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CORRECTIVE ACTION PLAN FOR

FORMER CHEVRON STATION # 9-1197
8808 LAWRENCE WELK DRIVE
ESCONDIDO, CALIFORNIA 92026

August 1, 2005
MTCH.91197.08

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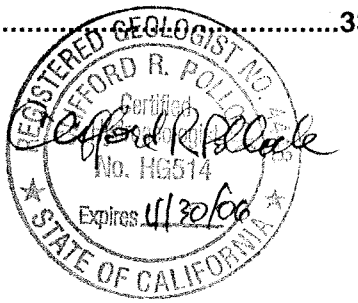

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REGISTERED GEOLOGIST NO. CLIFFORD R. POLLOCK Certified Engineering Geologist No. HG514 Expires 11/30/06 STATE OF CALIFORNIA

SITE IDENTIFICATION INFORMATION

Site Address:	Former Chevron Service Station #9-1197 8808 Lawrence Welk Drive Escondido, California 92026
Current Site Use:	Retail Texaco Gasoline Station/Automotive Repair Facility
Assessor's Parcel No:	185-331-01-00
Property Owner:	Teleklew Productions Incorporated Care of Champagne Texaco P.O. Box 219 Bonsall, CA 92003
UST Owner:	Mr. Jerry Perrault 947 South Chumash Trail Vista, CA 92084
UST Operator:	Mr. Jerry Perrault 947 South Chumash Trail Vista, CA 92084
Responsible Party:	Chevron Environmental Management Company P.O. Box 2292 Brea, CA 92822-2292
Consultant Contact:	Brian Londquist SECOR International Incorporated 2655 Camino Del Rio North, Suite 302 San Diego, CA 92108-1633 (619) 296-6195
Chevron Contact:	Mr. Dana Thurman Chevron Environmental Management Company 6001 Bollinger Canyon Road K 2236 San Ramon, CA 94583 (925) 842-9559
SAM Case #:	H05719-001

1.0 INTRODUCTION

SECOR International Incorporated (SECOR), on behalf of Chevron Environmental Management Company (Chevron), has prepared the following Corrective Action Plan (CAP) for former Chevron Station No. 9-1197, located at 8808 Lawrence Welk Drive in Escondido, California (the Site;Figure 1) for submittal to the San Diego County Department of Environmental Health, Land and Water Quality Division, Site Assessment and Mitigation (SAM) Program. This CAP provides a summary of assessment work conducted at the Site; as well as an evaluation of, and recommendations for, remediation of hydrocarbon-impacted subsurface soil and groundwater at the Site. The CAP has been prepared in general accordance with the *2004 SAM Manual* (SAM, 2004) and the requirements of California Code of Regulations Title 23, Division 3, Chapter 16, Article 11.

2.0 SITE DESCRIPTION

The Site is an operating Texaco-branded service station located on the northeastern corner of the intersection of Champagne Boulevard and Lawrence Welk Drive in Escondido, California (Figure 1). Site facilities currently include four double-walled, steel-clad and fiberglass reinforced underground storage tanks (USTs) of varying capacities. These include one 8,000-gallon capacity UST for storage of regular unleaded gasoline; one 6,000-gallon capacity UST for storage of midgrade unleaded gasoline; one 6,000-gallon capacity UST for storage of premium unleaded grade gasoline; and one 2,000-gallon capacity UST for storage of diesel fuel. The motor fuel distribution system includes three dispenser islands connected to the gasoline and diesel UST pits by buried product piping. Other Site features include a station building divided into a service bay (housing two hydraulic lifts and one pneumatic lift) and a convenience store, five on-site groundwater monitoring wells (MWs), and one off-site MW (which is located to the northwest of the Site adjacent to Champagne Boulevard). A site plan depicting all MWs associated with the Site is presented as Figure 2. The Site is bordered on the north, south, and east by the Lawrence Welk Resort and Golf Course. The Golf Country Mini Storage is located across Champagne Boulevard to the west.

2.1 SITE USAGE

The Site previously was occupied by a Chevron service station which operated from approximately 1968 to 1993. In 1995, the property was transferred from Chevron to the Texaco Oil Company (Texaco). The Site currently operates as a service station and automotive repair facility.

3.0 REGIONAL GEOLOGY AND HYDROGEOLOGY

3.1 GEOLOGIC SETTING

A review of the San Marcos, California 7.5-minute quadrangle topographic map (USGS, 1968; photorevised 1983) indicates the subject property is located approximately 500 feet above mean sea level (MSL). The Site is located in the Peninsular Range Province, in the northwestern portion of San Diego County. Faults typically dominate the structure of the Peninsular Ranges; however, the general vicinity of the Site is relatively unbroken by large faults (Jahns, 1954). Much of the Peninsular Range Province is underlain by the southern California batholith, a great composite mass of late Mesozoic plutonic rocks. These rocks range in composition from gabrro to granite, whereas the batholith as a whole is probably tonalitic in average composition (Merriam, 1954).

The Site is within the South Fork Moosa Canyon, a northwest-trending valley between the Merriam Mountains to the west and the Oat Hills to the east (USGS, 1968; photorevised 1983). This valley is underlain by approximately 60 feet of Quaternary alluvium consisting of gravels, sands, and silts (Jahns, 1954). The surrounding bedrock in the area is not typical of the southern California batholith in that they are largely granodiorites and gabbros, with a relatively small amount of tonalites. Bordering the alluvial unit to the east and west is a relatively narrow and long unit of intrusive rocks related to Santiago Peak volcanics, which are questionably Jurassic in age. This unit is bordered on the east and west by a relatively large area of coarse-grained, uniform Woodson Mountain granodiorite of Cretaceous-age (Merriam, 1954).

Lithologic assemblages encountered beneath the Site generally ranged from silty sands to well-graded sands. Lithologies encountered in the vicinity of the former USTs excavation limits (MW-2) consisted of artificial fill materials to an approximate depth of 12 feet below ground surface (ft bgs), well-graded sands from approximately 12 to 14.5 ft bgs, silty sands from approximately 14.5 to 24.5 ft bgs, clayey silts from approximately 24.5 to 25 ft bgs, and silty sands from approximately 25 to at least 25.5 ft bgs. Lithologic assemblages encountered in the north and northeastern portions of the Site generally consisted of silty sands from the ground surface to approximately 10 ft bgs, followed by well-graded sands from approximately 10 to 20 ft bgs, and silty sands from approximately 20 to 25 ft bgs. Lithologic assemblages encountered during the installation of the off-site groundwater MW (MW-6) consisted of silty sands from the ground surface to approximately 5 ft bgs, followed by well-graded sands from approximately 5 to 10 ft bgs, silty sands from approximately 10 to 25 ft bgs, and well-graded sands from approximately 25 to at least 26.5 ft bgs. Boring/well logs for the soil borings and MWs installed at the Site are presented in Appendix A. The cross section traces are presented on Figure 2 and geologic cross sections A-A' and B-B' are presented on Figures 3 and 4.

3.2 HYDROGEOLOGY

The Site is located within the Moosa Hydrologic Subarea (HSA; 903.13) of the Lower San Luis Hydrologic Area (HA; 903.10) of the San Luis Rey Hydrologic Unit (HU; 903.00), according to the California Regional Water Quality Control Board, San Diego Region (RWQCB) *Water Quality Control Plan, San Diego Basin (9)* (RWQCB, 1996; with 1998 amendments) (Table 1). The Site is located within the South Fork Moosa Canyon; groundwater in this canyon has been

found within Quaternary alluvial deposits, and generally flows to the northwest. Moosa Creek, which is an intermittent creek with seasonal water level fluctuations, is located approximately 20-ft directly east (upgradient) of the subject Site. Moosa Creek trends in a northwesterly direction.

Groundwater within the Moosa HSA has designated existing beneficial uses for municipal, agricultural, and industrial supply. Surface water in the Moosa HSA is exempted from municipal supply use; however, there are designated beneficial surface water uses for agricultural, industrial, recreational, warm water habitat, and wildlife habitat (RWQCB, 1996). The Site is not located within a designated San Diego County Water Authority (SDCWA) "sensitive aquifer area" (SDCWA, 1996).

Depth-to-static water (DTW) measurements in Site groundwater monitoring wells on May 5, 2005 ranged between 14.30 and 18.13 ft below top of casing (bTOC). Calculated groundwater elevations varied from 494.55 to 496.17 ft above mean seal level (MSL). The hydraulic gradient was calculated to be 0.0089 vertical feet per horizontal foot (ft/ft), with a flow direction to the northwest. Historic groundwater levels and sample analytical results are presented in Table 2. A cumulative summary of groundwater sample results and recent groundwater gradient and hydrocarbon distribution maps can be found in the Second and Fourth Quarter 2004 and Second Quarter 2005 Groundwater Monitoring Reports (Appendix B). The respective references are SECOR (2004a), SECOR (2004b), and SECOR (2005)

4.0 PREVIOUS ENVIRONMENTAL ACTIVITIES

4.1 SITE ASSESSMENT ACTIVITIES

According to the July 18, 1994 Bechtel Environmental, Inc. (Bechtel) report entitled, *Site Assessment and Soil Vapor Extraction Test Report* (Bechtel, 1994), Chevron installed two 10,000-gallon, one 5,000-gallon, and one 550-gallon steel-walled USTs in 1968. The two 10,000-gallon and one 5,000-gallon USTs contained regular, unleaded, unleaded-plus, and super-unleaded gasoline products; and the 550-gallon UST contained used oil. The USTs were precision integrity-tested from 1981 through 1993; on each test date, the USTs met National Fire Protection Association criteria. Based on this information, SECOR assumes that Chevron operated a retail gasoline station at the Site between 1968 and 1993 (Figure 1).

On October 21, 1993, representatives from The Reynolds Group Inc. (TRG) monitored the removal of the three fuel USTs and one used-oil UST at the Site. The two 10,000-gallon USTs were designated T-1 and T-2; the 5,000-gallon UST was designated T-3; and the waste oil UST was designated WO. Approximately 300 cubic yards of soil from the gasoline UST excavation was stockpiled on the Site. Approximately 20 cubic yards of soil was removed from the waste oil UST excavation, and this stockpiled soil subsequently was used to backfill the used oil UST excavation. Following the removal of the USTs, nine soil samples (T-1-W, T-1-E, T-2-W, T-2-E, T-3-W, T-3-E, and WO-1 thru WO-3) were taken from the base of the excavation limits of the former gasoline and waste oil UST pits. Total petroleum hydrocarbons as gasoline (TPHg) were detected in soil collected from the gasoline USTs excavation at concentrations up to 5,400 milligrams per kilogram (mg/kg) at approximately 16 ft bgs (sample T-3-E). Total Recoverable Petroleum Hydrocarbons (TRPH) was detected in soil samples collected from the used oil UST excavation at concentrations up to 23,000 mg/kg at approximately 7 ft bgs (sample WO-3). Benzene was analyzed for two soil samples within the gasoline and used oil UST excavations (T-3-E and WO-3). Benzene was not detected above laboratory detection limits (LDLs) for the two soil samples analyzed. The SAM opened Unauthorized Release (UAR) Case #H05719-001 in October 1993, based on the results of soil sampling during UST removal activities (Reynolds, 1993).

On November 2, 1993, representatives from TRG monitored the removal of the UST related product piping. Following the removal of the UST related product piping in the vicinity of the dispenser islands, eight hand-augered soil samples (P-1 thru P-8) were taken from the excavation limits of the former product piping at depths ranging from 2.5 to 5 ft bgs. TPHg was detected in seven of the eight soil samples collected, with concentrations ranging from 0.11 mg/kg in P-3 to 490 mg/kg in P-8. The highest TPHg concentration was detected in soil collected at a depth of 5 ft bgs. TPHg was the only constituent analyzed during this site assessment phase (Reynolds, 1993).

On November 2, 1993, Bechtel in conjunction with TRG's sampling efforts extended the sample depths of soil samples P-1 down to 5 ft bgs (P-1-D5), P-2 down to 6 ft bgs (P-2-D6), P-3 down to 3.5 ft bgs (P-3-D3.5), P-6 down to 6 ft bgs (P-6-D6), P-7 down to 6 ft bgs (P-7-D6), and P-8 down to 6 ft bgs (P-8-D6). One new hand-augered soil boring (P-5A-D6.5) was advanced within the excavation limits of the former product piping to a depth of 6.5 ft bgs. TPHg was detected in five of the seven soil samples collected, with concentrations ranging from 0.26 mg/kg in P-5A-

D6.5 to 3,300 mg/kg in P-1-D5. The highest TPHg concentration was detected in soils collected at a depth of 5 ft bgs. Total Fuel Hydrocarbons (TFH) was detected in four of the seven samples collected, with concentrations ranging from 26 mg/kg in P-8-D6 to 3,200 mg/kg in P-7-D6. The highest TFH concentration was detected in soil collected at a depth of 6 ft bgs. Benzene was detected in one soil sample (P-7-D6) at a depth of 6 ft bgs with a concentration of 1.8 mg/kg. The remaining soil samples did not have benzene levels detected at or above their respective LDLs (Bechtel, 1994).

On five dates (December 13, 14, 16, 17, and 20, 1993), Bechtel supervised the drilling and sampling of 13 soil borings (B1 thru B13) and four well borings (MW-1 thru MW-4). The well borings were completed as shallow groundwater MWs, while the soil borings were backfilled with bentonite/cement grout from base to ground surface. The highest concentrations of TPHg, benzene, and MTBE were detected in soil sample B12D5.5 at concentrations of 2,400 mg/kg, 3.7 mg/kg, and 2.4 mg/kg, respectively. B12D5.5 was drilled in the excavation limits of the former product piping runs, near the northern dispenser island. TRPH was detected in soil samples B1D5 and B7D5 at concentrations of 11 mg/kg for both samples. B1D5 and B7D5 were drilled near the former used oil UST. The initial groundwater results for the MWs indicated that the highest TPHg, benzene, and MTBE concentrations all were detected in groundwater samples collected from well MW-2. The MW-2 sample contained 25,000 micrograms per liter (µg/L) TPHg, 340 µg/L benzene, and 36 µg/L MTBE. Measurable apparent thicknesses of liquid-phase hydrocarbons (LPH) were not gauged in any of the wells at the Site (Bechtel, 1994).

On March 8 and 11, 1994, Bechtel drilled and sampled six soil borings (B14 thru B19) and four well borings. The latter were completed as a groundwater MW (MW-5) and three vapor extraction (VE) wells (VW1 thru VW3); and the former soil borings were abandoned in a manner similar to that used on soil borings B1 thru B13. The highest concentrations of TPHg were detected in soil sample VW2D5 at 70 mg/kg. Concentrations of benzene and MTBE, 0.074 mg/kg and 0.686 mg/kg, respectively, were detected in soil sample VW2D13. VW2 was drilled and sampled within the excavation limits of the former product piping runs, which were close to the northern dispenser island. The initial groundwater results for the well MW-5 sample indicated that dissolved MTBE was detected above its respective LDL at a concentration of 19.5 µg/L. By contrast, dissolved-phase TPHg and benzene concentrations were not detected above their respective LDLs in groundwater samples analyzed for MW-5 (Bechtel, 1994).

On April 12, 1994, Bechtel drilled and sampled three soil borings (B20 thru B22) and one vadose well boring (VW4). All soil borings (including the VE well boring) were drilled to maximum depths ranging from 12 to 13.5-ft bgs. The soil borings were properly abandoned by backfilling the annular space with bentonite/cement grout from base to ground surface. The vadose well boring was completed as a VE well. Benzene was detected in two soil samples (VW4D9 and VW4D12) at respective concentrations of 0.049 mg/kg and 0.030 mg/kg. TPHg and MTBE concentrations were not detected above their respective LDLs in any of the soil samples analyzed. VE well VW4 was installed in the eastern portion of the Site, near the station building. A summary of soil sample analytical results is presented on Table 3, and the distribution of key gasoline indicator chemicals is depicted on Figure 5 (Bechtel, 1994).

On April 20, 1994, Bechtel conducted a one-day Soil Vapor Extraction (SVE) test at the Site using VE wells VW1 thru VW4. During the SVE test, six vapor samples were extracted from the

VE wells and submitted for analysis of TPHg and BTEX by United States Environmental Protection Agency (USEPA) Method 8015M/8020 for air. TPHg concentrations of vapor samples ranged from 540 parts per million volumetric (ppmv) in VW4 to 5,900 ppmv in VW1. Benzene concentrations ranged from 8.5 ppmv in sample VW4 to 58 ppmv in sample VW1. Hydrocarbon initial mass removal rates ranged from approximately 3.4 pounds per day (lbs/day) to 41.8 lbs/day.

