/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / FOOT	O.V.M. (ppm)	DRY DENSITY (lb / ft^3)	TEST
							Fill - Sandy Gravel				
				dry		brown	Fine Sands trace Silt some Gravel SP				
5				moist		black	Clayey Silt SM				
							Total Depth of Boring at 6 ft - B.G.S.				
10											
15											
20											

CERTIFIED ENGINEERING GEOLOGIST
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Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-12

LOG OF BORING NO. SG-12

DATE DRILLED : 8/7/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger/Slide Hammer

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / FOOT	O.V.M. (ppm)	DRY DENSITY (lb / ft³)	TEST
							Top soil - Sandy Gravel				
	X			dry		tan	Silty Sand SP/SM				
5	X			moist		black	Clayey Silt trace Sand SM				
							Total Depth of Boring at 6 ft - B.G.S.				
10											
15											
20											

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Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-13

LOG OF BORING NO. SG-13

DATE DRILLED : *8/7/90*	ELEVATION :	W.L. TAKEN :	EQUIPMENT : *Hand Auger/Slide Hammer Sampler*

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / FOOT	O.V.M. (ppm)	DRY DENSITY (lb / ft^3)	TEST
							Top soil - Silty Sand				
	X			moist		dark gray	Clayey Silt SM				
5	X			very moist		black	Sandy Silt SM				
							Total Depth of Boring at 6 ft - B.G.S.				
10											
15											
20											

CERTIFIED ENGINEERING GEOLOGIST
CHARLES R. COMSTOCK
No. 1010
STATE OF CALIFORNIA

Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-14

LOG OF BORING NO. SG-14

DATE DRILLED : 9/13/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / 6"	O.V.M. (ppm)	DRY DENSITY (lb / ft³)	TEST
						tan	Sandy Gravel base 6"				
						brown	Coarse Gravel GP				
				moist	loose		Sandy Gravel/Gravelly Sand SP/GP				
	1							5			
								8			
5							Silty Clay CH				
	2			wet	soft	black	Sandy Silt (last 2") ML	3			
								4			
							Total Depth of Boring at 6 ft				
10											
15											
20											

REGISTERED PROFESSIONAL GEOLOGIST
JAY A. ACH
No. 4595
STATE OF CALIFORNIA

Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-15

LOG OF BORING NO. SG-15

DATE DRILLED : 9/13/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION		BLOWS / 6"	O.V.M. (ppm)	DRY DENSITY (lb / ft³)	TEST
							Sandy Gravel base	GP				
	1			slightly moist	medium dense	brown	Fine to coarse Sand	SP	8 9			
5	2			moist	soft	black	Silty Clay	CH	4			
					medium	black	Silty Sand	SM	4			
							Total Depth of Boring at 6 ft					

10

15

20

REGISTERED PROFESSIONAL GEOLOGIST
JAY A. ACH
No. 4595
STATE OF CALIFORNIA

Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-16

LOG OF BORING NO. SG-16

DATE DRILLED : 9/13/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : *Hand Auger*

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / 6"	O.V.M. (ppm)	DRY DENSITY (lb/ft³)	TEST
							Sandy Gravel base GP				
	1			moist	soft	brown black	Clayey Silt mixed with fine Sand ML/SP	4 3			
5	2			v. moist		black	Silty Sand ML	4 3			
							Total Depth of Boring at 6 ft				

10

15

20

REGISTERED PROFESSIONAL GEOLOGIST
JAY A. ACH
No. 4595
STATE OF CALIFORNIA

Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-17

LOG OF BORING NO. SG-17

DATE DRILLED : 9/13/90	ELEVATION :	W.L. TAKEN :	EQUIPMENT : Hand Auger

DEPTH (FT)	SAMPLE	WATER LEVEL	SYMBOL	MOISTURE	PLASTICITY	COLOR	DESCRIPTION	BLOWS / 6"	O.V.M. (ppm)	DRY DENSITY (lb / ft^3)	TEST
							Concrete 6"				
				moist	loose	black	Sandy Silt, trace Gravel ML				
	1							3 3			
				v. moist to wet	loose	black	Silty Sand, some Gravel SM				
5	2							3 1			
							Total Depth of Boring at 6 ft				
10											
15											
20											

REGISTERED PROFESSIONAL GEOLOGIST
JAY A. ACH
No. 4595
STATE OF CALIFORNIA

Shell Oil Company
285 Hegenberger Road
Oakland, California

Project No.
88-44-359-20

Converse Environmental West

Drawing No.
A-18

Cambria Environmental Technology, Inc.
1144 - 65th St.
Oakland, CA 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	Equiva Services LLC	BORING/WELL NAME	SB-1
JOB/SITE NAME	Oakland 285	DRILLING STARTED	18-Mar-99
LOCATION	285 Hegenberger Road, Oakland, California	DRILLING COMPLETED	18-Mar-99
PROJECT NUMBER	241-0734	WELL DEVELOPMENT DATE (YIELD)	NA
DRILLER	Gregg Drilling	GROUND SURFACE ELEVATION	Not Surveyed
DRILLING METHOD	Hydraulic push	TOP OF CASING ELEVATION	NA
BORING DIAMETER	2"	SCREENED INTERVAL	NA
LOGGED BY	M. Paves	DEPTH TO WATER (First Encountered)	6.0 ft (18-Mar-99) ▽
REVIEWED BY		DEPTH TO WATER (Static)	NA ▼
REMARKS	Hand augered to 9.5' bgs.		

TPHg (mg/kg)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	BORING BACKFILL
					SC		Gravelly Clayey SAND; (SC); brown; 20% clay, 10% silt, 50% sand, 20% gravel; low plasticity; high estimated permeability.		
		SB-1 -5.5'		5			@ 5' - wet. ▽	7.0	Portland Type I/II
		SB-1 -10.0'		10	CL		Sandy CLAY; (CL); green to brown; wet; 50% clay, 10% silt, 30% sand, 10% gravel; medium plasticity; low estimated permeability.	11.5	Bottom of Boring @ 11.5 ft

BOR LOG (TPH-G) G:\OA\91C-1\GINT\OKLN0285.GPJ DEFAULT GDT 4/26/00

Cambria Environmental Technology, Inc.
1144 - 65th St.
Oakland, CA 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	Equiva Services LLC	BORING/WELL NAME	SB-2
JOB/SITE NAME	Oakland 285	DRILLING STARTED	18-Mar-99
LOCATION	285 Hegenberger Road, Oakland, California	DRILLING COMPLETED	18-Mar-99
PROJECT NUMBER	241-0734	WELL DEVELOPMENT DATE (YIELD)	NA
DRILLER	Gregg Drilling	GROUND SURFACE ELEVATION	Not Surveyed
DRILLING METHOD	Hydraulic push	TOP OF CASING ELEVATION	NA
BORING DIAMETER	2"	SCREENED INTERVAL	NA
LOGGED BY	M. Paves	DEPTH TO WATER (First Encountered)	5.0 ft (18-Mar-99)
REVIEWED BY		DEPTH TO WATER (Static)	6.50 ft
REMARKS	Hand augered to 6' bgs.		

TPHg (mg/kg)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	BORING BACKFILL
							ASPHALT.	0.5	
							SAND; (FILL); brown. @ 1' - Silty SAND (FILL).	3.0	
					SP		Gravelly SAND; (SP); greenish brown; moist; 10% clay, 10% silt, 50% sand, 30% gravel; low plasticity; high estimated permeability.	3.5	
					CL		Gravelly Sandy CLAY; (CL); greenish brown; moist; 50% clay, 10% silt, 20% sand, 20% gravel; medium plasticity; moderate estimated permeability.	5.0	
		SB-2 -6.0'		5	SP		Gravelly Silty SAND; (SP); dark brown; wet; 10% clay, 20% silt, 50% sand, 20% gravel; low plasticity; high estimated permeability.	7.5	Portland Type I/II
		SB-2 -7.5'			SP		Gravelly SAND; (SP); light brown; wet; 10% clay, 10% silt; 50% sand, 30% gravel; low plasticity; high estimated permeability.	9.5	
		SB-2 -10.0'		10	CH		Silty CLAY; (CH); gray; moist; 60% clay, 30% silt, 10% sand; high plasticity; low estimated permeability.	12.0	
		SB-2 -11.5'					No Recovery.		
				15				15.0	Bottom of Boring @ 15 ft

BOR LOG (TPH-G) G:\OA\91C-1\GINT\OKLND285.GPJ DEFAULT.GDT 4/26/00

Cambria Environmental Technology, Inc.
1144 - 65th St.
Oakland, CA 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	Equiva Services LLC	BORING/WELL NAME	SB-3
JOB/SITE NAME	Oakland 285	DRILLING STARTED	18-Mar-99
LOCATION	285 Hegenberger Road, Oakland, California	DRILLING COMPLETED	18-Mar-99
PROJECT NUMBER	241-0734	WELL DEVELOPMENT DATE (YIELD)	NA
DRILLER	Gregg Drilling	GROUND SURFACE ELEVATION	Not Surveyed
DRILLING METHOD	Hydraulic push	TOP OF CASING ELEVATION	NA
BORING DIAMETER	2"	SCREENED INTERVAL	NA
LOGGED BY	M. Paves	DEPTH TO WATER (First Encountered)	6.0 ft (18-Mar-99) ▽
REVIEWED BY		DEPTH TO WATER (Static)	NA ▼
REMARKS	Hand augered to 5' bgs.		

TPHg (mg/kg)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	BORING BACKFILL
							ASPHALT.	0.4	
							Sandy FILL: (FILL); dry; light brown.		
							@ 2' - green; 10% clay, 10% silt, 50% sand, 30% gravel; low plasticity; high estimated permeability.	3.5	
					GP		Sandy GRAVEL; (GP); dry; 10% silt, 30% sand, 60% gravel; low plasticity; high estimated permeability.	5.0	
				5			No recovery. ▽	6.0	
					SP		Gravelly SAND; (GP); green; wet; 5% clay, 10% silt, 50% sand, 35% gravel; low plasticity; high estimated permeability.	7.3	
		SB-3 -7.0'			CL		Sandy Gravelly CLAY; (CL); greenish gray; wet; 50% clay, 10% silt, 20% sand, 20% gravel; medium plasticity; moderate estimated permeability.	8.8	◄ Portland Type I/II
		SB-3 -8.5'			SP		Gravelly SAND; (SP); wet.	10.3	
		SB-3 -10.0'		10	CL		Silty Sandy CLAY; (CL); greenish gray; wet; 50% clay, 20% silt, 20% sand, 10% gravel; medium plasticity; moderate estimated permeability.	11.0	
		SB-3 -11.0'			CH		Silty CLAY; (CL); gray; stiff; moist; 60% clay, 30% silt, 10% sand; high plasticity; low estimated permeability.	14.0	
		SB-3 -14.5'		15	CL		Gravelly Sandy CLAY; (CL); brownish gray; moist; 50% clay, 30% sand, 20% gravel; low plasticity; low to moderate estimated permeability.	16.0	
		SB-3 -16.5'			CH		Silty CLAY; (CH); green brown; moist; 60% clay, 30% silt, 10% sand; high plasticity; low estimated permeability.	17.0	Bottom of Boring @ 17 ft

BOR LOG (TPH-G) G:\OA191C~1\GINT\OKLND285.GPJ DEFAULT.GDT 4/26/00

ATTACHMENT B

Additional Soil Data and
Soil Sample Location Maps

TABLE 3. RESULTS OF SOIL CHEMICAL ANALYSES

Shell Oil Company Facility
285 Hegenberger Road
Oakland, California

Boring No.	Sample Depth (ft bgs)	Date Sampled	Concentration (mg/kg) TPH-g	TPH-d	Benzene	Toluene	Ethyl-benzene	Xylenes	Lead[1]
SB-1	4.0	2/13/89	140	NA	0.3	0.8	1.4	0.6	14.7
SB-2	5.0	2/13/89	3700	NA	<8	120	110	530	9.17
SB-3	4.0	5/24/89	1300	180	0.54	8.4	18	24	0.2
SB-3	2,4**	5/24/89	250	100	<0.25	1.1	1.9	3.2	<0.2
SB-4	2,4**	5/24/89	1300	12	0.54	0.4	18	24	
SB-4	4.0	5/24/89	50	20	0.12	0.43	0.45	0.18	<0.2
SB-5	2.0	5/24/89	31000	370	4.7	18	66	150	<0.2
SB-8	6.5	7/13/89	1900	360	<0.025	<0.025	25	82	6.2
SB-9	5.0	7/13/89	<10	<10	<0.025	<0.025	<0.075	<0.075	3.9
SB-10	4.5	7/13/89	550	75	2.3	11	13	71	5.8
SB-11	5.0	7/13/89	190	440	3.8	16	5.7	28	17
SB-12	5.0	11/16/89	<1	1.4	<0.0025	<0.0028	<0.0025	<0.0025	4.8
SB-12	7.0	11/16/89	<1	1.4	0.0068	0.046	<0.0025	0.0098	4.6
SB-13	5.0	11/16/89	650	60	1.4	5.2	6.0	25	5.5
MW-1	5.5	2/14/89	1100	NA	12	36	27	120	12.7
MW-2	6.0	2/15/89	2.0	NA	0.1	<0.1	<0.1	<0.1	3.31
MW-3	5.0	2/14/89	3.0	NA	<0.1	<0.1	<0.1	<0.1	1.42
MW-4	5.0	4/28/89	<10	<10	<0.025	<0.025	0.056	<0.075	34
MW-4	10.0	4/28/89	<10	<10	<0.025	0.052	<0.075	<0.075	2.3
MW-5	5.0	4/27/89	<10	<10	<0.025	<0.025	<0.075	<0.075	5.3
MW-5	10.0	4/27/89	<10	<10	<0.025	0.037	<0.075	<0.075	4.3
MW-6	5.0	4/28/89	<10	<10	0.033	0.079	<0.075	<0.075	8.2
MW-6	10.0	4/28/89	<10	<10	<0.025	0.12	<0.075	<0.075	7.0
MW-7	5.0	4/28/89	4100	84	14	92	14	190	14
MW-7	10.0	4/27/89	<10	18	0.11	0.045	<0.075	<0.075	14

TABLE 3 (cont'd). RESULTS OF SOIL CHEMICAL ANALYSES

Shell Oil Company Facility
285 Hegenberger Road
Oakland, California

Boring No.	Sample Depth (ft bgs)	Date Sampled	Concentration (mg/kg) TPH-g	TPH-d	Benzene	Toluene	Ethyl-benzene	Xylenes	Lead[1]
MW-8	5.0	4/28/89	<10	<10	<0.025	0.089	<0.075	<0.075	3.4
MW-8	10.0	7/13/89	<10	160	<0.025	0.087	<0.075	<0.075	22
MW-9	5.0	7/13/89	120	<10	1.1	0.64	3.7	0.46	4.1
MW-10	5.0	11/16/89	2.2	1.3	0.23	0.22	0.21	0.61	3.6
SG-1	3.0	8/06/90	<0.1	NA	<0.005	<0.005	<0.005	0.043	NA
SG-1	6.0		4.0	NA	0.140	0.018	0.076	0.037	NA
SG-2	3.0	8/06/90	<0.1	NA	<0.005	<0.005	<0.005	<0.005	NA
SG-2	5.5		4000	NA	22.0	110	100	510	NA
SG-3	3.0	8/06/90	<0.1	NA	<0.005	0.010	0.008	0.042	NA
SG-3	6.0		110	NA	0.640	<0.005	3.50	16.0	NA
SG-4	3.0	8/06/90	<0.1	NA	<0.005	<0.005	<0.005	<0.005	NA
SG-4	6.0		1.70	NA	<0.005	<0.005	<0.005	0.026	NA
SG-5	3.0	8/06/90	<0.1	NA	<0.005	<0.005	<0.005	<0.005	NA
SG-5	6.0		610	NA	<0.005	<0.005	<0.005	<0.005	NA
SG-6	3.0	8/06/90	<0.1	NA	<0.005	0.009	<0.005	<0.005	NA
SG-6	6.0		2.90	NA	<0.005	0.006	0.023	0.064	NA
SG-7	6.0	8/07/90	<0.1	NA	<0.005	<0.005	<0.005	<0.005	NA
SG-7	6.0		1900	NA	<0.005	<0.005	<0.005	35.0	NA
SG-8	3.0	8/07/90	16.0	NA	0.220	0.073	0.320	0.084	NA
SG-8	5.5		51.0	NA	1.90	<0.005	3.20	9.30	NA
SG-9	3.0	8/07/90	<0.1	NA	<0.005	<0.005	<0.005	<0.005	NA
SG-9	6.0		<0.1	NA	<0.005	<0.005	<0.005	<0.005	NA
SG-10	3.0	8/07/90	<0.1	NA	<0.005	<0.005	<0.005	<0.005	NA
SG-10	6.0		3000	NA	11.0	44.0	73.0	400	NA
SG-11	3.0	8/07/90	<0.1	NA	<0.005	<0.005	<0.005	<0.005	NA
SG-11	6.0		240	NA	<0.005	<0.005	1.40	2.60	NA
SG-12	3.0	8/07/90	<0.1	NA	<0.005	<0.005	<0.005	<0.005	NA
SG-12	6.0		960	NA	<0.005	<0.005	15.0	42.0	NA
SG-13	3	8/17/90	<0.1	NA	<0.005	<0.005	<0.005	<0.005	NA
SG-13	6		<0.1	NA	<0.005	<0.005	<0.005	<0.005	NA

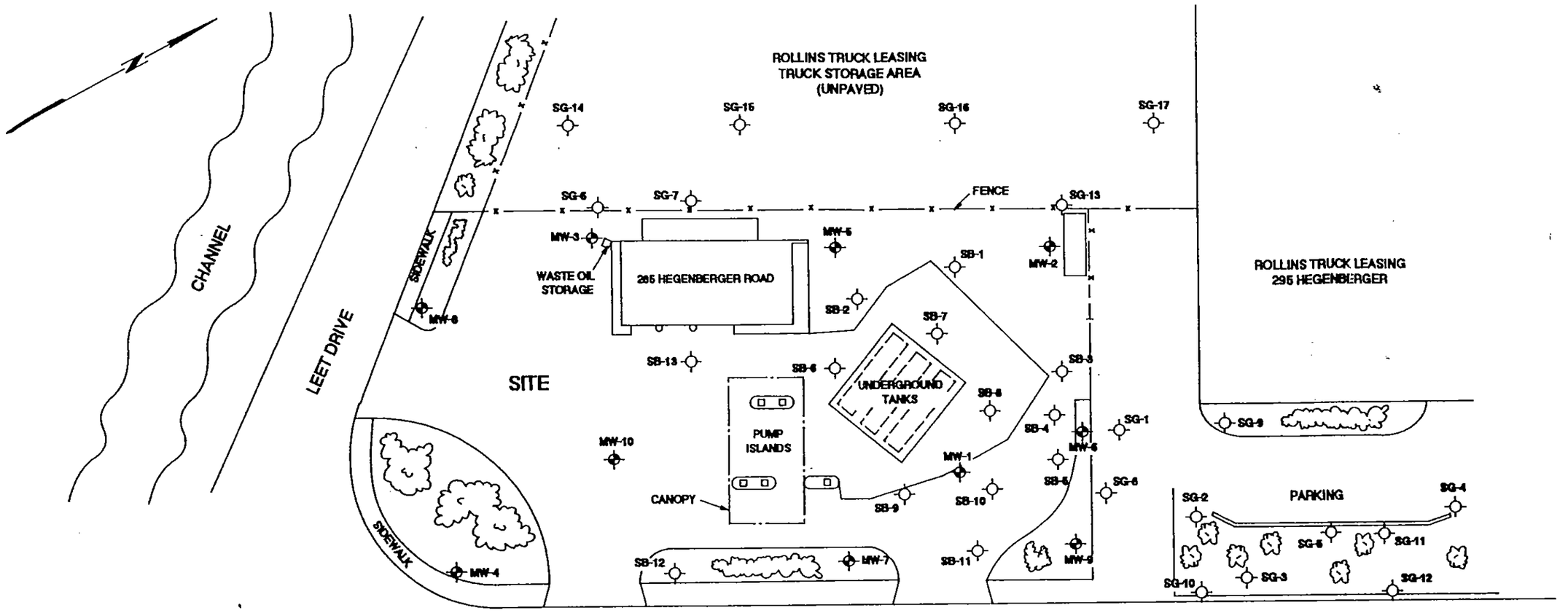
TABLE 3 (cont'd). RESULTS OF SOIL CHEMICAL ANALYSES

Shell Oil Company Facility
285 Hegenberger Road
Oakland, California

Boring No.	Sample Depth (ft bgs)	Date Sampled	Concentration (mg/kg) TPH-g	TPH-d	Benzene	Toluene	Ethyl-benzene	Xylenes	TPH-mo
SG-14	3'	9/13/90	<1.0	<1.0	<0.0025	0.0063	<0.0025	<0.0025	<10
	6'		<1.0	<1.0	0.190	0.0250	0.0170	0.037	<10
SG-15	3'	9/13/90	<1.0	<1.0	<0.0025	0.0100	<0.0025	0.0026	<10
	6'		<1.0	<1.0	<0.0025	0.0270	<0.0025	0.0039	<10
SG-16	3'	9/13/90	<1.0	<1.0	<0.0025	0.0120	<0.0025	0.0029	<10
	6'		<1.0	<1.0	<0.0025	0.0260	<0.0025	0.0036	12
SG-17	3'	9/13/90	<1.0	<1.0	<0.0025	0.0110	<0.0025	<0.0025	<10
	6'		<1.0	4.0	<0.0025	0.0073	<0.0025	<0.0025	<10

NOTES:

[1]	Analysis by EPA Methed 7421
**	Composite sample
ft bgs	Feet below ground surface
MW	Monitoring well
ppm	Part per million
SB	Soil boring
TPH-g	Total Petroleum Hydrocarbons as Gasoline (GCFID)
TPH-d	Total Petroleum Hydrocarbons as Diesel (GCFID)



LEGEND

SB-1 SOIL BORING (locations approximate)

SG-1 OFF SITE SOIL BORING (locations approximate)

MW-1 GROUNDWATER MONITORING WELL

0 40 80

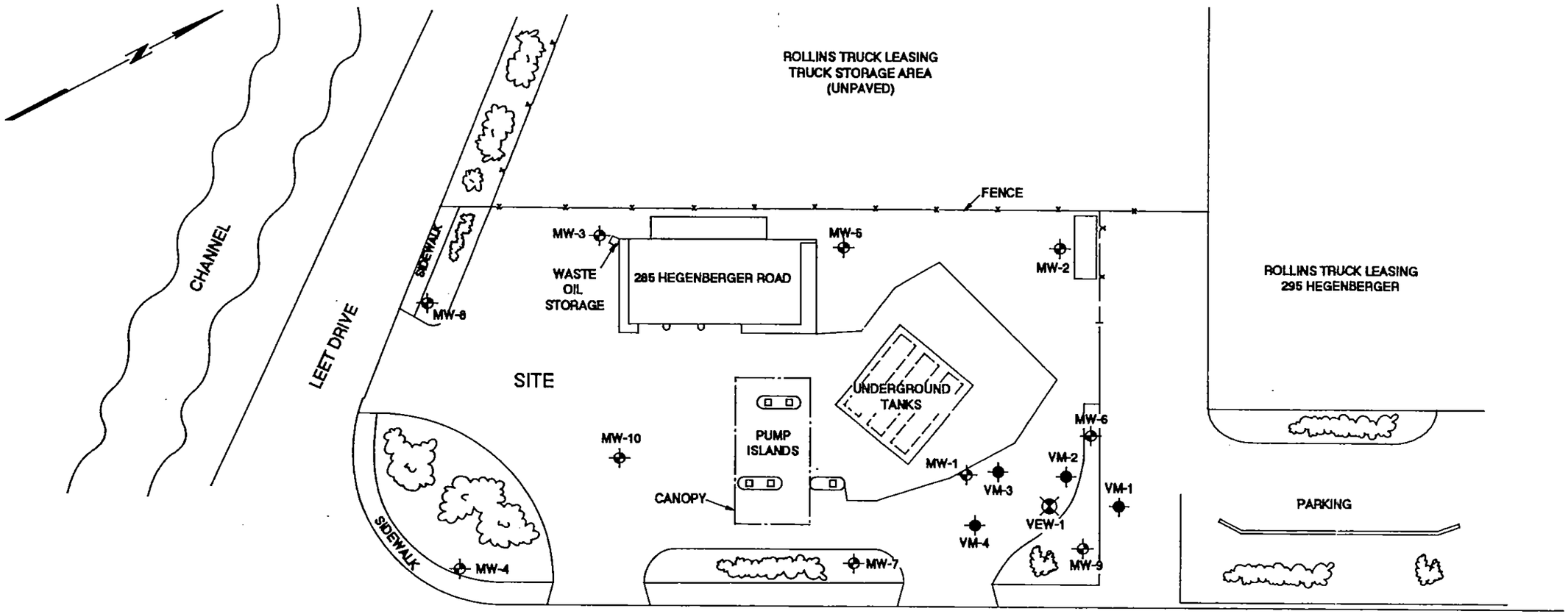
APPROXIMATE SCALE IN FEET

PLOT PLAN

SHELL OIL COMPANY
285 Hegenberger Road
Oakland, California

Converse Environmental West

Scale	AS SHOWN
Prepared by	DEN
Checked by	[illegible]
Approved by	CRC
Project No.	89-44-359-20
Date	9/24/90
Drawing No.	2



LEGEND

MW-1 GROUNDWATER MONITORING WELL

VM-3 VAPOR MONITORING POINT

VEW-1 VAPOR EXTRACTION WELL

0 40 80

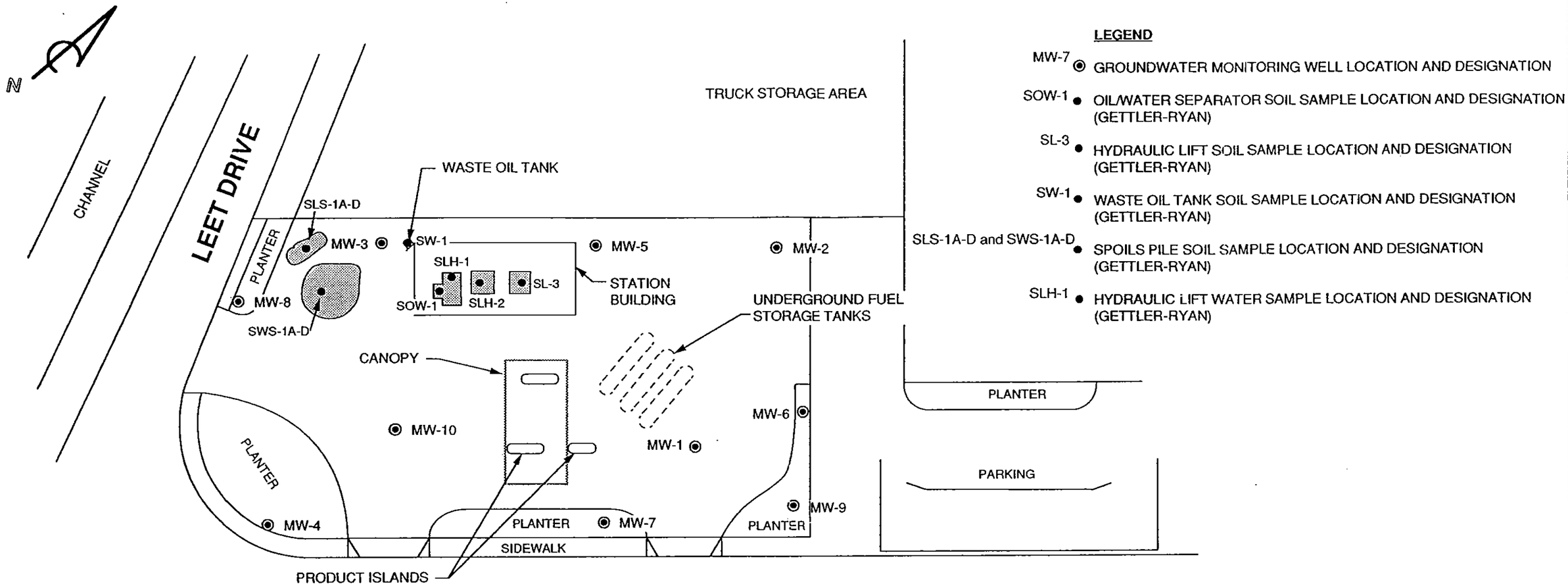
APPROXIMATE SCALE IN FEET

VAPOR EXTRACTION WELL & MONITORING POINT LOCATIONS

SHELL OIL COMPANY
285 Hegenberger Road
Oakland, California

Converse Environmental West

Scale	AS SHOWN
Prepared by	TNW
Checked by	JFK
Approved by	PAF
Project No.	89-44-359-20
Date	1/29/92
Drawing No.	2



PACIFIC ENVIRONMENTAL GROUP, INC.