Soil vapor flow rates up to 22 cubic feet per minute (cfm) were achieved during the SVE test; however, maximum flow rates could not be determined due to mounding of water table. Calculated radii of influence for four vent wells (VW1, VW2, VW3, and VW4) were approximately, 101, 15, 68, and 116 feet, respectively, at the highest flow rates tested at each well. Based on the aforementioned data, it was determined that the use of SVE as an interim remedial alternative for hydrocarbons in the soil is a feasible remediation option (Bechtel, 1994).

Based on the January 26, 1995 Bechtel report titled *Submittal of Feasibility Study/Remedial Action Plan and Recommendations* (Bechtel, 1995a), the most viable and cost-effective remedial alternatives were evaluated for the removal of petroleum-hydrocarbon-impacted soil at the Site. The remedial technologies that Bechtel (1995a) found to be technically and economically feasible included:

- Excavation and off-site disposal;
- Excavation and on-site thermal desorption;
- Excavation and on-site soil washing; and
- In-situ SVE with purchase/lease of equipment.

Bechtel (1995a) concluded that the most economical remedial alternative, among those considered for treatment of hydrocarbons in soil at the Site, was SVE with the "lease" option. Bechtel (1995a) estimated that 95% of extractable hydrocarbons on-site would be removed within the first month of SVE system operation, assuming advective-controlled hydrocarbon removal. Based on the relatively short anticipated remedial period by SVE, SVE with the purchase option did not appear to be cost-effective and the benefit of a faster cleanup time realized through the use of ex-situ methods would diminish. Therefore, Bechtel (1995a) recommended SVE as the best remedial alternative for the Site.

Additionally, Bechtel (1995a) performed calculations to estimate the total mass of the petroleum hydrocarbon plume in the vadose zone at the Site. These calculations provided information to estimate the time required for hydrocarbon removal by SVE. The total mass of petroleum hydrocarbons in the vadose zone was estimated to be 611 lbs, and the volume of petroleum-hydrocarbon-impacted soil is estimated to be 1,507 cubic yards or 2,645 tons (Bechtel, 1995a).

On three dates (March 1, 15, and 17, 1995), Bechtel conducted additional environmental assessment activities at the Site as part of a property transfer agreement between Chevron and Texaco. The results were reported in Bechtel's June 19, 1995 report titled *Results of Recent Field Activities* (Bechtel, 1995b). Bechtel collected soil samples during the installation of three double-walled, steel clad, fiberglass-reinforced gasoline USTs (one 8,000- and two 6,000-gallon capacity), one 2,000-gallon double-walled UST containing diesel fuel, two new dispenser islands, and associated product piping. The new USTs were installed in the southeastern portion of the Site (Figure 2). On March 17, 1995, Bechtel also drilled and sampled two soil

borings (B23 and B24, both located adjacent to the north end of the new UST pit) and a 10-foot-deep vadose well boring, completed as VE well (VW5), was located at the southern fuel dispenser island for use in a future SVE system (Figure 5). The highest levels of full-range TPH (also called TPH-Carbon Chain Breakdown) and benzene both were detected in soil sample B23D6. This sample contained 6,090 mg/kg TPH-full range and 5.94 mg/kg benzene (Table 3). TPHg and MTBE concentrations were not analyzed for any of the other soil samples collected during this assessment phase (Bechtel, 1995b).

On January 11, 1996, a Bechtel representative supervised the drilling and sampling of one off-site well boring (MW-6) to a maximum depth of 26.5 ft bgs and its subsequent completion as a groundwater MW well installation. Well boring MW-6 was located in a landscaped area northwest of the Site, adjacent to Champagne Boulevard (Figure 5). A total of three soil samples (MW6D5, MW6D10, and MW6D14) were collected during drilling activities for analytical testing for key gasoline indicator chemicals. None of these soil samples contained concentrations of TPHg or benzene at or above their respective LDLs (Table 3). Initial groundwater samples were collected both before ("pre"-) and after ("post"-) well development. In the groundwater sample collected from MW-6 before well development, dissolved-phase TPHg was detected above its respective LDLs at a concentration of 1,030 µg/L. Similarly, both benzene and MTBE were not detected at or above their respective LDLs for the groundwater sample collected from well MW-6 prior to its well development. In the groundwater sample collected from well MW-6 after well development, dissolved-phase concentrations of TPHg and benzene were not detected at or above their respective LDLs. However, dissolved-phase MTBE was detected at a concentration of 27 µg/L (Bechtel, 1996).

Based on its technical review of two remedial status reports (one dated January 12, 1996 by Alton Geoscience (AG), titled *Quarterly Remediation System Operation from October 1, Through December 31, 1995* [AG, 1996a]; and the other dated April 12, 1996 by AG, titled *Quarterly Remediation System Operation from January 1 Through March 31, 1996* [AG, 1996b], SECOR believes that a vapor extraction system (VES) system operated on-site from October 25, 1995 to March 1, 1996. The VES consisted of a 100 standard cubic feet per minute (SCFM) Falmouth Products Model 94-100 catalytic oxidizer unit, which included a heater, one EG&G Rotron blower, a knock out pot, a dilution air valve and filter, and associated instrumentation and controls. VE wells VW-1 thru VW-5 were connected to the system, and four of the VE wells (VW-2 thru VW-5) were used as VE wells for the SVE system.

During the fourth quarter 1995 reporting period, AG visited the Site to operate, maintain, repair, and monitor the VES on-site. During the reporting period the VES operated nearly continuously for the month of December. The sound isolation for the blower was completed and re-startup was accomplished on November 29, 1995. As of December 31, 1995, approximately 555 lbs of hydrocarbons were recovered (AG, 1996a).

During the first quarter 1996 reporting period, AG visited the Site to operate, maintain, repair, and monitor the VES on-site. During the reporting period the VES operated only briefly. Following catalyst replacement in February 1996, the system was shut down on March 1, 1996, as directed by Chevron. Subsequently, the VES was dismantled and removed from the Site. During this reporting period, approximately 27 lbs of hydrocarbons were removed. Total hydrocarbon recovery as of March 31, 1996 was approximately 583 lbs (AG, 1996b).

On June 14, 2001, SECOR submitted a *Sensitive Receptor Survey Report for Former Chevron Service Station 9-1197* (SECOR, 2001) to SAM for review. In the report, SECOR concluded the following: (1) Moosa Creek (which is the surface water body closest to the Site) runs along the eastern property line of the Site; however, due to the direction of the groundwater gradient at the Site, Moosa Creek does not qualify as a potential sensitive receptor; (2) Several irrigation wells that are located to the north, east, and south of the Site are unlikely to qualify as sensitive receptors due to the fact that they are being used for irrigation purposes; (3) The abandoned water supply well approximately 1,000 feet to the north of the Site is unlikely to qualify as a sensitive receptor due to its distance from the known gasoline release areas at the Site and the fact that the well is inactive; and (4) There are water supply vent pipes and a water supply line approximately 2,000-ft to the west of the Site that are unlikely to qualify as sensitive receptors. (SECOR, 2001).

On July 12, 2001, SAM responded to SECOR (2001) with a letter stating that SAM concurred with items 1 and 4 from the previous paragraph. However, SAM requested additional clarification in regards to the conclusion that it is unlikely that the irrigation wells and the abandoned water supply well qualify as sensitive receptors. According to SAM, irrigation wells are considered receptors as they could be converted to drinking water wells at any time. Also, migrants in the back-country often use irrigation wells as their water supply. As for the water supply well, unless it is abandoned, it would still be considered a potential receptor. SAM requested that SECOR provide a more comprehensive justification that the MTBE in groundwater can not reach the nearby irrigation wells. Additionally, SAM requested that the length of time be calculated for MTBE and benzene concentrations in groundwater at the Site to reach the State of California drinking water standard of 13 µg/L and 1.0 µg/L, respectively, for the purpose of future site closure (County of San Diego, 2001).

During the November 5, 2004 groundwater monitoring event, SECOR collected groundwater samples from an off-site agricultural well located at the Golf Country Mini Storage approximately 100 feet west of the Site. The agricultural well is the closest sensitive receptor to the Site and was sampled in order to determine if the well has been impacted by hydrocarbon constituents. The agricultural well was purged by allowing the well to run for approximately 15 minutes before collecting samples from the faucet on the well. The samples taken from the well were analyzed for BTEX, MTBE, di-isopropyl ether (DIPE), ethyl-tert-butyl ether (ETBE), tert-amyl-methyl ether (TAME), and tert-butyl alcohol (TBA) using EPA method 8260B. TPHg, BTEX, MTBE, DIPE, ETBE, TAME, and TBA were not detected at or above their respective LDLs in the samples collected from the agricultural well. Additionally, during the November 5, 2004 sampling event, natural attenuation (NA) parameters were analyzed for the six MWs associated with the Site and the off-site agricultural well. The NA parameters were used to evaluate whether or not natural attenuation of petroleum hydrocarbons is occurring at the site. The NA parameters analyzed included dissolved oxygen (D.O.), oxygen reduction potential (ORP), and ferrous iron (Fe^{+2}). D.O. concentrations ranged from 0.14 milligrams per liter (mg/L) in MW-5 to 4.40 mg/l in the off-site agricultural well. Fe^{+2} was detected at a concentration of 1.0 mg/L in MW-5. ORP ranged from 39 millivolts (mV) in MW-1 to -90 mV in MW-2. The NA data shows that MWs with relatively higher petroleum hydrocarbon concentrations (MW-2 and MW-5) coincide with areas that contain higher ferrous iron, lower ORPs, and lower D.O. This suggests that biodegradation of dissolved petroleum hydrocarbons at the Site is occurring via aerobic respiration, denitrification, and ferric-iron reduction. A summary of the NA data for the aforementioned reporting period is presented in Table 4 and a map depicting bio attenuation parameters is

presented in the *Fourth Quarter 2004 Groundwater Monitoring Report* under Appendix B (SECOR, 2004b).

5.0 RECEPTOR SURVEY

5.1 SENSITIVE RECEPTOR SURVEY

As previously mentioned, SECOR submitted a sensitive receptor survey (SRS) report to SAM for review on June 14, 2001. In the report SECOR concluded the following: (1) Moosa Creek (the closest surface body of water to the Site) runs along the eastern property line of the Site, however, due to the direction of the groundwater gradient at the Site, Moosa Creek does not qualify as a potential sensitive receptor; (2) Several irrigation wells located to the north, east, and south of the Site were unlikely to qualify as sensitive receptors due to the fact that they are used for irrigation purposes; (3) An abandoned supply well approximately 1,000-ft to the north of the Site is unlikely to qualify as a sensitive receptor due to the distance of the supply well from the release and the fact that the well is inactive; and (4) There are water supply vent pipes and a water supply line approximately 2,000-ft to the west of the Site that are unlikely to qualify as sensitive receptors.

On July 12, 2001, SAM responded to SECOR's SRS report (SECOR, 2001) with a letter stating that SAM concurred with items 1 and 4 from the previous paragraph. However, SAM requested additional clarification in regards to the conclusion that it is unlikely that the irrigation wells and the abandoned water supply well qualify as sensitive receptors. According to SAM, irrigation wells are considered receptors as they could be converted to drinking water wells at any time. Also, migrants in the back-country often use irrigation wells as their water supply. As for the water supply well, unless it is abandoned, it would still be considered a potential receptor. SAM requested that SECOR provide a more comprehensive justification that the MTBE in groundwater can not reach the nearby irrigation wells. Additionally, SAM requested that the length of time be calculated for MTBE and benzene concentrations in groundwater at the Site to reach the State of California drinking water standard of 13 µg/L and 1.0 µg/L, respectively, for the purpose of future site closure (SECOR, 2001).

Under Section 5.0 of this report, SECOR will address SAM's concerns regarding the classification of the irrigation wells and supply well as unlikely potential sensitive receptors. Additionally, SECOR will provide a more comprehensive justification that the dissolved-phase MTBE in the shallow groundwater plume can not reach the nearby irrigation wells and water supply well. The length of time for MTBE and benzene concentrations to reach the State of California drinking water standards will be addressed later in this report under Section 10.0.

5.2 ADJACENT PROPERTIES

The Site is bordered on the north, south, and east by the Lawrence Welk Resort and Golf Course. The Golf Country Mini Storage is located across Champagne Boulevard to the west.

5.3 GROUNDWATER RESOURCE UTILIZATION

Based on a recent review of available information obtained through the California Department of Water Resources (DWR), there are no permitted groundwater production wells located within a 2,000-ft radius of the Site. Based on the field verification conducted for the previous SRS and recent field verification, SECOR concludes that there is one active agricultural well (located at

the Golf Country Mini Storage), five active irrigation wells (located on the Lawrence Welk Resort and Golf Course property), two active irrigation wells (located at the Deer Park Winery), one inactive supply well (located in an undeveloped field north of the Site), and two water supply vent pipes, which are connected to the piping of the water tank located at a higher elevation outside of the search radius. None of the wells found during the site reconnaissance were identified by the USGS at any point of their history nor were they present in the USGS water well database. Figure 6 depicts the approximate location of each potential receptor in relation to the Site and the approximate radius of the area surveyed.

As previously mentioned at the beginning of this section, SAM agreed with SECOR's conclusion that the water supply vent pipes and water supply line 2,000-ft to the west of the Site are unlikely to qualify as sensitive receptors due to the distance of the water pipes from the release at the Site. Therefore, the water supply vent pipes and water supply line will be excluded from further discussions regarding groundwater resource utilization.

5.3.1 Golf Country Mini Storage – Active Agricultural Well

One agricultural well was identified at the Golf Country Mini Storage located approximately 100 feet west of Champagne Boulevard and 60 feet north of Lawrence Welk Drive. The agricultural well is used to irrigate the Lawrence Welk Golf course and has never been used for drinking purposes. This well qualifies as a sensitive receptor due to its proximity to the Site and due to its location with relationship to the groundwater gradient interpreted for the Site. The groundwater gradient interpreted for the Site currently, and historically flows to the northwest and has demonstrated general stability. The agricultural well is located west (cross-gradient) from the Site, however since the irrigation well qualifies as a sensitive receptor, the well was tested for hydrocarbon constituents to ensure that this receptor has not been impacted. The Golf Country Mini Storage agricultural well was not identified in the previous SRS report.

As previously mentioned, on November 5, 2004, the off-site agricultural well was purged and sampled. This well was purged by allowing the well to run for approximately 15 minutes before collecting samples from the faucet on the well. The samples taken from the well were analyzed for TPHg, BTEX, and the five fuel oxygenates (MTBE, DIPE, ETBE, TAME, and TBA) using EPA method 8260B. TPHg, BTEX, and fuel oxygenates constituents were not detected at or above their respective LDLs in the samples collected from the agricultural well. Based on the above analytical results, the cross-gradient location of the well from the Site, and the general stability (i.e., steady non-fluctuating flow direction) of the groundwater gradient vector; the agricultural well can be eliminated from further consideration as a sensitive receptor.

5.3.2 Lawrence Welk Resort and Golf Course – Active Irrigation Wells

Five irrigation wells were identified at the Lawrence Welk Resort and Golf course located to the north, east, and south of the Site. The irrigation wells are operated by the Lawrence Welk Resort and are used for irrigation, typically being pumped in the summer months. The Lawrence Welk Resort and Golf Course was in full operation at the time of the field reconnaissance; therefore, the irrigation wells were visually identified from a distance due to accessibility restraints. The closest irrigation well on the Lawrence Welk Resort property is approximately 220-ft southeast of the subject Site. All five irrigation wells are located either upgradient or cross-gradient from the Site; however, the irrigation wells qualify as sensitive

receptors due to their relative proximity from the Site and the fact that irrigation wells could be converted into drinking water wells at anytime.

Based on the water quality analytical testing results for the agricultural well located at the Golf Country Mini Storage, the upgradient and/or cross-gradient locations of the irrigation wells, and the general stability of the groundwater gradient vector; the irrigation wells can be eliminated from further consideration as sensitive receptors.