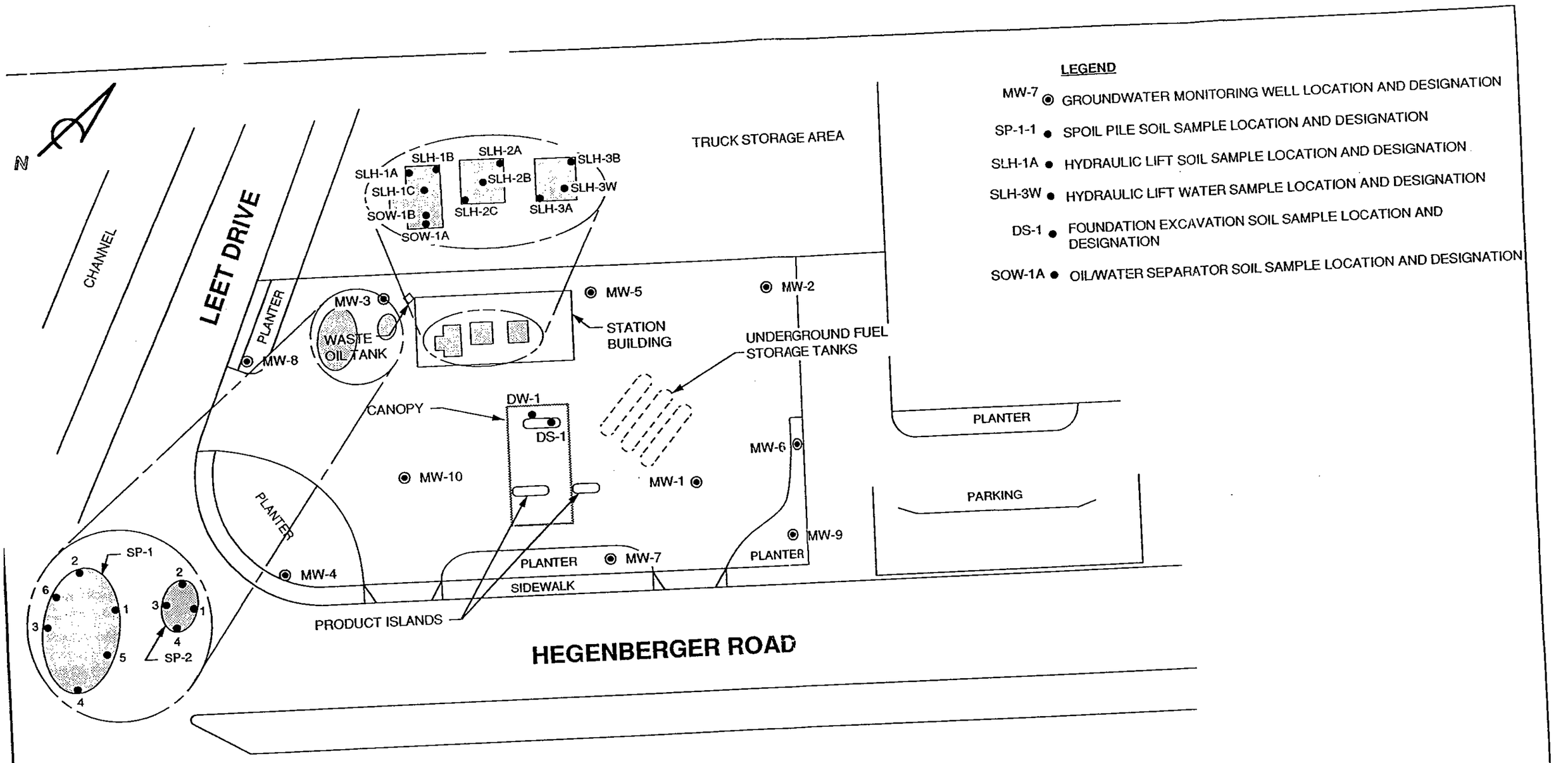
SCALE
0 40 80 FEET

SHELL SERVICE STATION
285 Hegenberger Road at Leet Drive
Oakland, California

SOIL SAMPLE LOCATION MAP (GETTLER-RYAN)

FIGURE: 2
PROJECT: 305-79.01

07/17/92



PACIFIC ENVIRONMENTAL GROUP, INC.

SCALE
0 40 80 FEET

SHELL SERVICE STATION
285 Hegenberger Road at Leet Drive
Oakland, California

SOIL SAMPLE LOCATION MAP (PACIFIC)

FIGURE: 3
PROJECT: 305-79.01

07/16/92

Table 2
Soil Analytical Data
Total Petroleum Hydrocarbons
(TPH as Gasoline, BTEX Compounds, and TPH as Diesel)

Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California

Well Number	Sample Depth (Feet)	TPH as Gasoline (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Xylenes (ppm)	TPH as Diesel (ppm)
MW-11	5-5.5	ND	ND	0.008	ND	ND	ND
MW-12	5-5.5	ND	ND	ND	ND	ND	ND
MW-13	6-6.5	ND	ND	ND	ND	ND	ND
VEW-2	4.5-5	550	6.4	15	13	52	31[a]
VEW-3	4.5-5	1,900	ND	16	40	94	560[a]
VEW-4	4.5-5	ND	ND	ND	ND	ND	10[a]
VEW-5	4.5-5	1,000	1.2	0.9	21	14	320[a]

ppm = Parts per million
ND = Not detected
a. The laboratory noted that compound detected and calculated as TPH-d is due to a non-diesel mix.
See individual certified analytical reports for detection limits.

MW-11 and MW-12 samples collected on 6-8-1993.
VEW-2, VEW-4, and VEW-5 samples collected on 6-9-1993.
MW-13 and VEW-3 samples collected on 6-10-1993.

ATTACHMENT C

Soil Vapor Analytical Results and Remediation Data

TABLE 1. SOIL VAPOR EXTRACTION PILOT TEST SUMMARY

Shell Oil Company Facility
285 Hegenberger Road
Oakland, California

Flow Rate (CFM)[1]	VEW-1[2]	Maximum Vacuum Observed at Wellhead (Inches of Water) VM-2 (r = 10 ft)[3]	MW-9 (r =19 ft)[3]	VM-3 (r = 19.5 ft)[3]	MW-6 (r = 29 ft)[3]	VM-4 (r = 29.7 ft)[3]	MW-1 (r = 30.5 ft)[3]
10	10	5	0	0.85	0	3	0
30	53	16	0	3	3	10	4
70	75	30	0	6	5	17	11
80	75	30	0	6	4	17	10
90	95	40	0	7	5	20	13

NOTES:

1. CFM = Cubic Feet per Minute
2 VEW-1 is The Extraction Well
2. r = Radial Distance From Extraction Well

Data collected 11-22-91

TABLE 2. RESULTS OF SOIL VAPOR CHEMICAL ANALYSES

Shell Oil Company Facility
285 Hegenberger Road
Oakland, California

Sample No.	TPH-g[1] (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Xylenes (mg/L)
VEW-1-1[2]	11	0.17	0.04	0.044	0.11
VEW-1-2[2]	6.5	0.12	0.046	0.025	0.075
VEW-1-3[2]	56	0.48	0.073	0.029	0.063
VEW-1-4	90	1.7	0.45	0.18	0.44
VEW-1-5	75	1.5	0.42	0.22	0.57
VEW-1-6	58	1.2	0.43	0.15	0.4
Detection Limits	0.006	0.00006	0.00006	0.00006	0.00006

NOTES:

1. TPH-g = Total Petroleum Hydrocarbons Characterized as gasoline
2. Lower concentrations are likely due to dilution with bleed air.

Data collected 11-22-91

Table 3

Soil Vapor Extraction System Performance Data

Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California

Sample ID	Date Sampled	Hourmeter Reading (hrs)	Flow Rate (scfm)	TPH as Gasoline			Benzene		
				Influent Concentration (ppmv)	Removal Rate (lbs/day)	Removed to Date (lbs)	Influent Concentration (ppmv)	Removal Rate (lbs/day)	Removed to Date (lbs)
INFL	08/30/93	6,248	34	7,801	99.35	0.00	123.63	1.29	0.00
INFL	08/31/93	6,250	37	2,364	33.52	5.54	26.46	0.33	0.07
INFL	09/01/93	6,260	30	3,073	35.17	19.85	48.88	0.46	0.23
INFL	09/02/93	6,269	46	2,080	36.62	33.31	54.63	0.79	0.47
INFL	09/08/93	6,361	25	591	5.64	114.30	27.31	0.21	2.39
INFL	09/14/93	6,502 a	29	780	8.48	155.76	13.80	0.12	3.38
INFL	10/27/93	1,190.00 b	85	121	3.90	155.78	1.52	0.04	3.38
INFL	10/28/93	1,213.57	85	187	6.03	160.66	5.18	0.14	3.47
INFL	10/29/93	1,328.37	87	187	6.18	189.86	4.03	0.11	4.06
INFL	11/11/93	1,511.20	90	260	8.90	247.26	5.46	0.15	5.06
INFL	11/22/93	1,779.22	74	194	5.45	327.41	ND	0.00	5.92
INFL	12/09/93	2,183.44	68	35	0.92	381.06	ND	0.00	5.92
INFL	01/11/94	2,591.27	60	165	3.77	420.92	ND	0.00	5.92
INFL	01/27/94	2,976.94	74	151	4.26	465.44	ND	0.00	5.92
INFL	02/10/94	3,199.56	67	31	0.78	508.81	ND	0.00	5.92
INFL	03/02/94	3,678.57	60	12	0.28	519.42	0.58	0.01	6.03
INFL	03/09/94	3,688.03	70	50	1.32	519.74	0.12	0.00	6.03
INFL	03/24/94	4,051.56	48	43	0.78	535.63	0.76	0.01	6.14
INFL	04/11/94	4,482.67	42	ND	0.00	542.60	ND	0.00	6.25
INFL	04/21/94	4,662.97	45	12	0.29	543.35	ND	0.00	6.25
INFL	05/10/94	5,114.89	40	24	0.36	548.60	0.08	0.00	6.26
INFL	06/08/94	5,187.80	40 c	111	1.69	551.71	ND	0.00	6.26
INFL	06/21/94	5,500.70	64	92	2.24	577.35	ND	0.00	6.26
INFL	06/26/94	6,531.03 d	50	78	1.48	579.70	ND	0.00	6.26
INFL	09/13/94	6,481.00 e	65	284	7.01	579.70	1.5	0.03	6.26
INFL	09/20/94	6,644.00	56	92	1.96	610.17	0.60	0.01	6.40
INFL	09/28/94	6,841.00	50	69	1.30	623.57	0.35	0.01	6.46
INFL	10/11/94	7,155.00	48	40	0.73	656.90	ND	0.00	6.50
INFL	10/31/94	7,631.00	60	61	1.40	658.07	ND	0.00	6.50
INFL	11/10/94	7,871.33	50	402	7.64	703.34	4.6	0.07	6.86
INFL	11/23/94	7,883.71	44	3.1 f	0.05	705.32	ND f	0.00	6.88
INFL	12/13/94	8,367.43	35	ND	0.00	705.84	ND	0.00	6.88

Table 3 (continued)
Soil Vapor Extraction System Performance Data

Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California

Sample ID	Date Sampled	Hourmeter Reading (hrs)	Flow Rate (scfm)	TPH as Gasoline: Influent Concentration (ppmv)	TPH as Gasoline: Removal Rate (lbs/day)	TPH as Gasoline: Removed to Date (lbs)	Benzene: Influent Concentration (ppmv)	Benzene: Removal Rate (lbs/day)	Benzene: Removed to Date (lbs)
INFL	12/27/94	8,699.00	30	7.8	0.09	706.46	ND	0.00	6.88
INFL	01/10/95	9,019.51	43	ND	0.00	707.05	ND	0.00	6.88
INFL	02/09/95	9,743.77	57	ND	0.00	707.05	ND	0.00	6.88

REPORTING PERIOD:	11/23/94 - 02/09/95
TOTAL POUNDS TPH-GASOLINE REMOVED:	707.05
TOTAL GALLONS TPH-GASOLINE REMOVED:	115.91
TOTAL POUNDS BENZENE REMOVED:	6.88
TOTAL GALLONS BENZENE REMOVED:	0.94
PERIOD POUNDS TPH-GASOLINE REMOVED:	1.73
PERIOD GALLONS TPH-GASOLINE REMOVED:	0.28
PERIOD POUNDS BENZENE REMOVED:	0.00
PERIOD GALLONS BENZENE REMOVED:	0.00
AVERAGE FLOW RATE (cfm):	42
PERIOD PERCENT OPERATIONAL:	99%

TPH = Total petroleum hydrocarbons
hrs = Hours
scfm = Standard cubic feet per minute
ppmv = Parts per million by volume
lbs = Pounds
ND = Not detected
See certified analytical reports for detection limits.

a. Internal combustion engine shut down 09/14/94.
b. King-Buck Cat-Ox start-up on 10/27/93.
c. Estimated flow rate.
d. System temporarily shut down June 28, 1994; King-Buck Cat-ox removed to different site.
e. Cat-ox installation and startup on 09/13/94.
f. Samples taken on December 1, 1994.

Table 4
Vapor-Phase Analytical Data
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California

Well Number	Date Sampled	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)
VEW-1	08/30/93	140,000	3,300	860	1,400	3,400
	09/14/93	53,000	1,000	850	57	1,900
	10/27/93	26,000	660	450	300	1,300
	12/22/93	5.3	ND	0.097	0.11	0.75
	09/13/94	23,000	190	ND	59	120
	10/31/94	680	ND	0.88	ND	3.5
VEW-2	08/30/93	21,000	ND	ND	180	190
	09/14/93	4,200	23	26	8.0	250
	10/27/93	1,400	ND	ND	8.0	13
	12/22/93	ND	ND	ND	ND	0.25
	09/13/94	2,600	ND	ND	5.2	ND
	10/31/94	670	1.8	ND	1.9	1.7
VEW-3	08/30/93	41,000	ND	62	510	390
	09/14/93	3,100	ND	6.4	14	79
	10/27/93	3,000	ND	ND	49	45
	12/22/93	ND	ND	ND	ND	0.27
	09/13/94	1,200	3.0	ND	5.4	1.8
	10/31/94	750	ND	ND	ND	ND
VEW-4	08/30/93	12,000	ND	ND	74	98
	09/14/93	5,200	ND	27	ND	160
	10/27/93	1,100	ND	4.0	10	22
	12/22/93	NS	NS	NS	NS	NS
	09/13/94	1,400	ND	ND	2.9	ND
	10/31/94	320	1.2	ND	1.1	0.95
VEW-5	08/30/93	120,000	ND	200	1,900	1,500
	09/14/93	3,500	ND	ND	21	64
	10/27/93	9,400	ND	ND	100	71
	12/22/93	150	ND	ND	ND	0.25
	09/13/94	3,600	5.7	ND	8.0	ND
	10/31/94	960	3.2	ND	ND	2.4

µg/L = Micrograms per liter
ND = Not detected
NS = Not sampled

Table 3. Soil Vapor Extraction Test Field Data Summary - Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, Oakland, California

Well ID	Date	Cumulative Hours of Operation (hrs.)	System Flow Rate (cfm)	System Vacuum ("H_2O)	HYDROCARBON CONCENTRATIONS (ppmv) Influent FID	Midpoint FID	Effluent FID	Comments
VW-4	11/03/99	0	26	50	150	0.1	0.7	Start up, VW-4 open only
VW-4	11/03/99	0.6	--	50	135	---	---	50" at max flowrate for VW-4
VW-4	11/03/99	1.77	15.6	45	145	2.5	4.7	VW-4A sample collected
VW-4	11/03/99	2	17.6	45	140	---	---	End test. VW-4B sample collected
VW-1	11/04/99	0	1.0	25	40	---	---	Startup VW-1 open only
VW-1	11/04/99	0.25	0.9	25	40	---	---	
VW-1	11/04/99	0.33	2.22	50	95	0.7	0.7	
VW-1	11/04/99	0.583	1.32	60	---	---	---	60" at max flowrate for VW-1
VW-1	11/04/99	1	8.8	60	66	---	---	Collected VW-1A sample
VW-1	11/04/99	1.25	3.63	60	130	---	---	
VW-1	11/04/99	1.75	4.18	55	77	---	---	
VW-1	11/04/99	2	2.2	60	125	---	---	End test. VW-1B sample collected
VW-2	11/04/99	0	0.29	25	---	---	---	Startup VW-2 open only
	11/04/99	0.083	0	25	---	---	---	
	11/04/99	0.25	0	25	---	---	---	End test. No flow, No Screen.
VW-3	11/04/99	0	0	25	---	---	---	Startup, VW-3 open only
	11/04/99	0.083	0	50	---	---	---	
	11/04/99	0.25	0	75	---	---	---	End test. No flow
VW-1/VW-4	11/04/99	0	22.7	50	152	---	---	Startup,
	11/04/99	0.5	18.3	45	144	---	---	
	11/04/99	1	18.7	45	55	---	---	VW-1/VW-4 sample collected
	11/05/99	26.66	19.1	50	---	---	---	Optimized system
	11/05/99	26.91	19.6	50	---	---	---	
	11/05/99	27.74	19.6	50	---	---	---	
	11/08/99	71	---	---	---	---	---	
	11/09/99	71	18.9	50	206	---	---	System operating
	11/09/99	72.25	17.8	50	195	11	0	
	11/09/99	73	18	50	185	---	---	VW-1/VW-4 sample collected

Table 3. Soil Vapor Extraction Test Field Data Summary - Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, Oakland, California

Well ID	Date	Cumulative Hours of Operation (hrs.)	System Flow Rate (cfm)	System Vacuum ("H_2O)	HYDROCARBON CONCENTRATIONS (ppmv) Influent FID	Midpoint FID	Effluent FID	Comments

Abbreviations and Notes:

cfm = Cubic feet per minute
ppmv = Parts per million by volume
# = Pounds
"H_20 = Inches of water
--- = Not analyzed / not measured
SVE = Soil vapor extraction
TPHg = Total petroleum hydrocarbons as gasoline (C6-C12), analyzed by modified EPA Method 8015
Benzene and MTBE are analyzed by EPA Method 8020

Table 4. Hydrocarbon Mass Removal Summary - Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, Oakland, California

Well ID	Date	Cumulative Hours of Operation (hrs.)	System Flow Rate (cfm)	HYDROCARBON CONCENTRATIONS Influent TPHg (ppmv)	MTBE (ppmv)	Benzene (ppmv)	TPHg Removal Rate (#/day)	Cumulative TPHg Removal (#)	MTBE Removal Rate (#/day)	Cumulative MTBE Removal (#)	Benzene Removal Rate (#/day)	Cumulative Benzene Removal (#)	Comments
VW-4	11/03/99	0	26	---	---	---	---	---	---	---	---	---	Startup
VW-4	11/03/99	0.6	---	---	---	---	---	---	---	---	---	---	
VW-4	11/03/99	1.77	15.6	259	26.4	2.3	1.3	0.096	0.135	0.010	0.010	0.001	VW-4A sample collected
VW-4	11/03/99	2	17.6	366	3.47	6.05	2.1	0.172	0.020	0.002	0.031	0.003	End Test. VW-4B sample collected
VW-1	11/04/99	0	1.0	---	---	---	---	---	---	---	---	---	Startup
VW-1	11/04/99	0.25	0.9	---	---	---	---	---	---	---	---	---	
VW-1	11/04/99	0.33	2.22	---	---	---	---	---	---	---	---	---	
VW-1	11/04/99	0.583	1.32	---	---	---	---	---	---	---	---	---	
VW-1	11/04/99	1	8.8	1,410	40.6	24.5	4.0	0.166	0.12	0.005	0.06	0.003	VW-1A sample collected
VW-1	11/04/99	1.25	3.63	---	---	---	---	---	---	---	---	---	
VW-1	11/04/99	1.75	4.18	---	---	---	---	---	---	---	---	---	
VW-1	11/04/99	2	2.2	1,350	44.2	32.3	0.95	0.206	0.03	0.006	0.02	0.499	End Test. VW-1B sample collected
VW-2	11/04/99	0	0.29	---	---	---	---	---	---	---	---	---	Startup
VW-2	11/04/99	0.083	0	---	---	---	---	---	---	---	---	---	
VW-2	11/04/99	0.25	0	---	---	---	---	---	---	---	---	---	End Test
VW-3	11/04/99	0	0	---	---	---	---	---	---	---	---	---	Start up
VW-3	11/04/99	0.083	0	---	---	---	---	---	---	---	---	---	
VW-3	11/04/99	0.25	0	---	---	---	---	---	---	---	---	---	End Test
VW-1/VW-4	11/04/99	0	22.7	---	---	---	---	---	---	---	---	---	Startup at Optimized settings VW-1/VW-4
VW-1/VW-4	11/04/99	0.5	18.3	---	---	---	---	---	---	---	---	---	
VW-1/VW-4	11/04/99	1	18.7	355	37.8	3.32	2.13	0.089	0.23	0.010	0.02	0.001	VW-1/VW-4 sample collected
VW-1/VW-4	11/05/99	26.66	19.1	---	---	---	---	---	---	---	---	---	Optimized System
VW-1/VW-4	11/05/99	26.91	19.6	---	---	---	---	---	---	---	---	---	
VW-1/VW-4	11/05/99	27.74	19.6	---	---	---	---	---	---	---	---	---	
VW-1/VW-4	11/08/99	71	--	---	---	---	---	---	---	---	---	---	System down on arrival - 71 hrs of operation.
VW-1/VW-4	11/09/99	71	18.9	---	---	---	---	---	---	---	---	---	Re-start system at 8:30 am
VW-1/VW-4	11/09/99	72.25	17.8	---	---	---	---	---	---	---	---	---	
VW-1/VW-4	11/09/99	73	18	1,030	129	29.7	5.95	17.933	0.76	2.300	0.16	0.467	End test. VW-1/VW-4 sample collected
EFF Carbon	11/09/99	---	---	---	---	---	---	---	---	---	---	---	Effluent Sample taken at 10:30 am, ND
					Total Mass Removed (#):			**18.661**		**2.333**		**0.973**	

Table 4. Hydrocarbon Mass Removal Summary - Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, Oakland, California

Well ID	Date	Cumulative Hours of Operation (hrs.)	System Flow Rate (cfm)	HYDROCARBON CONCENTRATIONS Influent TPHg (ppmv)	MTBE (ppmv)	Benzene (ppmv)	TPHg Removal Rate (#/day)	Cumulative TPHg Removal (#)	MTBE Removal Rate (#/day)	Cumulative MTBE Removal (#)	Benzene Removal Rate (#/day)	Cumulative Benzene Removal (#)	Comments

Abbreviations and Notes:

cfm = Cubic feet per minute
ppmv = Parts per million by volume
# = Pounds
ND = Below detection limits
--- = Not analyzed or not measured.
SVE = Soil vapor extraction
TPHg = Total petroleum hydrocarbons as gasoline (C6-C12), analyzed by modified EPA Method 8015
Benzene and MTBE are analyzed by EPA Method 8020
TPHg, MTBE, and benzene removal rate = Lab concentration(ppmv) x system flow rate (cfm) x (1lb-mole/386ft3) x molecular weight (86 lb/lb-mole for TPHg, 88.15 lb/lb-mole for MTBE, 78 lb/lb-mole for benzene) x 1440 min/day x 1/1,000,000.
Cumulative TPHg, MTBE, and benzene removal = Cumulative sum of the current and previous removal

Table 2: Analytical Results and Monitoring Data for Vapor Extraction System - Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, Oakland, CA 94621

Sample Date (mm/dd/yy)	INFLUENT TPHg Conc. (ppmv)	INFLUENT Benzene Conc. (ppmv)	INFLUENT MTBE Conc (ppmv)	INFLUENT OVA Conc. (ppmv)	MIDFLUENT TPHg Conc. (ppmv)	MIDFLUENT Benzene Conc (ppmv)	MIDFLUENT MTBE Conc (ppmv)	MIDFLUENT OVA Conc. (ppmv)	EFFLUENT TPHg Conc. (ppmv)	EFFLUENT Benzene Conc. (ppmv)	EFFLUENT MTBE Conc (ppmv)	EFFLUENT OVA Conc. (ppmv)
03/25/02	<5.0	<0.050	<0.10	1.0	<5.0	<0.050	<0.10	0	<5.0	<0.050	<0.10	0
03/26/02				1.0				0				0
03/27/02				0.0				0				0
03/28/02	<5.0	<0.050	<0.10	1.0	<5.0	<0.050	<0.10	0	<5.0	<0.050	<0.10	0
03/29/02				0.0				0				0
04/30/02	300	3.40	<0.20		14	0.12	<0.10		5	0.05	<1.0	--
05/09/02				438				29				4
05/14/02	52	1.70	0.32	519	<5.0	<0.050	<0.10	74	<5.0	<0.050	<0.10	18
06/03/02				1,070				89				0
06/25/02				1,152				112				0
07/05/02	91	1.60	0.12	1,724	<5.0	<0.050	<0.10	129	<5.0	<0.050	<0.10	0
07/16/02				1,611				150				0.0
07/30/02	120	1.50	0.16	1,470	<5.0	<0.050	<0.10	110	20	<0.050	1.40	0.0
08/13/02				1,941				142				0.0
08/13/02	System shut down for Carbon Change Out											
09/23/02	930	5.6	<4.0	340	---	---	---	0.2	---	---	---	0.0
10/15/02	90	0.31	<0.10	66	---	---	---	0.0	---	---	---	0.0
11/11/02	<5.0	<0.050	<0.10	0.0	---	---	---	0.0	---	---	---	0.0
12/9/2002[i]	34	<0.050	<0.10	6.0	---	---	---	1.3	<5.0	<0.050	<0.10	1.1
01/31/03	28	<0.050	<0.10	1.0	---	---	---	0.0	<5.0	<0.050	<0.10	0.0
02/14/03	ns	ns	ns	0.3	ns	ns	ns	0.0	ns	ns	ns	0.0

Table 2: Analytical Results and Monitoring Data for Vapor Extraction System - Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, Oakland, CA 94621

Sample Date (mm/dd/yy)	INFLUENT TPHg Conc. (ppmv)	INFLUENT Benzene Conc. (ppmv)	INFLUENT MTBE Conc (ppmv)	INFLUENT OVA Conc. (ppmv)	MIDFLUENT TPHg Conc. (ppmv)	MIDFLUENT Benzene Conc (ppmv)	MIDFLUENT MTBE Conc (ppmv)	MIDFLUENT OVA Conc. (ppmv)	EFFLUENT TPHg Conc. (ppmv)	EFFLUENT Benzene Conc. (ppmv)	EFFLUENT MTBE Conc (ppmv)	EFFLUENT OVA Conc. (ppmv)

Abbreviations & Notes:

TPHg = Total petroleum hydrocarbons as gasoline
BTEX = benzene, toluene, ethlybenzene and xylenes
MTBE = Methyl tert-butyl ether
ppmv = parts per million by volume
OVA = organic vapor analyzer
BTEX and MTBE analyzed by EPA Method 8060B
"--" no reading taken
(1) background concentration was 1.0 ppm
ns = not sampled

Table 2. Dual-phase Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, Oakland, California

Date/Time	Hour Meter (hours)	Cumulative Operation (hours)	Well Head: Vacuum Gauge(in WC)	Well Head: Vacuum Abs(in WC)	Well Head: Flow Rate (ACFM)	Well Head: Flow Rate (SCFM)	Hydrocarbon Concentrations (Concentrations in ppmv): TPHg	Benzene	MTBE	TPHg: Removal Rate (#/hour)	TPHg: Cumulative Removed (#)	Benzene: Removal Rate (#/hour)	Benzene: Cumulative Removed (#)	MTBE: Removal Rate (#/hour)	MTBE: Cumulative Removed (#)
MW-10 DPE Test															
11/15/2004 9:45	2648.0	0.0	102.8	304.0	66.5	49.7	*525*			1.395	0.000	0.0307	0.0000	0.00591	0.00000
10:00	2648.3	0.3	90.1	316.7	*30.0*	*23.4*	*790*			0.656	0.197	0.0144	0.0043	0.00278	0.00083
11:00	2649.4	1.4	*395.0*	*11.8*	21.2	*0.6*	*782*			0.017	0.216	0.0004	0.0048	0.00007	0.00091
11:10	2649.5	1.5	*300.0*	*106.8*	7.6	*2.0*	*63*			0.056	0.221	0.0012	0.0049	0.00024	0.00094
11:20	2649.6	1.6	204.0	202.8	8.6	4.3	*7,880*			0.120	0.233	0.0026	0.0051	0.00051	0.00099
11:25	2649.7	1.7	164.2	242.6	11.0	6.6	*10,120*			0.184	0.252	0.0041	0.0055	0.00078	0.00107
11:30	2649.8	1.8	119.5	287.3	6.4	4.5	*6,040*			0.126	0.264	0.0028	0.0058	0.00054	0.00112
11:45	2650.1	2.1	211.5	195.3	9.7	4.7	**2,100**	**51**	**8.7**	0.131	0.303	0.0029	0.0067	0.00055	0.00129
12:00	2650.3	2.3	200.0	206.8	10.4	5.3	*13,650*			0.148	0.333	0.0033	0.0073	0.00063	0.00141
12:30	2650.8	2.8	169.5	237.3	10.2	6.0	*10,120*			0.167	0.417	0.0037	0.0092	0.00071	0.00177
13:00	2651.3	3.3	165.0	241.8	10.5	6.3	*15,150*			0.176	0.504	0.0039	0.0111	0.00074	0.00214
13:30	2651.8	3.8	*165.0*	*241.8*	*10.0*	*5.9*	**2,500**	**69**	**15**	0.199	0.604	0.0050	0.0136	0.00122	0.00275
11/16/2004 7:30	2669.8	21.8	158.1	248.7	*10.0*	*6.1*	NM			0.204	4.281	0.0051	0.1057	0.00125	0.02533
8:10	2670.4	22.4	158.2	248.6	*10.0*	*6.1*	*328*			0.204	4.404	0.0051	0.1087	0.00125	0.02608
8:45	2671.0	23.0	158.2	248.6	*10.0*	*6.1*	**170**	**3.9**	**0.32**	0.014	4.412	0.0003	0.1089	0.00003	0.02610
9:30	2671.8	23.8	184.9	221.9	*10.0*	*5.5*	*310*			0.012	4.422	0.0003	0.1091	0.00002	0.02611
9:45	2672.1	24.1	186.1	220.7	10.0	5.4	*323*			0.012	4.426	0.0003	0.1092	0.00002	0.02612
10:15	2672.6	24.6	*300.0*	*106.8*	11.7	*3.1*	*108*			0.007	4.429	0.0001	0.1093	0.00001	0.02613
10:45	2673.1	25.1	206.2	200.6	*10.0*	*4.9*	*394*			0.011	4.435	0.0002	0.1094	0.00002	0.02614
11:15	2673.6	25.6	208.6	198.2	*10.0*	*4.9*	*442*			0.011	4.440	0.0002	0.1095	0.00002	0.02615
11:45	2674.1	26.1	210.6	196.2	*10.0*	*4.8*	*752*			0.011	4.446	0.0002	0.1096	0.00002	0.02616
12:15	2674.6	26.6	209.8	197.0	*10.0*	*4.8*	*748*			0.011	4.451	0.0002	0.1097	0.00002	0.02617
12:45	2675.1	27.1	218.1	188.7	*10.0*	*4.6*	*1,190*			0.011	4.457	0.0002	0.1098	0.00002	0.02618
13:15	2675.6	27.6	185.2	221.6	*10.0*	*5.4*	*1,208*			0.012	4.463	0.0003	0.1100	0.00002	0.02619
13:45	2676.1	28.1	185.1	221.7	*10.0*	*5.4*	**580**	**13**	**1.2**	0.042	4.484	0.0009	0.1104	0.00009	0.02624
14:30	2676.8	28.8	183.0	223.8	*10.0*	*5.5*	*1,179*			0.043	4.514	0.0009	0.1110	0.00009	0.02630
11/17/2004 7:00	2693.4	45.4	188.0	218.8	5.1	2.8	*28,950*			0.021	4.869	0.0004	0.1182	0.00005	0.02705
7:15	2693.7	45.7	189.5	217.3	7.3	3.9	**1,600**	**26**	**4.1**	0.083	4.894	0.0012	0.1186	0.00022	0.02712
7:30	2694.0	46.0	188.5	218.3	7.2	3.9	*21,340*			0.083	4.919	0.0012	0.1189	0.00022	0.02718
MW-9 DPE Test															
11/17/2004 8:40	2694.1	0.0	NM	NA	NM	NA	NM			NA	0.0000	NA	0.000000	NA	0.000000
9:30	2694.9	0.8	32.8	374.0	*5.0*	*4.6*	*34*			0.0014	0.0011	0.000046	0.000037	0.000004	0.000004
9:45	2695.1	1.0	33.1	373.7	*5.0*	*4.6*	*23*			0.0014	0.0014	0.000046	0.000046	0.000004	0.000004
10:00	2695.3	1.2	65.2	341.6	*5.0*	*4.2*	*21*			0.0013	0.0017	0.000042	0.000054	0.000004	0.000005
10:15	2695.6	1.5	100.3	306.5	*5.0*	*3.8*	*44*			0.0012	0.0020	0.000037	0.000065	0.000004	0.000006
10:25	2695.8	1.7	172.4	234.4	*5.0*	*2.9*	**23**	**0.82**	**<0.14**	0.0009	0.0022	0.000029	0.000071	0.000003	0.000007
11:00	2696.4	2.3	170.2	236.6	1.1	0.6	*28*			0.0002	0.0023	0.000006	0.000075	0.000001	0.000007
11:45	2697.2	3.1	188.8	218.0	2.0	1.1	*33*			0.0003	0.0026	0.000011	0.000083	0.000001	0.000008
12:15	2697.7	3.6	189.2	217.6	*5.0*	*1.1*	*31*			0.0003	0.0027	0.000011	0.000089	0.000001	0.000009
12:45	2698.2	4.1	190.5	216.3	2.2	1.2	*42*			0.0004	0.0029	0.000011	0.000094	0.000001	0.000009
13:30	2698.9	4.8	191.7	215.1	4.3	2.3	*29*			0.0007	0.0034	0.000023	0.000110	0.000002	0.000011
14:00	2699.4	5.3	191.3	215.5	10.2	5.4	*38*			0.0017	0.0042	0.000054	0.000137	0.000005	0.000013
14:30	2699.9	5.8	190.8	216.0	4.5	2.4	**24**	**0.44**	**<0.14**	0.0008	0.0046	0.000013	0.000143	0.000002	0.000014

Table 2. Dual-phase Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, Oakland, California

										TPHg		Benzene		MTBE	
	Hour Meter	Cumulative Operation	Well Head				Hydrocarbon Concentrations			Removal Rate	Cumulative Removed	Removal Rate	Cumulative Removed	Removal Rate	Cumulative Removed
			Vacuum		Flow Rate		TPHg	Benzene	MTBE						
Date/Time	(hours)	(hours)	Gauge(in WC)	Abs(in WC)	(ACFM)	(SCFM)	(Concentrations in ppmv)			(#/hour)	(#)	(#/hour)	(#)	(#/hour)	(#)
15:00	2700.4	6.3	191.5	215.3	3.2	1.7	*52*			0.0005	0.0049	0.000009	0.000148	0.000002	0.000015
11/18/2004 7:30	2717.0	22.9	*200.0*	*206.8*	1.2	*0.6*	*7*			0.0002	0.0082	0.000003	0.000202	0.000001	0.000025
8:00	2717.5	23.4	*200.0*	*206.8*	2.8	*1.4*	*4*			0.0005	0.0084	0.000008	0.000206	0.000001	0.000026
8:30	2718.0	23.9	*200.0*	*206.8*	1.8	*0.9*	*8*			0.0003	0.0085	0.000005	0.000209	0.000001	0.000026
9:00	2718.5	24.4	*200.0*	*206.8*	5.4	*2.8*	*5*			0.0009	0.0090	0.000015	0.000216	0.000003	0.000027
9:30	2719.0	24.9	*200.0*	*206.8*	2.2	*1.1*	**<14**	**<0.31**	**<0.14**	0.0001	0.0090	0.000002	0.000217	0.000001	0.000028
10:00	2719.5	25.4	*200.0*	*206.8*	*4.4*	*2.2*	*3*			0.0002	0.0091	0.000004	0.000219	0.000002	0.000029
MW-1 DPE Test															
11/18/2004 10:30	2720.0	0.0	198.2	208.6	2.8	1.4	*137*			0.050	0.000	0.0004	0.0000	0.00005	0.00000
10:45	2720.3	0.3	199.1	207.7	3.0	1.5	*411*			0.053	0.016	0.0004	0.0001	0.00006	0.00002
11:00	2720.5	0.5	198.8	208.0	1.4	0.7	*563*			0.025	0.021	0.0002	0.0002	0.00003	0.00002
11:15	2720.7	0.7	175.2	231.6	2.1	1.2	**2,600**	**24**	**2.7**	0.042	0.029	0.0003	0.0002	0.00004	0.00003
11:30	2721.0	1.0	105.4	301.4	0.5	0.4	*4,930*			0.013	0.033	0.0001	0.0003	0.00001	0.00004
11:45	2721.3	1.3	78.0	328.8	*5.0*	*4.0*	*4,950*			0.140	0.075	0.0012	0.0006	0.00015	0.00008
12:00	2721.5	1.5	108.6	298.2	*5.0*	*3.7*	*4,140*			0.127	0.101	0.0011	0.0008	0.00014	0.00011
12:30	2722.0	2.0	130.1	276.7	8.7	5.9	*3,480*			0.206	0.204	0.0017	0.0017	0.00022	0.00022
13:00	2722.5	2.5	128.2	278.6	*5.0*	*3.4*	*3,108*			0.119	0.263	0.0010	0.0022	0.00013	0.00028
13:30	2723.0	3.0	131.4	275.4	*5.0*	*3.4*	*3,359*			0.118	0.322	0.0010	0.0027	0.00013	0.00034
14:00	2723.5	3.5	116.3	290.5	*5.0*	*3.6*	*3,230*			0.124	0.384	0.0010	0.0032	0.00013	0.00041
14:30	2724.0	4.0	129.3	277.5	*5.0*	*3.4*	*3,140*			0.119	0.443	0.0010	0.0037	0.00013	0.00047
15:00	2724.5	4.5	118.9	287.9	3.8	2.7	**1,000**	**19**	**<1.4**	0.036	0.461	0.0006	0.0040	0.00003	0.00048
15:30	2725.0	5.0	121.4	285.4	*5.0*	*3.5*	*4,010*			0.047	0.485	0.0008	0.0044	0.00003	0.00050
11/19/2004 8:00	2741.5	21.5	167.4	239.4	25.8	15.2	*296*			0.203	3.834	0.0035	0.0621	0.00015	0.00290
8:30	2742.0	22.0	26.5	380.3	8.4	7.9	*903*			0.105	3.886	0.0018	0.0630	0.00008	0.00294
8:40	2742.2	22.2	102.5	304.3	*5.0*	*3.7*	*1,221*			0.050	3.896	0.0009	0.0632	0.00004	0.00294
9:00	2742.5	22.5	145.2	261.6	8.4	5.4	**1,100**	**9.7**	**1.5**	0.079	3.920	0.0006	0.0634	0.00011	0.00298
9:30	2743.0	23.0	137.8	269.0	*5.0*	*3.3*	*2,030*			0.049	3.944	0.0004	0.0636	0.00007	0.00301
10:50	2744.4	24.4	137.2	269.6	39.3	26.0	**900**	**9.3**	**1.5**	0.313	4.383	0.0029	0.0677	0.00053	0.00376
MW-10 DPE Test															
11/19/2004 12:00	2744.8	0.0	NM	NA	NM	NA	NM			NA	0.000	NA	0.000	NA	0.000
12:30	2745.3	0.5	118.0	288.8	8.4	5.9	*5,240*			0.207	0.103	0.003	0.002	0.001	0.001
12:45	2745.5	0.7	112.0	294.8	10.2	7.4	**2,600**	**47**	**17**	0.257	0.155	0.004	0.003	0.002	0.001
13:00	2745.8	1.0	113.5	293.3	10.5	7.6	*5,270*			0.263	0.234	0.004	0.004	0.002	0.002
14:15	2747.1	2.3	139.5	267.3	8.1	5.3	*6,780*			0.185	0.475	0.003	0.008	0.001	0.003
11/22/2004 7:30	2812.5	67.7	129.8	277.0	15.3	10.4	*23,870*			0.362	24.156	0.006	0.396	0.002	0.162
7:35	2812.6	67.8	130.9	275.9	14.7	10.0	*22,980*			0.347	24.191	0.006	0.397	0.002	0.162
7:45	2812.8	68.0	132.4	274.4	16.1	10.9	**8,100**	**110**	**22**	1.176	24.426	0.014	0.400	0.003	0.163
11/23/2004 7:30	2836.6	91.8	156.0	250.8	13.1	8.1	*19,990*			0.876	45.271	0.011	0.656	0.002	0.220
8:00	2837.1	92.3	156.0	250.8	12.9	7.9	*18,470*			0.860	45.701	0.011	0.662	0.002	0.222
8:30	2837.6	92.8	156.0	250.8	14.5	9.0	**30,000**	**460**	**100**	3.590	47.496	0.050	0.687	0.012	0.228
9:00	2838.1	93.3	156.0	250.8	13.6	8.4	*19,660*			3.365	49.179	0.047	0.710	0.011	0.233
9:30	2838.6	93.8	156.0	250.8	11.9	7.3	*24,010*			2.945	50.651	0.041	0.730	0.010	0.239
10:15	2839.3	94.5	156.0	250.8	10.5	6.5	*22,030*			2.591	52.465	0.036	0.756	0.009	0.245
10:45	2839.8	95.0	156.0	250.8	11.5	7.1	*21,240*			2.848	53.889	0.040	0.775	0.010	0.250

Table 2. Dual-phase Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, Oakland, California

											TPHg		Benzene		MTBE	
	Hour	Cumulative	Well Head				Hydrocarbon Concentrations				Removal	Cumulative	Removal	Cumulative	Removal	Cumulative
	Meter	Operation	Vacuum		Flow Rate		TPHg	Benzene	MTBE		Rate	Removed	Rate	Removed	Rate	Removed
Date/Time	(hours)	(hours)	Gauge(in WC)	Abs(in WC)	(ACFM)	(SCFM)	(Concentrations in ppmv)				(#/hour)	(#)	(#/hour)	(#)	(#/hour)	(#)
11:30	2840.6	95.8	156.0	250.8	9.2	5.7	*20,190*				2.272	55.707	0.032	0.801	0.008	0.256
12:00	2841.1	96.3	156.0	250.8	8.6	5.3	*19,970*				2.124	56.769	0.030	0.815	0.007	0.259
12:30	2841.6	96.8	156.0	250.8	10.1	6.2	*20,580*				2.502	58.020	0.035	0.833	0.009	0.264
13:00	2842.1	97.3	156.0	250.8	10.5	6.5	*19,840*				2.604	59.322	0.036	0.851	0.009	0.268
13:30	2842.6	97.8	156.0	250.8	9.9	6.1	**26,000**	**400**	**82**		2.119	60.381	0.030	0.866	0.007	0.272
14:00	2843.1	98.3	156.0	250.8	8.5	5.2	*21,420*				1.813	61.288	0.025	0.878	0.006	0.274
14:30	2843.6	98.8	156.0	250.8	9.0	5.5	*20,590*				1.922	62.249	0.027	0.892	0.006	0.278
15:00	2844.1	99.3	156.0	250.8	8.5	5.3	*18,560*				1.830	63.164	0.026	0.905	0.006	0.280
11/24/2004 8:00	2856.0	111.2	160.0	246.8	5.7	3.5	*18,690*				1.200	77.441	0.017	1.104	0.004	0.327
8:30	2856.5	111.7	160.0	246.8	8.4	5.1	*19,980*				1.778	78.330	0.025	1.116	0.006	0.329
9:00	2857.0	112.2	160.0	246.8	10.7	6.5	**21,000**	**350**	**74**		1.814	79.237	0.027	1.130	0.007	0.333
9:30	2857.5	112.7	160.0	246.8	8.1	4.9	*17,250*				1.386	79.930	0.021	1.140	0.005	0.335
10:00	2858.0	113.2	160.0	246.8	8.7	5.3	*20,490*				1.477	80.669	0.022	1.152	0.005	0.338
10:30	2858.5	113.7	160.0	246.8	8.5	5.2	*19,420*				1.454	81.396	0.022	1.163	0.005	0.340
11:00	2859.0	114.2	160.0	246.8	8.2	5.0	*22,490*				1.398	82.095	0.021	1.173	0.005	0.343
11:30	2859.5	114.7	160.0	246.8	*8.5*	*5.2*	*22,200*				1.448	82.819	0.022	1.184	0.005	0.346
12:00	2860.0	115.2	160.0	246.8	8.9	5.4	*20,860*				1.517	83.577	0.023	1.196	0.005	0.348
12:30	2860.5	115.7	160.0	246.8	6.9	4.2	*24,630*				1.173	84.164	0.018	1.204	0.004	0.350
13:00	2861.0	116.2	160.0	246.8	7.2	4.3	*21,590*				1.218	84.773	0.018	1.214	0.004	0.353
13:30	2861.5	116.7	160.0	246.8	7.0	4.2	**59,000**	**660**	**140**		3.326	86.436	0.034	1.230	0.008	0.357
14:00	2862.0	117.2	160.0	246.8	9.5	5.7	*20,960*				4.527	88.699	0.046	1.253	0.011	0.362
Total Pounds Removed:											**TPHg =**	**98.0**	**Benzene =**	**1.44**	**MTBE =**	**0.393**

Abbreviations and Notes:

in WC = inches of water column

ACFM = Actual cubic feet per minute

SCFM = Standard cubic feet per minute.

SCFM = (ACFM) (Applied Absolute Vacuum / Atmospheric Absolute Vacuum)

ppmv = Parts per million by volume # = Pounds

O/R = Over range of instrument

NM = Not measured

NA = Not available

H2O = Measurement not available because the air was too wet.

TPHG, Benzene, and MTBE analyzed by EPA Method 8260 respectively from 1 liter tedlar bag samples

(Rate = Laboratory analytical concentration (ppmv) x wellhead flow rate (scfm) x (1lb-mole/386ft3) x molecular weight (86 lb/lb-mole for TPHg, 78 lb/lb-mole for benzene, 88 lb/lb-mole for MTBE) x 60 min/hour x 1/1,000,000)

Cumulative TPHg / Benzene / MTBE removal = Previous removal rate multiplied by the hour-interval of operation plus the previous total

When consituents are not detected by laboratory analysis, half the detection limit is used in subsequent calculations

Italicized TPHg Concentrations are field measured values.

Italicized Vacuum and Flow Rate data is estimated. Readings were either not measured or not measurable with available monitoring eqiupment under set operating conditions.

Table 2. Dual-phase Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, Oakland, California

Date/Time	Hour Meter (hours)	Cumulative Operation (hours)	Well Head: Vacuum Gauge(in WC)	Well Head: Vacuum Abs(in WC)	Well Head: Flow Rate (ACFM)	Well Head: Flow Rate (SCFM)	Hydrocarbon Concentrations (Concentrations in ppmv): TPHg	Benzene	MTBE	TPHg: Removal Rate (#/hour)	TPHg: Cumulative Removed (#)	Benzene: Removal Rate (#/hour)	Benzene: Cumulative Removed (#)	MTBE: Removal Rate (#/hour)	MTBE: Cumulative Removed (#)
MW-10 DPE Test															
4/18/2005 11:53	3139.5	0.0	NM	*283.1*	NM	*4.0*	NM			0.0018	0.000	0.0001	0.0000	0.0001	0.00000
12:30	3140.1	0.6	123.7	283.1	5.8	4.0	*684*			0.0018	0.0011	0.0001	0.0000	0.0001	0.0000
13:00	3140.6	1.1	6.5	400.3	6.0	5.9	*26*			0.0026	0.0024	0.0001	0.0001	0.0001	0.0001
13:30	3141.2	1.7	14.5	392.3	5.0	4.8	*16*			0.0021	0.0036	0.0001	0.0001	0.0001	0.0001
13:45	3141.4	1.9	100.0	306.8	5.0	3.8	*290*			0.0017	0.0040	0.0001	0.0001	0.0001	0.0001
14:00	3141.7	2.2	113.4	293.4	3.5	2.5	*206*			0.0011	0.0043	0.0000	0.0001	0.0000	0.0002
14:15	3141.9	2.4	117.8	289.0	8.3	5.9	*237*			0.0026	0.0048	0.0001	0.0001	0.0001	0.0002
14:30	3142.2	2.7	120.4	286.4	6.7	4.7	*242*			0.0021	0.0055	0.0001	0.0002	0.0001	0.0002
15:00	*3142.7*	3.2	NM	*286.4*	NM	*4.7*	**33**	**1.1**	**1.2**	0.0021	0.0065	0.0001	0.0002	0.0001	0.0002
4/19/2005 8:45	3160.5	21.0	223.0	183.8	21.0	9.5	*86*			0.0057	0.1081	0.0002	0.0045	0.0006	0.0102
9:15	3161.0	21.5	227.7	179.1	25.3	11.1	*71*			0.0067	0.1114	0.0003	0.0046	0.0007	0.0105
9:45	3161.5	22.0	229.5	177.3	15.6	6.8	*249*			0.0041	0.1135	0.0002	0.0047	0.0004	0.0107
10:15	3162.0	22.5	232.8	174.0	13.9	5.9	*270*			0.0036	0.1153	0.0002	0.0048	0.0003	0.0109
10:45	3162.5	23.0	228.5	178.3	16.5	7.2	*377*			0.0044	0.1175	0.0002	0.0049	0.0004	0.0111
11:15	3163.1	23.6	228.8	178.0	11.8	5.2	*403*			0.0031	0.1193	0.0001	0.0050	0.0003	0.0113
11:45	3163.6	24.1	226.0	180.8	9.0	4.0	*435*			0.0024	0.1205	0.0001	0.0050	0.0002	0.0114
12:15	3164.1	24.6	233.0	173.8	8.1	3.5	*427*			0.0021	0.1216	0.0001	0.0051	0.0002	0.0115
12:45	3164.6	25.1	218.6	188.2	9.5	4.4	**45**	**2.1**	**4.3**	0.0026	0.1229	0.0001	0.0051	0.0003	0.0116
4/20/2005 9:45	3185.7	46.2	211.7	195.1	8.4	4.0	*48*			0.0050	0.2274	0.0007	0.0196	0.0019	0.0512
10:15	3186.3	46.8	213.4	193.4	7.5	3.6	*46*			0.0044	0.2301	0.0006	0.0199	0.0017	0.0521
10:45	3186.7	47.2	213.6	193.2	5.0	2.4	*40*			0.0029	0.2312	0.0004	0.0201	0.0011	0.0526
11:00	3187.0	47.5	150.4	256.4	15.1	9.5	*53*			0.0117	0.2347	0.0016	0.0206	0.0044	0.0539
11:30	3187.5	48.0	143.9	262.9	14.0	9.0	*54*			0.0111	0.2403	0.0015	0.0213	0.0042	0.0560
12:00	3188.0	48.5	134.0	272.8	10.9	7.3	*36*			0.0090	0.2448	0.0012	0.0219	0.0034	0.0577
12:30	3188.5	49.0	115.0	291.8	8.0	5.7	*61*			0.0071	0.2483	0.0010	0.0224	0.0027	0.0591
13:00	3189.0	49.5	135.0	271.8	5.0	3.3	**92**	**14**	**34**	0.0041	0.2504	0.0006	0.0227	0.0016	0.0598
4/21/2005 9:00	3209.1	69.6	124.0	282.8	3.8	2.6	*55*			0.0020	0.2915	0.0002	0.0277	0.0008	0.0751
9:30	3209.6	70.1	126.5	280.3	8.0	5.5	*53*			0.0043	0.2937	0.0005	0.0280	0.0016	0.0759
10:00	3210.1	70.6	163.7	243.1	19.3	11.5	*151*			0.0089	0.2982	0.0011	0.0285	0.0033	0.0775
10:30	3210.6	71.1	159.4	247.4	20.2	12.3	*128*			0.0095	0.3029	0.0012	0.0291	0.0035	0.0793
10:45	3210.8	71.3	176.3	230.5	9.1	5.2	*441*			0.0040	0.3037	0.0005	0.0292	0.0015	0.0796
11:00	3211.1	71.6	177.8	229.0	25.1	14.1	*205*			0.0110	0.3070	0.0013	0.0296	0.0041	0.0808
11:30	3211.6	72.1	177.4	229.4	24.5	13.8	*256*			0.0107	0.3124	0.0013	0.0303	0.0040	0.0828
12:00	3212.1	72.6	151.0	255.8	35.0	22.0	*135*			0.0171	0.3209	0.0021	0.0313	0.0063	0.0860
12:15	3212.3	72.8	152.4	254.4	46.8	29.3	*130*			0.0227	0.3254	0.0028	0.0319	0.0084	0.0876
12:30	3212.6	73.1	149.5	257.3	33.3	21.1	*110*			0.0163	0.3303	0.0020	0.0325	0.0061	0.0895
13:00	3213.1	73.6	148.2	258.6	37.0	23.5	**58**	**7.8**	**21**	0.0182	0.3394	0.0022	0.0336	0.0068	0.0928
4/22/2005 8:15	3232.6	93.1	134.6	272.2	25.0	16.7	*700*			0.0011	0.3608	0.0000	0.0342	0.0003	0.0977
8:45	3233.1	93.6	177.0	229.8	32.0	18.1	*120*			0.0012	0.3614	0.0000	0.0342	0.0003	0.0979
9:15	3233.6	94.1	173.0	233.8	31.5	18.1	*6,000*			0.0012	0.3620	0.0000	0.0342	0.0003	0.0980
9:45	3234.1	94.6	170.0	236.8	37.0	21.5	*1,850*			0.0014	0.3627	0.0000	0.0343	0.0003	0.0982
10:15	3234.6	95.1	191.0	215.8	NA	*16.6*	*140*			0.0011	0.3632	0.0000	0.0343	0.0002	0.0983
10:45	3235.1	95.6	190.0	216.8	NA	*16.6*	*185*			0.0011	0.3638	0.0000	0.0343	0.0002	0.0984
11:15	3235.6	96.1	191.0	215.8	18.5	9.8	*160*			0.0006	0.3641	0.0000	0.0343	0.0001	0.0985