5.3.3 Deer Park Winery – Active Irrigation Wells

Two irrigation wells were identified at the Deer Park Winery located approximately 1,500-ft north of the subject Site. The winery was not in operation at the time of the most recent field reconnaissance; however, the winery was in full operation during the field reconnaissance performed for the initial SRS. According to the grounds supervisor, the irrigation wells were installed at different times for irrigation purposes and one of the two wells does not operate due to a broken motor. Due to the fact that the wells are used for irrigation purposes, the irrigation wells qualify as sensitive receptors. However, due to the large distance (approximately 1,500-ft) from the gasoline impacted release at the subject Site and the cross-gradient location from the Site, the irrigation wells can be eliminated from further consideration as sensitive receptors.

5.3.4 Undeveloped Field – Inactive Supply Well

The closest water supply well to the Site was identified in a field located approximately 2,000-ft north of the subject Site. The field was fenced and appeared to be ranch land. Nobody could be interviewed regarding the well at the time of the previous and most recent field reconnaissance. The surface components appeared to be in fair condition. The well was open to the atmosphere. Since the supply well has not been properly abandoned, it would be considered as a potential sensitive receptor. However, due to the large distance from the gasoline impacted release of the Site and cross-gradient location from the Site, the supply well can be eliminated from further consideration as a sensitive receptor.

5.4 SURFACE WATER

The Site is located within the Moosa Hydrologic Subarea (HSA; 903.13) of the Lower San Luis Hydrologic Area (HA; 903.10) of the San Luis Rey Hydrologic Unit (HU; 903.00), according to RWQCB, (1996). Table 1 lists the potential beneficial uses of groundwater and surface water in the Moosa HSA. Groundwater within the Moosa HSA has designated existing beneficial uses for municipal, agricultural, and industrial supply. Surface water in the Moosa HSA is exempted from municipal supply use; however, there are designated beneficial surface water uses for agricultural, industrial, recreational, warm water habitat, and wildlife habitat (RWQCB, 1996). The Site is not located within a designated SDCWA "sensitive aquifer area" (SDCWA, 1996). Moosa Creek; an intermittent creek with seasonal water level fluctuations is located approximately 20-feet directly east (upgradient) of the subject Site. Moosa Creek trends in a northwesterly direction. As previously mentioned in this report, SECOR in its previous SRS report (SECOR, 2001) determined that Moosa Creek could be discarded as a potential sensitive receptor.

5.5 IMPACT ON BIOLOGICAL RECEPTORS

No endangered plants or animals have been identified within the subject or adjacent property boundaries that compromise the Site. No nuisance or odor complaints have been made regarding the Site.

6.0 ASSESSMENT OF IMPACTS

The purpose of this section is to: (1) identify the contaminants of concern (COCs) present at the Site; (2) discuss the chemical, physical, toxicological and environmental fate/transport characteristics of the COCs; and (3) describe the extent of COC impact (and potential impact) to soil, groundwater, surface water, air and subsurface utilities at and near the Site.

6.1 CONTAMINANTS OF CONCERN

Available information regarding past and present UST operations at the Site indicate the USTs were (and are) used for storing gasoline. Accordingly, gasoline-related hydrocarbons and additives have been identified in soil and groundwater samples collected from the subsurface per the results of laboratory analytical testing methods during site assessment activities. Hydrocarbon compounds identified in the subsurface include TPHg, BTEX, MTBE and TBA.

6.2 CONTAMINANT CHARACTERISTICS

Key chemical, physical, environmental fate/transport characteristics and relevant regulatory levels of the COCs are summarized in Table 5. Additional information on the COCs is summarized below.

6.2.1 Gasoline

Gasoline is a clear liquid with a characteristic odor that is used as a fuel for internal combustion engines and as a solvent. Gasoline is a flammable liquid and is insoluble in water. Gasoline vapors are also flammable and may flash if an ignition source is present. Gasoline contains chemicals which are hazardous to human health and may cause cancer (New Jersey Department of Health and Senior Services (NJDHSS, no date)). The primary chemicals of concern in gasoline that have been reported in samples from the Site will be discussed individually in the following paragraphs.

6.2.2 Benzene

Benzene is a colorless liquid with an aromatic odor. It is found in gasoline, is used in making other chemicals and as a solvent. Commercial use of benzene as a solvent is generally being phased out due to its toxicity. Benzene is flammable in liquid and vapor states and vapors may flash if an ignition source is present. Benzene is a carcinogen and mutagen that is readily absorbed through inhalation, ingestion and dermal pathways (NJDHSS, no date).

6.2.3 Toluene

Toluene is a colorless liquid with a sweet, strong odor. It is present in gasoline and used in making other chemicals, perfumes, dyes and detergents. Toluene is flammable in liquid and vapor states and vapors may flash if an ignition source is present. Toluene is a suspected teratogen and exposure may damage a developing fetus (NJDHSS, no date).

6.2.4 Ethylbenzene

Ethylbenzene is a colorless liquid with an aromatic odor, which is found in gasoline and is used in the production of polymers and as a solvent. Ethylbenzene is flammable in liquid and vapor states, and vapors may flash if an ignition source is present. Long term exposure to ethylbenzene may cause damage to the liver. There is limited evidence that exposure to ethylbenzene may cause cancer or damage to a developing fetus (NJDHSS, no date).

6.2.5 Xylenes

Xylene isomers (meta-xylene, ortho-xylene and para-xylene) are clear liquids with strong odors. Xylenes are found in gasoline and are used as solvents. Xylenes are flammable in liquid and vapor states, and vapors may flash if an ignition source is present. Long term exposure to xylenes may damage the liver and kidneys, and xylenes may damage a developing fetus (NJDHSS, no date).

6.2.6 Methyl tert-Butyl Ether

MTBE is a colorless liquid that has historically been used in gasoline as an octane booster and to reduce hazardous emissions from automobiles. MTBE is flammable in liquid and vapor states, and vapors may flash if an ignition source is present. Long term exposure to MTBE may cause damage to the kidneys (New Jersey Dept. of Health). The general use of MTBE in gasoline in the State of California was phased out in 2003. The State of California has classified MTBE as a carcinogen.

6.2.7 Tert-Butyl Alcohol

TBA is an oily, colorless liquid or solid with a mothball-like odor. TBA is used as a solvent for pharmaceuticals, as a paint remover and as an additive in unleaded gasoline. TBA is flammable as a solid or liquid and poisonous gases may be produced in a fire. TBA is not listed as a carcinogen or known to adversely affect reproduction; however high levels of exposure to TBA may affect kidney and liver function and be a respiratory and dermal irritant (New Jersey Dept. of Health).

6.3 FATE, TRANSPORT AND PERSISTENCE OF CHEMICALS OF CONCERN IN THE ENVIRONMENT

Chemical fate and transport is dependent on a variety of factors relating to the physical and chemical properties of the substance(s) released and the subsurface conditions at the release Site. A full fate and transport analysis is beyond the scope of this document; however a general discussion of fate and transport of the chemicals of concern is provided below. Benzene and MTBE are classified by the State of California as carcinogens and represent the greatest potential risk to human health and the environment. Therefore, the fate, transport, and persistence discussion will focus on these two chemicals. Toluene, ethylbenzene, xylene isomers are anticipated to behave similarly to benzene.

A comparison of chemical properties of benzene and MTBE (Table 5) indicates MTBE is approximately 11 times more soluble in water than benzene. However, benzene has a higher

soil sorption coefficient and higher retardation factor than MTBE. This indicates that MTBE is less inhibited by sorption onto soil particles and that MTBE migrates faster in groundwater than benzene.

Biodegradation and chemical oxidation commonly occur in the subsurface and may act to reduce benzene and/or MTBE concentrations over time. Biodegradation occurs when microorganisms in the subsurface consume a chemical under aerobic or anaerobic conditions. The rate at which biodegradation occurs is dependent on the types of microorganisms that are present, environmental conditions, presence of sufficient nutrients to support the microorganisms, and the presence of electron acceptors. Benzene is reported to be biodegradable under aerobic conditions in surface water with a half-life ranging from a little as two days to 17 days; however, aerobic degradation is expected to occur more slowly in groundwater. Benzene biodegradation does not occur as readily under anaerobic conditions (New Jersey Dept. of Health).

Studies have shown that MTBE degrades under anaerobic conditions and through chemical oxidation processes resulting in residual TBA. MTBE typically persists longer in groundwater than benzene, apparently due to microbial preference for benzene and other compounds. Once benzene has been removed, degradation rates for MTBE typically increase (Wilson, et al, 2000). Other studies have shown that MTBE degrading aerobic microbes are relatively uncommon in the subsurface at most sites and that the addition of special cultures and nutrients is necessary to encourage aerobic degradation of MTBE (Spinnler and others, 2001).

6.4 PATHWAYS OF EXPOSURE

The only natural pathway identified to date is groundwater, which has been identified to flow to the northwest at approximately 14 to 18 ft bgs. Existing site improvements (asphalt pavement of parking lot and concrete slab or structure) are believed to have limited most natural pathways for exposure such as vertical migration of hydrocarbon vapors from soil and groundwater.

Man-made pathways for potential exposure that are believed to exist on-site and in the vicinity of the Site include buried sewer, gas, electrical, and water conduits. In general, subsurface utilities are buried in trenches 1.5 to 3 feet bgs and in some instances can be buried down to 6 to 8 feet bgs beneath roadways.

6.4.1 Vapor Inhalation from Vertical Migration of Hydrocarbon Vapors

Vapor inhalation can occur if hydrocarbon vapors migrate through conduits from the subsurface such as foundation cracks. The Site is currently paved with both asphalt and concrete. Due to the fact that the Site building has a concrete foundation, risk from vapor inhalation would be very low at this Site. Additionally, it is an operational gasoline service station with background hydrocarbon vapors already present.

6.4.2 Ingestion of Soil and Dust

Direct contact with impacted soil is unlikely to occur because the Site is covered with asphalt and concrete. The potential for soil/dust ingestion may exist during future construction activities.

However, there are no current intentions for construction activities at the Site. Therefore, this exposure pathway is incomplete.

6.4.3 Dermal Contact with Soils or Groundwater

Direct contact with impacted soil is unlikely to occur because the Site is covered with asphalt and concrete. The potential for dermal contact with soil/dust or groundwater may exist during future construction activities. However, there are no current plans for construction activities at the Site. Therefore, this exposure pathway is incomplete.

7.0 EXTENT OF HYDROCARBON IMPACTS

7.1 HYDROCARBON IMPACT TO SOIL

Hydrocarbons were discovered in soil samples taken during the removal of the former gasoline USTs and used-oil UST at the Site in October, 1993 (TRG, 1993). TPHg concentrations in soil samples collected from the former UST excavation limits ranged from 0.25 mg/kg (T-1-E) to 5,400 mg/kg (T-3-E). TRPH concentrations in soil samples taken from the used oil UST excavation limits ranged from below their respective LDLs to 23,000 mg/kg (WO-3). Benzene was analyzed for two soil samples within the gasoline and waste oil UST excavation limits (T-3-E and WO-3). Benzene was not detected above its respective LDLs for the two soil samples analyzed.

TPHg concentrations in soil samples collected from the UST related product piping excavations in November 1993 ranged from 0.15 mg/kg (P-5) to 3,300 mg/kg (P-1-D5). TFH concentrations in these soil samples ranged from 26 mg/kg (P-8-D6) to 3,200 mg/kg (P-7-D6). Benzene was detected in one soil sample (P-7-D6) with a concentration of 1.8 mg/kg (Bechtel, 1994).

Soil borings and corresponding samples have been collected from December 1993 to January 1996. The highest detection of TPHg and MTBE was found in soil sample B12D5.5 at concentrations of 2,400 mg/kg and 2.4 mg/kg, respectively, at a depth of 5.5 feet bgs. The highest detection of benzene was found in soil sample B23D6 at a concentration of 5.94 mg/kg at six feet bgs. A summary of soil analytical results are outlined in Table 3 and cumulative soil concentrations for TRPH, TPHg, TFH, benzene, and MTBE are illustrated on Figure 5.

The volume of soil with hydrocarbons was multiplied by the soil density to obtain the mass of soil with TPHg in the soil to obtain the total hydrocarbon mass present in soil. Concentrations were determined by graphically integrating concentration as a function of depth. The total mass of petroleum hydrocarbons in the vadose zone was estimated to be 611 lbs. The volume of petroleum-hydrocarbon-impacted soil was estimated to be 1,507 cubic yards or 2,645 tons (Bechtel, 1996b).

7.2 EXTENT OF HYDROCARBON IMPACT TO GROUNDWATER

Groundwater monitoring and sampling frequency has varied from a quarterly basis to an annual basis since the first sampling event on December 20, 1993. The maximum concentration of dissolved benzene and MTBE was reported in the groundwater sample collected from well MW-2 at concentrations of 914 µg/L and 6,540 µg/L, respectively, on June 5, 1995. Historically, LPH has been absent from the Site.

During the most recent comprehensive groundwater monitoring event (May 5, 2005), all six Site groundwater MWs were sampled following purge sampling procedures based on SAM guidelines. Groundwater sample analytical results for the Site groundwater MWs indicated that the highest TPHg and benzene concentrations were present in MW-2 at concentrations of 4,100 µg/L and 2.0 µg/L, respectively. The highest MTBE concentration was detected in the sample collected from MW-5 at a concentration of 71 µg/L (SECOR, 2005). Table 2 presents all

groundwater analytical results to date. Appendix B presents groundwater monitoring reports for calendar years 2004 and 2005.

The dissolved phase plume is located in the northwest portion of the Site and moves in a hydraulic downgradient direction towards Champagne Boulevard. The groundwater plume has been well defined and concentrations of hydrocarbon constituents are decreasing to stable. The groundwater gradient direction and magnitude for the Site is generally stable. Additionally, natural attenuation is supported as a reduction mechanism for the concentration of hydrocarbon constituents in the dissolved phase plume. Isoconcentration contour maps are depicted on Figures 7, 8, and 9 (for dissolved TPHg plume) and on Figures 10, 11, and 12 (for dissolved benzene plume), and Figures 13, 14, and 15 (for dissolved MTBE plume). Comparison of the isoconcentration maps of TPHg, benzene and MTBE from May 2004 through May 2005 reveals the stable nature of the plume.

7.3 CURRENT DISSOLVED-PHASE HYDROCARBON PLUME EXTENT

The current spatial extent of dissolved-phase motor fuel hydrocarbon constituents in the groundwater plume emanating from the known Site gasoline products release areas is best depicted on Figure 15. This figure shows the configuration and extent of the dissolved MTBE plume for May, 5, 2005. Historically, the dissolved MTBE plume has been the most spatially-extensive of the key gasoline indicator chemical plumes in shallow groundwater at the Site. By contrast, the dissolved benzene plume is much smaller, and it remains centered on well MW-2. The current (May 5, 2005) spatial extent of the dissolved benzene plume is depicted on Figure 12.

8.0 DETERMINATION OF APPLICABLE CLEANUP LEVELS

SECOR proposes soil and groundwater cleanup goals that are protective of human health and the environment.

8.1 SOIL

SECOR proposes soil cleanup goals that are protective of current and future beneficial groundwater uses and human health and safety. Specific numeric cleanup goals have not been developed for this Site.

8.2 GROUNDWATER

To protect current and potential future beneficial uses of groundwater and surface water in the vicinity, long-term cleanup levels that are protective of human health and the environment will be applied. These long-term groundwater cleanup goals are presented in the table below:

Applicable Groundwater Cleanup Levels – Potential Future Use as Municipal Drinking Water Supply	
Chemical	Target Concentration (µg/L)
Benzene	1.0 – California primary maximum contaminant level (MCL)
Ethylbenzene	300 - California primary MCL
MTBE	13 – California primary MCL
TBA	12 – California State action level
Toluene	150 - California primary MCL
Xylenes	1,750 - California primary MCL

9.0 FEASIBILITY STUDY

The purpose of this section is to evaluate alternative site remediation strategies for appropriateness and cost-effectiveness. Based on the evaluation, the most appropriate and most cost-effective strategy is selected for implementation at the Site. The main focus is the long-term protection of current and future beneficial groundwater uses in the area, with MTBE being the primary COC. The remedial strategy to be implemented will be chosen based on consideration of the following objectives (that are listed in descending order of importance):

- Stop further migration of the MTBE groundwater plume.
- Reduce the concentration of dissolved-phase hydrocarbons in the saturated zone to levels that are protective of current and future beneficial uses.
- Reduce the source mass of hydrocarbons in vadose zone and capillary-fringe soil.

9.1 REMEDIAL TECHNOLOGY SCREENING

A list of proven remedial technologies (USEPA, 1995) was screened for applicability at the Site. A remedial technology screening matrix is presented as Table 6. Site-specific conditions that involve impact to soil and groundwater were considered for the initial screening of corrective action technologies. Technologies that passed the initial screening are listed below:

- High-Vacuum Dual-Phase Extraction,
- Enhanced Bioremediation, and
- Natural Attenuation.

9.2 REMEDIAL ALTERNATIVES

The remedial technologies that passed the initial screening were used to develop three remedial alternatives that, in SECOR's opinion, can best achieve the remedial goals. These alternatives are described below.

9.2.1 Alternative 1 – High-Vacuum Dual-Phase Extraction (HVDPE)

This alternative would utilize SECOR's Mobile Remediation System (MRS) to perform two 96-hour HVDPE events utilizing well MW-2 concurrently as a groundwater extraction (GWEX) and VE well. SECOR's MRS extracts groundwater and soil vapor using a high-vacuum liquid-ring pump. The extracted liquid and vapor are separated within the MRS unit. Liquid is transferred to an aboveground storage tank for subsequent treatment and/or disposal. Soil vapors (petroleum hydrocarbons) are subjected to thermal oxidation within a combustion chamber and the treated effluent air stream is released to the atmosphere in accordance with the requirements of the San Diego County Air Pollution Control District (APCD) permit for the MRS. This remediation method is the most aggressive of the three proposed alternatives; it would be the most costly, at approximately $45,000 to implement for remediation of the remaining dissolved-phase hydrocarbon constituent concentrations in the groundwater plume at the Site (Table 7).

9.2.2 Alternative 2 - In-Situ Enhanced Bioremediation with Oxygen-Releasing Compound

Molecular oxygen, derived from the reaction of magnesium peroxide with groundwater, is released into the impacted groundwater plume for use as a food source by indigenous microorganisms. This microbial degradation process, which is referred to as the aerobic biodegradation, ultimately results in the complete biotransformation of petroleum hydrocarbon contaminants into carbon dioxide and water. Oxygen-releasing compound (ORC™) can be injected in a slurry form into the impacted groundwater zone using either a direct-push or auger drill rig, and/or it can be installed in existing wells in the form of ORC™ socks. The increased dissolved oxygen stimulates naturally-occurring microorganisms that aerobically degrade hydrocarbon compounds. This alternative is a "passive" remediation method, and it would be the second most costly, at approximately $16,260 (Table 8).

9.2.3 Alternative 3 - Remediation by Natural Attenuation

Remediation by natural attenuation (RNA) is a "passive" remedial method that does not involve active remediation. RNA is a multi-component process that incorporates biological mechanisms (biodegradation), chemical mechanisms (oxidation and hydrolysis), and physical mechanisms (dispersion, volatilization, and sorption). Historical groundwater monitoring data (Table 2) shows that dissolved benzene concentrations are decreasing, and that MTBE concentrations are stable to decreasing. This data, in conjunction with the November 5, 2004 natural attenuation parameter measurements (Table 4) suggests that the remaining dissolved-phase hydrocarbon concentrations within the groundwater plume currently are being reduced through the processes of natural attenuation. RNA, which involves no further active remediation and no further monitoring of Site groundwater MWs, is the most cost-effective of the three proposed alternatives at $0 (Table 9).

9.3 SELECTED REMEDIAL ALTERNATIVE

A comparison of the advantages and disadvantages of the proposed remedial alternatives (Table 10) matrix indicates that all of the proposed remedial alternatives would result in an adequate level of protection of human health, and protect the environment and beneficial uses of groundwater and surface water in the vicinity of the Site. Each alternative would effectively reduce the remaining hydrocarbons in the subsurface over time, and each remedial alternative is relatively easy to implement. Most other factors in the matrix are also nearly equal in terms of short and long-term effectiveness of remediation, and impact to the surrounding community.

Given that all three of the proposed alternatives would be effective in reaching the cleanup goals, the selection process is narrowed down to a cost comparison (Table 10). Based on cost considerations, RNA is the preferred remedial alternative for the remediating the remaining hydrocarbon impact at the Site.

10.0 ESTIMATED TIME FOR GROUNDWATER TO REACH CLEANUP GOALS

This section provides an estimate of the time required for dissolved-phase petroleum hydrocarbon constituent groundwater concentrations in the plume below the Site to reach State of California primary drinking water MCLs. Data presented in this report has demonstrated that the dissolved-phase hydrocarbon plume below the Site is shrinking and that it is not migrating (Section 7.2). There are currently two MWs at the Site (MW-2 and MW-5) that consistently contain dissolved MTBE above the State of California primary MCLs of 13 µg/L. Hydrocarbon concentrations in the other four MWs (MW-1, MW-3, MW-4, and MW-6) have been near or below the MCLs for at least one year. Recent dissolved MTBE concentrations in Site MWs are summarized in Table 2 and Figure 15.

It has been observed that the attenuation of dissolved phase hydrocarbon concentrations at fuel hydrocarbon sites generally follows a first-order decay trend once the majority of hydrocarbon source material has been removed. The following equation has been used to describe the observed concentration decrease at a point (e.g., MW) within a dissolved phase hydrocarbon plume:

$$C = C_o e^{-kt}$$

Where:
C = concentration at time t (µg/L)
C_o = peak concentration (µg/L)
k = overall attenuation rate constant ($days^{-1}$)
t = elapsed time after observation of peak concentration (days)

10.1 NATURAL ATTENUATION OF DISSOLVED CONSTITUENTS OF CONCERN

To estimate the time for remaining dissolved MTBE below the Site to attenuate to MCLs through natural attenuation, SECOR used concentration trends in key MWs at the Site to estimate first-order attenuation rate constants for MTBE. The attenuation rate constant was estimated by utilizing the equation above with the peak concentration (C_o) for the given well and the concentration from the most recent groundwater sampling event. This calculated first-order degradation rate constant gives an approximate natural attenuation rate around a given well. The resulting rate constants were then used to extrapolate the estimated time to reach MCLs at the Site. This analysis was performed on MWs with the historically highest dissolved levels of MTBE, which have been reported in wells MW-2 and MW-5. Data sets used during the analysis, began with the highest concentrations of MTBE in wells MW-2 and MW-5 following the discontinued use of the reported VES system in 1996.

For MTBE in well MW-2, a data set beginning on June 3, 1997 with a concentration of 1,000 µg/L to May 5, 2005 with a concentration of 62 µg/L was used for analysis. A semi-logarithmic plot of MTBE concentration versus time for well MW-2 and the resulting best-fit line and equation are presented as Figure 16. The slope of the best-fit line (0.0011 $days^{-1}$) is the estimated first-order attenuation rate constant for the data set. The first-order decay equation and estimated rate constant are then used to estimate the time required for MTBE concentrations to reach 13 µg/L. This method estimates that MTBE concentrations in the vicinity of well MW-2 will reach 13 µg/L in approximately three years by natural attenuation.

Recent data shows that MTBE concentrations in MW-2 have been stable to decreasing since December 12, 2003 which supports this analysis (Table 2), and corroborates the estimated time calculated from Figure 16.

This same approach was used to evaluate MTBE concentration data for well MW-5. A data set beginning on June 13, 1996 with a concentration of 510 µg/L to May 5, 2005 with a concentration of 71 µg/L was used for analysis. A semi-logarithmic plot of MTBE concentration versus time for well MW-5 and the resulting best-fit line and equation are presented as Figure 17. The slope of the best-fit line (0.0008 $days^{-1}$) is the estimated first-order attenuation rate constant for the data set. Using the first-order decay equation and estimated rate constant, MTBE concentrations in the vicinity of well MW-5 were estimated to reach 13 µg/L in approximately four years with natural attenuation. A summary of the MW-2 and MW-5 trend analysis is provided in Table 11.

10.2 ESTIMATED TIME TO REACH MCL CLEANUP LEVELS

Based on a review of the Site data, the groundwater concentrations below the Site should consistently reach MCLs between 3 and 4 years. This estimate allows for a reasonable amount of uncertainty due to the possible presence of small pockets of residual hydrocarbons below the Site that could result in future short-term rises in MTBE concentrations above MCLs similar to the recent MTBE concentrations observed in wells MW-2 and MW-5. This estimate assumes that there are no additional releases at the Site.

11.0 RECOMMENDED MITIGATION APPROACH

Based on review of the site assessment data collected to date, the site appears to meet the eight criteria for administrative closure as a "Low Risk Groundwater Case", as outlined by the San Diego Regional Water Quality Control Board's *Interim Guidance Document*, dated April 1, 1996. Preceding sections of this CAP have provided an adequate discussion of the criteria, which are listed below.

1. *Groundwater has been impacted, the leak has been stopped and on-going sources, including free product (LPH), have been removed or remediated to the extent practicable.*

2. *The site has been adequately characterized.*

3. *The site is located in a Basin without designated municipal and domestic beneficial uses.*

4. *The site is located outside of a sensitive aquifer boundary.*

5. *The dissolved hydrocarbon plume is not migrating.*

6. *No water wells, deeper drinking water aquifers, surface water, or other sensitive receptors are likely to be impacted.*

7. *The site appears to present no significant risk to human health.*

8. *The site appears to present no significant risk to the environment.*

SECOR notes that the Item #3 criterion can be met only if the impacted aquifer is not used for potable water supply during the entire period that it will take for the dissolved MTBE plumes to aerobically biodegrade to their respective MCLs. There are no plans to develop groundwater in the area of the Site by any agency as a source of potable water. Additionally, based on the fact that a number of wells at the Site either "dewater" or are classified as "slow rechargers" suggests a very limited capacity for water production.

SECOR evaluated three viable remediation alternatives for cleaning up the hydrocarbon-impacted soil and groundwater at the site (refer to Section 9.0), and identified RNA to be the more cost-effective of the approaches. Baseline RNA indicator parameters have been collected at the Site and the RNA parameters demonstrates that biodegradation of dissolved petroleum hydrocarbons at the Site is occurring via aerobic respiration, denitrification, and ferric-iron reduction (Table 4). Additionally, Under Section 10.2 of this report, SECOR estimated that groundwater concentrations below the Site should consistently reach MCLs between 3 and 4 years.

12.0 CONCLUSIONS AND RECOMMENDATIONS

12.1 CONCLUSIONS

SECOR concludes that the potential sensitive receptors identified in this report can be eliminated as sensitive receptors based on the groundwater analytical results from the agricultural well located at the Golf Country Mini-Storage, the up and cross-gradient orientation of the receptors, the general stability of the groundwater gradient at the Site, and the relatively large distance from the receptors to the gasoline-impacted groundwater at the Site.

Based on SECOR's review of the three retained site remediation strategies, SECOR concludes that RNA is the preferred remedial approach. SECOR notes that the continuing presence of residual hydrocarbons and dissolved-phase hydrocarbons in the Site's subsurface presents no threat to human health, water resources, or the environment.

SECOR also concludes that biodegradation of dissolved petroleum hydrocarbons at the Site is occurring via aerobic respiration, denitrification, and ferric-iron reduction. Additionally, SECOR estimates that groundwater concentrations below the Site should consistently reach MCLs between 3 and 4 years.

12.2 RECOMMENDATIONS

SECOR further recommends that the dissolved-phase motor fuel hydrocarbon plume be allowed to be reduced by RNA.

To implement the RNA process and to secure expeditious administrative closure of the Site (Unauthorized Release #H05719-001) case file, SECOR recommends that the following sequence of events be approved for implementation by the LWQD:

1) The LWQD should review and approve the CAP,

2) The LWQD case officer should issue a conditional letter of concurrence for the CAP and for its recommended remedial approach (e.g., RNA and Well Abandonment).

3) The LWQD should issue written authorization to SECOR to implement the public notice process (for concerned residents and commercial businesses) and its 30-day comment period.

4) Upon successful completion of the comment period, the LWQD case officer should issue a final concurrence letter for the CAP and its selected remedial alternative (e.g., RNA and Well Abandonment).

5) SECOR should secure all necessary well abandonment permits to enable it to decommission all of the groundwater MWs and VE wells.

6) SECOR should then proceed to properly abandon the six groundwater MWs and five VE wells in accordance with the approved LWQD well abandonment permit specifications.

13.0 CORRECTIVE ACTION WORKPLAN

Based on the selection of Remedial Alternative 3, no further active remediation would be required. A workplan for the well abandonment will be prepared upon concurrence from SAM with this CAP and completion of the required 30-day public notification period.

The following are activities associated with decommissioning the groundwater MWs at the subject Site. Such activities include the destruction of six groundwater MWs and five VE wells.

13.1 HEALTH & SAFETY PLAN

Prior to commencing field work that is to be performed at the Site, SECOR will prepare a site-specific health and safety plan (HASP) to address potential hazards at the Site during the proposed field activities. The HASP will be reviewed, signed, and adhered to by all on-site personnel.

13.2 PERMITTING

Prior to fieldwork for removal of the wells, SECOR will prepare a well permit application for the destruction of six groundwater MWs and five VE wells and submit the application to the DEH for approval.

13.3 DESTRUCTION OF GROUNDWATER MONITORING AND VAPOR EXTRACTION WELLS

Six existing on-Site and off-Site groundwater MWs and five VE wells will be destroyed by overdrilling the wells to their respective total depths. Wells will be destroyed by removing all material in the original borehole, including casing, filter pack, and annular seal, and will be backfilled from the total depth to ground surface in accordance with the *2004 SAM Manual* (SAM, 2004).

13.4 WASTE DISPOSAL

Wastes generated from the well destructions will be contained in properly labeled, open head 55-gallon drums with locking covers, and stored on-site. The drums will be transported to a state-certified treatment/disposal facility. Well casing will be disposed of by the drilling contractor in an appropriate manner.

13.5 WELL DESTRUCTION REPORT

SECOR will prepare a report summarizing the well destruction as part of the permit requirement. The report will include a summary of the amounts of backfill materials used.

14.0 VERIFICATION MONITORING ANI

Further monitoring and reporting are unnecessary at the
demonstrated by the existing monitoring program. It is SE
sufficient monitoring of the groundwater quality at the Site has a

15.0 PUBLIC NOTIFICATION

A Public Notification Program will be implemented as part of the Corrective Action Plan approval process. This program will include distribution of Public Notices to adjacent local businesses, residences and the local planning agency. The public notice will describe the proposed CAP and invite interested parties to review the CAP at a local library and/or the offices of the SAM. There will be a 30-day period for the public to review the CAP and to comment directly to the SAM.

16.0 LIMITATIONS

The findings and conclusions contained in this report have been prepared for the specific application to this project and have been developed in a manner consistent with that level of care and skill normally exercised by members of the environmental scientific profession currently practicing under similar conditions in the area at the time this investigation was performed. No warranty, either expressed or implied, is made.

A potential always remains for the presence of the unknown, unidentified, or unforeseen subsurface contamination. Further evidence against such potential site contamination would require additional subsurface exploration and testing.

17.0 REFERENCES

Alton Geoscience, 1996a. Quarterly Remediation System Operation Report from October 1, Through December 31, 1995, January 12.

Alton Geoscience, 1996b. Quarterly Remediation System Operation Report from January 1, Through March 31, 1996, April 12.

Bechtel Environmental Incorporated, 1994. Site Assessment and Soil Vapor Extraction Test Report for Former Chevron Facility No. 9-1197, 8808 Lawrence Welk Drive, Escondido, California (SAM Case No. H05719-001), July 18.

Bechtel Environmental Incorporated 1995a. Submittal of Feasibility Study/Remedial Action Plan for Former Chevron Service Station No. 9-1197, 8808 Lawrence Welk Drive, Escondido, California, January 26.

Bechtel Environmental Incorporated 1995b. Results of Recent Field Activities, June 19.

Bechtel Environmental Incorporated 1996a. 30-Day Drilling Report, February 6.

California Regional Water Quality Control Board (RWQCB), San Diego, 1996. Water Quality Control Plan, San Diego Basin (9); with 1998 amendments.

County of San Diego, Department of Environmental Health, Land and Water Quality Division (LWQD), Site Assessment and Mitigation Program (SAM), 2004. SAM Manual, February.

County of San Diego, Department of Environmental Health, LWQD, 2001. Unauthorized Release #H05719-001, Review of Sensitive Receptor Survey, Former Chevron Station # 9-1197, 8808 Lawrence Welk Drive, Escondido, CA, July 12.

Jahns, R. H., 1954. Geologic Guide for the Northern Part of the Peninsular Range Province, Southern California, Contribution No. 696, Division of the Geological Sciences, California Institute of Technology.