Table 2. Dual-phase Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, Oakland, California

										TPHg		Benzene		MTBE	
	Hour	Cumulative	Well Head				Hydrocarbon Concentrations			Removal	Cumulative	Removal	Cumulative	Removal	Cumulative
	Meter	Operation	Vacuum		Flow Rate		TPHg	Benzene	MTBE	Rate	Removed	Rate	Removed	Rate	Removed
Date/Time	(hours)	(hours)	Gauge(in WC)	Abs(in WC)	(ACFM)	(SCFM)	(Concentrations in ppmv)			(#/hour)	(#)	(#/hour)	(#)	(#/hour)	(#)
11:45	3236.1	96.6	112.0	294.8	25.8	18.7	*55*			0.0012	0.3647	0.0000	0.0343	0.0003	0.0986
12:15	3236.6	97.1	113.0	293.8	29.0	20.9	*52*			0.0014	0.3654	0.0000	0.0343	0.0003	0.0988
12:30	*3236.9*	97.4	NM	*293.8*	NM	*20.9*	**<9.8**	**<0.31**	**1.1**	0.0014	0.3658	0.0000	0.0343	0.0003	0.0989
12:45	3237.1	97.6	154.0	252.8	15.0	9.3	*335*			0.0150	0.3688	0.0010	0.0345	0.0027	0.0994
4/23/2005 8:00	3256.5	117.0	140.0	266.8	45.0	29.5	*94*			0.0473	1.2873	0.0032	0.0963	0.0085	0.2639
8:20	3256.8	117.3	163.5	243.3	48.5	29.0	*284*			0.0465	1.3012	0.0031	0.0973	0.0083	0.2664
4/24/2005 13:45	3286.5	147.0	176.5	230.3	31.1	17.6	*210*			0.0282	2.1401	0.0019	0.1537	0.0051	0.4166
14:15	3287	147.5	172.0	234.8	35.8	20.7	*212*			0.0331	2.1566	0.0022	0.1548	0.0059	0.4196
14:30	3287.3	147.8	170.1	236.7	41.9	24.4	*234*			0.0391	2.1684	0.0026	0.1556	0.0070	0.4217
14:45	3287.5	148.0	170.5	236.3	36.2	21.0	*247*			0.0337	2.1751	0.0023	0.1560	0.0060	0.4229
15:00	3287.8	148.3	170.7	236.1	29.1	16.9	*195*			0.0271	2.1832	0.0018	0.1566	0.0049	0.4243
15:10	*3288.0*	148.5	NM	*236.1*	NM	*16.9*	**120**	**8.9**	**21**	0.0271	2.1887	0.0018	0.1570	0.0049	0.4253
Total Pounds Removed:										**TPHg =**	**2.19**	**Benzene =**	**0.157**	**MTBE =**	**0.425**

Abbreviations and Notes:

in WC = inches of water column

ACFM = Actual cubic feet per minute

SCFM = Standard cubic feet per minute.

SCFM = (ACFM) (Applied Absolute Vacuum / Atmospheric Absolute Vacuum)

ppmv = Parts per million by volume

= Pounds

NM = Not measured

NA = Not available

TPHG, Benzene, and MTBE analyzed by EPA Method 8260 respectively from 1 liter tedlar bag samples

(Rate = Laboratory analytical concentration (ppmv) x wellhead flow rate (scfm) x (1lb-mole/386ft3) x molecular weight (86 lb/lb-mole for TPHg, 78 lb/lb-mole for benzene, 88 lb/lb-mole for MTBE) x 60 min/hour x 1/1,000,000)

Cumulative TPHg / Benzene / MTBE removal = Previous removal rate multiplied by the hour-interval of operation plus the previous total

When consituents are not detected by laboratory analysis, half the detection limit is used in subsequent calculations

Italicized TPHg Concentrations are field measured values.

Italicized Vacuum and Flow Rate data is estimated. Readings were either not measured or not measurable with available monitoring eqiupment under set operating conditions.

Table 3. DTW and Vacuum Influence Data, Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, O

	MW-3	MW-4		VEW-7	
Date/Time	DTW (ft. TOC)	DTW (ft. TOC)	Vacuum (in. WC)	DTW (ft. TOC)	Vacuum (in. WC)
4/18/2005 11:53	3.52	**5.44**	-	2.73	-
4/19/2005 8:45	3.72	**5.24**	0.1	2.94	0.0
9:15	-	-	0.0	-	0.0
9:45	-	-	0.0	-	0.0
10:15	-	-	0.0	-	0.0
10:45	-	-	0.0	-	0.0
11:15	-	-	0.0	-	0.0
11:45	-	-	0.1	-	0.1
12:15	-	-	0.0	-	0.0
12:45	3.71	**5.17**	-	2.87	-
4/20/2005 9:45	3.81	4.91	0.1	**3.10**	0.0
10:15	-	-	0.1	-	0.0
10:45	-	-	0.0	-	0.0
11:00	-	-	0.0	-	0.0
11:30	-	-	0.0	-	0.0
12:00	-	-	0.0	-	0.0
12:30	-	-	0.0	-	0.1
13:00	3.81	4.92	-	**3.11**	-
4/21/2005 9:00	3.85	4.91	0.0	**3.09**	0.0
10:00	-	-	0.0	-	0.0
10:30	-	-	0.0	-	0.0
10:45	-	-	0.0	-	0.0
11:30	-	-	0.0	-	0.0
12:30	-	-	0.0	-	0.0
4/22/2005 8:15	3.85	4.91	-	3.00	-
8:45	-	-	0.0	-	0.0
9:15	-	-	0.0	-	0.0
9:45	-	-	0.0	-	0.0
10:15	-	-	0.0	-	0.0
10:45	-	-	0.0	-	0.0
11:15	-	-	0.0	-	0.0
11:45	-	-	0.0	-	0.0
12:15	-	-	0.0	-	0.0

Table 3. DTW and Vacuum Influence Data, Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, O

	MW-3	MW-4		VEW-7	
Date/Time	DTW (ft. TOC)	DTW (ft. TOC)	Vacuum (in. WC)	DTW (ft. TOC)	Vacuum (in. WC)
12:30	-	-	0.0	-	0.0
12:45	3.84	4.89	-	2.97	-
4/24/2005 13:45	3.96	4.86	-	**3.24**	-
14:15	-	-	0.0	-	0.0
14:30	-	-	0.0	-	0.0
14:45	-	-	0.0	-	0.0
15:00	-	4.86	-	**3.24**	-

Abbreviations:
DTW = Depth to water
ft. TOC = Feet referenced to top of casing
in. WC = Inches of water column
Note: Vacuum influence was not measured in MW-3 because the well screen was submerged throughout interim DPE.
Bold font indicates that the measured DTW is below the top of the well screen.

ATTACHMENT D

Historical Groundwater Data

Table 2
Groundwater Analytical Data
TPH-g, BTEX compounds, TPH-d, and oil and grease

Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California

Sample	Date Sampled	TPH-g (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	TPH-d (ppb)	Oil and Grease (ppb)
SLH-1	02/12/92	NA	NA	NA	NA	NA	460,000	720,000
SLH-2	02/12/92	NA	NA	NA	NA	NA	370,000	400,000
SLH-3W	04/21/92	88,000	6,100	2,400	780	1,700	NA	NA
DW-1	05/20/92	87,000	18,000	19,000	5,700	22,000	11,000	NA

ppb = Parts per billion
NA = Not Analyzed
* = The positive result for petroleum hydrocarbon as diesel appears to be a combination of heavier and lighter hydrocarbons, rather than diesel.

Table 1. **Groundwater Analytical Data - Other Constituents** - Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, Oakland, California

Well ID	Date	Motor Oil	Nitrate as Nitrate	Sulfate	Ferrous Iron	DO	ORP (millivolts)
		← (Concentrations in ppm) →					
MW-1	06/10/98	----	<1.0	3.3	14	0.5/0.5	-163/-178
	06/10/98[dup]	----	<1.0	5.1	14	0.5/0.5	-163/-178
	12/30/98	<0.250	<1.0	6.8	9.2	1.6/1.4	-119/-107
	06/25/99	----	0.0800	1.39	11.40	1.2/2.1	-150/-148
	12/28/99	0.507	<5.00	<5.00	3.80	1.4/1.8	-156/-152
	05/31/00	<0.500	<1.00	11.9	1.30	0.98/2.27	2/-130
	10/17/00	<0.5	<0.200	2.68	7.98	4.0/3.1	-122/-114
	05/01/01	0.297	<0.2	<1	0.541	1.6/1.3	-125/-130
	11/07/01	<5	<0.2	<1	3.4	2.1/1.4	-42/-56
	05/01/02	<0.1	<0.2	<1	4.7	3.4/2.3	-87/-108
	07/16/02	<5	<0.50	2.0	<0.10	0.9/0.8	-120/-134
	10/17/02	<5	0.12	1.2	0.10	0.8/1.2	-117/-170
	01/21/03	**<5**	**<0.10**	**18**	**4.1**	**0.3/0.7**	**-92/-107**
MW-2	06/10/98	----	<1.0	47	5.1	0.7/0.6	-155/-161
	12/30/98	<0.250	<1.0	84	7.6	1.3/1.2	-96/-107
	06/25/99	----	<0.0500	126	7.97	2.3/2.5	-101/-106
	12/28/99	<0.500	<5.00	98.8	0.380	2.1/2.4	-112/-120
	05/31/00	<0.500	6.89	129	0.130	1.8/2.7	-15/-73
	10/17/00	---	---	---	---	---	---
	11/05/01	<0.1	<0.2	3	0.43	0.6/1.1	-81/-111
	05/01/02	<0.1	<0.2	380	0.19	6.2/0.9	-62/-50
	07/16/02	<5	0.60	62	<0.10	0.9/1.3	-79/-67
	10/17/02	<5	0.11	14	<0.10	0.6/2.2	-95/-48
	01/21/03	**<5**	**0.13**	99	**<0.10**	**0.5/1.0**	40/3
MW-3	06/10/98	----	<1.0	15	3.5	0.8/0.9	-101/-149
	12/30/98	<0.250	<1.0	21	2.1	1.3/1.4	-84/-76
	06/25/99	----	<0.0500	4.74	8.73	1.4/1.9	-138/-148
	12/28/99	<0.500	<5.00	5.10	0.260	1.3/1.5	-86/-74
	05/31/00	<0.500	<1.00	19.3	22.6	1.2/2.2	-68/-103
	10/17/00	<0.5	<1.00	21.2	5.78	2.0/2.1	152/138
	05/01/01	<0.25	---	8.72	0.328	1.9/2.7	-63/-95
	05/29/01	---	0.45	---	---	3.0/1.9	78/-8
	11/05/01	<0.1	<0.2	6.6	0.19	0.5/1.9	-119/113

Table 1. **Groundwater Analytical Data - Other Constituents** - Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, Oakland, California

Well ID	Date	Motor Oil	Nitrate as Nitrate	Sulfate	Ferrous Iron	DO	ORP (millivolts)
		← (Concentrations in ppm) →					
MW-3 (cont.)	05/01/02	0.39	0.83	20	<0.1	4.1/0.7	-82/-44
	07/16/02	<5	<0.50	2.5	<0.10	0.3/1.7	-95/-112
	10/17/02	<5	0.11	4.9	<0.10	0.8/2.4	-30/-47
	01/21/03	**<5**	**0.21**	**15**	**<0.10**	**1.2/1.0**	**164/3.0**
MW-4	12/30/98	<0.250	<1.0	9.6	1.6	1.7/1.6	-118/-111
	12/28/99	<0.500	<5.00	<5.00	<0.0100	1.4/1.5	-121/-117
	05/31/00	<0.500	---	---	---	---	---
	10/17/00	0.513	1.05	16.0	0.338	3.8/4.0	167/131
	11/05/01	<0.1	0.2	12	0.46	1.3/1.5	-126/112
	05/01/02	<0.1	<0.2	7.4	0.43	2.6/1.1	146/-90
	10/17/02	<5	<0.10	13	<0.10	1.4/2.4	533/0
MW-6	06/10/98	----	<1.0	7.4	1.8	0.4/0.4	-159/-155
	12/30/98	<0.250	<1.0	120	0.46	2.1/1.6	-98/-107
	06/25/99	----	0.101	22.1	12.80	1.4/3.6	-143/-136
	12/28/99	0.568	<5.00	147	0.320	1.8/2.0	-108/-96
	05/31/00	<0.500	<1.00	19.2	0.704	0.92/2.30	-31/-91
	10/17/00	<0.5	<1.00	<5.00	3.31	2.5/2.1	-107/-126
	05/01/01	0.416	---	4.88	<0.1	2.2/1.6	-107/-112
	05/29/01	---	<0.1	---	---	2.0/1.3	33/-65
	11/07/01	<5	<0.2	44	2.4	2.4/1.8	60/51
	05/01/02	<0.1	<0.2	10	<0.1	2.5/2.0	-111/-130
	07/16/02	<5	<0.50	1.7	<0.10	0.6/0.6	-108/-105
	10/17/02	<5	0.11	17	<0.10	1.2/1.1	-92/-119
	01/21/03	**<5**	**0.11**	**56**	**0.73**	**0.8/0.6**	**15/-27**
MW-8	12/30/98	<0.250	12	54	0.031	0.8/0.9	-128/-121
	12/28/99	<0.500	<5.00	<5.00	<0.0100	1.0/0.9	-136/-121
	05/31/00	---	---	---	---	---	---
	10/17/00	<0.5	<1.00	23.2	1.12	4.0/4.1	114/119
	11/05/01	<0.1	0.59	22	0.13	0.6/1.3	-66/-75
	05/01/02	<0.1	2.1	18	<0.1	0.6/3.6	30/87
	10/17/02	<5	0.71	17	1.7	3.3/2.2	-99/-42

Table 1. **Groundwater Analytical Data - Other Constituents** - Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, Oakland, California

Well ID	Date	Motor Oil	Nitrate as Nitrate	Sulfate	Ferrous Iron	DO	ORP
		← (Concentrations in ppm) →					(millivolts)
MW-9	06/10/98	----	<1.0	6.6	21	0.3/0.4	-169/-188
	12/30/98	<0.250	<1.0	6.4	9.3	1.1/1.2	-107/-111
	06/25/99	----	0.0900	1.25	19.80	1.2/2.4	-164/-153
	12/28/99	<0.500	<5.00	<5.00	0.660	1.0/1.1	-111/-115
	05/31/00	<0.500	<1.00	13.9	1.41	2.8/a	-21/162
	10/17/00	<0.5	<1.00	<5.00	13.3	3.0/3.5	-126/-132
	05/01/01	<0.250	---	<1	2.66	1.6/1.0	-144/-154
	05/29/01	---	<0.1	---	---	1.9/1.5	45/-96
	11/07/01	<5	<0.2	<1	2.7	1.4/1.1	-39/-54
	05/01/02	<0.1	<0.2	<1	12	2.9/1.1	-111/-181
	07/16/02	<5	<0.50	1.4	0.12	0.7/0.4	-54/-121
	10/17/02	<5	<0.40	<4.0	1.6	1.0/1.2	-100/-140
	01/21/03	**<5**	**<0.10**	**3.1**	**<0.10**	**0.4/0.8**	**-102/-113**
MW-10	06/10/98	----	<1.0	6.3	17	0.7/0.5	-149/-162
	12/30/98	<0.250	<1.0	8.0	17	1.0/0.7	-72/-89
	06/25/99	----	0.134	<1.00	15.80	0.9/2.5	-139/-119
	12/28/99	0.604	0.998	<5.00	2.20	1.2/1.4	-87/-92
	05/31/00	<0.500	<1.00	12.4	3.22	2.8/3.9	-28/-93
	10/17/00	<0.5	<1.00	<5.00	8.30	2.3/3.0	-160/-113
	05/01/01	0.884	---	<1	2.34	2.0/1.1	-129/-137
	05/29/01	---	<0.1	---	---	3.70/1.8	-15/-50
	11/07/01	<5	<0.2	<1	2.4	1.8/1.0	-139/-147
	05/01/02	<0.1	<0.2	<1	1.9	4.0/0.5	-121/-113
	07/16/02	<5	<0.50	0.82	<0.10	0.5/1.5	-120/-118
	10/17/02	<5	0.10	<1.0	0.21	0.8/1.2	-56/-40
	01/21/03	**<5**	**<0.10**	**<1.0**	**<0.10**	**0.3/0.6**	**-88/-113**
MW-11	12/30/98	<0.250	<1.0	1,000	0.21	0.7/0.6	-86/-74
	12/28/99	<0.500	<5.00	<5.00	<0.0100	0.8/1.0	-94/-67
	05/31/00	---	---	---	---	---	---
	10/17/00	<0.50	<1.00	1,140	1.74	4.1/4.0	81/64
	05/08/02	<5	3.8	1,000	1.2	1.0/1.1	-33/-21
	10/17/02	<5	<10.0	860	0.60	1.3/1.0	67/-57

Table 1. **Groundwater Analytical Data - Other Constituents** - Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, Oakland, California

Well ID	Date	Motor Oil	Nitrate as Nitrate	Sulfate	Ferrous Iron	DO	ORP (millivolts)
		←		(Concentrations in ppm)		→	
MW-12	12/30/98	<0.250	6.1	1,500	0.06	1.3/0.9	-119/-106
	12/28/99	<0.500	<5.00	<5.00	<0.0100	1.0/1.2	-120/-110
	05/31/00	---	---	---	---	---	---
	10/17/00	<0.50	<1.00	182	0.0107	5.1/3.0	15/24
	05/08/02	<5	12	170	<0.10	1.2/0.9	17/26
	10/17/02	<5	0.91	92	<0.10	1.8/1.5	-20/10
MW-13	12/30/98	<0.250	7.2	230	0.031	1.1/0.8	-111/-104
	12/28/99	<0.500	<5.00	<5.00	<0.0100	0.8/1.0	-117/-115
	05/31/00	---	---	---	---	---	---
	10/17/00	<0.5	<1.00	1,800	0.169	2.5/2.8	-10/19
	05/01/02	<0.1	10	280	<0.1	3.5/3.5	96/102
	10/17/02	<5	1.8	220	<0.10	1.4/0.9	-94/-42
VEW-5	10/17/00	<1	<1.00	15.0	2.64	3.0/3.1	-112/-126
	05/01/01	1.45	---	---	2.4	0.4/0.6	-95/-133
	11/05/01	<100	<0.2	<1	5.6	0.6/a	-108/a
	05/01/02	<0.1	0.2	21	19	4.7/2.9	492/-0
	07/16/02	<5	<0.50	3.0	0.61	0.4/0.3	-96/-185
	10/17/02	<5	8.4	82	<0.10	1.1/1.0	-107/-126
	01/21/03	**<5**	**0.11**	**150**	**<0.10**	**1.6/0.5**	**166/-6**
VEW-6	10/17/00	<1	<1.00	17.7	4.16	2.0/2.1	-92/-115
	05/01/01	0.805	---	---	1.67	0.8/1.2	-108/-129
	05/29/01	---	0.49	---	---	3.0/1.7	-13//-53
	11/05/01	<100	<0.2	14	5.6	0.8/1.3	-145/-127
	05/01/02	<0.1	<0.2	13	3.3	0.2/0.4	-177/-182
	07/16/02	<5	<0.50	41	<0.10	0.3/0.2	-125/-108
	10/17/02	<5	9.0	130	<0.10	0.9/1.3	-170/-266
	01/21/03	**<5**	**0.18**	**130**	**<0.10**	**4.6/5.6**	**56/-100**
VEW-7	10/17/00	<1	<0.200	1.96	508	3.5/4.1	-87/-82
	05/01/01	0.348	---	---	1.97	0.8/0.8	-102/-120
	05/29/01	---	0.43	---	---	2.5/1.4	-21/-75
	11/05/01	<100	<0.2	4.1	4.8	3.52/a	-113/-147

Table 1. **Groundwater Analytical Data - Other Constituents** - Shell-branded Service Station, Incident #98995749, 285 Hegenberger Road, Oakland, California

Well ID	Date	Motor Oil	Nitrate as Nitrate	Sulfate	Ferrous Iron	DO	ORP (millivolts)
		← (Concentrations in ppm) →					
VEW-7 (cont.)	05/01/02	<0.1	<0.2	41	0.62	2.9/3.3	110/0
	07/16/02	<5	25	240	<0.10	3.6/2.5	-102/-36
	10/17/02	<5	9.3	480	<0.10	3.0/1.9	-226/-184
	01/21/03	**<5**	**5.4**	**360**	**<0.10**	**0.3/0.8**	**-127/-119**
AS-1	10/17/00	<1	<1.00	965	0.708	2.0/2.5	-109/-79
	11/05/01	<100	<0.2	830	0.21	0.4/0.5	-122/150
	07/16/02	<5	<0.50	1,800	<0.10	4.6/2.8	-51/-95
	01/21/03	**<5**	**0.88**	**1,800**	**<0.10**	**2.2/2.5**	**36/40**
AS-2	10/17/00	<0.5	<1.00	3,810	2.46	3.1/3.0	-65/-69
	11/05/01	<100	<10	4,100	8.8	0.8/0.6	-97/-132
	05/01/02	<0.1	<2	5,500	0.34	1.0/0.8	0/-163
	07/16/02	<5	<2.5	5,300	<0.10	0.7/0.9	-71/-93
	01/21/03	**<5**	**<2.0**	**7,400**	**<0.10**	**1.4/1.6**	**-529/43**
AS-3	10/17/00	1.26	<1.00	493	0.0402	3.1/3.0	26/29
	11/05/01	<100	<0.2	450	0.13	1.1/3.2	-71/-62
	01/21/03	**<5**	**1.5**	**7,000**	**<0.10**	**2.2/1.1**	**-506/62**
Ideal Aerobic Degradation Relationship:		Inverse	Inverse	Direct	Inverse	Direct	
Observed Relationship:		Moderately Inverse	Inverse	Inconclusive	Direct	Inverse	

Abbreviations:

ppm = Parts per million
DO = Dissolved oxygen, measured in the field, reported as pre-purge/post-purge
ORP = Oxidation reduction potential, measured in the field, reported as pre-purge/post-purge

Notes:

---- = Not analyzed
<n = Below detection limit of n ppm
Motor oil by DHS LUFT
Ferrous iron analyzed by EPA Method 200.7
Nitrate as nitrate and sulfate analyzed by EPA Method 300.0
a = Post-purge reading not taken

Table 3. **Historic Water Analytical Data - TPHg, TPHd, BTEX, and MTBE** - Shell-branded Service Station - Incident #98995749, 285 Hegenberger Rd., Oakland, California

Sample ID	Date Sampled	TPHg	TPHd	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE
		← parts per billion →						
SB-1	3/18/1999	<50.0	182	<0.500	<0.500	<0.500	<0.500	86.3
SB-2	3/18/1999	3,650	1,290	4.96	<0.500	3.11	2.76	33.9
SB-3	3/18/1999	16,500	5,080	268	8.11	901	1,400	180(<5.00)

Notes and Abbreviations:

TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015.

TPHd = Total petroleum hydrocarbons as diesel by modified EPA Method 8015

MTBE = Methyl tert-butyl ether by EPA Method 8020. Result in parentheses represents MTBE by EPA Method 8260B.

Benzene, ethylbenzene, toluene, xylenes by EPA Method 8020.