Merriam, R., 1954. Geology of Southern California, A Typical Portion of the Southern California Batholith, San Diego, County, California Division of Mines Bulletin 170, Sacramento, CA.

New Jersey Department of Health and Senior Services (NJDHSS), (no date), Right to Know Hazardous Substance Fact Sheets; http://www.state.nj.us/health/eoh/rtkweb/rtkhsfs.htm

The Reynolds Group, 1993. Underground Storage Tank Closure Report Closure Report, Chevron Retail Service Station No. 9-1197, 8808 Lawrence Welk Drive, Escondido, California, October.

San Diego County Water Authority (SDCWA), 1996. Groundwater Basins Hydrologic Panning Unit Map.

SECOR International Incorporated (SECOR), 2001. Sensitive Receptor Survey, June 14.

SECOR International Incorporated, 2004a. Annual Groundwater Monitoring Report, Second Quarter 2004, Former Chevron Station #9-1197, 8808 Lawrence Welk Drive, Escondido, California, June 22.

SECOR International Incorporated, 2004b. Annual Groundwater Monitoring Report, Fourth Quarter 2004, Former Chevron Station #9-1197, 8808 Lawrence Welk Drive, Escondido, California, December 14.

SECOR International Incorporated, 2005. Annual Groundwater Monitoring Report, Second Quarter 2005, Former Chevron Station #9-1197, 8808 Lawrence Welk Drive, Escondido, California, July 21.

Spinnler, Gerard E., Sulanitro, Joseph P., Maner, Paul M., Lyons, Karen A., 2001. Enhanced Bioremediation of MTBE (Bioremedy) at Retail Gas Stations in Contaminated Soil Sediment and Water Special Oxygenated Fuels Edition, pp 47-49.

United States Environmental Protection Agency (USEPA), 1995. How to Evaluate Alternative Cleanup Technologies for Underground Storage Tank Sites: A Guide for Corrective Action Plan Reviewers.

United States Geological Survey, 1968. 7.5-minute topographic map series, photorevised 1983, San Marcos Quadrangle, San Diego County, California: 1 sheet, scale 1:24,000, 1968.

Wilson, John T., Cho, J.S., and Wilson, B.H., 2000. Natural Attenuation of MTBE in The Subsurface Under Methanogenic Conditions. USEPA, Office of Research and Development, National Risk Management Research Laboratory.

APPENDIX A
BORING/WELL LOGS

FORMER CHEVRON STATION # 9-1197

8808 LAWRENCE WELK DRIVE
ESCONDIDO, CALIFORNIA, 92026

MTCH.91197.08
August 1, 2005

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	MW1

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
12/13/93	12/13/93	West Hazmat	CME 75	140lb/30"	10 inch	26.5 feet

GRND EL.	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
510.5 FT	15.5 feet	J. Sheldon	Wendy W. Arano

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	WELL CONSTRUCTION	DEPTH FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
								6" of asphaltic concrete.	
								WELL GRADED SAND (SW): olive brown (2.5Y 4/3); 0-10% fine gravel; 10-20% coarse-grained sand; 30-40% medium-grained sand; 40-50% fine-grained sand; dense; moist.	Surface seal type: concrete Annular seal type: bentonite Filter pack: Lonestar 2/16 sand Screen: 4" diameter, Sch.40 PVC with 0.010" perforations
MW1 D5		None	0	13 17 29		5			
								SILTY SAND (SM): very dark grayish brown (2.5Y 3/2); 5-15% coarse-grained sand; 15-25% medium-grained sand; 55-65% fine-grained sand; 10-20% silt; medium dense; moist.	
MW1 D10		Faint	100	8 10 12		10			Sample MW1D10 analyzed for TPHg, BTEX, and MTBE.
								@14 feet, same as above.	Sample MW1D14 analyzed for TPHg, BTEX, and MTBE.
MW1 D14		Moderate	516	5 6 8		15			Ground water was encountered at 15.5 feet bgs.
				5 6 7				WELL GRADED SAND WITH SILT (SW): very dark grayish brown (2.5Y 3/2); 10-20% coarse-grained sand; 25-35% medium-grained sand; 40-50% fine-grained sand; 5-15% silt; medium dense; wet.	
				3 4 5				POORLY GRADED SAND WITH SILT (SP): very dark grayish brown (2.5Y 3/2); trace of coarse-grained sand; 30-40% medium-grained sand; 50-60% fine-grained sand; 5-15% fines; medium dense; wet.	
				4 5 7					
		N/A	N/A	1 2 4		20		SILTY SAND (SM): olive brown (2.5Y 4/3); trace of coarse-grained sand; 60-70% fine-grained sand; 30-40% silt; loose; wet. @20 feet, same as above; trace of coarse-grained sand; 5-15% medium-grained sand; 60-70% fine-grained sand; 20-30% silt. @21.5 feet, same as above; 0-10% coarse-grained sand; 20-30% medium-grained sand; 45-55% fine-grained sand; 15-25% silt. @23.5 feet, same as above; 15-25% coarse-grained sand; 25-35% medium-grained sand; 40-50% fine-grained sand; 10-20% silt. @25 feet, same as above; 0-10% coarse-grained sand; 35-45% medium-grained sand; 35-45% fine-grained sand; 10-20% silt.	
				2 2 2					
				2 3 6					
		N/A	N/A	2 3 6		25			Boring was terminated at 26.5 feet bgs.
						30			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. MW1

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	MW2

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
12/14/93	12/14/93	West Hazmat	CME 75	140lb/30"	10 inch	25.5 feet

GRND EL.	DEPTH/EL TO WATER	LOGGED BY	REVIEWED BY
510.5 FT	15 feet	J. Sheldon	Wendy W. Arano

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	WELL CONSTRUCTION	DEPTH FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
								4" of asphaltic concrete.	Surface seal type: concrete
								WELL GRADED SAND WITH SOME SILT (SW): olive (5Y 4/4) to dark olive gray (5Y 3/2); 15–25% coarse-grained sand; 25–35% medium-grained sand; 35–45% fine-grained sand; 5–15% silt; medium dense; moist.	Annular seal type: bentonite Filter pack: Lonestar 2/16 sand Screen: 4" diameter, Sch.40 PVC with 0.010" perforations
MW2 D5	■	None	None	11 15 19		5			
MW2 D10	■	None	51	9 13 20		10		@10 feet, same as above.	Sample MW2D10 analyzed for TPHg, BTEX, and MTBE.
								@14 feet, same as above; very dark grayish brown (10YR 3/2); 10–20% coarse-grained sand; 35–45% medium-grained sand; 50–60% fine grained sand; loose; very moist.	
MW2 D14	■	Moderate	1417	2 2 2		15		SILTY SAND (SM): very dark grayish brown (10YR 3/2); 0–10% coarse-grained sand; 30–40% medium-grained sand; 40–50% fine-grained sand; 10–20% silt; loose; wet.	Sample MW2D14 analyzed for TPHg, TPHd, BTEX, and MTBE. Ground water was encountered at 15 feet bgs.
	■	Moderate	N/A	N/A		20		@20 feet, same as above; 10–20% medium-grained sand; 40–50% fine-grained sand; 35–45% silt.	
	■	N/A	N/A	N/A				@24 feet, same as above.	
						25		CLAYEY SILT WITH SAND (ML): dark grayish brown (10YR 4/2); 0–10% medium-grained sand; 10–20% fine-grained sand; 75–85% fines; moderate dilatancy; low plasticity.	Boring was terminated at 25.5 feet bgs.
								SILTY SAND (SM): dark grayish brown (10YR 4/2); 0–10% coarse-grained sand; 30–40% medium-grained sand; 35–45% fine-grained sand; 15–25% silt; trace of clay.	
						30			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. MW2

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	MW3

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
12/14/93	12/14/93	West Hazmat	CME 75	140lb/30"	10 inch	23 feet

GRND EL.	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
508.3 FT	12.5 feet	J. Sheldon	Wendy W. Arano

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	WELL CONSTRUCTION	DEPTH FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
								4" of asphaltic concrete.	
								SILTY SAND (SM): dark yellowish brown (10YR 4/6); trace of coarse and fine gravel; 0–10% coarse-grained sand; 20–30% medium-grained sand; 50–60% fine-grained sand; 10–20% silt; dense; moist.	Surface seal type: concrete Annular seal type: bentonite Filter pack: Lonestar 2/16 sand Screen: 4" diameter, Sch.40 PVC with 0.010" perforations
MW3 D5		None	1.5	11 15 19		5		@4.5 feet, same as above; dark brown (10YR 3/3).	Sample MW3D5 analyzed for TPHg, BTEX, and MTBE.
MW3 D10		None	0	3 3 4		10		@9 feet, same as above; dark yellowish brown (10YR 4/4). @9.5 feet, same as above; very dark gray (10YR 3/1); loose.	Sample MW3D12 analyzed for TPHg, BTEX, and MTBE.
MW3 D12		None	0	5 5 8				WELL GRADED SAND (SW): very dark gray (10YR 3/1); 10–20% coarse-grained sand; 30–40% medium-grained sand; 40–50% fine-grained sand; 0–10% silt; medium dense; moist.	Ground water was encountered at 12.5 feet bgs.
				9 11 14				SILTY SAND (SM) INTERBEDDED WITH POORLY GRADED SAND (SP). (SM): very dark gray (10YR 3/1); 15–25% medium-grained sand; 35–45% fine-grained sand; 35–45% silt; loose; wet. (SP): 5–15% coarse-grained sand; 35–45% medium-grained sand; 35–45% fine-grained sand; 5–15% silt; loose; wet.	Interbeds are 4 inches thick.
				9 9 11		15			
		None	N/A	5 7 8				@17 feet, same as above; very dark grayish brown (10YR 3/2).	
				4 4 5				@18.5 feet, same as above; dark brown (10YR 3/3).	
				2 3 4					
		None	N/A	3 3 4		20		@21.5 feet, same as above; 10–20% coarse-grained sand; 25–35% medium-grained sand; 30–40% fine-grained sand; 15–25% silt; medium dense.	Boring was terminated at 23 feet bgs.
				6 10 10					
						25			
						30			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. MW3

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	MW4

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
12/17/93	12/17/93	West Hazmat	CME 75	140lb/30"	10 inch	26.5 feet

GRND EL.	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
510.7 FT	16 feet	J. Sheldon	Wendy W. Arano

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	WELL CONSTRUCTION	DEPTH FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
								4" of asphaltic concrete.	
								SILTY SAND (SM): brown (10YR 4/3); trace of fine gravel; 5-15% coarse-grained sand; 20-30% medium-grained sand; 40-50% fine-grained sand; 15-25% silt; very dense; moist.	Surface seal type: concrete Annular seal type: bentonite Filter pack: Lonestar 2/16 sand Screen: 4" diameter, Sch.40 PVC with 0.010" perforations
MW4 D5		None	0	10 14 21		5			Sample MW4D10 analyzed for TRPH, TPHg, and BTEX.
								@9 feet, same as above.	
MW4 D10		None	0	7 8 11		10		CLAYEY SILT (ML): very dark grayish brown (10YR 3/2); 5-15% fine to medium-grained sand; 85-95% fines; low plasticity; slow to medium dilatancy; moist.	
								SILTY SAND (SM): very dark brown (10YR 3/2); 55-65% sand; 35-45% silt; medium dense; moist. @12 feet, same as above; dark brown (10YR 3/3); 50-60% sand; 40-50% silt. @14 feet, same as above; very dark grayish brown (10YR 3/2); 60-70% sand; 30-40% silt; very moist.	@10 feet: 0-10% coarse-grained sand; 10-20% medium-grained sand; 35-45% fine-grained sand. @12 feet: 5-15% medium-grained sand; 40-50% fine-grained sand. @14 feet: 0-10% coarse-grained sand; 10-20% medium-grained sand; 40-50% fine-grained sand.
MW4 D15		None	0	9 10 13		15		WELL GRADED SAND (SW): dark gray(10YR 4/1) to very dark gray (10YR 3/1); trace of fine gravel; 10-20% coarse gravel; 40-50% medium-grained sand; 30-40% fine-grained sand; 0-10% silt; dense; very moist to wet.	Sample MW4D14 analyzed for TRPH, TPHg, and BTEX. Ground water was encountered at 16 feet bgs.
		None	0	5 7 8		20			
								SILTY SAND (SM): dark brown (10YR 3/3); 0-10% coarse-grained sand; 5-15% medium-grained sand; 50-60% fine-grained sand; 25-35% silt; dense; wet.	
		None	0	4 5 11		25		@25.3 feet, same as above; dark yellowish brown (10YR 4/6); trace of clay.	Boring was terminated at 26.5 feet bgs.
						30			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. MW4

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	MW5

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
03/08/94	03/08/94	West Hazmat	CME 75	140lb/30"	10 inch	25.5 feet

GROUND ELEVATION	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
511.0 FT	15 feet	J. Sheldon	Wendy W. Arano

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	WELL CONSTRUCTION	DEPTH FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
								3" of asphaltic concrete.	
								SILTY SAND (SM): brown (10YR 4/3); 10-20% coarse sand; 25-35% medium sand; 30-40% fine sand; 15-25% silt; dense; moist.	Surface seal: concrete from 0 to 2 ft bgs.
MW5 D5	■	None	0	9 19 20		5			Casing: 4" Sch.40 PVC from 0 to 5 ft bgs. Annular seal: hydrated bentonite chips from 2 to 4.5 ft bgs. Filter pack: #2/16 sand from 4.5 to 25 ft bgs.
MW5 D10	■	Mild, Possible Gasoline	280	15 13 8		10		@9 feet, same as above; medium dense. @10 feet, same as above; black (10YR 6/1); trace coarse sand; 5-15% medium sand; 40-50% fine sand; 40-50% silt.	Screen: 4" PVC with 0.010" slots from 5 to 25 ft bgs.
MW5 D14	■	Mild	52 62	9 8 6		15		@15 feet, same as above; dark brown (10YR 3/3); trace fine gravel; 5-15% coarse sand; 15-25% medium sand; 40-50% fine sand; 20-30% silt; medium dense; very moist to wet.	Ground water was encountered at 15 ft bgs.
MW5 D20	■	None	N/A	3 5 7		20		@20 feet, same as above; very dark grayish brown (10YR 3/2); trace coarse sand; 5-15% medium sand; 40-50% fine sand; 40-50% silt; loose to medium dense; wet.	
MW5 D25	■	None	N/A	4 5 5		25		@25 feet, same as above; dark yellowish brown (10YR 4/4); 5-15% coarse sand; 30-40% medium sand; 30-40% fine sand; 15-25% silt; loose; wet.	Boring was terminated at 25.5 ft bgs.
						30			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. MW5

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	MW6

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
01/11/96	01/11/96	West Hazmat	CME 85	140lb/30"	10 IN	26.5 FT

GROUND ELEVATION	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
511.0 FT	15.5 FT	G. Quintero	J. Metcalf

SAMPLE ID	SAMPLE INTERVAL	HYDROCARBON ODOR	PID READING (PPM)	BLOW COUNTS (# BLOWS/6")	WELL CONSTRUCTION	DEPTH IN FEET	GRAPHIC SYMBOL	DESCRIPTION AND CLASSIFICATION	NOTES
								SILTY SAND (SM): brown (10YR 5/3); fine to medium grained sand; well graded sand; angular to sub-angular grains; non-plastic fines; loose; moist	Well Construction Detail:
MW6 D5		None	0	15 33 37		5		SAND (SW): light olive brown (2.5Y 5/4); gravelly sand; well graded; angular grains; loose; trace fines; moist	Surface seal: concrete from 0 to 3 ft bgs; Casing: blank 4" Sch. 40 PVC from 0 to 10 ft bgs;
MW6 D10		None	0	10 10 11		10		SILTY SAND (SM): very dark gray (2.5Y 3/1); fine to medium grained; well-graded sand; trace gravels; non-plastic fines; sub-angular grains; loose; moist	Annular seal: hydrated bentonite chips from 3 to 6 ft bgs; hydrated bentonite pellets from 6 to 8 ft bgs;
MW6 D15		None	0	9 10 12		15		SILTY SAND (SM): dark grayish brown (2.5y 4/2); fine to very fine grained; sub-angular grains; slightly plastic fines; loose; wet	Filter pack: #3 Lonestar sand from 8 to 26.5 ft bgs; Screen: 4" Sch. 40 PVC with 0.020" slots from 10 to 25 ft bgs.
MW6 D20		None	0	5 17 10		20			Ground water encountered 15.5 ft bgs.
MW6 D25		None	0	7 12 13		25		SAND (SW): grayish brown (2.5Y 5/2): medium to coarse grained; well-graded; angular to sub-angular grains; loose; non-plastic trace fines; wet	Total Depth 26.5 ft bgs.