<n = Below detection limit of n mg/kg

WELL CONCENTRATIONS
Shell-branded Service Station
285 Hegenberger Road
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Well ID	Date	TPPH (ug/L)	TEPH as Diesel (ug/L)	TEPH as Motor Oil (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
MW-1	02/16/1989	99,000	NA	NA	20,000	23,000	5,700	2,300	NA	NA	NA	NA	NA	NA	6.64	3.83	2.81	NA
MW-1	05/23/1989	48,000	11,000	NA	4,200	5,200	1,200	7,700	NA	NA	NA	NA	NA	NA	6.64	3.59	3.05	NA
MW-1	08/03/1989	63,000	11,000	NA	5,500	5,500	3,200	9,500	NA	NA	NA	NA	NA	NA	6.64	4.04	2.60	NA
MW-1	12/15/1989	30,000	11,000	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	6.64	4.22	2.42	NA
MW-1	02/07/1990	93,000	10,000	NA	13,000	9,600	2,400	14,000	NA	NA	NA	NA	NA	NA	6.64	4.60	2.04	NA
MW-1	04/18/1990	55,000	8,700	NA	14,000	8,400	3,200	13,000	NA	NA	NA	NA	NA	NA	6.64	4.02	2.62	NA
MW-1	07/23/1990	73,000	3,600	NA	16,000	7,400	2,800	15,000	NA	NA	NA	NA	NA	NA	6.64	4.17	2.47	NA
MW-1	09/27/1990	45,000	1,700	NA	8,000	4,300	2,000	11,000	NA	NA	NA	NA	NA	NA	6.64	4.60	2.04	NA
MW-1	01/03/1991	43,000	3,100	NA	10,000	3,400	1,900	11,000	NA	NA	NA	NA	NA	NA	6.64	4.88	1.76	NA
MW-1	04/10/1991	67,000	1,800	NA	20,000	9,600	3,500	16,000	NA	NA	NA	NA	NA	NA	6.64	3.55	3.09	NA
MW-1	07/12/1991	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.64	3.97	2.67	NA
MW-1	10/08/1991	55,000	7,400	NA	18,000	3,500	2,300	8,600	NA	NA	NA	NA	NA	NA	6.64	4.26	2.38	NA
MW-1	02/06/1992	48,000	15,000 a	NA	12,000	2,800	1,900	7,400	NA	NA	NA	NA	NA	NA	6.64	4.94	1.70	NA
MW-1	05/04/1992	71,000	10,000 a	NA	16,000	6,000	3,100	14,000	NA	NA	NA	NA	NA	NA	6.64	3.58	3.06	NA
MW-1	07/28/1992	68,000	18,000 a	NA	21,000	5,500	3,400	15,000	NA	NA	NA	NA	NA	NA	6.64	3.91	2.73	NA
MW-1 (D)	07/28/1992	70,000	19,000 a	NA	17,000	5,000	2,700	13,000	NA	NA	NA	NA	NA	NA	6.64	3.91	2.73	NA
MW-1	10/27/1992	53,000	1,300	NA	18,000	3,700	3,400	11,000	NA	NA	NA	NA	NA	NA	6.64	4.79	1.85	NA
MW-1 (D)	10/27/1992	48,000	2,500 a	NA	17,000	3,600	3,100	9,900	NA	NA	NA	NA	NA	NA	6.64	4.79	1.85	NA
MW-1	01/14/1993	84,000	2,200 a	NA	17,000	5,400	3,000	13,000	NA	NA	NA	NA	NA	NA	6.64	3.39	3.25	NA
MW-1	04/23/1993	100,000	2,300 a	NA	18,000	7,800	4,700	20,000	NA	NA	NA	NA	NA	NA	6.64	2.67	3.97	NA
MW-1	07/20/1993	41 a	3,100 a	NA	12,000	870	1,500	4,400	NA	NA	NA	NA	NA	NA	9.50	3.48	6.02	NA
MW-1	10/18/1993	33,000	8,100 a	NA	14,000	1,200	2,000	4,900	NA	NA	NA	NA	NA	NA	9.50	4.20	5.30	NA
MW-1 (D)	10/18/1993	44,000	3,700 a	NA	14,000	1,200	2,000	4,900	NA	NA	NA	NA	NA	NA	9.50	4.20	5.30	NA
MW-1	01/06/1994	71,000	9,000 a	NA	9,000	870	1,600	5,100	NA	NA	NA	NA	NA	NA	9.50	4.13	5.37	NA
MW-1	04/12/1994	42,000	5,900	NA	6,600	170	2,300	4,700	NA	NA	NA	NA	NA	NA	9.50	2.42	7.08	NA
MW-1 (D)	04/12/1994	40,000	4,700	NA	6,300	180	2,000	4,400	NA	NA	NA	NA	NA	NA	9.50	2.42	7.08	NA
MW-1	07/25/1994	13,000	7,000 a	NA	4,400	110	460	1,400	NA	NA	NA	NA	NA	NA	9.50	3.37	6.13	NA
MW-1	10/25/1994	19,000	3,900	NA	5,500	210	880	2,000	NA	NA	NA	NA	NA	NA	9.50	4.07	5.43	NA
MW-1	01/09/1995	37,000	8,600 a	NA	6,700	800	2,800	8,900	NA	NA	NA	NA	NA	NA	9.50	2.65	6.85	NA
MW-1	04/11/1995	26,000	5,500	NA	4,700	270	1,800	3,400	NA	NA	NA	NA	NA	NA	9.50	2.38	7.12	NA
MW-1	07/18/1995	57,000	7,000	NA	7,500	880	4,100	11,000	NA	NA	NA	NA	NA	NA	9.50	3.49	6.01	NA
MW-1 (D)	07/19/1995	46,000	6,600	NA	6,000	670	3,200	7,500	NA	NA	NA	NA	NA	NA	9.50	3.49	6.01	NA

WELL CONCENTRATIONS
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Well ID	Date	TPPH (ug/L)	TEPH as Diesel (ug/L)	TEPH as Motor Oil (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
MW-1	10/18/1995b	37,000	3,200	NA	5,400	450	2,600	7,400	10,000	NA	NA	NA	NA	NA	9.50	NA	NA	NA
MW-1	01/09/1996	32,000	NA	NA	3,000	240	1,900	3,500	6,100	NA	NA	NA	NA	NA	9.50	2.95	6.55	NA
MW-1	04/02/1996	30,000	NA	NA	3,100	260	2.0	3,900	8.0	NA	NA	NA	NA	NA	9.50	2.00	7.50	NA
MW-1	10/03/1996	18,000	2,800	NA	3,000	120	1,200	1,700	7,500	NA	NA	NA	NA	NA	9.50	3.21	6.29	2.2
MW-1	04/03/1997	29,000	3,000	NA	2,300	170	2,300	2,900	4,300	NA	NA	NA	NA	NA	9.50	2.84	6.66	2.2
MW-1	10/08/1997	22,000	3,600	NA	920	71	2,400	2,200	820	NA	NA	NA	NA	NA	9.50	2.58	6.92	1.5
MW-1	06/10/1998	13,000	2,900	NA	860	<100	1,300	500	29,000	32,000	NA	NA	NA	NA	9.50	2.67	6.83	0.5/0.5
MW-1 (D)	06/10/1998	9,400	2,100	NA	870	<50	1,300	520	28,000	NA	NA	NA	NA	NA	9.50	2.67	6.83	0.5/0.5
MW-1	12/30/1998	6,930	1,540	NA	714	52.7	243	<25.0	9,000	NA	NA	NA	NA	NA	9.50	4.68	4.82	1.6/1.4
MW-1 *	06/25/1999	12,600	NA	NA	1,110	44.7	1,340	710	6,080	NA	NA	NA	NA	NA	9.50	2.86	6.64	1.2/2.1
MW-1	12/28/1999	3,260	1,170	NA	527	14.0	50.7	40.3	5,430	7,060 b	NA	NA	NA	NA	9.50	3.23	6.27	1.4/1.8
MW-1	05/31/2000	6,820	2,050	NA	1,620	<50.0	116	<50.0	6,070	4,710	NA	NA	NA	NA	9.50	2.39	7.11	0.98/2.27
MW-1	10/17/2000	2,530	995 a	NA	388	<10.0	16.4	22.1	917	NA	NA	NA	NA	NA	9.50	2.05	7.45	4.0/3.1
MW-1	05/01/2001	12,300	1,510	NA	1,480	19.5	205	111	4,160	NA	NA	NA	NA	NA	9.50	3.55	5.95	1.6/1.3
MW-1	11/05/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.85 e	4.43	5.42	0.4
MW-1	11/07/2001	3,000	<1,000	NA	290	6.0	11	15	NA	870	NA	NA	NA	NA	9.85	4.00	5.85	2.1/1.4
MW-1	05/01/2002	11,000	<2,000	NA	2,100	29	180	68	NA	1,500	NA	NA	NA	NA	9.85	3.14	6.71	3.4/2.3
MW-1	07/16/2002	7,400	<1,500	NA	1,200	22	37	24	NA	1,900	NA	NA	NA	NA	9.85	3.69	6.16	0.9/0.8
MW-1	10/17/2002	4,600	<2,000	NA	810	16	68	31	NA	1,600	NA	NA	NA	NA	9.44	4.76	4.68	0.8/1.2
MW-1	01/21/2003	11,000	<7,000	NA	1,100	28	210	53	NA	1,100	NA	NA	NA	NA	9.44	3.50	5.94	0.3/0.7
MW-1	05/01/2003	13,000	4,900 a	NA	1,500	33	260	68	NA	1,700	NA	NA	NA	NA	9.44	3.04	6.40	NA
MW-1	07/17/2003	10,000	3,200 a,f	NA	2,400	<50	250	<100	NA	3,100	NA	NA	NA	NA	9.44	3.92	5.52	NA
MW-1	10/02/2003	Well inaccessible		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.44	NA	NA	NA
MW-1	10/16/2003	8,500	3,700 a	NA	1,100	26	140	41	NA	1,700	NA	NA	NA	NA	9.44	4.65	4.79	NA
MW-1	01/05/2004	11,000	4,300 a	NA	1,600	29	200	45	NA	1,400	NA	NA	NA	NA	9.44	2.39	7.05	NA
MW-1	04/01/2004	10,000	3,700 a	NA	1,500	28	330	59	NA	630	NA	NA	NA	NA	9.44	3.06	6.38	NA
MW-1	08/02/2004	9,100	4,600 a	<1,000	1,700	17	200	24	NA	1,700	<40	<40	<40	2,900	9.44	4.50	4.94	NA
MW-1	11/02/2004	9,100	3,100 g	<500	2,100	50	140	70	NA	680	NA	NA	NA	NA	9.44	3.08	6.36	NA
MW-1	01/10/2005	21,000	3,600 g	<500	2,700	31	1,000	880	NA	1,000	NA	NA	NA	NA	9.44	2.43	7.01	NA
MW-1	04/13/2005	8,800	2,500 a	740	1,500	20	180	130	NA	430	NA	NA	NA	NA	9.44	2.44	7.00	NA
MW-1	07/20/2005	11,000	5,900 g	530	880	23	150	99	NA	570	<40	<40	<40	2,100	9.44	4.65	4.79	NA
MW-1	10/24/2005	8,900	5,100 a	1,100 l	2,100	23	68	37	NA	780	NA	NA	NA	760	9.37	3.70	5.67	NA

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Well ID	Date	TPPH (ug/L)	TEPH as Diesel (ug/L)	TEPH as Motor Oil (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
MW-1	**01/04/2006**	**11,800**	**2,830 f**	**279 f**	**562**	**12.6**	**35.0**	**24.4**	**NA**	**99.2**	**NA**	**NA**	**NA**	**90.7**	**9.37**	**1.92**	**7.45**	**NA**
MW-2	02/16/1989	20,000	NA	NA	200	900	2,700	9,600	NA	NA	NA	NA	NA	NA	7.68	5.33	2.35	NA
MW-2	05/23/1989	1,500	1,600	NA	4.3	2.9	11	150	NA	NA	NA	NA	NA	NA	7.68	5.23	2.45	NA
MW-2	08/03/1989	15,000	7,400	NA	75	120	850	2,200	NA	NA	NA	NA	NA	NA	7.68	6.03	1.65	NA
MW-2	12/15/1989	5,000	2,600	NA	52	13	4.1	290	NA	NA	NA	NA	NA	NA	7.68	6.43	1.25	NA
MW-2	02/07/1990	13,000	4,800	NA	32	34	230	640	NA	NA	NA	NA	NA	NA	7.68	5.82	1.86	NA
MW-2	04/18/1990	9,800	3,200	NA	33	19	460	1,700	NA	NA	NA	NA	NA	NA	7.68	5.88	1.80	NA
MW-2	07/23/1990	9,600	2,700	NA	41	27	540	940	NA	NA	NA	NA	NA	NA	7.68	6.05	1.63	NA
MW-2	10/01/1990	390	1,600	NA	3.4	15	8.5	25	NA	NA	NA	NA	NA	NA	7.68	NA	NA	NA
MW-2	01/03/1991	1,800	830	NA	56	4.4	4.8	92	NA	NA	NA	NA	NA	NA	7.68	6.82	0.86	NA
MW-2	04/10/1991	1,900	280	NA	ND	28	140	490	NA	NA	NA	NA	NA	NA	7.68	4.80	2.88	NA
MW-2	07/12/1991	8,100	1,100	NA	89	66	350	930	NA	NA	NA	NA	NA	NA	7.68	5.70	1.98	NA
MW-2	10/08/1991	1,400	2,600	NA	5.1	1.5	36	270	NA	NA	NA	NA	NA	NA	7.68	6.40	1.28	NA
MW-2	02/06/1992	2,000	5,400 a	NA	7.8	2.5	130	210	NA	NA	NA	NA	NA	NA	7.68	6.40	1.28	NA
MW-2	05/04/1992	21	1,000	NA	ND	ND	300	960	NA	NA	NA	NA	NA	NA	7.68	4.68	3.00	NA
MW-2	07/28/1992	2,100	830 a	NA	7.7	3.3	130	310	NA	NA	NA	NA	NA	NA	7.68	5.86	1.82	NA
MW-2	10/27/1992	1,100	530	NA	16	3.1	4.5	25	NA	NA	NA	NA	NA	NA	7.68	6.96	0.72	NA
MW-2	01/14/1993	290	170 a	NA	5.2	3.1	8.4	21	NA	NA	NA	NA	NA	NA	7.68	4.12	3.56	NA
MW-2	04/23/1993	2,400	1,200 a	NA	ND	ND	210	610	NA	NA	NA	NA	NA	NA	7.68	3.84	3.84	NA
MW-2	07/20/1993	440	130	NA	1.7	1.7	15	38	NA	NA	NA	NA	NA	NA	10.55	5.17	5.38	NA
MW-2	10/18/1993	2,100	1,600 a	NA	ND	ND	90	110	NA	NA	NA	NA	NA	NA	10.55	6.20	4.35	NA
MW-2	01/06/1994	1.9 a	130	NA	ND	6.7	7.1	12	NA	NA	NA	NA	NA	NA	10.55	5.39	5.16	NA
MW-2	04/12/1994	120	130	NA	ND	ND	3.4	4.3	NA	NA	NA	NA	NA	NA	10.55	4.72	5.83	NA
MW-2	07/25/1994	0.18 a	280 a	NA	5.3	ND	6.2	8.2	NA	NA	NA	NA	NA	NA	10.55	5.44	5.11	NA
MW-2	10/25/1994	170	400	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.55	6.73	3.82	NA
MW-2	01/09/1995	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.55	4.34	6.21	NA
MW-2	04/11/1995	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.55	3.72	6.83	NA
MW-2	07/18/1995	250	160	NA	2.8	0.5	12	13	NA	NA	NA	NA	NA	NA	10.55	4.91	5.64	NA
MW-2	10/18/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.55	5.88	4.67	NA
MW-2	01/09/1996	790	130	NA	5.1	1.5	2.4	4.6	1,400	NA	NA	NA	NA	NA	10.55	4.75	5.80	NA
MW-2	04/02/1996	260	NA	NA	<2	<2	13	6.9	540	NA	NA	NA	NA	NA	10.55	3.25	7.30	NA

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MW-2	10/03/1996	<2,000	620	NA	<20	<20	<20	<20	13,000	NA	NA	NA	NA	NA	10.55	5.27	5.28	2.3
MW-2	04/03/1997	<1,000	190	NA	<10	<10	<10	<10	2,800	NA	NA	NA	NA	NA	10.55	3.99	6.56	2.2
MW-2	10/08/1997	<5,000	1,100	NA	<50	<50	<50	<50	d	NA	NA	NA	NA	NA	10.55	5.03	5.52	1.6
MW-2	06/10/1998	120	310	NA	1.7	<1.0	<1.0	<1.0	3,800	NA	NA	NA	NA	NA	10.55	4.11	6.44	0.7/0.6
MW-2	12/30/1998	<5,000	1,050	NA	<50.0	<50.0	<50.0	<50.0	12,100	15,300	NA	NA	NA	NA	10.55	4.76	5.79	1.3/1.2
MW-2 *	06/25/1999	<1,000	NA	NA	<10.0	<10.0	<10.0	<10.0	7,570	NA	NA	NA	NA	NA	10.55	4.63	5.92	2.3/2.5
MW-2	12/28/1999	228	446	NA	4.54	<0.500	<0.500	<0.500	4,260	NA	NA	NA	NA	NA	10.55	4.95	5.60	2.1/2.4
MW-2	05/31/2000	597	187	NA	19.3	<0.500	0.860	<0.500	2,480	NA	NA	NA	NA	NA	10.55	4.06	6.49	1.8/2.7
MW-2	10/17/2000	Well inaccessible		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.55	NA	NA	NA
MW-2	05/01/2001	Well inaccessible		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.55	NA	NA	NA
MW-2	11/05/2001	<500	610	NA	<5.0	<5.0	<5.0	<5.0	NA	1,800	NA	NA	NA	NA	10.55	6.12	4.43	0.6/1.1
MW-2	05/01/2002	440	<50	NA	<2.5	<2.5	<2.5	<2.5	NA	1,300	NA	NA	NA	NA	10.55	3.85	6.70	6.2/0.9
MW-2	07/16/2002	<500	250	NA	<5.0	<5.0	<5.0	<5.0	NA	2,100	NA	NA	NA	NA	10.55	4.56	5.99	0.9/1.3
MW-2	10/17/2002	280	240	NA	<1.0	<1.0	<1.0	<1.0	NA	270	NA	NA	NA	NA	10.10	5.90	4.20	0.6/2.2
MW-2	01/21/2003	160	72	NA	<0.50	<0.50	<0.50	<0.50	NA	380	NA	NA	NA	NA	10.10	4.11	5.99	0.5/1.0
MW-2	05/01/2003	350	<50	NA	<0.50	<0.50	<0.50	<1.0	NA	110	NA	NA	NA	NA	10.10	4.18	5.92	NA
MW-2	07/17/2003	120	61 a,f	NA	<0.50	<0.50	<0.50	<1.0	NA	14	NA	NA	NA	NA	10.10	4.72	5.38	NA
MW-2	10/02/2003	190	200 a	NA	1.6	<0.50	<0.50	<1.0	NA	17	NA	NA	NA	NA	10.10	5.76	4.34	NA
MW-2	01/05/2004	77	<50	NA	<0.50	0.86	<0.50	<1.0	NA	1.3	NA	NA	NA	NA	10.10	3.28	6.82	NA
MW-2	04/01/2004	450 a	<50	NA	<0.50	<0.50	<0.50	<1.0	NA	1.6	NA	NA	NA	NA	10.10	3.71	6.39	NA
MW-2	08/02/2004	110	130 a	<500	<0.50	<0.50	<0.50	<1.0	NA	3.9	<2.0	<2.0	<2.0	150	10.10	5.50	4.60	NA
MW-2	11/02/2004	130	55 a	<500	<0.50	<0.50	<0.50	<1.0	NA	1.7	NA	NA	NA	NA	10.10	4.37	5.73	NA
MW-2	01/10/2005	81	<50	<500	<0.50	<0.50	<0.50	<1.0	NA	0.65	NA	NA	NA	NA	10.10	3.70	6.40	NA
MW-2	04/13/2005	500	<50 j,k	<500 j,k	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	10.10	3.13	6.97	NA
MW-2	07/20/2005	810	330 a	<500	11	<5.0	<5.0	<10	NA	11	<20	<20	<20	1,800	10.10	5.75	4.35	NA
MW-2	10/24/2005	320	100 a	<500	<0.50	<0.50	<0.50	<1.0	NA	4.7	NA	NA	NA	570	10.07	5.30	4.77	NA
MW-2	**01/04/2006**	**<50.0**	**<100 f**	**<100 f**	**<0.500**	**<0.500**	**<0.500**	**<0.500**	**NA**	**<0.500**	**NA**	**NA**	**NA**	**<10.0**	**10.07**	**2.35**	**7.72**	**NA**
MW-3	02/16/1989	60,000	NA	NA	5,500	ND	3,200	5,200	NA	NA	NA	NA	NA	NA	7.81	5.17	2.64	NA
MW-3	05/23/1989	ND	1,500	NA	ND	200	ND	ND	NA	NA	NA	NA	NA	NA	7.81	5.09	2.72	NA
MW-3	08/03/1989	2,000	1,200	NA	120	ND	ND	86	NA	NA	NA	NA	NA	NA	7.81	5.34	2.47	NA
MW-3	12/15/1989	5,200	1,700	NA	380	12	17	410	NA	NA	NA	NA	NA	NA	7.81	6.02	1.79	NA

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MW-3	02/07/1990	260	230	NA	17	47	5.4	2.5	NA	NA	NA	NA	NA	NA	7.81	4.95	2.86	NA
MW-3	04/18/1990	260	ND	NA	ND	ND	ND	9.4	NA	NA	NA	NA	NA	NA	7.81	5.55	2.26	NA
MW-3	07/23/1990	510	210	NA	46	ND	ND	9.3	NA	NA	NA	NA	NA	NA	7.81	5.81	2.00	NA
MW-3	09/27/1990	460	350	NA	6.3	1.2	ND	15	NA	NA	NA	NA	NA	NA	7.81	6.86	0.95	NA
MW-3	01/03/1991	4,800	630	NA	920	1.7	ND	190	NA	NA	NA	NA	NA	NA	7.81	6.84	0.97	NA
MW-3	04/10/1991	120	60	NA	1.2	8.8	3.5	21	NA	NA	NA	NA	NA	NA	7.81	4.93	2.88	NA
MW-3	07/12/1991	430	ND	NA	12	0.8	ND	7.7	NA	NA	NA	NA	NA	NA	7.81	5.56	2.25	NA
MW-3	10/08/1991	770	560	NA	140	ND	ND	53	NA	NA	NA	NA	NA	NA	7.81	6.62	1.19	NA
MW-3	02/06/1992	500	340 a	NA	74	0.7	5.2	5.3	NA	NA	NA	NA	NA	NA	7.81	6.28	1.53	NA
MW-3	05/04/1992	310	290 a	NA	47	0.9	17	16	NA	NA	NA	NA	NA	NA	7.81	4.65	3.16	NA
MW-3	07/28/1992	780	100 a	NA	130	ND	13	4.2	NA	NA	NA	NA	NA	NA	7.81	5.56	2.25	NA
MW-3	10/27/1992	740	69 a	NA	92	ND	7.8	9.6	NA	NA	NA	NA	NA	NA	7.81	6.65	1.16	NA
MW-3	01/14/1993	ND	ND	NA	2.4	2.8	ND	ND	NA	NA	NA	NA	NA	NA	7.81	3.88	3.93	NA
MW-3	04/23/1993b	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.81	NA	NA	NA
MW-3	07/20/1993b	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11.25 (TOB)	NA	NA	NA
MW-3	10/18/1993b	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11.25 (TOB)	NA	NA	NA
MW-3	01/06/1994	130	64	NA	1.7	ND	ND	0.93	NA	NA	NA	NA	NA	NA	11.25 (TOB)	5.54	NA	NA
MW-3	04/12/1994	ND	75	NA	0.82	ND	ND	0.7	NA	NA	NA	NA	NA	NA	11.25 (TOB)	4.82	NA	NA
MW-3	07/25/1994	0.06 a	ND	NA	2.8	ND	ND	0.7	NA	NA	NA	NA	NA	NA	11.25 (TOB)	6.03 (TOB)	5.22	NA
MW-3	10/25/1994	70	100	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	11.25 (TOB)	6.48	NA	NA
MW-3	01/09/1995	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	11.25 (TOB)	4.86 (TOB)	6.39	NA
MW-3	04/11/1995	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	11.25 (TOB)	4.22 (TOB)	7.03	NA
MW-3	07/18/1995	ND	90	NA	2.8	ND	ND	ND	NA	NA	NA	NA	NA	NA	11.25 (TOB)	5.44 (TOB)	5.81	NA
MW-3	10/18/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11.25 (TOB)	5.72	NA	NA
MW-3	01/09/1996	90	90	NA	1.7	ND	<0.5	<0.5	61	NA	NA	NA	NA	NA	11.25 (TOB)	4.96	NA	NA
MW-3	04/02/1996	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	24	NA	NA	NA	NA	NA	11.25 (TOB)	3.43	NA	NA
MW-3	10/03/1996	<500	180	NA	<5	<5	<5	<5	1,200	NA	NA	NA	NA	NA	11.25 (TOB)	5.39	NA	2.4
MW-3	04/03/1997	150	83	NA	3.2	<0.50	<0.50	0.81	280	NA	NA	NA	NA	NA	11.25 (TOB)	4.20	NA	2.0
MW-3	10/08/1997	180	120	NA	7.3	0.68	0.54	3.9	1,700	NA	NA	NA	NA	NA	11.25 (TOB)	5.51(TOB)	5.74	2.1
MW-3	06/10/1998	130	120	NA	12	0.85	<0.50	2.1	600	NA	NA	NA	NA	NA	11.25 (TOB)	3.91(TOB)	7.34	0.8/0.9
MW-3	12/30/1998	<250	108	NA	<2.50	<2.50	<2.50	<2.50	1,010	NA	NA	NA	NA	NA	11.25 (TOB)	5.76 (TOB)	5.49	1.3/1.4
MW-3 *	06/25/1999	269	NA	NA	4.24	<2.50	<2.50	<2.50	1,180	NA	NA	NA	NA	NA	11.25 (TOB)	4.73	NA	1.4/1.9

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MW-3	12/28/1999	333	122	NA	41.4	6.48	6.57	21.3	2,680	NA	NA	NA	NA	NA	11.25 (TOB)	5.75 (TOB)	5.50	1.3/1.5
MW-3	05/31/2000	1,180	89.2	NA	19.1	1.92	3.26	<1.00	2,130	NA	NA	NA	NA	NA	11.25 (TOB)	4.96 (TOB)	6.29	1.2/2.2
MW-3	10/17/2000	156	183 a	NA	5.22	0.819	<0.500	1.53	2,250	NA	NA	NA	NA	NA	11.25 (TOB)	5.70 (TOB)	5.55	2.0/2.1
MW-3	05/01/2001	286	95.9	NA	<2.50	<2.50	<2.50	<2.50	1,470	NA	NA	NA	NA	NA	11.25 (TOB)	4.88 (TOB)	6.37	1.9/2.7
MW-3	05/29/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11.25 (TOB)	5.25 (TOB)	6.00	3.0/1.9
MW-3	11/05/2001	<500	<50	NA	<5.0	<5.0	<5.0	<5.0	NA	2,100	NA	NA	NA	NA	11.25 (TOB)	6.25 (TOB)	5.00	0.5/1.9
MW-3	05/01/2002	<100	80	NA	<1.0	<1.0	<1.0	<1.0	NA	430	NA	NA	NA	NA	11.25 (TOB)	4.77 (TOB)	6.48	4.1/0.7
MW-3	07/16/2002	410	340	NA	12	2.0	<2.0	3.5	NA	530	NA	NA	NA	NA	11.25 (TOB)	5.44 (TOB)	5.81	0.3/1.7
MW-3	10/17/2002	220	82	NA	2.5	<2.0	<2.0	2.3	NA	25	NA	NA	NA	NA	10.58	6.03	4.55	0.8/2.4
MW-3	01/21/2003	<50	150	NA	<0.50	<0.50	<0.50	<0.50	NA	28	NA	NA	NA	NA	10.58	4.30	6.28	1.2/1.0
MW-3	05/01/2003	60	<50	NA	<0.50	<0.50	<0.50	<1.0	NA	16	NA	NA	NA	NA	10.58	4.30	6.28	NA
MW-3	07/17/2003	120	<50	NA	1.2	<0.50	<0.50	<1.0	NA	11	NA	NA	NA	NA	10.58	5.36	5.22	NA
MW-3	10/02/2003	160	56 a	NA	3.1	1.1	<0.50	2.1	NA	8.2	NA	NA	NA	NA	10.58	6.00	4.58	NA
MW-3	01/05/2004	54	<50	NA	<0.50	<0.50	<0.50	<1.0	NA	15	NA	NA	NA	NA	10.58	4.44	6.14	NA
MW-3	04/01/2004	<50	<50	NA	<0.50	<0.50	<0.50	<1.0	NA	4.2	NA	NA	NA	NA	10.58	4.29	6.29	NA
MW-3	08/02/2004	300	<50	<500	<2.5	<2.5	<2.5	<5.0	NA	17	<10	<10	<10	1,900	10.58	5.80	4.78	NA
MW-3	11/02/2004	72	<50	<500	0.51	<0.50	<0.50	<1.0	NA	3.0	NA	NA	NA	NA	10.58	5.00	5.58	NA
MW-3	01/10/2005	<50	<50	<500	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	10.58	3.01	7.57	NA
MW-3	04/13/2005	<50	<50	<500	<0.50	<0.50	<0.50	<1.0	NA	0.69	NA	NA	NA	NA	10.58	2.89	7.69	NA
MW-3	07/20/2005	300	60 g	<500	1.3	0.61	<0.50	1.2	NA	4.7	<2.0	<2.0	<2.0	780	10.58	5.10	5.48	NA
MW-3	10/24/2005	210	57 a	<500	1.2	<1.0	<1.0	<2.0	NA	6.3	NA	NA	NA	1,300	10.58	5.68	4.90	NA
MW-3	**01/04/2006**	**<50.0**	**<100 f**	**<100 f**	**<0.500**	**<0.500**	**<0.500**	**<0.500**	**NA**	**<0.500**	**NA**	**NA**	**NA**	**<10.0**	**10.58**	**2.80**	**7.78**	**NA**
MW-4	05/23/1989	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.38	5.60	1.78	NA
MW-4	08/03/1989	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.38	6.37	1.01	NA
MW-4	12/15/1989	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.38	6.91	0.47	NA
MW-4	03/08/1990	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.38	6.06	1.32	NA
MW-4	04/18/1990	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.38	5.84	1.54	NA
MW-4	07/23/1990	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.38	6.92	0.46	NA
MW-4	09/27/1991	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.38	8.03	0.65	NA
MW-4	01/03/1991	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.38	7.54	-0.16	NA
MW-4	04/10/1991	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.38	5.06	2.32	NA