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. MW6

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	VW1

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
03/11/94	03/11/94	West Hazmat	CME 75	140lb/30"	10 inch	15.5 feet

GROUND ELEVATION	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
510.4 FT	15 feet	J. Sheldon	Wendy W. Arano

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	WELL CONSTRUCTION	DEPTH FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
								6.5" of asphaltic concrete.	
								WELL-GRADED SAND WITH SILT (SW): yellowish brown (10YR 5/4); 15-25% coarse sand; 20-30% medium sand; 40-50% fine sand; 5-15% silt; dense; moist.	Surface seal: concrete from 0 to 2 ft bgs.
VW1 D5	■	None	0.7	14 18 24		5			Casing: 4" Sch.40 PVC from 0 to 5 ft bgs.
								SILTY SAND (SM): brown (10YR 4/3); trace fine gravel; 5-15% coarse sand; 20-30% medium sand; 35-45% fine sand; 20-30% silt; dense; moist.	Annular seal: hydrated bentonite chips from 2 to 4.5 ft bgs.
									Filter pack: #3 Monterey sand from 4.5 to 15 ft bgs.
VW1 D10	■	Mild	151	28 >50		10		@9 feet, same as above; dark yellowish brown (10YR 4/4). @10 feet, same as above; dark brown (2.5Y 3/3).	Screen: 4" PVC with 0.020" slots from 5 to 15 ft bgs.
									Drilling easier at 12 ft bgs.
									Ground water was encountered at 15 ft bgs.
VW1 D14	■	Mild (moist) Strong (wet)	3180	8 9 8		15		@14 feet, same as above; dark brown (2.5Y 3/3); 0-10% coarse sand; 20-30% medium sand; 40-50% fine sand; 20-30% silt; medium dense; very moist to wet.	Boring was terminated at 15.5 ft bgs.
									Boring was sampled to 15.5 ft, then drilled to 15 ft to set well.
						20			
						25			
						30			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. VW1

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	VW2

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
03/11/94	03/11/94	West Hazmat	Acker	140lb/30"	10 inch	16 feet

GROUND ELEVATION	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
510.2 FT	Not Enctd	J. Sheldon	Wendy W. Arano

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	WELL CONSTRUCTION	DEPTH FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
								6.5" of concrete.	Odors noted during hand augering at 2 ft bgs.
								SILTY SAND (SM): brown (10YR 4/3); 5-15% coarse sand; 20-30% medium sand; 40-50% fine sand; 15-25% silt; medium dense; very moist @5 ft to moist @6 ft.	Surface seal: concrete from 0 to 2 ft bgs.
									Casing: 4" Sch.40 PVC from 0 to 4 ft bgs.
VW2 D5	■	Mild Strong	110 1200	6 10 12		5		@6 feet, same as above; dark yellowish brown (10YR 4/4); trace coarse gravel.	Annular seal: hydrated bentonite chips from 2 to 4 ft bgs.
									Filter pack: #3 Monterey sand from 4 to 13.5 ft bgs.
VW2 D9	■	Moderate	525	19 20 21		10		@8.5 feet, same as above; brown (10YR 4/3); trace fine gravel. @9 feet, same as above; very dark brown (10YR 3/2); 0-10% coarse sand; 0-10% medium sand; 40-50% fine sand; 40-50% silt; dense; trace rootlets; decaying wood fragments.	Screen: 4" PVC with 0.020" slots from 4 to 13.5 ft bgs.
									After sampling to 16 ft, water came up in hole to 14 ft bgs.
VW2 D13	■	N/A	916	6 22 23		15		@13 feet, same as above; very dark grayish brown (10YR 4/2); 0-10% coarse sand; 25-35% medium sand; 40-50% fine sand; 15-25% silt; dense; moist. @13.5 feet, trace fine gravel. @15 feet, brown (10YR 4/3); very moist.	Boring was terminated at 16 ft bgs and backfilled with sand from 13.5 to 16 ft bgs.
						20			
						25			
						30			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. VW2

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	VW3

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
03/11/94	03/11/94	West Hazmat	Acker	140lb/30"	10 inch	12.5 feet

GROUND ELEVATION	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
509.6 FT	12.5 feet	J. Sheldon	Wendy W. Arano

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	WELL CONSTRUCTION	DEPTH FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
								4" of asphaltic concrete.	Surface seal: concrete from 0 to 2 ft bgs.
								SILTY SAND (SM): brown (10YR 4/3); 0-10% coarse sand; 10-20% medium sand; 35-45% fine sand; 35-45% silt; medium dense; moist.	Casing: 4" Sch.40 PVC from 0 to 5 ft bgs.
VW3 D5		None	0.9	8 10 12		5			Odors during hand augering at 2 ft bgs.
									Annular seal: hydrated bentonite chips from 2 to 4.5 ft bgs.
VW3 D9		Mild	78	13 22 25				@8 feet, same as above.	Filter pack: #3 Monterey sand from 4.5 to 12.5 ft bgs.
VW3 D9.5		Moderate	680			10		@9 feet, same as above; very dark brown (10YR 2/2); 0-10% coarse sand; 15-25% medium sand; 30-40% fine sand; 35-45% silt; dense; very moist.	Screen: 4" PVC with 0.020" slots from 5 to 12.5 ft bgs.
VW3 D12		Moderate	708	19 20 23				@11 feet, same as above; moist.	Odors at 7 ft bgs.
		Mild						WELL-GRADED SAND WITH SILT (SW): very dark gray (10YR 3/1); 15-25% coarse sand; 25-35% medium sand; 35-45% fine sand; 5-15% silt; dense; wet @12.5 ft.	Ground water was encountered at 12.5 ft bgs.
						15			Boring was terminated at 12.5 ft bgs.
						20			
						25			
						30			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. VW3

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	VW4

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
04/12/94	04/12/94	West Hazmat	Acker	140lb/30"	8"/10"	13.5 feet

GROUND ELEVATION	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
510.2 (approx)	13 feet	J. Sheldon	Wendy W. Arano

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	WELL CONSTRUCTION	DEPTH FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
								4" of asphaltic concrete.	Surface seal: concrete from 0 to 2 ft bgs.
		Moderate	230					SILTY SAND (SM): very dark grayish brown (10YR 3/2); 10-15% medium sand; 45% fine sand; 40-45% fines.	Casing: 2" Sch. 40 PVC from 0 to 4 ft bgs.
		Faint	50					@3 to 4 feet, same as above; cobbles.	Odors noted at 2 ft bgs.
		Faint	40						
		Moderate	110			5		@5 feet, same as above; dark grayish brown (10YR 4/2); 10% medium sand; 55% fine sand; 35% silt; dense; moist.	Annular seal: hydrated bentonite pellets from 2 to 4 ft bgs.
VW4 D6	■		40	18 20 23					
								WELL-GRADED SAND WITH SILT (SW): trace fine gravel; 15-20% coarse sand; 30-35% medium sand; 35-40% fine sand; 10-15% silt; dense; moist.	Screen: 2" Sch. 40 PVC with 0.020" slots from 4 to 12.5 ft bgs.
VW4 D9	■	Strong	1590	19 32				SILTY SAND (SM): dark grayish brown (10YR 4/2); trace coarse sand; 15% medium sand; 45% fine sand; 40% fines.	Filter pack: #3 Monterey sand from 4 to 12.5 ft bgs.
	■	Mild	190	31		10		@9.5 feet, same as above; very dark brown (10YR 2/2); 5% medium sand; 50% fine sand; 45% silt; very dense; moist.	Hard drilling at 6 ft bgs.
VW4 D12	■	None	1.3	18 20 24				POORLY-GRADED SAND (SP): trace fine gravel; 10% coarse sand; 45% medium sand; 40% fine sand; 5% silt; dense; very moist to wet; @13 feet, 6" layer of increasing medium sand.	Sample VW4D6 analyzed for TPHg, BTEX, and MTBE.
						15			Sample VW4D9 analyzed for TPHg, BTEX, and MTBE.
									Sample VW4D12 analyzed for TPHg, BTEX, and MTBE.
									Ground-water was encountered at 13 ft bgs.
						20			Boring was terminated at 13.5 ft and backfilled with hydrated bentonite chips from 12.5 to 13.5 ft bgs.
						25			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. VW4

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	VW5

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
03/17/95	03/17/95	Gregg Drilling	Rhino	140lb/30"	10 in	11 ft

GROUND ELEVATION	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
510.0 FT	Not Enctd	G. Quintero	J. Metcalf

SAMPLE ID	SAMPLE INTERVAL	HYDROCARBON ODOR	PID READING (PPM)	BLOW COUNTS (# BLOWS/6")	ELEVATION IN FEET	DEPTH IN FEET	GRAPHIC SYMBOL	DESCRIPTION AND CLASSIFICATION	NOTES
		Strong	427.2	N/A				SAND (SW): olive gray (5Y 4/2); 60% medium-grained sand; 30% coarse-grained sand; 10% non-plastic fines; well-graded, subangular; very loose.	Surface seal: concrete from 0 to 2 ft bgs. Casing: blank 4" Sch.40 PVC from 0 to 5 ft bgs. Annular seal: hydrated bentonite chip from 2 to 4 ft bgs. Filter pack: #3 RMC-Lonestar sand from 4 to 11 ft bgs. Screen: 4" Sch.40 PVC with 0.020" slots from 5 to 11 ft bgs.
VW5 D5		Strong	718.1	N/A		5			
								SAND (SW): black (7.5YR 2.5/1); 60% medium to coarse-grained sand; 30% fine-grained sand; 10% very low plasticity fines; well-graded; loose.	
VW5 D10		Moderate	47.5	N/A		10			Ground water not encountered. Total depth = 11 ft
						15			
						20			
						25			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. VW5

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	B1

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
12/13/93	12/14/93	West Hazmat	CME 75	140lb/30"	8 inch	17 feet

GRND EL.	DEPTH/EL TO WATER	LOGGED BY	REVIEWED BY
510.6 FT	16 feet	J. Sheldon	Wendy W. Arano

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
					510			4" of asphaltic concrete over 1" of gravel base.	
								GRAVELLY SAND (SG): dark yellowish brown (10YR 4/6) to olive (5Y 4/4); 10–20% coarse gravel; 10–20% fine gravel; 10–20% coarse-grained sand; 20–30% medium-grained sand; 20–30% fine-grained sand; medium dense; moist.	
B1D5		None	0	7 7 9	505	5			Sample B1D5 analyzed for TRPH, TPHg, BTEX, HVOC, and CAM metals.
B1D10		Moderate Used-Oil	25	8 11 12	500	10		SILTY SAND (SM): black (10YR 2/1); 15–25% medium-grained sand; 45–55% fine-grained sand; 25–35% fines; micaceous; medium dense; moist.	Sample B1D10 analyzed for TRPH, TPHg, BTEX, HVOC, and CAM metals.
B1D15		None	N/A	5 7 8	495	15		WELL GRADED SAND WITH SILT (SW): very dark gray (2.5Y 3/1); 10–20% coarse-grained sand; 30–40% medium-grained sand; 35–45% fine-grained sand; 5–15% fines; medium dense; moist.	15' sample not retained in barrel. Redrove sample to 17 feet.
								SILTY SAND (SM): very dark grayish brown (2.5Y 3/2); 0–10% coarse-grained sand; 10–20% medium-grained sand; 55–65% fine-grained sand; 15–25% silt; wet.	Ground water was encountered at 16 feet bgs.
					490	20			Boring was terminated at 17 feet bgs.
					485	25			Backed out sampler to 14 feet. Pushed hydropunch to 18 feet bgs (screened from 15 to 18 feet bgs).
					480	30			Borehole was backfilled with bentonite chips.

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. B1

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	B2

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
12/13/93	12/13/93	West Hazmat	CME 75	140lb/30"	8 inch	15.5 feet

GRND EL	DEPTH/EL TO WATER	LOGGED BY	REVIEWED BY
510.5 FT	15 feet	J. Sheldon	Wendy W. Arano

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
					510			4" of asphaltic concrete.	
								SILTY SAND (SM): brown (10YR 4/3) to very dark grayish brown (10YR 3/2); trace of coarse-grained sand; 25-35% medium-grained sand; 45-55% fine-grained sand; 15-25% silt; dense; moist.	
B2D5	■	None	0	11 19 28	505	5			
B2D10	■	Faint,not Gasoline	548	3 3 5	500	10		@10 feet, same as above; very dark grayish brown (2.5Y 3/2); 0-10% coarse-grained sand; 25-35% medium-grained sand; 45-55% fine-grained sand; 10-20% silt; loose; moist; aged petroleum odor (not gasoline).	Sample B2D10 analyzed for TPHg, BTEX, and MTBE.
B2D14	■	Strong Gasoline	>2000	10 10 12	495	15		@14 feet, same as above; trace of coarse-grained sand; 25-35% medium-grained sand; 50-60% fine-grained sand; 10-20% silt; medium dense; wet at 15 feet bgs.	Sample B2D14 analyzed for TPHg, TPHd, BTEX, and MTBE. Ground water was encountered at 15 feet bgs. Boring was terminated at 15.5 feet bgs. Borehole was backfilled with bentonite chips.
					490	20			
					485	25			
					480	30			

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	B3

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
12/13/93	12/13/93	West Hazmat	CME 75	140lb/30"	8 inch	15.5 feet

GRND EL.	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
510.6 FT	15 feet	J. Sheldon	Wendy W. Arano

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
					510			4" of asphaltic concrete.	
								SILTY SAND (SM): brown (10YR 4/3) to very dark grayish brown (10YR 3/2); 0-5% coarse-grained sand; 35-40% medium-grained sand; 40-50% fine-grained sand; 10-20% silt; dense; moist.	
B3D5		None	105	9 16 25	505	5			Sample B3D5 analyzed for TPHg, BTEX, and MTBE.
								@9 feet, same as above; brown (10YR 4/3).	
B3D10		Mild, Aged	3400	4 5 5	500	10		@10 feet, same as above; black (10YR 2/1); trace of coarse-grained sand; 15-25% medium-grained sand; 40-50% fine-grained sand; 30-40% silt; loose; moist.	Sample B3D10 analyzed for TPHg, TPHd, BTEX, and MTBE.
								@14 feet, same as above; very dark grayish brown (10YR 4/3).	Sample B3D14 analyzed for TPHg, BTEX, and MTBE.
B3D14		Mild, Aged	750	3 4 5	495	15		@15 feet, same as above; 10-20% medium-grained sand; 45-55% fine-grained sand; 30-40% silt; wet.	Ground water was encountered at 15 feet bgs.
									Boring was terminated at 15.5 feet bgs.
									Borehole was backfilled with bentonite chips.
					490	20			
					485	25			
					480	30			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. B3

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	B4

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
12/13/93	12/13/93	West Hazmat	CME 75	140lb/30"	8 inch	15.5 feet

GRND EL.	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
509.9 FT	14.5 feet	J. Sheldon	Wendy W. Arano

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
								4" of asphaltic concrete.	
								SILTY SAND (SM): brown (10YR 4/3); 0-10% coarse-grained sand; 25-35% medium-grained sand; 40-50% fine-grained sand; 20-30% silt; medium dense; moist.	
B4D5	■	None	23	10 13 21	505	5		@5 feet, same as above; very dark grayish brown(10YR 3/2); 20-30% medium-grained sand; 45-55% fine-grained sand; 20-30% silt; trace of clay.	Sample B4D5 analyzed for TPHg, BTEX, and MTBE.
B4D10	■	None	5	5 8 11	500	10		@10 feet, same as above; black (10YR 2/1); trace of coarse-grained sand; 15-25% medium-grained sand; 40-50% fine-grained sand; 30-40% silt; medium dense; moist.	Sample B4D10 analyzed for TPHg, TPHd, BTEX, and MTBE.
B4D14	■	None	0	3 4 6	495	15		@15 feet, same as above; very dark grayish brown(10YR 4/3); trace of coarse-grained sand; 10-20% medium-grained sand; 45-55% fine-grained sand; 30-40% silt; loose; wet.	Sample B4D14 analyzed for TPHg, BTEX, and MTBE. Ground water was encountered at 14.5 feet bgs. Boring was terminated at 15.5 feet bgs. Borehole was backfilled with bentonite chips.
					490	20			
					485	25			
					480	30			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. B4