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MW-4	07/12/1991	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.38	6.86	0.52	NA
MW-4	10/08/1991	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.38	7.44	-0.06	NA
MW-4	02/06/1992	120	2,500 a	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.38	7.29	0.09	NA
MW-4	05/04/1992	ND	53	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.38	5.33	2.05	NA
MW-4	07/28/1992	ND	60	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.38	6.95	0.43	NA
MW-4	10/27/1992	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.38	7.65	-0.27	NA
MW-4	01/14/1993	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.38	4.84	2.54	NA
MW-4	04/23/1993	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.38	4.84	2.54	NA
MW-4	07/20/1993	ND	ND	NA	2.2	ND	1.1	7.7	NA	NA	NA	NA	NA	NA	10.28	6.47	3.81	NA
MW-4	10/18/1993	ND	ND	NA	ND	1.2	ND	ND	NA	NA	NA	NA	NA	NA	10.28	7.35	2.93	NA
MW-4	01/06/1994	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.28	7.64	2.64	NA
MW-4	04/12/1994	ND	76	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.28	6.39	3.89	NA
MW-4	07/25/1994	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.28	7.00	3.28	NA
MW-4	10/25/1994	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.28	7.53	2.75	NA
MW-4	01/09/1995	ND	70 a	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.28	4.90	5.38	NA
MW-4	04/11/1995	ND	140	NA	1.5	ND	0.6	3.4	NA	NA	NA	NA	NA	NA	10.28	5.04	5.24	NA
MW-4	07/18/1995	ND	160	NA	13	3.4	ND	ND	NA	NA	NA	NA	NA	NA	10.28	6.18	4.10	NA
MW-4	10/18/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.28	6.63	3.65	NA
MW-4	01/09/1996	<50	ND	NA	<0.5	ND	<0.5	<0.5	ND	NA	NA	NA	NA	NA	10.28	3.82	6.46	NA
MW-4	04/02/1996	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NA	NA	NA	10.28	3.97	6.31	NA
MW-4	10/03/1996	<50	81	NA	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NA	NA	NA	10.28	3.74	6.54	NA
MW-4	04/03/1997	<50	69	NA	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	NA	10.28	3.74	6.54	1.8
MW-4	10/08/1997	<50	75	NA	<0.50	<0.50	<0.50	<0.50	13	NA	NA	NA	NA	NA	10.28	4.89	5.39	2.0
MW-4 (D)	10/08/1997	<50	NA	NA	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	NA	10.28	4.89	5.39	2.0
MW-4	06/10/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.28	4.39	5.89	NA
MW-4	12/30/1998	<50.0	94.1	NA	<0.500	<0.500	<0.500	0.580	7.33	NA	NA	NA	NA	NA	10.28	5.58	4.70	1.7/1.6
MW-4	06/25/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.28	4.17	6.11	NA
MW-4	12/28/1999	<50.0	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<5.00	NA	NA	NA	NA	NA	10.28	4.54	5.74	1.4/1.5
MW-4	05/31/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.28	3.85	6.43	NA
MW-4	10/17/2000	<50.0	274 a	NA	<0.500	<0.500	<0.500	<0.500	9.40	NA	NA	NA	NA	NA	10.28	3.50	6.78	3.8/4.0
MW-4	05/01/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.28	4.10	6.18	NA
MW-4	11/05/2001	<50	<50	NA	<0.50	<0.50	<0.50	<0.50	NA	8.4	NA	NA	NA	NA	10.28	5.21	5.07	1.3/1.5

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MW-4	05/01/2002	<50	<50	NA	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	10.28	4.28	6.00	2.6/1.1
MW-4	07/16/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.28	3.87	6.41	NA
MW-4	10/17/2002	<50	<50	NA	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	9.83	4.66	5.17	1.4/2.4
MW-4	01/21/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.83	3.87	5.96	NA
MW-4	05/01/2003	<50	57 a	NA	<0.50	<0.50	<0.50	<1.0	NA	<5.0	NA	NA	NA	NA	9.83	4.49	5.34	NA
MW-4	07/17/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.83	5.46	4.37	NA
MW-4	10/02/2003	<50	<50	NA	<0.50	<0.50	<0.50	<1.0	NA	5.9	NA	NA	NA	NA	9.83	5.51	4.32	NA
MW-4	01/05/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.83	3.83	6.00	NA
MW-4	04/01/2004	<50	<50	NA	<0.50	<0.50	<0.50	<1.0	NA	3.0	NA	NA	NA	NA	9.83	4.43	5.40	NA
MW-4	08/02/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.83	5.05	4.78	NA
MW-4	11/02/2004	<50	<50	<500	<0.50	<0.50	<0.50	<1.0	NA	3.8	NA	NA	NA	NA	9.83	4.31	5.52	NA
MW-4	01/10/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.83	3.51	6.32	NA
MW-4	04/13/2005	<50	83 a,j,k	<500 j,k	<0.50	<0.50	<0.50	<1.0	NA	5.1	NA	NA	NA	NA	9.83	3.77	6.06	NA
MW-4	07/20/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.83	5.91	3.92	NA
MW-4	10/24/2005	<50	92 g	<500	<0.50	<0.50	<0.50	<1.0	NA	3.9	NA	NA	NA	NA	9.83	3.98	5.85	NA
MW-4	**01/04/2006**	**<50.0**	**<100 f**	**<100 f**	**<0.500**	**<0.500**	**<0.500**	**<0.500**	**NA**	**2.90**	**NA**	**NA**	**NA**	**<10.0**	**9.83**	**3.45**	**6.38**	**NA**
MW-5	05/23/1989	26,000	7,000	NA	1,500	280	ND	8,100	NA	NA	NA	NA	NA	NA	8.18	5.47	2.71	NA
MW-5	08/03/1989	12,000	8,700	NA	860	94	ND	2,600	NA	NA	NA	NA	NA	NA	8.18	5.94	2.24	NA
MW-5	12/15/1989	1,000	710	NA	22	35	18	44	NA	NA	NA	NA	NA	NA	8.18	6.75	1.43	NA
MW-5	02/07/1990	ND	620	NA	0.8	ND	ND	ND	NA	NA	NA	NA	NA	NA	8.18	6.03	2.15	NA
MW-5	04/18/1990	19,000	5,000	NA	4,500	850	97	8,000	NA	NA	NA	NA	NA	NA	8.18	5.80	2.38	NA
MW-5	07/23/1990	23,000	2,700	NA	3,600	400	160	6,500	NA	NA	NA	NA	NA	NA	8.18	6.00	2.18	NA
MW-5	09/23/1990	5,400	550	NA	1,400	26	13	1,300	NA	NA	NA	NA	NA	NA	8.18	7.18	1.00	NA
MW-5	01/03/1991	860	560	NA	280	2.8	0.8	45	NA	NA	NA	NA	NA	NA	8.18	7.17	1.01	NA
MW-5	04/10/1991	12,000	1,800	NA	710	130	500	2,400	NA	NA	NA	NA	NA	NA	8.18	5.25	2.93	NA
MW-5	07/12/1991	24,000	1,700	NA	2,200	280	430	5,700	NA	NA	NA	NA	NA	NA	8.18	5.70	2.48	NA
MW-5	10/08/1991	2,800	1,400	NA	860	13	ND	580	NA	NA	NA	NA	NA	NA	8.18	6.50	1.68	NA
MW-5	02/06/1992	1,000	1,200	NA	300	ND	14	62	NA	NA	NA	NA	NA	NA	8.18	6.35	1.83	NA
MW-5	05/04/1992	10,000	4,100 a	NA	1,500	350	710	2,300	NA	NA	NA	NA	NA	NA	8.18	4.87	3.31	NA
MW-5	07/28/1992	12,000	3,800 a	NA	2,200	63	1,400	3,500	NA	NA	NA	NA	NA	NA	8.18	5.73	2.45	NA
MW-5	10/27/1992	7,500	480 a	NA	1,100	59	230	900	NA	NA	NA	NA	NA	NA	8.18	6.98	1.20	NA

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MW-5	01/14/1993	7,700	1,100 a	NA	420	49	570	840	NA	NA	NA	NA	NA	NA	8.18	4.70	3.48	NA
MW-5	04/23/1993	110,000	1,600 a	NA	2,900	2,500	3,400	12,000	NA	NA	NA	NA	NA	NA	8.18	4.19	3.99	NA
MW-5	07/20/1993	18a	1,200 a	NA	1,400	84	1,500	3,200	NA	NA	NA	NA	NA	NA	10.87	5.10	5.77	NA
MW-5	10/18/1993	14,000	5,800 a	NA	2,000	100	2,300	5,100	NA	NA	NA	NA	NA	NA	10.87	5.79	5.08	NA
MW-5	01/06/1994	81,000	1,100 a	NA	11,000	9,300	3,600	12,000	NA	NA	NA	NA	NA	NA	10.87	5.56	5.31	NA
MW-5	04/12/1994	17,000	4,100	NA	2,900	380	430	1,300	NA	NA	NA	NA	NA	NA	10.87	4.90	5.97	NA
MW-5	07/25/1994	5,900	5,400 a	NA	1,500	42	34	170	NA	NA	NA	NA	NA	NA	10.87	5.38	5.49	NA
MW-5	10/25/1994	2,300	1,900 a	NA	35	3	ND	8	NA	NA	NA	NA	NA	NA	10.87	6.16	4.71	NA
MW-5	01/09/1995	8,300	3,700 a	NA	1,500	95	330	1,900	NA	NA	NA	NA	NA	NA	10.87	4.60	6.27	NA
MW-5	04/11/1995	7,300	9,800	NA	1,200	230	600	550	NA	NA	NA	NA	NA	NA	10.87	3.74	7.13	NA
MW-5	07/18/1995	17,000	5,100	NA	2,300	730	770	2,500	NA	NA	NA	NA	NA	NA	10.87	4.97	5.90	NA
MW-5	10/18/1995	Well abandoned		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.87	5.67	5.20	NA
MW-6	05/23/1989	22,000	7,000	NA	16	6.5	7	3,400	NA	NA	NA	NA	NA	NA	8.21	5.47	2.74	NA
MW-6	08/03/1989	28,000	8,800	NA	1,200	130	2,100	2,800	NA	NA	NA	NA	NA	NA	8.21	5.91	2.30	NA
MW-6	12/15/1989	16,000	5,500	NA	370	92	200	180	NA	NA	NA	NA	NA	NA	8.21	5.98	2.23	NA
MW-6	02/07/1990	22,000	2,600	NA	520	85	630	770	NA	NA	NA	NA	NA	NA	8.21	5.47	2.74	NA
MW-6	04/18/1990	21,000	5,700	NA	900	77	2,700	2,700	NA	NA	NA	NA	NA	NA	8.21	5.80	2.41	NA
MW-6	07/23/1990	24,000	3,000	NA	1,000	94	3,400	2,700	NA	NA	NA	NA	NA	NA	8.21	5.85	2.36	NA
MW-6	09/27/1990	22,000	ND	NA	700	93	2,500	2,400	NA	NA	NA	NA	NA	NA	8.21	6.42	1.79	NA
MW-6	01/03/1991	25,000	960	NA	1,000	88	2,600	3,700	NA	NA	NA	NA	NA	NA	8.21	6.73	1.48	NA
MW-6	04/10/1991	18,000	920	NA	560	190	480	830	NA	NA	NA	NA	NA	NA	8.21	5.24	2.97	NA
MW-6	07/12/1991	9,500	1,900	NA	670	51	1,100	920	NA	NA	NA	NA	NA	NA	8.21	5.78	2.43	NA
MW-6	10/08/1991	11,000	5,100	NA	1,000	43	ND	ND	NA	NA	NA	NA	NA	NA	8.21	6.36	1.85	NA
MW-6	02/06/1992	7,200	1,500 a	NA	560	8	720	160	NA	NA	NA	NA	NA	NA	8.21	6.15	2.06	NA
MW-6	05/04/1992	7,900	2,900 a	NA	610	ND	1,500	240	NA	NA	NA	NA	NA	NA	8.21	5.07	3.14	NA
MW-6	07/28/1992	17,000	3,200 a	NA	1,200	ND	3,000	610	NA	NA	NA	NA	NA	NA	8.21	5.85	2.36	NA
MW-6	10/27/1992	15,000	1,300 a	NA	1,300	130	1,700	490	NA	NA	NA	NA	NA	NA	8.21	6.69	1.52	NA
MW-6	01/14/1993	4,900	1,600 a	NA	80	31	330	37	NA	NA	NA	NA	NA	NA	8.21	4.52	3.69	NA
MW-6	04/23/1993	4,800	1,800 a	NA	120	ND	780	73	NA	NA	NA	NA	NA	NA	8.21	4.32	3.89	NA
MW-6	07/20/1993	19 a	910 a	NA	570	18	1,100	130	NA	NA	NA	NA	NA	NA	11.04	5.39	5.65	NA
MW-6	10/18/1993	24,000	2,500 a	NA	770	440	1,600	830	NA	NA	NA	NA	NA	NA	11.04	6.67	4.37	NA

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MW-6	01/06/1994	20 a	2,300 a	NA	450	30	530	52	NA	NA	NA	NA	NA	NA	11.04	5.66	5.38	NA
MW-6	04/12/1994	3,600	1,600	NA	150	ND	340	21	NA	NA	NA	NA	NA	NA	11.04	4.91	6.13	NA
MW-6	07/25/1994	1,600	2,200 a	NA	160	ND	ND	10	NA	NA	NA	NA	NA	NA	11.04	5.55	5.49	NA
MW-6 (D)	07/25/1994	1,000	2,400 a	NA	160	ND	ND	18	NA	NA	NA	NA	NA	NA	11.04	5.55	5.49	NA
MW-6	10/25/1994	9,800	3,000 a	NA	390	22	300	57	NA	NA	NA	NA	NA	NA	11.04	6.24	4.80	NA
MW-6	01/09/1995	2,200	800 a	NA	74	12	400	39	NA	NA	NA	NA	NA	NA	11.04	4.58	6.46	NA
MW-6	04/11/1995	5,000	7,700	NA	330	15	760	85	NA	NA	NA	NA	NA	NA	11.04	4.04	7.00	NA
MW-6	07/18/1995	4,200	1,700	NA	320	11	490	22	NA	NA	NA	NA	NA	NA	11.04	5.01	6.03	NA
MW-6	10/18/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11.04	5.86	5.18	NA
MW-6	01/09/1996	5,600	790	NA	59	<5	180	12	14,000	NA	NA	NA	NA	NA	11.04	4.75	6.29	NA
MW-6	04/02/1996	1,500	NA	NA	12	<5	170	9	1,900	NA	NA	NA	NA	NA	11.04	3.82	7.22	NA
MW-6	10/03/1996	2,600	1,800	NA	110	<25	<25	<25	11,000	NA	NA	NA	NA	NA	11.04	5.27	5.77	2.2
MW-6	04/03/1997	<2,500	650	NA	30	<25	32	<25	10,000	NA	NA	NA	NA	NA	11.04	4.42	6.62	2.0
MW-6	10/08/1997	1,900	1,100	NA	31	<5.0	6.1	<5.0	2,600	NA	NA	NA	NA	NA	11.04	4.70	6.34	1.0
MW-6	06/10/1998	<1,000	1,500	NA	17	12	14	88	14,000	NA	NA	NA	NA	NA	11.04	4.36	6.68	0.4/0.4
MW-6	12/30/1998	260	528	NA	<2.50	<2.50	<2.50	<2.50	909	NA	NA	NA	NA	NA	11.04	4.98	6.06	2.1/1.6
MW-6 *	06/25/1999	<2,500	NA	NA	<25.0	<25.0	<25.0	<25.0	8,850	7,630	NA	NA	NA	NA	11.04	4.81	6.23	1.4/3.6
MW-6	12/28/1999	526	416	NA	7.60	<1.00	<1.00	<1.00	1,510	NA	NA	NA	NA	NA	11.04	5.17	5.87	1.8/2.0
MW-6	05/31/2000	2,870	998	NA	45.7	4.70	8.61	<2.50	3,780	NA	NA	NA	NA	NA	11.04	4.58	6.46	0.92/2.30
MW-6	10/17/2000	2,370	944 a	NA	49.8	5.36	<5.00	<5.00	746	NA	NA	NA	NA	NA	11.04	4.80	6.24	2.5/2.1
MW-6	05/01/2001	3,000	706	NA	2.72	<2.50	4.46	<2.50	473	NA	NA	NA	NA	NA	11.04	4.75	6.29	2.2/1.6
MW-6	05/29/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11.04	4.86	6.18	2.0/1.3
MW-6	11/05/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11.04	5.73	5.31	0.6
MW-6	11/07/2001	1,700	180	NA	1.3	1.2	1.3	1.1	NA	430	NA	NA	NA	NA	11.04	5.75	5.29	2.4/1.8
MW-6	05/01/2002	1,400	<300	NA	2.0	0.61	4.3	0.68	NA	220	NA	NA	NA	NA	11.04	4.47	6.57	2.5/2.0
MW-6	07/16/2002	3,500	<600	NA	31	1.5	5.7	1.2	NA	220	NA	NA	NA	NA	11.04	5.05	5.99	0.6/0.6
MW-6	10/17/2002	3,000	<700	NA	27	1.7	2.9	1.8	NA	340	NA	NA	NA	NA	10.59	5.80	4.79	1.2/1.1
MW-6	01/21/2003	900	<200	NA	1.5	<0.50	1.4	<0.50	NA	73	NA	NA	NA	NA	10.59	4.39	6.20	0.8/0.6
MW-6	05/01/2003	700 a	160 a	NA	0.58	<0.50	0.82	<1.0	NA	71	NA	NA	NA	NA	10.59	4.19	6.40	NA
MW-6	07/17/2003	<1,200	220 a,f	NA	<12	<12	<12	<25	NA	840	NA	NA	NA	NA	10.59	5.22	5.37	NA
MW-6	10/02/2003	<1,000	300 a	NA	<10	<10	<10	<20	NA	1,500	NA	NA	NA	NA	10.59	5.86	4.73	NA
MW-6	01/05/2004	520	140 a	NA	<0.50	0.72	<0.50	<1.0	NA	30	NA	NA	NA	NA	10.59	3.79	6.80	NA

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Well ID	Date	TPPH (ug/L)	TEPH as Diesel (ug/L)	TEPH as Motor Oil (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
MW-6	04/01/2004	650	220 a	NA	<0.50	<0.50	0.54	<1.0	NA	130	NA	NA	NA	NA	10.59	4.28	6.31	NA
MW-6	08/02/2004	1,600	500 a	<500	<2.5	<2.5	<2.5	<5.0	NA	480	<10	<10	<10	900	10.59	5.78	4.81	NA
MW-6	11/02/2004	580	150 g	<500	<0.50	<0.50	<0.50	<1.0	NA	55	NA	NA	NA	NA	10.59	4.73	5.86	NA
MW-6	01/10/2005	620	230 g	<500	<0.50	<0.50	0.50	<1.0	NA	17	NA	NA	NA	NA	10.59	3.70	6.89	NA
MW-6	04/13/2005	2,000	570 a,j,k	520 j,k	0.98	1.7	1.2	1.2	NA	190	NA	NA	NA	NA	10.59	3.75	6.84	NA
MW-6	07/20/2005	2,800	1,200 a	<500	<2.0	2.1	<2.0	<4.0	NA	320	<8.0	<8.0	<8.0	1,800	10.59	5.95	4.64	NA
MW-6	10/24/2005	2,000	1,300 a	<500	<2.0	<2.0	<2.0	<4.0	NA	200	NA	NA	NA	560	9.14	5.21	3.93	NA
MW-6	**01/04/2006**	**1,140**	**216 f**	**<100 f**	**<0.500**	**<0.500**	**<0.500**	**<0.500**	**NA**	**11.3**	**NA**	**NA**	**NA**	**50.4**	**9.14**	**3.36**	**5.78**	**NA**
MW-7	05/23/1989	47,000	11,000	NA	3,500	5,000	1,500	7,800	NA	NA	NA	NA	NA	NA	7.44	5.48	1.96	NA
MW-7	08/03/1989	68,000	22,000	NA	6,200	6,600	3,600	8,800	NA	NA	NA	NA	NA	NA	7.44	4.22	3.22	NA
MW-7	12/15/1989	100,000	12,000	NA	4,500	5,300	1,300	5,300	NA	NA	NA	NA	NA	NA	7.44	4.58	2.86	NA
MW-7	02/07/1990	96,000	8,100	NA	15,000	15,000	2,500	14,000	NA	NA	NA	NA	NA	NA	7.44	5.34	2.10	NA
MW-7	04/18/1990	94,000	10,000	NA	25,000	13,000	3,300	13,000	NA	NA	NA	NA	NA	NA	7.44	4.92	2.52	NA
MW-7	07/23/1990	84,000	12,000	NA	3,800	26,000	13,000	3,000	NA	NA	NA	NA	NA	NA	7.44	4.99	2.45	NA
MW-7	09/27/1990	43,000	ND	NA	25,000	6,100	2,400	9,000	NA	NA	NA	NA	NA	NA	7.44	6.16	1.28	NA
MW-7	01/03/1991	78,000	3,100	NA	26,000	16,000	3,000	14,000	NA	NA	NA	NA	NA	NA	7.44	4.96	2.48	NA
MW-7	04/10/1991	140,000	1,800	NA	26,000	16,000	2,200	14,000	NA	NA	NA	NA	NA	NA	7.44	4.13	3.31	NA
MW-7	07/12/1991	79,000	1,100	NA	7,700	7,200	2,300	10,000	NA	NA	NA	NA	NA	NA	7.44	4.98	2.46	NA
MW-7	10/08/1991	55,000	390 a	NA	29,000	7,500	1,800	9,300	NA	NA	NA	NA	NA	NA	7.44	5.48	1.96	NA
MW-7	02/06/1992	63,000	9,600 a	NA	16,000	8,700	1,600	7,400	NA	NA	NA	NA	NA	NA	7.44	5.05	2.39	NA
MW-7	05/04/1992	67,000	9,800 a	NA	22,000	13,000	1,800	9,400	NA	NA	NA	NA	NA	NA	7.44	4.43	3.01	NA
MW-7	07/28/1992	85,000	13,000 a	NA	26,000	17,000	2,900	15,000	NA	NA	NA	NA	NA	NA	7.44	4.88	2.56	NA
MW-7	10/27/1992	63,000	1,900 a	NA	21,000	11,000	3,000	11,000	NA	NA	NA	NA	NA	NA	7.44	5.39	2.05	NA
MW-7	01/14/1993	120,000	2,300 a	NA	28,000	21,000	1,600	15,000	NA	NA	NA	NA	NA	NA	7.44	4.26	3.18	NA
MW-7	04/23/1993	60,000	12,000 a	NA	17,000	3,700	2,200	11,000	NA	NA	NA	NA	NA	NA	7.44	4.04	3.40	NA
MW-7 (D)	04/23/1993	50,000	14,000 a	NA	17,000	4,200	2,200	11,000	NA	NA	NA	NA	NA	NA	7.44	4.04	3.40	NA
MW-7	07/20/1993	47,000	13,000	NA	23,000	9,900	2,200	12,000	NA	NA	NA	NA	NA	NA	10.28	4.36	5.92	NA
MW-7	10/18/1993	44,000	10,000 a	NA	22,000	3,800	2,600	10,000	NA	NA	NA	NA	NA	NA	10.28	5.14	5.14	NA
MW-7	01/06/1994	65,000	5.200 a	NA	16,000	4,900	1,900	8,500	NA	NA	NA	NA	NA	NA	10.28	4.83	5.45	NA
MW-7	04/12/1994	68,000	3,400	NA	12,000	2,000	580	6,400	NA	NA	NA	NA	NA	NA	10.28	4.24	6.04	NA
MW-7	07/25/1994	63,000	4,200 a	NA	16,000	5,800	300	8,300	NA	NA	NA	NA	NA	NA	10.28	4.58	5.70	NA