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	B5

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
12/14/93	12/14/93	West Hazmat	CME 75	140lb/30"	8 inch	14.5 feet

GRND EL.	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
509.6 FT	13 feet	J. Sheldon	Wendy W. Arand

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
								4" of asphaltic concrete.	
								SILTY SAND (SM): dark yellowish brown (10YR 4/4); trace of coarse gravel; 0–10% fine gravel; 15–25% coarse-grained sand; 25–35% medium-grained sand; 25–35% fine-grained sand; 10–20% silt; dense; moist.	
B5D5		None	5	9 15 17	505	5			Sample B5D5 analyzed for TPHg, BTEX, and MTBE.
								@9 feet, same as above. @9.1 feet, same as above; black (10YR 2/1); 0–10% coarse-grained sand; 15–25% medium-grained sand; 40–50% fine-grained sand; 25–35% silt; loose.	
B5D10		Aged	29	4 4 6	500	10			Sample B5D10 analyzed for TPHg, TPHd, BTEX, and MTBE.
		None	14	3 5 13	495	15		WELL GRADED SAND WITH SILT (SW): dark gray (2.5Y 4/1); 10–20% coarse-grained sand; 45–55% medium-grained sand; 25–35% fine-grained sand; 0–10% silt; medium dense; wet.	Ground water was encountered at 13 feet bgs. Boring was terminated at 14.5 feet bgs. Borehole was backfilled with bentonite chips.
					490	20			
					485	25			
					480	30			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. B5

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	B6

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
12/14/93	12/14/93	West Hazmat	CME 75	140lb/30"	8 inch	14.5 feet

GRND EL.	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
510.1 FT	14 feet	J. Sheldon	Wendy W. Arano

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
					510			4" of asphaltic concrete.	
								SILTY SAND (SM): dark grayish brown (10YR 4/2); trace of coarse gravel; 0–10% fine gravel; 5–15% coarse-grained sand; 30–40% medium-grained sand; 30–40% fine-grained sand; 10–20% silt; moist.	
B6D5		Faint	370	15 22 35	505	5		@5 feet, same as above; yellowish brown (10YR 5/6); 10–20% coarse-grained sand; 25–35% medium-grained sand; 35–45% fine-grained sand; 10–20% silt; very dense; moist.	Sample B6D5 analyzed for TPHg, BTEX and MTBE.
B6D10		Aged	155	4 5 7	500	10		@10 feet, same as above; black (10YR 2/1); 5–15% coarse-grained sand; 15–25% medium-grained sand; 30–40% fine-grained sand; 30–40% silt; medium dense; moist.	Sample B6D10 analyzed for TPHg, TPHd, BTEX and MTBE.
								@13 feet, same as above; interface.	Gasoline odor in cuttings.
		None	56	5 6 7				WELL GRADED SAND (SW): very dark gray (10YR 3/1); 0–5% coarse gravel; 0–5% fine gravel; 10–20% coarse-grained sand; 35–45% medium-grained sand; 30–40% fine-grained sand; 0–10% silt; medium dense; wet.	Ground water was encountered at 14 feet bgs.
					495	15			Boring was terminated at 14.5 feet bgs.
									Borehole was backfilled with bentonite chips.
					490	20			
					485	25			
					480	30			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. B6

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	B7

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
12/16/93	12/17/93	West Hazmat	Soilmaster	140lb/30"	6 inch	14 feet

GRND EL.	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
510.7 FT	13.5 feet	J. Sheldon	Wendy W. Arano

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
					510			6" concrete at surface.	
								SILTY SAND (SM): dark brown (10YR 3/3); trace of fine gravel; 5-15% coarse-grained sand; 25-35% medium-grained sand; 30-40% fine-grained sand; 20-30% silt; moist.	
B7D5		None	5	N/A	505	5			Sample B7D5 analyzed for TRPH, TPHg, and BTEX. Sample B7D5 collected on 12/16/93. Rig broke down at 7 feet bgs. Continued on 12/17/93.
								@9 feet, same as above; trace of coarse-grained sand; 10-20% medium-grained sand; 55-65% fine-grained sand; 25-35% silt; very dense.	
B7D10		Aged	0	50 10 12 14	500	10		@10 feet, same as above; black (10YR 3/1); 0-10% coarse-grained sand; 5-15% medium-grained sand; 50-60% fine-grained sand; 25-35% silt; medium dense; moist.	Sample B7D10 analyzed for TRPH, TPHg, and BTEX.
B7 D13.5		None	16.5	25 23 20 25					Sample B7D13.5 analyzed for TRPH, TPHg, and BTEX. Ground water was encountered at 13.5 feet bgs.
								WELL GRADED SAND (SW): very dark gray (10YR 3/1); trace of fine gravel; 10-20% coarse-grained sand; 45-55% medium-grained sand; 30-40% fine-grained sand; trace of silt; dense; very moist; wet at 13.5 ft bgs.	Boring was terminated at 14 feet bgs.
					495	15		SILTY SAND (SM): very dark grayish brown (10YR 3/2); 5-15% coarse-grained sand; 10-20% medium-grained sand; 45-55% fine-grained sand; 20-30% silt; dense; wet.	Borehole was backfilled with bentonite chips.
					490	20			
					485	25			
					480	30			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. B7

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	B8

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
12/16/93	12/16/93	West Hazmat	CME 75	140lb/30"	8 inch	15.5 feet

GRND EL.	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
510.2 FT	14.5 feet	J. Sheldon	Wendy W. Arand

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
					510			4" of asphaltic concrete.	
								SILTY SAND WITH CLAY (SM): dark brown (10YR 3/3); trace of coarse and medium-grained sand; 50-60% fine-grained sand; 30-40% silt; 5-15% clay; slightly moist.	
B8D5	■	Faint Sweet	11	14 18 23	505	5		@5 feet, SILTY SAND (SM): very dark grayish brown (10YR 3/2); trace of fine gravel; 15-20% coarse-grained sand; 25-35% medium-grained sand; 30-40% fine-grained sand; 15-25% silt; dense; moist.	
B8D10	■	Aged	15	5 5 6	500	10		@9 feet, same as above; black (10YR 2/1). @11.5 feet, same as above; very dark brown (10YR 2/2).	Sample B8D10 analyzed for TRPH, TPHg, and BTEX.
								WELL GRADED SAND WITH SILT (SW): very dark gray (5Y 3/1); 10-20% coarse-grained sand; 35-45% medium-grained sand; 30-40% fine-grained sand; 5-15% silt; medium dense; moist.	Ground water was encountered at 14.5 feet bgs.
B8D14	■	None	0	6 7 10	495	15		@15 feet, same as above; black(5Y 2/1); wet.	Sample B8D14 analyzed for TRPH, TPHg, and BTEX.
									Boring was terminated at 15.5 feet bgs.
									Borehole was backfilled with bentonite chips.
					490	20			
					485	25			
					480	30			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. B8

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	B9

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
12/16/93	12/16/93	West Hazmat	CME 75	140lb/30"	8 inch	15.5 feet

GRND EL.	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
510.6 FT	14.5 feet	J. Sheldon	Wendy W. Arand

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
					510			4" of asphaltic concrete over 1.67' of fill.	Newly paved asphaltic concrete over former pipe trench.
								SILTY SAND WITH CLAY (SM): dark brown (10YR 3/3); trace of coarse-grained sand; 10-20% medium-grained sand; 45-55% fine-grained sand; 25-35% silt; 0-10% clay; moist.	
B9D5		None	1	8 12 13	505	5		@5 feet, SILTY SAND (SM): dark grayish brown (10YR 3/2); trace of coarse-grained sand; 20-30% medium-grained sand; 50-60% fine-grained sand; 20-30% silt; medium dense; moist. @6 feet, same as above; 0-10% medium-grained sand; 45-55% fine-grained sand; 40-50% silt.	
B9D10		Aged	49	5 6 6	500	10		@9.3 feet, same as above; black (10YR 2/1).	Sample B9D10 analyzed for TRPH, TPHg, and BTEX.
								@13.5 feet, same as above; very dark brown (10YR 2/1); 10-20% coarse-grained sand; 25-35% medium-grained sand; 25-35% fine-grained sand; 20-30% silt; medium dense; moist.	Sample B9D14 analyzed for TRPH, TPHg, and BTEX.
B9D14		None	10	6 9 9		15		WELL GRADED SAND (SW): very dark grayish brown (10YR 3/2); trace fine gravel; 10-20% coarse-grained sand; 25-35% medium-grained sand; 40-50% fine-grained sand; 5-15% silt; medium dense; very moist, (wet @ 14.5 ft).	Ground water was encountered at 14.5 feet bgs. Boring was terminated at 15.5 feet bgs. Borehole was backfilled with bentonite chips.
					495				
					490	20			
					485	25			
					480	30			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. B9

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	B10

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
12/16/93	12/16/93	West Hazmat	Soilmaster	140lb/30"	6 inch	14.5 feet

GRND EL.	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
510.0 FT	13 feet	J. Sheldon	Wendy W. Arano

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
					510			4" of asphaltic concrete.	
								SILTY SAND (SM): very dark grayish brown (10YR 3/2); 10–20% coarse-grained sand; 25–35% medium-grained sand; 35–45% fine-grained sand; 10–20% silt.	
B10D5		None	7	9 13 16	505	5		@5 feet, same as above; very dark gray (10YR 3/1); trace of fine gravel and coarse-grained sand; 30–40% medium-grained sand; 30–40% fine-grained sand; 25–35% silt; dense; moist.	Sample B10D5 analyzed for TPHg, TPHd, BTEX and MTBE.
								@8.5 feet, same as above; black (10YR 3/1); 0–10% coarse-grained sand; 10–20% medium-grained sand; 45–55% fine-grained sand; 30–40% silt; loose; moist.	
B10D10		Aged	22	4 4 5	500	10			Sample B10D10 analyzed for TPHg, BTEX and MTBE.
								POORLY GRADED SAND (SP): dark gray (10YR 4/1); trace of coarse-grained sand; 10–20% medium-grained sand; 75–85% fine-grained sand; 0–10% silt; wet.	Sample B10D13 analyzed for TPHg, BTEX and MTBE.
B10D13		None	2.5	N/A					Ground water was encountered at 13 feet bgs.
					495	15			Boring was terminated at 14.5 feet bgs.
					490	20			Borehole was backfilled with bentonite chips.
					485	25			
					480	30			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. B10

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	B11

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
12/17/93	12/17/93	West Hazmat	Soilmaster	140lb/30"	6 inch	14 feet

GRND EL.	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
510.4 FT	13.5 feet	J. Sheldon	Wendy W. Arano

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
					510			4" of concrete.	
								SILTY SAND (SM): brown (10YR 4/3); trace of fine gravel; 5-15% coarse-grained sand; 20-30% medium-grained sand; 40-50% fine-grained sand; 15-25% silt; very dense; moist.	
B11D5		Moderate	2106	150/6"	505	5			Sample B11D5 analyzed for TPHg, TPHd, BTEX and MTBE.
								@9 feet, same as above; dark grayish brown (10YR 4/2); 0-10% coarse-grained sand; 10-20% medium-grained sand; 35-45% fine-grained sand; 35-45% silt; medium dense; moist.	
B11D10		Moderate	3232	11 13 10	500	10		@10 feet, same as above; black (10YR 3/1).	Sample B11D10 analyzed for TPHg, BTEX and MTBE.
B11D13		None	35	7 7 9				WELL GRADED SAND (SW): very dark gray (10YR 3/1); 20-30% coarse-grained sand; 45-55% medium-grained sand; 20-30% fine-grained sand; trace of silt; medium dense; very moist.	Sample B11D13 analyzed for TPHg, BTEX and MTBE.
					495	15		POORLY GRADED SAND (SP): very dark gray (10YR 3/1); 5-15% coarse-grained sand; 35-45% medium-grained sand; 40-50% fine-grained sand; 5-15% silt; very moist, (wet @ 13.5 ft).	Ground water was encountered at 13.5 feet bgs. Boring was terminated at 14 feet bgs. Borehole was backfilled with bentonite chips.
								SILTY SAND (SM): very dark grayish brown (10YR 3/2); 0-10% coarse-grained sand; 10-20% medium-grained sand; 40-50% fine-grained sand; 30-40% silt; medium dense; wet.	
					490	20			
					485	25			
					480	30			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. B11

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	B12

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
12/17/93	12/17/93	West Hazmat	Soilmaster	140lb/30"	6 inch	14.5 feet

GRND EL.	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
510.2 FT	13 feet	J. Sheldon	Wendy W. Arano

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
					510			6" of concrete.	Boring hand augered to 5 feet bgs. Approximately 2 hours later, prior to drilling, encountered standing water in open hole at 4 feet bgs.
								SILTY SAND (SM): brown (10YR 4/3) to dark brown (10YR 3/2); trace of fine gravel; 5–15% coarse-grained sand; 25–35% medium-grained sand; 35–45% fine-grained sand; 10–20% silt; dense; moist.	
								@4.5 feet, same as above; wet; sewage odor.	
B12 D5.5		Strong @5.5 ft	3209	2 9 10 16	505	5		@5.5 feet, same as above; moist; gasoline odor.	Sample B12D5.5 analyzed for TPHg, TPHd, BTEX and MTBE.
								@8.5 feet, same as above; trace of organic material (wood). @9 feet, same as above; very dark brown (10YR 3/2); trace of coarse-grained sand; 5–15% medium-grained sand; 40–50% fine-grained sand; 40–50% silt.	
B12D10		N/A	325	5 7 8 9	500	10			Sample B12D10 analyzed for TPHg, BTEX and MTBE.
B12D13		None	0	10 6 6 9				WELL GRADED SAND (SW): very dark gray (10YR 3/1); 15–25% coarse-grained sand; 40–50% medium-grained sand; 30–40% fine-grained sand; medium dense; moist; (wet @ 13 ft).	Ground water was encountered at 13 feet bgs.
					495	15		SILTY SAND (SM): very dark grayish brown (10YR 3/2); 0–10% coarse-grained sand; 10–20% medium-grained sand; 40–50% fine-grained sand; 30–40% silt; medium dense; wet.	Boring was terminated at 14.5 feet bgs. Borehole was backfilled with bentonite chips.
					490	20			
					485	25			
					480	30			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. B12

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	B13

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
12/17/93	12/17/93	West Hazmat	Soilmaster	140lb/30"	6 inch	13 feet

GRND EL.	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
509.9 FT	12.5 feet	J. Sheldon	Wendy W. Arano

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
								6" of concrete.	
								SILTY SAND (SM): brown (10YR 4/3); trace of fine gravel; 5-15% coarse-grained sand; 20-30% medium-grained sand; 35-45% fine-grained sand; 15-25% silt; dense; moist.	
B13D5		Moderate Faint	531 137	16 16 20 25	505	5			Sample B13D5 analyzed for TPHg, TPHd, BTEX and MTBE.
								SILTY SAND WITH CLAY (SM): brown (10YR 4/3); trace of coarse-grained sand; 5-15% medium-grained sand; 40-50% fine-grained sand; 40-50% silt; 5-15% clay; dense; moist.	
B13D10		Aged	47	6 8 14	500	10		@9 feet, same as above; very dark brown (10YR 3/2); 0-10% coarse-grained sand; 5-15% medium-grained sand; 40-50% fine-grained sand; 35-45% silt; medium dense.	Sample B13D10 analyzed for TPHg, BTEX and MTBE.
B13D12		None	4	4 8 13 10				WELL GRADED SAND WITH SILT (SW): very dark gray (10YR 3/1); 15-25% coarse-grained sand; 30-40% medium-grained sand; 30-40% fine-grained sand; 5-15% silt; very moist. (wet @ 12.5 ft).	Sample B13D12 analyzed for TPHg, BTEX and MTBE.
									Ground water was encountered at 12.5 feet bgs.
					495	15			Boring was terminated at 13 feet bgs.
									Borehole was backfilled with bentonite chips.
					490	20			
					485	25			
					480	30			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. B13

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	B14

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
03/08/94	03/08/94	West Hazmat	CME 75	140lb/30"	8 inch	14.5 feet

GROUND ELEVATION	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
510.3 FT	Not Enctd	J. Sheldon	Wendy W. Arand