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MW-7	10/25/1994	46,000	3,800 a	NA	16,000	3,700	1,200	7,300	NA	NA	NA	NA	NA	NA	10.28	5.07	5.21	NA
MW-7	01/09/1995	62,000	3,300 a	NA	24,000	8,500	1,100	9,400	NA	NA	NA	NA	NA	NA	10.28	3.38	6.90	NA
MW-7 (D)	01/11/1995	57,000	3,200 a	NA	9,500	7,900	620	8,000	NA	NA	NA	NA	NA	NA	10.28	3.38	6.90	NA
MW-7	04/11/1995	53,000	7,000	NA	13,000	4,200	1,500	7,700	NA	NA	NA	NA	NA	NA	10.28	3.52	6.76	NA
MW-7 (D)	04/12/1995	55,000	7,600	NA	11,000	3,700	1,300	6,400	NA	NA	NA	NA	NA	NA	10.28	3.52	6.76	NA
MW-7	07/18/1995	95,000	2,700	NA	24,000	8,000	2,100	12,000	NA	NA	NA	NA	NA	NA	10.28	4.70	5.58	NA
MW-7	10/18/1995	Well abandoned		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.28	5.25	5.03	NA
MW-8	05/23/1989	ND	100	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.79	6.62	1.17	NA
MW-8	08/03/1989	ND	75	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.79	6.62	1.17	NA
MW-8	12/15/1989	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.79	6.71	1.08	NA
MW-8	03/08/1990	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.79	4.95	2.84	NA
MW-8	04/18/1990	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.79	6.40	1.89	NA
MW-8	07/23/1990	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.79	6.62	1.17	NA
MW-8	09/27/1990	ND	1,100	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.79	6.98	0.81	NA
MW-8	01/03/1991	ND	ND	NA	1.3	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.79	7.03	0.76	NA
MW-8	04/10/1991	50	ND	NA	0.7	1.1	0.8	1	NA	NA	NA	NA	NA	NA	7.79	4.40	3.39	NA
MW-8	07/12/1991	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.79	6.80	0.99	NA
MW-8	10/08/1991	ND	ND	NA	1.4	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.79	7.56	0.23	NA
MW-8	02/06/1992	ND	60 a	NA	ND	0.7	ND	ND	NA	NA	NA	NA	NA	NA	7.79	6.94	0.85	NA
MW-8	05/04/1992	ND	210 a	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.79	5.86	1.93	NA
MW-8	07/28/1992	51	ND	NA	ND	ND	1	0.6	NA	NA	NA	NA	NA	NA	7.79	6.94	0.85	NA
MW-8	10/27/1992	ND	ND	NA	ND	6.6	ND	ND	NA	NA	NA	NA	NA	NA	7.79	7.83	-0.04	NA
MW-8	01/14/1993	ND	64 a	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.79	3.60	4.19	NA
MW-8 (D)	01/14/1993	ND	NA	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.79	3.60	4.19	NA
MW-8	04/23/1993	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.79	4.12	3.67	NA
MW-8	07/20/1993	ND	ND	NA	0.7	0.7	0.8	4.1	NA	NA	NA	NA	NA	NA	10.61	6.38	4.23	NA
MW-8	10/18/1993	ND	ND	NA	ND	800	ND	ND	NA	NA	NA	NA	NA	NA	10.61	7.47	3.14	NA
MW-8	01/06/1994	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.61	7.20	3.41	NA
MW-8	04/12/1994	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.61	6.16	4.45	NA
MW-8	07/25/1994	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.61	6.94	3.67	NA
MW-8	10/25/1994	ND	ND	NA	ND	1	ND	ND	NA	NA	NA	NA	NA	NA	10.61	7.43	3.18	NA

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MW-8	01/09/1995	ND	70 a	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.61	3.98	6.63	NA
MW-8	04/11/1995	ND	78	NA	0.63	1.3	ND	0.75	NA	NA	NA	NA	NA	NA	10.61	4.12	6.49	NA
MW-8	07/18/1995	ND	130	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.61	5.21	5.40	NA
MW-8	10/18/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.61	5.58	5.03	NA
MW-8	01/09/1996	<50	ND	NA	<0.5	<0.5	<0.5	<0.5	ND	NA	NA	NA	NA	NA	10.61	5.09	5.52	NA
MW-8	04/02/1996	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NA	NA	NA	10.61	3.42	7.19	NA
MW-8	10/03/1996	<50	<69	NA	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NA	NA	NA	10.61	4.30	6.31	NA
MW-8	04/03/1997	<50	62	NA	<0.50	<0.50	<0.50	0.91	<2.5	NA	NA	NA	NA	NA	10.61	4.58	6.03	2.6
MW-8	10/08/1997	<50	57	NA	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	NA	10.61	3.00	7.61	3.6
MW-8	06/10/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.61	2.88	7.73	NA
MW-8	12/30/1998	<50.0	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.00	NA	NA	NA	NA	NA	10.61	5.38	5.23	0.8/0.9
MW-8	06/25/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.61	4.53	6.08	NA
MW-8	12/28/1999	<50.0	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<5.00	NA	NA	NA	NA	NA	10.61	4.93	5.68	1.0/0.9
MW-8	05/31/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.61	4.02	6.59	NA
MW-8	10/17/2000	<50.0	143 a	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	10.61	3.10	7.51	4.0/4.1
MW-8	05/01/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.61	4.12	6.49	NA
MW-8	11/05/2001	<50	<50	NA	<0.50	0.99	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	10.61	5.00	5.61	0.6/1.3
MW-8	05/01/2002	<50	<50	NA	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	10.61	3.25	7.36	0.6/3.6
MW-8	07/16/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.61	3.64	6.97	NA
MW-8	10/17/2002	<50	<50	NA	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	10.18	4.53	5.65	3.3/2.2
MW-8	01/21/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.18	3.98	6.20	NA
MW-8	05/01/2003	<50	<50	NA	<0.50	<0.50	<0.50	<1.0	NA	<5.0	NA	NA	NA	NA	10.18	4.00	6.18	NA
MW-8	07/17/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.18	4.37	5.81	NA
MW-8	10/02/2003	<50	<50	NA	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	10.18	4.56	5.62	NA
MW-8	01/05/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.18	2.90	7.28	NA
MW-8	04/01/2004	<50	<50	NA	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	10.18	3.83	6.35	NA
MW-8	08/02/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.18	5.35	4.83	NA
MW-8	11/02/2004	<50	<50	<500	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	10.18	4.28	5.90	NA
MW-8	01/10/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.18	2.44	7.74	NA
MW-8	04/13/2005	<50 i	120 h	<500	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	10.18	2.75	7.43	NA
MW-8	07/20/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.18	4.95	5.23	NA
MW-8	10/24/2005	<50	<50	<500	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	10.18	3.94	6.24	NA

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MW-8	**01/04/2006**	**<50.0**	**224 f**	**206 f**	**<0.500**	**<0.500**	**<0.500**	**<0.500**	**NA**	**<0.500**	**NA**	**NA**	**NA**	**<10.0**	**10.18**	**1.87**	**8.31**	**NA**
MW-9	08/03/1989	47,000	12,000	NA	5,600	6,600	1,500	8,500	NA	NA	NA	NA	NA	NA	7.63	5.78	1.85	NA
MW-9	12/15/1989	88,000	9,200	NA	4,300	5,400	140	5,600	NA	NA	NA	NA	NA	NA	7.63	5.24	2.39	NA
MW-9	02/07/1990	50,000	7,400	NA	1,800	1,400	3,200	1,800	NA	NA	NA	NA	NA	NA	7.63	5.23	2.40	NA
MW-9	04/18/1990	50,000	7,500	NA	14,000	11,000	730	10,000	NA	NA	NA	NA	NA	NA	7.63	5.34	2.29	NA
MW-9	07/23/1990	62,000	3,200	NA	19,000	16,000	950	15,000	NA	NA	NA	NA	NA	NA	7.63	5.65	1.98	NA
MW-9	09/27/1990	30,000	2,700	NA	16,000	6,500	980	11,000	NA	NA	NA	NA	NA	NA	7.63	5.96	1.67	NA
MW-9	01/03/1991	34,000	2,500	NA	9,200	3,200	770	7,000	NA	NA	NA	NA	NA	NA	7.63	6.23	1.40	NA
MW-9	04/10/1991	66,000	2,200	NA	17,000	13,000	1,400	14,000	NA	NA	NA	NA	NA	NA	7.63	4.65	2.98	NA
MW-9	07/12/1991	40,000	2,000	NA	7,700	3,200	1,100	9,400	NA	NA	NA	NA	NA	NA	7.63	5.65	1.98	NA
MW-9	10/08/1991	20,000	4,700 a	NA	11,000	640	240	6,000	NA	NA	NA	NA	NA	NA	7.63	6.08	1.55	NA
MW-9	02/06/1992	36,000	6,600 a	NA	11,000	490	1,100	6,700	NA	NA	NA	NA	NA	NA	7.63	5.92	1.71	NA
MW-9	05/04/1992	31,000	5,800 a	NA	11,000	1,700	1,200	8,700	NA	NA	NA	NA	NA	NA	7.63	4.80	2.83	NA
MW-9	07/28/1992	50,000	14,000	NA	17,000	1,200	1,500	12,000	NA	NA	NA	NA	NA	NA	7.63	5.61	2.02	NA
MW-9	10/27/1992	43,000	880 a	NA	15,000	680	1,700	8,100	NA	NA	NA	NA	NA	NA	7.63	6.24	1.39	NA
MW-9	01/14/1993	52,000	730 a	NA	9,600	1,100	1,100	7,000	NA	NA	NA	NA	NA	NA	7.63	4.95	2.68	NA
MW-9	04/23/1993	45,000	8,000 a	NA	11,000	1,400	1,500	10,000	NA	NA	NA	NA	NA	NA	7.63	4.54	3.09	NA
MW-9	07/20/1993	25,000	5,100	NA	10,000	320	1,100	7,100	NA	NA	NA	NA	NA	NA	10.48	5.25	5.23	NA
MW-9	10/18/1993	32,000	4,900 a	NA	14,000	530	2,000	10,000	NA	NA	NA	NA	NA	NA	10.48	6.00	4.48	NA
MW-9	01/06/1994	41,000	7,700 a	NA	15,000	810	1,400	9,000	NA	NA	NA	NA	NA	NA	10.48	5.62	4.86	NA
MW-9 (D)	01/06/1994	43,000	8,300 a	NA	15,000	920	1,300	8,000	NA	NA	NA	NA	NA	NA	10.48	5.62	4.86	NA
MW-9	04/12/1994	39,000	2,000	NA	8,300	ND	ND	4,000	NA	NA	NA	NA	NA	NA	10.48	4.31	6.17	NA
MW-9	07/25/1994	22,000	3,600 a	NA	7,500	150	ND	4,100	NA	NA	NA	NA	NA	NA	10.48	5.43	5.05	NA
MW-9	10/25/1994	31,000	3,200 a	NA	13,000	240	1,000	8,500	NA	NA	NA	NA	NA	NA	10.48	6.00	4.48	NA
MW-9 (D)	10/26/1994	31,000	3,500 a	NA	13,000	220	1,100	8,300	NA	NA	NA	NA	NA	NA	10.48	6.00	4.48	NA
MW-9	01/09/1995	4,800	2,300 a	NA	1,200	510	42	1,400	NA	NA	NA	NA	NA	NA	10.48	4.26	6.22	NA
MW-9	04/11/1995	20,000	3,400	NA	5,100	460	400	3,400	NA	NA	NA	NA	NA	NA	10.48	4.08	6.40	NA
MW-9	07/18/1995	43,000	2,900	NA	12,000	1,800	960	9,100	NA	NA	NA	NA	NA	NA	10.48	5.07	5.41	NA
MW-9	10/18/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.48	5.82	4.66	NA
MW-9	01/09/1996	64,000	2,800	NA	12,000	5,400	1,800	10,000	2100	NA	NA	NA	NA	NA	10.48	4.36	6.12	NA
MW-9	04/02/1996	39,000	NA	NA	10,000	100	520	4,100	<500	NA	NA	NA	NA	NA	10.48	3.86	6.62	NA

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Well ID	Date	TPPH (ug/L)	TEPH as Diesel (ug/L)	TEPH as Motor Oil (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
MW-9	10/03/1996	46,000	3,100	NA	12,000	180	1,400	6,700	2,300	NA	NA	NA	NA	NA	10.48	4.90	5.58	1.4
MW-9	04/03/1997	36,000	2,300	NA	9,700	140	580	3,900	<500	NA	NA	NA	NA	NA	10.48	3.98	6.50	1.8
MW-9	10/08/1997	34,000	3,500	NA	6,900	<100	830	4,500	<125	NA	NA	NA	NA	NA	10.48	4.17	6.31	0.8
MW-9	06/10/1998	20,000	2,500	NA	9,900	250	3,100	170	460	NA	NA	NA	NA	NA	10.48	3.84	6.64	0.3/0.4
MW-9	12/30/1998	30,100	1,900	NA	8,500	166	603	3,340	<100	NA	NA	NA	NA	NA	10.48	4.72	5.76	1.1/1.2
MW-9 *	06/25/1999	26,300	NA	NA	8,090	73.5	409	2,730	<100	NA	NA	NA	NA	NA	10.48	4.47	6.01	1.2/2.4
MW-9	12/28/1999	4,130	839	NA	1,260	57.9	103	213	1,470	NA	NA	NA	NA	NA	10.48	4.82	5.66	1.0/1.1
MW-9	05/31/2000	8,210	1,300	NA	9,290	62.3	141	908	565	NA	NA	NA	NA	NA	10.48	3.87	6.61	2.8/c
MW-9	10/17/2000	19,000	1,510 a	NA	5,420	54.5	479	2,680	<250	NA	NA	NA	NA	NA	10.48	3.87	6.61	3.0/3.5
MW-9	05/01/2001	24,300	976	NA	11,200	52.9	159	1,610	<250	NA	NA	NA	NA	NA	10.48	4.44	6.04	1.6/1.0
MW-9	05/29/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.48	3.99	6.49	1.9/1.5
MW-9	11/05/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.48	5.41	5.07	0.7
MW-9	11/07/2001	25,000	<1,000	NA	7,300	85	630	4,100	NA	<250	NA	NA	NA	NA	10.48	5.60	4.88	1.4/1.1
MW-9	05/01/2002	27,000	<700	NA	11,000	79	260	1,300	NA	<500	NA	NA	NA	NA	10.48	3.38	7.10	2.9/1.1
MW-9	07/16/2002	29,000	<700	NA	12,000	<50	74	810	NA	<500	NA	NA	NA	NA	10.48	4.04	6.44	0.7/0.4
MW-9	10/17/2002	15,000	<800	NA	10,000	31	36	490	NA	53	NA	NA	NA	NA	10.07	4.92	5.15	1.0/1.2
MW-9	01/21/2003	8,500	<400	NA	3,100	39	190	590	NA	<200	NA	NA	NA	NA	10.07	4.52	5.55	0.4/0.8
MW-9	05/01/2003	16,000 a	1,600 a	NA	4,900	<100	<100	1,500	NA	<1,000	NA	NA	NA	NA	10.07	4.05	6.02	NA
MW-9	07/17/2003	14,000	1,300 a,f	NA	9,900	130	<120	2,300	NA	<120	NA	NA	NA	NA	10.07	4.82	5.25	NA
MW-9	10/02/2003	13,000	3,100 a	NA	8,500	190	770	5,100	NA	<100	NA	NA	NA	NA	10.07	5.17	4.90	NA
MW-9	01/05/2004	37,000	1,500 a	NA	15,000	250	750	3,800	NA	<100	NA	NA	NA	NA	10.07	3.94	6.13	NA
MW-9	04/01/2004	14,000	1,800 a	NA	6,800	80	230	1,800	NA	<50	NA	NA	NA	NA	10.07	4.24	5.83	NA
MW-9	08/02/2004	12,000	710 g	<500	8,200	<50	66	650	NA	<50	<200	<200	<200	<500	10.07	5.10	4.97	NA
MW-9	11/02/2004	15,000	1,500 g	<500	9,300	73	240	1,400	NA	70	NA	NA	NA	NA	10.07	4.21	5.86	NA
MW-9	01/10/2005	28,000	1,700 g	<500	7,400	1,100	1,400	5,400	NA	<50	NA	NA	NA	NA	10.07	3.45	6.62	NA
MW-9	04/13/2005	55,000	5,100 g	690	15,000	3,300	2,800	12,000	NA	<50	NA	NA	NA	NA	10.07	3.53	6.54	NA
MW-9	07/20/2005	27,000	6,700 g	<1,000	5,100	320	900	3,200	NA	<50	<200	<200	<200	<500	10.07	5.75	4.32	NA
MW-9	10/24/2005	25,000	4,200 g	<500	11,000	680	890	3,900	NA	<50	NA	NA	NA	NA	10.04	4.42	5.62	NA
MW-9	**01/04/2006**	**39,600**	**3,400 f**	**427 f**	**5,800**	**636**	**187**	**6,130**	**NA**	**73.1**	**NA**	**NA**	**NA**	**139**	**10.04**	**3.10**	**6.94**	**NA**
MW-10	12/15/1989	ND	3,100	NA	1,500	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.45	6.33	0.82	NA
MW-10	03/08/1990	25,000	1,800	NA	17,000	330	2,100	1,400	NA	NA	NA	NA	NA	NA	7.45	5.41	2.00	NA

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Well ID	Date	TPPH (ug/L)	TEPH as Diesel (ug/L)	TEPH as Motor Oil (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
MW-10	04/18/1990	23,000	3,600	NA	15,000	1,200	190	3,300	NA	NA	NA	NA	NA	NA	7.45	5.60	1.85	NA
MW-10	07/23/1990	18,000	1,900	NA	12,000	380	ND	1,400	NA	NA	NA	NA	NA	NA	7.45	5.81	1.64	NA
MW-10	09/27/1990	9,500	430	NA	13,000	100	1,800	230	NA	NA	NA	NA	NA	NA	7.45	6.64	0.81	NA
MW-10	01/03/1991	4,300	630	NA	3,700	10	ND	110	NA	NA	NA	NA	NA	NA	7.45	6.96	0.49	NA
MW-10	04/10/1991	45,000	1,400	NA	16,000	4,600	3,000	6,900	NA	NA	NA	NA	NA	NA	7.45	4.70	2.75	NA
MW-10	07/12/1991	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	7.45	5.90	1.55	NA
MW-10	10/08/1991	3,800	1,500 a	NA	13,000	82	9	500	NA	NA	NA	NA	NA	NA	7.45	6.68	0.77	NA
MW-10	02/06/1992	22,000	1,600 a	NA	12,000	ND	600	170	NA	NA	NA	NA	NA	NA	7.45	7.04	0.41	NA
MW-10	05/04/1992	39,000	8,000 a	NA	14,000	5,000	1,800	5,000	NA	NA	NA	NA	NA	NA	7.45	4.69	2.76	NA
MW-10	07/28/1992	38,000	8,700 a	NA	17,000	2,800	1,500	4,000	NA	NA	NA	NA	NA	NA	7.45	6.00	1.45	NA
MW-10	10/27/1992b	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.45	NA	NA	NA
MW-10	01/14/1993	26,000	950 a	NA	10,000	ND	ND	160	NA	NA	NA	NA	NA	NA	7.45	6.07	1.38	NA
MW-10	04/23/1993	80,000	1,900 a	NA	21,000	13,000	3,400	12,000	NA	NA	NA	NA	NA	NA	7.45	4.14	3.31	NA
MW-10	07/20/1993	31,000	4,800	NA	14,000	4,200	1,700	5,500	NA	NA	NA	NA	NA	NA	10.61	5.62	4.99	NA
MW-10	10/18/1993	13,000	1,200 a	NA	8,600	220	ND	450	NA	NA	NA	NA	NA	NA	10.61	6.43	4.18	NA
MW-10	01/06/1994	16,000	670 a	NA	9,700	<125	<125	210	NA	NA	NA	NA	NA	NA	10.61	6.74	3.87	NA
MW-10	04/12/1994	16,000	860	NA	5,600	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.61	5.98	4.63	NA
MW-10	07/25/1994	2,300	2,100 a	NA	1,400	26	25	51	NA	NA	NA	NA	NA	NA	10.61	6.31	4.30	NA
MW-10	10/25/1994	1,400	1,000 a	NA	290	5	2	38	NA	NA	NA	NA	NA	NA	10.61	6.64	3.97	NA
MW-10	01/09/1995	16,000	2,300 a	NA	7,500	1,400	230	1,500	NA	NA	NA	NA	NA	NA	10.61	5.70	4.91	NA
MW-10	04/11/1995	54,000	5,000	NA	13,000	4,500	1,500	4,500	NA	NA	NA	NA	NA	NA	10.61	5.82	4.79	NA
MW-10	07/18/1995	72,000	2,600	NA	20,000	7,200	2,800	9,000	NA	NA	NA	NA	NA	NA	10.61	6.79	3.82	NA
MW-10	10/18/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.61	5.31	5.30	NA
MW-10	01/09/1996	32,000	2,100	NA	8,000	1,600	880	3,200	12,000	NA	NA	NA	NA	NA	10.61	5.92	4.69	NA
MW-10	04/02/1996	68,000	NA	NA	9,100	2,300	1,100	3,700	3,300	NA	NA	NA	NA	NA	10.61	5.43	5.18	NA
MW-10	10/03/1996	33,000	2,900	NA	11,000	1,300	830	2,400	7,300	NA	NA	NA	NA	NA	10.61	6.07	4.54	1.7
MW-10 (D)	10/03/1996	40,000	3,300	NA	12,000	1,700	1,100	3,100	6,500	NA	NA	NA	NA	NA	10.61	6.07	4.54	1.7
MW-10	04/03/1997	36,000	3,400	NA	12,000	2,300	1,400	4,500	2,300	NA	NA	NA	NA	NA	10.61	3.45	7.16	1.8
MW-10 (D)	04/03/1997	52,000	3,000	NA	12,000	2,300	1,400	4,500	2,100	NA	NA	NA	NA	NA	10.61	3.45	7.16	1.8
MW-10	10/08/1997	20,000	3,100	NA	7,500	420	470	1,300	1,500	NA	NA	NA	NA	NA	10.61	3.72	6.89	1.2
MW-10	06/10/1998	48,000	2,500	NA	14,000	2,600	1,500	4,800	1,800	NA	NA	NA	NA	NA	10.61	4.00	6.61	0.7/0.5
MW-10	12/30/1998	17,800	2,820	NA	6,000	136	344	639	1,250	NA	NA	NA	NA	NA	10.61	5.26	5.35	1.0/0.7

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MW-10 *	06/25/1999	17,600	NA	NA	6,150	212	287	687	1,740	NA	NA	NA	NA	NA	10.61	4.49	6.12	0.9/2.5
MW-10	12/28/1999	10,800	1,400	NA	3,370	155	321	626	3,740	NA	NA	NA	NA	NA	10.61	4.87	5.74	1.2/1.4
MW-10	05/31/2000	3,020	2,270	NA	1,080	34.3	118	251	775	NA	NA	NA	NA	NA	10.61	3.48	7.13	2.8/3.9
MW-10	10/17/2000	15,500	1,750 a	NA	7,450	54.7	387	308	3,840	4,300	NA	NA	NA	NA	10.61	4.25	6.36	2.3/3.0
MW-10	05/01/2001	27,900	2,260	NA	9,920	1,050	1,020	2,370	2,180	NA	NA	NA	NA	NA	10.61	5.40	5.21	2.0/1.1
MW-10	05/29/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.61	3.74	6.87	3.70/1.8
MW-10	11/05/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.61	6.08	4.53	0.6
MW-10	11/07/2001	14,000	360	NA	5,300	260	430	810	NA	1,700	NA	NA	NA	NA	10.61	5.45	5.16	1.8/1.0
MW-10	05/01/2002	79,000	<1,500	NA	16,000	4,400	3,300	8,800	NA	890	NA	NA	NA	NA	10.61	4.62	5.99	4.0/0.5
MW-10	07/16/2002	21,000	<1,000	NA	6,500	350	460	1,000	NA	1,200	NA	NA	NA	NA	10.61	5.80	4.81	0.5/1.5
MW-10	10/17/2002	17,000	<1,800	NA	5,800	290	520	1,100	NA	980	NA	NA	NA	NA	9.81	5.27	4.54	0.8/1.2
MW-10	01/21/2003	52,000	<2,000	NA	13,000	2,000	2,100	4,800	NA	<1,000	NA	NA	NA	NA	9.81	5.72	4.09	0.3/0.6
MW-10	05/01/2003	40,000	3,800 a	NA	13,000	1,700	2,200	5,000	NA	2,900	NA	NA	NA	NA	9.81	4.29	5.52	NA
MW-10	07/17/2003	13,000	1,700 a,f	NA	7,200	250	740	1,500	NA	2,400	NA	NA	NA	NA	9.81	5.05	4.76	NA
MW-10	10/02/2003	<5,000	1,400 a	NA	2,700	<50	56	<100	NA	2,800	NA	NA	NA	NA	9.81	5.46	4.35	NA
MW-10	01/05/2004	77,000	2,300 a	NA	21,000	4,200	3,900	8,500	NA	1,900	NA	NA	NA	NA	9.81	3.52	6.29	NA
MW-10	04/01/2004	33,000	3,100 a	NA	11,000	1,000	1,600	3,600	NA	5,200	NA	NA	NA	NA	9.81	4.12	5.69	NA
MW-10	08/02/2004	9,900	1,100 a	570	4,100	140	500	700	NA	3,800	<100	<100	<100	710	9.81	5.35	4.46	NA
MW-10	11/02/2004	48,000	3,500 g	<500	16,000	1,400	3,100	6,000	NA	3,100	NA	NA	NA	NA	9.81	5.06	4.75	NA
MW-10	01/10/2005	120,000	4,200 g	<500	21,000	20,000	5,400	22,000	NA	16,000	NA	NA	NA	NA	9.81	3.14	6.67	NA
MW-10	04/13/2005	83,000	9,100 g	<1,000	22,000	13,000	5,500	18,000	NA	22,000	NA	NA	NA	NA	9.81	3.12	6.69	NA
MW-10	07/20/2005	82,000	11,000 g	<2,500	14,000	9,700	4,700	20,000	NA	32,000	<500	<500	<500	9,800	9.81	5.33	4.48	NA
MW-10	10/24/2005	67,000	9,800 g	<1,000	12,000	4,000	4,500	13,000	NA	14,000	NA	NA	NA	6,200	9.78	4.24	5.54	NA
MW-10	**01/04/2006**	**114,000**	**5,690 f**	**364 f**	**15,000**	**5,110**	**1,310**	**17,400**	**NA**	**3,720**	**NA**	**NA**	**NA**	**1,150**	**9.78**	**2.53**	**7.25**	**NA**
MW-11	07/20/1993	50	ND	NA	2.5	1.9	3.9	18	NA	NA	NA	NA	NA	NA	10.56	8.08	2.48	NA
MW-11	10/18/1993	ND	65	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.56	8.24	2.32	NA
MW-11	01/06/1994	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.56	8.47	2.09	NA
MW-11	04/12/1994	ND	ND	NA	1.1	0.87	ND	1.5	NA	NA	NA	NA	NA	NA	10.56	8.44	2.12	NA
MW-11	07/25/1994	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.56	8.20	2.36	NA
MW-11	10/25/1994	ND	100	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.56	8.67	1.89	NA
MW-11	01/09/1995	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.56	7.63	2.93	NA

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MW-11	04/11/1995	ND	140	NA	ND	0.7	ND	0.5	NA	NA	NA	NA	NA	NA	10.56	8.06	2.50	NA
MW-11	07/18/1995	ND	50	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.56	9.31	1.25	NA
MW-11	10/18/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.56	8.34	2.22	NA
MW-11	01/09/1996	<50	ND	NA	<0.5	<0.5	<0.5	<0.5	ND	NA	NA	NA	NA	NA	10.56	8.22	2.34	NA
MW-11	04/02/1996	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NA	NA	NA	10.56	7.97	2.59	NA
MW-11	10/03/1996	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NA	NA	NA	10.56	8.37	2.19	3.6
MW-11	04/03/1997	<50	<50	NA	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	NA	10.56	8.31	2.25	2.2
MW-11	10/08/1997	<50	54	NA	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	NA	10.56	8.56	2.00	1.2
MW-11	06/10/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.56	7.85	2.71	NA
MW-11	12/30/1998	<50.0	66.2	NA	<0.500	<0.500	<0.500	<0.500	<2.00	NA	NA	NA	NA	NA	10.56	8.51	2.05	0.7/0.6
MW-11	06/25/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.56	8.01	2.55	NA
MW-11	12/28/1999	<50.0	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<5.00	NA	NA	NA	NA	NA	10.56	8.39	2.17	0.8/1.0
MW-11	05/31/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.56	7.38	3.18	NA
MW-11	10/17/2000	<50.0	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	10.56	8.35	2.21	4.1/4.0
MW-11	05/01/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.56	8.15	2.41	NA
MW-11	11/05/2001	Unable to locate		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.56	NA	NA	NA
MW-11	05/01/2002	Unable to locate		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.56	NA	NA	NA
MW-11	05/08/2002	<50	<50	NA	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	10.56	7.82	2.74	1.0/1.1
MW-11	07/16/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.56	7.64	2.92	NA
MW-11	10/17/2002	<50	<50	NA	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	7.95	NA	1.3/1.0
MW-11	01/21/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.57	NA	NA
MW-11	05/01/2003	<50	<50	NA	<0.50	<0.50	<0.50	<1.0	NA	<5.0	NA	NA	NA	NA	NA	7.62	NA	NA
MW-11	07/17/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.93	NA	NA
MW-11	10/02/2003	<50	<50	NA	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	7.56	NA	NA
MW-11	01/05/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.03	NA	NA
MW-11	04/01/2004	<50	<50	NA	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	7.55	NA	NA
MW-11	08/02/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.50	NA	NA
MW-11	11/02/2004	<50	<50	<500	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	7.41	NA	NA
MW-11	01/10/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.45	NA	NA
MW-11	04/13/2005	<50	84 a	<500	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	7.35	NA	NA
MW-11	07/20/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.56	NA	NA
MW-11	10/24/2005	<50	66 a	<500	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	10.06	7.72	2.34	NA

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MW-11	**01/04/2006**	**<50.0**	**<100 f**	**<100 f**	**<0.500**	**<0.500**	**<0.500**	**<0.500**	**NA**	**<0.500**	**NA**	**NA**	**NA**	**<10.0**	**10.06**	**6.55**	**3.51**	**NA**
MW-12	07/20/1993	ND	1,500	NA	2.8	1.9	3.2	ND	NA	NA	NA	NA	NA	NA	9.56	6.76	2.80	NA
MW-12	10/18/1993	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	9.56	7.12	2.44	NA
MW-12	01/06/1994	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	9.56	7.15	2.41	NA
MW-12	04/12/1994	ND	ND	NA	0.61	ND	ND	1.1	NA	NA	NA	NA	NA	NA	9.56	6.68	2.88	NA
MW-12	07/25/1994	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	9.56	6.83	2.73	NA
MW-12	10/25/1994	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	9.56	7.34	2.22	NA
MW-12	01/09/1995	ND	80 a	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	9.56	5.02	4.54	NA
MW-12	04/11/1995	ND	200	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	9.56	7.38	2.18	NA
MW-12	07/18/1995	ND	90	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	9.56	8.50	1.06	NA
MW-12	10/18/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.56	6.63	2.93	NA
MW-12	01/09/1996	<50	ND	NA	<0.5	<0.5	<0.5	<0.5	ND	NA	NA	NA	NA	NA	9.56	6.32	3.24	NA
MW-12	04/02/1996	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NA	NA	NA	9.56	5.60	3.96	NA
MW-12	10/03/1996	<50	72	NA	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NA	NA	NA	9.56	3.30	6.26	2.5
MW-12	04/03/1997	<50	74	NA	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	NA	9.56	6.13	3.43	2.2
MW-12	10/08/1997	<50	73	NA	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	NA	9.56	6.49	3.07	3.0
MW-12	06/10/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.56	5.85	3.71	NA
MW-12	12/30/1998	<50.0	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.00	NA	NA	NA	NA	NA	9.56	8.42	1.14	1.3/0.9
MW-12	06/25/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.56	7.89	1.67	NA
MW-12	12/28/1999	<50.0	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<5.00	NA	NA	NA	NA	NA	9.56	8.26	1.30	1.0/1.2
MW-12	05/31/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.56	7.21	2.35	NA
MW-12	10/17/2000	<50.0	82.9 a	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	9.56	6.80	2.76	5.1/3.0
MW-12	05/01/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.56	5.95	3.61	NA
MW-12	11/05/2001	Unable to locate		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.56	NA	NA	NA
MW-12	05/01/2002	Unable to locate		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.56	NA	NA	NA
MW-12	05/08/2002	<50	<50	NA	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	9.56	4.75	4.81	1.2/0.9
MW-12	07/16/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.56	4.88	4.68	NA
MW-12	10/17/2002	<50	81	NA	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	5.11	NA	1.8/1.5
MW-12	01/21/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.76	NA	NA
MW-12	05/01/2003	<50	95 a	NA	<0.50	<0.50	<0.50	<1.0	NA	<5.0	NA	NA	NA	NA	NA	5.00	NA	NA
MW-12	07/17/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.85	NA	NA

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MW-12	10/02/2003	<50	<50	NA	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	5.02	NA	NA
MW-12	01/05/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.95	NA	NA
MW-12	04/01/2004	<50	<50	NA	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	5.04	NA	NA
MW-12	08/02/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.42	NA	NA
MW-12	11/02/2004	<50	150 h	<500	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	4.55	NA	NA
MW-12	01/10/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.81	NA	NA
MW-12	04/13/2005	<50	120 a	<500	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	4.01	NA	NA
MW-12	07/20/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.00	NA	NA
MW-12	10/24/2005	<50	94 a	<500	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	9.09	4.83	4.26	NA
MW-12	**01/04/2006**	**<50.0**	**330 f**	**675 f**	**<0.500**	**<0.500**	**<0.500**	**<0.500**	**NA**	**<0.500**	**NA**	**NA**	**NA**	**<10.0**	**9.09**	**5.52**	**3.57**	**NA**
MW-13	07/20/1993	ND	1,500	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.10	8.32	1.78	NA
MW-13 (D)	07/21/1993	ND	1,000	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.10	8.32	1.78	NA
MW-13	10/18/1993	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.10	8.66	1.44	NA
MW-13	01/06/1994	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.10	8.70	1.40	NA
MW-13	04/12/1994	ND	100	NA	1.7	1.2	0.59	2.4	NA	NA	NA	NA	NA	NA	10.10	8.20	1.90	NA
MW-13	07/25/1994	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.10	8.39	1.71	NA
MW-13	10/25/1994	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.10	8.70	1.40	NA
MW-13	01/09/1995	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.10	7.35	2.75	NA
MW-13	04/11/1995	ND	320	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.10	5.50	4.60	NA
MW-13	07/18/1995	ND	ND	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	10.10	6.63	3.47	NA
MW-13	10/18/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.10	8.12	1.98	NA
MW-13	01/09/1996	<50	ND	NA	<0.5	<0.5	<0.5	<0.5	ND	NA	NA	NA	NA	NA	10.10	7.74	2.36	NA
MW-13	04/02/1996	<50	NA	NA	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NA	NA	NA	10.10	6.30	3.80	NA
MW-13	10/03/1996	<50	<50	NA	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NA	NA	NA	10.10	6.50	3.60	3.0
MW-13	04/03/1997	<50	<50	NA	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	NA	10.10	7.58	2.52	2.0
MW-13	10/08/1997	<50	<50	NA	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	NA	10.10	8.17	1.93	1.0
MW-13	06/10/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.10	7.54	2.56	NA
MW-13	12/30/1998	<50.0	69.0	NA	<0.500	<0.500	<0.500	<0.500	<2.00	NA	NA	NA	NA	NA	10.10	6.91	3.19	1.1/0.8
MW-13	06/25/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.10	6.31	3.79	NA
MW-13	12/28/1999	<50.0	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<5.00	NA	NA	NA	NA	NA	10.10	6.65	3.45	0.8/1.0
MW-13	05/31/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.10	5.94	4.16	NA

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MW-13	10/17/2000	<50.0	121 a	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	10.10	8.38	1.72	2.5/2.8
MW-13	05/01/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.10	7.65	2.45	NA
MW-13	11/05/2001	Unable to locate		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.10	NA	NA	NA
MW-13	05/01/2002	<50	<50	NA	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	10.10	6.80	3.30	3.5/3.5
MW-13	07/16/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.10	6.84	3.26	NA
MW-13	10/17/2002	<50	<50	NA	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	9.64	6.73	2.91	1.4/0.9
MW-13	01/21/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.64	6.99	2.65	NA
MW-13	05/01/2003	<50	<50	NA	3.4	0.75	1.1	2.7	NA	<5.0	NA	NA	NA	NA	9.64	6.62	3.02	NA
MW-13	07/17/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.64	5.99	3.65	NA
MW-13	10/02/2003	<50	<50	NA	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	9.64	6.81	2.83	NA
MW-13	01/05/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.64	5.98	3.66	NA
MW-13	04/01/2004	<50	<50	NA	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	9.64	5.09	4.55	NA
MW-13	08/02/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.64	5.49	4.15	NA
MW-13	11/02/2004	<50	<50	<500	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	9.64	5.99	3.65	NA
MW-13	01/10/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.64	5.63	4.01	NA
MW-13	04/13/2005	<50	72 a	<500	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	9.64	6.00	3.64	NA
MW-13	07/20/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.64	8.31	1.33	NA
MW-13	10/24/2005	<50	52 a	<500	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	9.62	5.00	4.62	NA
MW-13	**01/04/2006**	**<50.0**	**<100 f**	**<100 f**	**<0.500**	**<0.500**	**<0.500**	**<0.500**	**NA**	**<0.500**	**NA**	**NA**	**NA**	**<10.0**	**9.62**	**5.54**	**4.08**	**NA**
VEW-5	09/26/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.91	NA	NA
VEW-5	10/17/2000	74,800	4,180 a	NA	9,090	14,600	2,630	14,500	632	NA	NA	NA	NA	NA	NA	2.65	NA	3.0/3.1
VEW-5	05/01/2001	94,800	5,350	NA	11,300	12,900	4,520	22,200	419	NA	NA	NA	NA	NA	NA	2.86	NA	0.4/0.6
VEW-5	11/05/2001	82,000	<1,600	NA	14,000	7,400	2,900	15,000	NA	740	NA	NA	NA	NA	NA	4.11	NA	0.6/c
VEW-5	05/01/2002	16,000	<3,000	NA	610	320	7.9	3,600	NA	310	NA	NA	NA	NA	NA	2.63	NA	4.7/2.9
VEW-5	07/16/2002	45,000	<3,000	NA	7,900	2,700	1,000	4,600	NA	920	NA	NA	NA	NA	NA	2.96	NA	0.4/0.3
VEW-5	10/17/2002	<50	200	NA	<0.50	<0.50	<0.50	<0.50	NA	46	NA	NA	NA	NA	8.81	3.55	5.26	1.1/1.0
VEW-5	01/21/2003	740	1,200	NA	53	22	17	70	NA	17	NA	NA	NA	NA	8.81	2.06	6.75	1.6/0.5
VEW-5	05/01/2003	1,500	1,000 a	NA	140	92	120	290	NA	11	NA	NA	NA	NA	8.81	2.34	6.47	NA
VEW-5	07/17/2003	4,200	1,400 a,f	NA	630	1,300	360	1,400	NA	38	NA	NA	NA	NA	8.81	3.36	5.45	NA
VEW-5	10/02/2003	10,000	3,500 a	NA	690	1,200	420	1,800	NA	54	NA	NA	NA	NA	8.81	3.65	5.16	NA
VEW-5	01/05/2004	180	530 a	NA	5.0	0.73	6.5	11	NA	1.9	NA	NA	NA	NA	8.81	2.02	6.79	NA

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VEW-5	04/01/2004	2,800	2,500 a	NA	520	23	260	290	NA	55	NA	NA	NA	NA	8.81	2.77	6.04	NA
VEW-5	08/02/2004	8,900	3,800 a	550	790	74	600	1,600	NA	62	<40	<40	<40	<100	8.81	3.55	5.26	NA
VEW-5	11/02/2004	1,200	830 g	<500	72	5.8	83	100	NA	11	NA	NA	NA	NA	8.81	2.89	5.92	NA
VEW-5	01/10/2005	<50	320 a	700	<0.50	<0.50	<0.50	2.0	NA	0.56	NA	NA	NA	NA	8.81	1.14	7.67	NA
VEW-5	04/13/2005	270	540 a	1,100	23	1.4	11	15	NA	2.0	NA	NA	NA	NA	8.81	2.17	6.64	NA
VEW-5	07/20/2005	130	100 g	<500	5.7	0.65	1.4	9.3	NA	7.7	<2.0	<2.0	<2.0	41	8.81	4.39	4.42	NA
VEW-5	10/24/2005	2,300	8,900 a	3,700 l	260	17	28	140	NA	13	NA	NA	NA	41	8.79	3.15	5.64	NA
VEW-5	**01/04/2006**	**493**	**883 f**	**710 f**	**1.69**	**<0.500**	**2.72**	**6.19**	**NA**	**<0.500**	**NA**	**NA**	**NA**	**<10.0**	**8.79**	**1.28**	**7.51**	**NA**
VEW-6	09/26/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.94	NA	NA
VEW-6	10/17/2000	63,800	4,820 a	NA	6,940	2,750	2,760	18,700	3,700	NA	NA	NA	NA	NA	NA	3.13	NA	2.0/2.1
VEW-6	05/01/2001	57,000	3,460	NA	6,280	697	2,640	15,800	6,240	NA	NA	NA	NA	NA	NA	3.25	NA	0.8/1.2
VEW-6	05/29/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.17	NA	3.0/1.7
VEW-6	11/05/2001	39,000	<1,300	NA	6,800	380	1,900	7,900	NA	8,800	NA	NA	NA	NA	NA	4.35	NA	0.8/1.3
VEW-6	05/01/2002	24,000	<4,500	NA	1,800	270	470	3,700	NA	3,100	NA	NA	NA	NA	NA	2.73	NA	0.2/0.4
VEW-6	07/16/2002	19,000	<2,700	NA	1,900	250	140	3,500	NA	2,900	NA	NA	NA	NA	NA	3.59	NA	0.3/0.2
VEW-6	10/17/2002	<50	110	NA	<0.50	<0.50	<0.50	<0.50	NA	13	NA	NA	NA	NA	9.33	4.33	5.00	0.9/1.3
VEW-6	01/21/2003	900	<500	NA	30	1.1	20	61	NA	110	NA	NA	NA	NA	9.33	3.08	6.25	4.6/5.6
VEW-6	05/01/2003	1,100 a	290 a	NA	41	<5.0	58	66	NA	89	NA	NA	NA	NA	9.33	2.79	6.54	NA
VEW-6	07/17/2003	3,100	1,400 a,f	NA	400	30	280	820	NA	1,400	NA	NA	NA	NA	9.33	3.80	5.53	NA
VEW-6	10/02/2003	2,100	1,200 a	NA	310	37	200	420	NA	1,500	NA	NA	NA	NA	9.33	4.10	5.23	NA
VEW-6	01/05/2004	320	170 a	NA	4.9	0.54	3.3	18	NA	68	NA	NA	NA	NA	9.33	2.31	7.02	NA
VEW-6	04/01/2004	450	270 a	NA	44	1.6	23	24	NA	180	NA	NA	NA	NA	9.33	2.87	6.46	NA
VEW-6	08/02/2004	Well Inaccessible		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.33	NA	NA	NA
VEW-6	11/02/2004	910	210 g	<500	35	1.4	39	79	NA	74	NA	NA	NA	NA	9.33	3.26	6.07	NA
VEW-6	01/10/2005	110	150 a	<500	1.3	<0.50	1.3	3.3	NA	4.7	NA	NA	NA	NA	9.33	2.01	7.32	NA
VEW-6	04/13/2005	98	330 a,j,k	1,000 j,k	10	<0.50	2.4	2.6	NA	77	NA	NA	NA	NA	9.33	2.05	7.28	NA
VEW-6	07/20/2005	150	<50	<500	4.3	<0.50	1.1	7.1	NA	7.8	<2.0	<2.0	<2.0	37	9.33	4.27	5.06	NA
VEW-6	10/24/2005	4,800	3,300 a	1,600 l	150	4.6	280	720	NA	120	NA	NA	NA	160	9.22	3.56	5.66	NA
VEW-6	**01/04/2006**	**1,010**	**1,260 f**	**1,010 f**	**2.67**	**<0.500**	**4.79**	**12.6**	**NA**	**23.8**	**NA**	**NA**	**NA**	**93.6**	**9.22**	**1.85**	**7.37**	**NA**
VEW-7	09/26/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.59	NA	NA

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Well ID	Date	TPPH (ug/L)	TEPH as Diesel (ug/L)	TEPH as Motor Oil (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
VEW-7	10/17/2000	74,300	3,990 a	NA	11,900	12,500	1,640	15,500	36,600	NA	NA	NA	NA	NA	NA	3.72	NA	3.5/4.1
VEW-7	05/01/2001	46,000	1,930	NA	7,250	5,300	1,960	9,820	15,600	16,900	NA	NA	NA	NA	NA	3.40	NA	0.8/0.8
VEW-7	05/29/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.54	NA	2.5/1.4
VEW-7	11/05/2001	38,000	<900	NA	9,300	610	1,700	6,000	NA	21,000	NA	NA	NA	NA	NA	4.85	NA	3.52/c
VEW-7	05/01/2002	590	<600	NA	6.3	7.2	<2.5	81	NA	1,100	NA	NA	NA	NA	NA	2.62	NA	2.9/3.3
VEW-7	07/16/2002	95	54	NA	1.5	<0.50	1.5	6.1	NA	100	NA	NA	NA	NA	NA	3.84	NA	3.6/2.5
VEW-7	10/17/2002	<50	110	NA	1.4	<0.50	<0.50	<0.50	NA	34	NA	NA	NA	NA	9.49	4.93	4.56	3.0/1.9
VEW-7	01/21/2003	<50	180	NA	0.88	<0.50	<0.50	4.2	NA	19	NA	NA	NA	NA	9.49	3.27	6.22	0.3/0.8
VEW-7	05/01/2003	2,200	1,000 a	NA	62	8.0	230	80	NA	360	NA	NA	NA	NA	9.49	2.95	6.54	NA
VEW-7	07/17/2003	<1,200	590 a,f	NA	97	19	150	110	NA	830	NA	NA	NA	NA	9.49	3.94	5.55	NA
VEW-7	10/02/2003	800	1,300 a	NA	78	11	170	49	NA	1,200	NA	NA	NA	NA	9.49	5.00	4.49	NA
VEW-7	01/05/2004	2,500	970 a	NA	120	13	86	300	NA	660	NA	NA	NA	NA	9.49	2.82	6.67	NA
VEW-7	04/01/2004	4,700	1,500 a	NA	100	42	240	680	NA	830	NA	NA	NA	NA	9.49	2.99	6.50	NA
VEW-7	08/02/2004	1,100	830 a	<500	60	6.5	30	120	NA	920	<20	<20	<20	430	9.49	4.45	5.04	NA
VEW-7	11/02/2004	Well inaccessible		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.49	NA	NA	NA
VEW-7	11/04/2004	7,900	2,700 g	<500	410	26	280	1,100	NA	2,100	NA	NA	NA	NA	9.49	3.57	5.92	NA
VEW-7	01/10/2005	1,200	690 g	<500	110	<5.0	49	73	NA	530	NA	NA	NA	NA	9.49	2.26	7.23	NA
VEW-7	04/13/2005	760	280 a	530	18	3.3	28	84	NA	120	NA	NA	NA	NA	9.49	2.28	7.21	NA
VEW-7	07/20/2005	160	250 g	<500	4.8	0.57	1.9	11	NA	9.3	<2.0	<2.0	<2.0	37	9.49	4.50	4.99	NA
VEW-7	10/24/2005	540	1,100 a	630 l	11	1.7	2.8	11	NA	36	NA	NA	NA	490	9.43	3.74	5.69	NA
VEW-7	**01/04/2006**	**<50.0**	**386 f**	**305 f**	**<0.500**	**<0.500**	**<0.500**	**<0.500**	**NA**	**7.68**	**NA**	**NA**	**NA**	**96.7**	**9.43**	**1.93**	**7.50**	**NA**
AS-1	09/26/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.67	NA	NA
AS-1	10/17/2000	13,400	3,280 a	NA	1,600	82.8	<20.0	2,600	498	NA	NA	NA	NA	NA	NA	5.50	NA	2.0/2.5
AS-1	05/01/2001	Well inaccessible		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
AS-1	11/05/2001	5,300	<900	NA	85	26	46	120	NA	190	NA	NA	NA	NA	NA	6.11	NA	0.4/0.5
AS-1	05/01/2002	Insufficient water		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	14.73	NA	NA
AS-1	07/16/2002	210	<150	NA	8.2	<0.50	7.9	3.5	NA	25	NA	NA	NA	NA	NA	5.59	NA	4.6/2.8
AS-1	10/17/2002	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.23	NA	NA	NA
AS-1	01/21/2003	<50	220	NA	0.62	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	8.23	9.51	-1.28	2.2/2.5
AS-1	05/01/2003	79	96 a	NA	2.2	0.99	5.1	4.8	NA	<5.0	NA	NA	NA	NA	8.23	5.75	2.48	NA
AS-1	07/17/2003	<50	79 a,f	NA	1.2	0.60	0.95	1.7	NA	3.6	NA	NA	NA	NA	8.23	5.90	2.33	NA

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AS-1	10/02/2003	440	99 a	NA	12	49	22	94	NA	3.5	NA	NA	NA	NA	8.23	5.90	2.33	NA
AS-1	01/05/2004	<50	76 a	NA	0.75	<0.50	0.70	<1.0	NA	2.4	NA	NA	NA	NA	8.23	5.64	2.59	NA
AS-1	04/01/2004	<50	<50	NA	0.79	<0.50	<0.50	<1.0	NA	3.2	NA	NA	NA	NA	8.23	5.86	2.37	NA
AS-2	09/26/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.38	NA	NA
AS-2	10/17/2000	4,380	1,380 a	NA	167	<10.0	225	680	315	NA	NA	NA	NA	NA	NA	5.50	NA	3.1/3.0
AS-2	05/01/2001	Well inaccessible		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
AS-2	11/05/2001	2,200	<300	NA	100	0.99	91	21	NA	220	NA	NA	NA	NA	NA	5.99	NA	0.8/0.6
AS-2	05/01/2002	880	<300	NA	19	<0.50	31	22	NA	57	NA	NA	NA	NA	NA	5.25	NA	1.0/0.8
AS-2	07/16/2002	910	<200	NA	40	4.1	39	43	NA	78	NA	NA	NA	NA	NA	5.53	NA	0.7/0.9
AS-2	10/17/2002	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.65	NA	NA	NA
AS-2	01/21/2003	<50	140	NA	1.4	<0.50	2.0	0.94	NA	19	NA	NA	NA	NA	8.65	9.32	-0.67	1.4/1.6
AS-2	05/01/2003	56	120 a	NA	2.1	<0.50	4.7	<1.0	NA	12	NA	NA	NA	NA	8.65	6.74	1.91	NA
AS-2	07/17/2003	180	80 a,f	NA	11	0.56	34	13	NA	23	NA	NA	NA	NA	8.65	6.40	2.25	NA
AS-2	10/02/2003	320	190 a	NA	8.5	6.3	24	25	NA	21	NA	NA	NA	NA	8.65	6.20	2.45	NA
AS-2	01/05/2004	210	160 a	NA	1.4	<0.50	21	1.6	NA	15	NA	NA	NA	NA	8.65	6.32	2.33	NA
AS-2	04/01/2004	200	130 a	NA	0.87	<0.50	17	<1.0	NA	18	NA	NA	NA	NA	8.65	6.15	2.50	NA
AS-3	09/26/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.75	NA	NA
AS-3	10/17/2000	3,520	942 a	NA	588	521	41.2	566	1,740	NA	NA	NA	NA	NA	NA	6.18	NA	3.1/3.0
AS-3	05/01/2001	Well inaccessible		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
AS-3	11/05/2001	1,600	110	NA	41	4.9	8.2	30	NA	240	NA	NA	NA	NA	NA	6.41	NA	1.1/3.2
AS-3	05/01/2002	Insufficient water		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	14.90	NA	NA
AS-3	07/16/2002	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
AS-3	10/17/2002	Insufficient water		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.84	14.78	-5.94	NA
AS-3	01/21/2003	<50	320	NA	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	8.84	11.59	-2.75	2.2/1.1
AS-3	05/01/2003	57	150 a	NA	0.53	<0.50	4.7	2.7	NA	<5.0	NA	NA	NA	NA	8.84	6.44	2.40	NA
AS-3	07/17/2003	<50	110 a,f	NA	0.83	2.1	2.4	5.4	NA	2.5	NA	NA	NA	NA	8.84	6.55	2.29	NA
AS-3	10/02/2003	<50	96 a	NA	2.9	3.9	8.4	15	NA	8.1	NA	NA	NA	NA	8.84	6.55	2.29	NA
AS-3	01/05/2004	<50	120 a	NA	<0.50	<0.50	<0.50	<1.0	NA	1.5	NA	NA	NA	NA	8.84	6.47	2.37	NA
AS-3	04/01/2004	<50	110 a	NA	<0.50	<0.50	<0.50	<1.0	NA	2.8	NA	NA	NA	NA	8.84	6.32	2.52	NA

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Abbreviations:
TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; prior to November 5, 2001, analyzed by EPA Method 8015.
TEPH = Total petroleum hydrocarbons ananlyzed by EPA Method 8015M.
BTEX = Benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B; prior to November 5, 2001, analyzed by EPA Method 8020.
MTBE = Methyl tertiary butyl ether
DIPE = Di-isopropyl ether, analyzed by EPA Method 8260B
ETBE = Ethyl tertiary butyl ether, analyzed by EPA Method 8260B
TAME = Tertiary amyl methyl ether, analyzed by EPA Method 8260B
TBA = Tertiary butyl alcohol, analyzed by EPA Method 8260B
TOC = Top of Casing Elevation
TOB = Top of Wellbox
GW = Groundwater
DO = Dissolved Oxygen
ug/L = Parts per billion
ppm = Parts per million
MSL = Mean sea level
ft. = Feet
<n = Below detection limit
(D) = Duplicate sample
n/n = Dissolved oxygen reading; pre-purge/post-purge.
NA = Not applicable

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Notes:

a = Chromatogram pattern indicates an unidentified hydrocarbon/Hydrocarbon does not match pattern of laboratory's standard.

b = Sample was analyzed outside of EPA recommended holding time.

c = Post-purge DO reading not taken.

d = Lab did not record detected result.

e = Change in casing elevation due to wellhead maintenance.

f = TEPH with Silica Gel Cleanup.

g = Hydrocarbon reported is in the early Diesel range and does not match the laboratory's standard.

h = Hydrocarbon reported is in the late Diesel range and does not match the laboratory's standard.

i = The concentration reported reflect(s) individual or discrete unidentified peaks not matching a typical fuel pattern.

j = Samples were re-extracted past EPA recommended holding time.

k = Surrogate recoveries lower than acceptance limits.

l = Quanity of unknown hydrocarbon(s) in sample based on motor oil.

* All Diesel and motor oil samples for this event were lost in laboratory fire.

Site surveyed, except wells MW-11 and MW-12, on March 18, 2002 by Virgil Chavez Land Surveying of Vallejo, CA.

Wells MW-1 through MW-4, MW-6, MW-9 through MW-13, VEW-5, VEW-6, abd VEW-7 surveyed on September 27, 2005 by Virgil Chavez Land Surveying of Vallejo, CA.