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
					510			3" of asphaltic concrete.	
								SILTY SAND (SM): dark yellowish brown (10YR 4/4); 0-10% coarse sand; 10-20% medium sand; 45-55% fine sand; 25-35% silt; very dense; moist.	
B14 D5	■	None	1	38 50	505	5			
									Color change at 7 ft bgs.
B14 D10	■	None to Mild	1 16	10 8 7	500	10		@9 feet, same as above.	
								@10 feet, same as above; very dark gray (10YR 3/1); trace coarse sand; 5-15% medium sand; 45-55% fine sand; 45-55% silt; medium dense; moist.	
B14 D13	■	Mild	10	12 10 9				@14 feet, same as above; very dark grayish brown (10YR 3/2); 5-15% coarse sand; 5-15% medium sand; 50-60% fine sand; 20-30% silt; very moist.	
					495	15			Boring was terminated at 14.5 ft bgs and backfilled with bentonite from 1 to 14.5 ft and concrete from 0 to 1 ft bgs.
					490	20			
					485	25			
					480	30			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. B14

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	B15

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
03/08/94	03/08/94	West Hazmat	CME 75	140lb/30"	8 inch	14.5 feet

GROUND ELEVATION	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
510.0 FT	Not Enctd	J. Sheldon	Wendy W. Arano

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
					510			3" of asphaltic concrete.	
								SILTY SAND (SM): dark grayish brown (10YR 4/2); 5-15% coarse sand; 10-20% medium sand; 45-55% fine sand; 20-30% silt; very dense; moist.	
B15 D5	■	None	4	36 50/5"	505	5			
B15 D10	■	Possible	28	5 3 4	500	10		@9 feet, same as above. @9.5 feet, same as above; very dark gray (10YR 3/1); trace coarse sand; 5-15% medium sand; 40-50% fine sand; 40-50% silt; loose; moist.	
B15 D13	■	Possible	10	6 8 6	495	15		@14 feet, same as above; very dark grayish brown (10YR 3/2); 5-15% coarse sand; 5-15% medium sand; 50-60% fine sand; 20-30% silt; very moist.	Boring was terminated at 14.5 ft bgs and backfilled with bentonite from 1 to 14.5 ft and concrete from 0 to 1 ft bgs.
					490	20			
					485	25			
					480	30			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. B15

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	B16

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
03/08/94	03/08/94	West Hazmat	CME 75	140lb/30"	8 inch	13 feet

GROUND ELEVATION	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
510.6 FT	Not Enctd	J. Sheldon	Wendy W. Arand

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
					510			3" of asphaltic concrete.	
								SILTY SAND (SM): dark grayish brown (10YR 4/2); 5-15% coarse sand; 10-20% medium sand; 40-50% fine sand; 25-35% silt; medium dense; moist.	
B16 D5		None	4	7 8 7	505	5			Driller noted odors in cuttings at 2 ft, stronger at 4 ft bgs. Soil on flights was odorous at 6 ft bgs.
B16 D10		Moderate	351	16 14 15	500	10		@8.5 feet, same as above. @9 feet, same as above; very dark gray (10YR 3/1); trace coarse sand; 5-15% medium sand; 40-50% fine sand; 40-50% silt; loose; moist.	
B16 D12		Moderate	3220	7 8 7	495	15		@12 feet, same as above; brown (10YR 4/3); 10-20% coarse sand; 10-20% medium sand; 35-45% fine sand; 25-35% silt; medium dense; moist to very moist.	Boring was terminated at 13 ft bgs and backfilled with bentonite from 1 to 13 ft and concrete from 0 to 1 ft bgs.
					490	20			
					485	25			
					480	30			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. B16

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	B17

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
03/08/94	03/08/94	West Hazmat	CME 75	140lb/30"	8 inch	12.5 feet

GROUND ELEVATION	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
509.4 FT	Not Encld	J. Sheldon	Wendy W. Arano

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
								3" of asphaltic concrete.	
								SILTY SAND (SM): dark yellowish brown (10YR 4/3); 5-15% coarse sand; 20-30% medium sand; 30-40% fine sand; 25-35% silt; medium dense; moist.	
B17 D5		None	1	11 10 8	505	5			
								@8.5 feet, same as above.	
B17 D10		None	1 2	N/A	500	10		@9 feet, same as above; very dark gray (10YR 3/1); trace coarse sand; 5-15% medium sand; 40-50% fine sand; 40-50% silt; loose; moist. Decaying wood fragments at 9.5 ft.	Color change at 9 ft bgs. Decaying wood fragments in sample (0.75" long x 1" diameter) at 9.5 ft bgs.
B17 D12		Organic	1	11 9 10				SILTY SAND/SANDY SILT (SM/ML): very dark brown (10YR 2/2); 5-10% coarse sand; 5-10% medium sand; 30-40% fine sand; 45-55% silt; low plasticity; rapid dilatancy; moist to very moist; rootlets.	Boring was terminated at 12.5 ft bgs and backfilled with bentonite from 1 to 12.5 ft and concrete from 0 to 1 ft bgs.
					495	15			
					490	20			
					485	25			
					480	30			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. B17

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	B18

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
03/11/94	03/11/94	West Hazmat	Acker	140lb/30"	8 inch	14.5 feet

GROUND ELEVATION	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
510.7 FT	Not Enctd	J. Sheldon	Wendy W. Arano

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
					510			6" of concrete.	
								SILTY SAND (SM): dark yellowish brown (10YR 4/4); 0-10% coarse sand; 20-30% medium sand; 40-50% fine sand; 20-30% silt; medium dense; moist. Decayed wood fragments @6 ft (1" x 0.25" diameter).	
B18 D5		None	0	8 7 7	505	5			
B18 D10		Mild Aged	390	8 7 5	500	10		@9.5 feet, same as above; very dark brown (10YR 2/2); trace coarse sand; 5-15% medium 35-45% fine sand; 45-55% silt; medium dense; moist.	
B18 D14		Possible	16	19 22 25	495	15		@13 feet, same as above; dark brown (10YR 3/3); 5-15% coarse sand; 15-25% medium sand 35-45% fine sand; 25-35% silt; dense; moist to very moist. Coarse gravel noted at 14.5 feet.	Boring was terminated at 14.5 ft bgs and backfilled with bentonite from 1 to 14.5 ft and concrete from 0 to 1 ft bgs.
					490	20			
					485	25			
					480	30			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. B18

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	B19

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
03/11/94	03/11/94	West Hazmat	Acker	140lb/30"	8 inch	14.5 feet

GROUND ELEVATION	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
510.7 FT	Not Enctd	J. Sheldon	Wendy W. Grand

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
					510			3" of asphaltic concrete.	
								SILTY SAND (SM): brown (10YR 4/3); trace fine gravel; 10-20% coarse sand; 20-30% medium sand; 35-45% fine sand; 15-25% silt; medium dense; moist.	Coarse gravel present during hand augering from 0 to 3 ft bgs.
B19 D5	■	None	0	8 10 12	505	5			
B19 D9.5 B19 D10	■	Faint, Aged	25	8 12 12	500	10		@9.5 feet, same as above. @10 feet, same as above; very dark grayish brown (10YR 3/2); 0-10% coarse sand; 10-20% medium sand; 35-45% fine sand; 35-45% silt; medium dense; moist.	
B19 D13	■	Mild, Sweet	91	15 20 25	495	15		@13 feet, same as above; 10-20% coarse sand; 20-30% medium sand; 40-50% fine sand; 10-20% silt.	Boring was terminated at 14.5 ft bgs and backfilled with bentonite from 1 to 14.5 ft and concrete from 0 to 1 ft bgs.
					490	20			
					485	25			
					480	30			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. B19

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	B20

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
04/12/94	04/12/94	West Hazmat	Acker	140lb/30"	8"	13.5 feet

GROUND ELEVATION	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
510.0 feet (approx)	Not Enctd	J. Sheldon	Wendy W. Arano

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
					510			3" of asphaltic concrete.	
								SILTY SAND (SM): brown (10YR 4/3); 10% medium sand; 45% fine sand; 45% fines; very dense; moist.	
									Sample B20D6 analyzed for TPHg, BTEX, and MTBE.
B20 D6	■	None	1.5	18 32 50	505	5		@6 feet, same as above; 1"-2" long rootlets.	
B20 D9	■	None	3.0	18 30 32				@8 feet, same as 2'.	Sample B20D9 analyzed for TPHg, BTEX, and MTBE.
					500	10		SANDY SILT (ML): very dark brown (10YR 2/2); 35% fine sand; 65% fines; low plasticity; medium dilatancy; hard; moist.	Sample B20D12.5 analyzed for TPHg, BTEX, and MTBE.
B20 D12.5	■	None	1.0	19 24 33				SILTY SAND (SM): very dark brown (10YR 2/2); 25% coarse sand; 30% medium sand; 30% fine sand; 15% silt; dense. @12 feet, same as above; brown (10YR 4/3); 10% medium sand; 45% fine sand; 45% silt; very moist. @13 feet, same as above; very dark brown (10YR 2/2).	Ground-water was not encountered.
								POORLY-GRADED SAND WITH SILT (SP): 10% coarse sand; 40% medium sand; 40% fine sand; 10% silt; dense; very moist.	Boring was terminated at 13.5 ft bgs and backfilled with hydrated bentonite chips from 0 to 13.5 ft bgs.
					495	15			
					490	20			
					485	25			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. B20

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	B21

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
04/12/94	04/12/94	West Hazmat	Acker	140lb/30"	8"	12.5 feet

GROUND ELEVATION	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
509.5 feet (approx)	12 feet	J. Sheldon	Wendy W. Arano

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
								4" of asphaltic concrete.	
								SILTY SAND (SM): brown (10YR 4/3); 10% medium sand; 45% fine sand; 45% silt; dense; moist.	
					505	5			Sample B21D6 analyzed for TPHg, BTEX, and MTBE.
B21 D6	■	None	0.0	19 40 23					
									Sample B21D9 analyzed for TPHg, BTEX, and MTBE.
								@8.5 feet, same as above.	
B21 D9	■	None	0.5	12 18 20	500	10		POORLY-GRADED SAND WITH SILT (SP): very dark grayish brown (10YR 3/2); trace coarse gravel; trace fine gravel; 10% medium sand; 80% fine sand; 10% silt; dense; moist.	Sample B21D11 analyzed for TPHg, BTEX, and MTBE.
B21 D11	■	None	0.7	18 21 30				@11 feet, same as above.	Ground-water was encountered at 12 ft bgs.
								SILTY SAND (SM): dark brown (10YR 3/3); 15% medium sand; 40% fine sand; 45% silt; dense; very moist.	
								WELL-GRADED SAND WITH SILT (SW): very dark grayish brown (10YR 3/2); 25% coarse sand; 35% medium sand; 30% fine sand; 10% silt; dense; wet.	Boring was terminated at 12.5 ft bgs and backfilled with hydrated bentonite chips from 0 to 12.5 ft bgs.
					495	15			
					490	20			
					485	25			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. B21

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	B22

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
04/12/94	04/12/94	West Hazmat	Acker	140lb/30"	8"	12 feet

GROUND ELEVATION	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
509.5 feet (approx)	Not Enctd	J. Sheldon	Wendy W. Arano

SAMPLE NUMBER	SAMPLE TYPE	ODOR	PID READING (PPM)	BLOW COUNT	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, CHARACTER OF DRILLING AND LABORATORY TESTING
								3" of asphaltic concrete.	
								SILTY SAND (SM): brown (10YR 4/3); 10% medium sand; 45% fine sand; 45% silt; very dense; moist.	
					505				
B22 D6	■	None	0	10 12 18		5		@6 feet, same as above; 10% coarse sand; 20% medium sand; 35% fine sand; 35% silt.	Sample B22D6 analyzed for TPHg, BTEX, and MTBE.
B22 D8.5	■	None	0	14 10 23	500			POORLY-GRADED SAND (SP): light yellowish brown (10YR 6/4) to brown (10YR 4/3); 75% medium sand; 20% fine sand; 5% silt; dense; moist.	Sample B22D8.5 analyzed for TPHg, BTEX, and MTBE.
B22 D11	■	None	0	8 12 18		10		@11 feet, same as above; silt increasing to 15% with depth. @11.5 feet, same as above; dark brown (10YR 3/3); 10% coarse sand; 30% medium sand; 50% fine sand; 10% silt; very moist.	Sample B22D11 analyzed for TPHg, BTEX, and MTBE.
									Ground-water was not encountered.
					495	15			Boring was terminated at 12 ft bgs and backfilled with hydrated bentonite chips from 0 to 12 ft bgs.
					490	20			
					485	25			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. B22

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	B23

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
03/17/95	03/17/95	Gregg Drilling	Rhino	140lb/30"	5.5 in	10 ft

GROUND ELEVATION	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
Approx. 510 ft	Not Enctd	G. Quintero	G. Metcalf

SAMPLE ID	SAMPLE INTERVAL	HYDROCARBON ODOR	PID READING (PPM)	BLOW COUNTS (# BLOWS/6")	ELEVATION IN FEET	DEPTH IN FEET	GRAPHIC SYMBOL	DESCRIPTION AND CLASSIFICATION	NOTES
					510			SAND (SW): light olive brown (2.5Y 5/3); trace gravel; 30% coarse-grained sand; 50% medium-grained sand; well-graded; subangular; very loose.	
B23 D3		Strong	N/A	N/A				SAND (SW): olive (5Y 4/4); trace coarse-grained sand; 20% medium-grained sand; 70% fine-grained sand; 10% non-plastic fines; subrounded; loose.	
					505	5			
B23 D6		Strong	N/A	N/A				GRAVELLY SAND (SW): very dark grayish brown (10YR 3/2); 20% fine gravel, angular to subangular; 30% coarse-grained sand; 50% medium-grained sand; very loose.	
B23 D10		Strong	N/A	N/A					Ground water not encountered.
					500	10			Total depth = 10 ft; backfilled with hydrated betonite chips.
					495	15			
					490	20			
					485	25			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. B23

BEI EXPLORATORY BORING LOG

PROJECT	JOB NO.	SHEET NO.	HOLE NO.
Chevron Multi-Site	9-1197	1 of 1	B24

SITE LOCATION	MAP DESCRIPTION	ANGLE FROM HORIZONTAL
Escondido	Sec.12, T11S, R3W	Vertical

BEGUN	FINISHED	DRILLER	DRILL RIG MAKE	HAMMER WEIGHT/FALL	HOLE D.	T.D.
03/17/95	03/17/95	Gregg Drilling	Rhino	140lb/30"	5.5 in	10 ft

GROUND ELEVATION	DEPTH/EL. TO WATER	LOGGED BY	REVIEWED BY
Approx. 510 ft	Not Enctd	G. Quintero	J. Metcalf

SAMPLE ID	SAMPLE INTERVAL	HYDROCARBON ODOR	PID READING (PPM)	BLOW COUNTS (# BLOWS/6")	ELEVATION IN FEET	DEPTH IN FEET	GRAPHIC SYMBOL	DESCRIPTION AND CLASSIFICATION	NOTES
					510			SILTY SAND (SM): dark yellowish brown (10YR 4/6); 30% medium-grained sand; 50% fine-grained sand; 20% non-plastic fines; loose.	
B24 D3		Strong	N/A	N/A					
								SAND (SW): olive (5Y 4/4); 20% medium-grained sand; 70% fine-grained sand; 10% non-plastic fine; loose.	
					505	5			
B24 D6		Strong	N/A	N/A					
								SILTY SAND (SM): black (5YR 2.5/1); 20% coarse-grained sand; 60% fine-grained sand; 20% non-plastic fines; well-graded; micaceous; loose.	
B24 D10		Strong	N/A	N/A					Ground water not encountered.
					500	10			Total depth = 10 ft; backfilled with hydrated betonite chips.
					495	15			
					490	20			
					485	25			

N/A = DATA NOT COLLECTED

SITE : Escondido

HOLE NO. B24

APPENDIX B
CY 2004 AND CY 2005 GROUNDWATER MONITORING REPORTS

FORMER CHEVRON STATION # 9-1197

8808 LAWRENCE WELK DRIVE
ESCONDIDO, CALIFORNIA, 92026

MTCH.91197.08
August 1, 2005

SECOR

SECOR
INTERNATIONAL
INCORPORATED

www.secor.com

2655 Camino Del Rio N. Suite 302
San Diego, CA 92108
619-296-6195 TEL
619-296-6199 FAX

DATE: June 22, 2004

CHEVRON ANNUAL GROUNDWATER MONITORING REPORT

Station No.: 9-1197
Address: 8808 Lawrence Welk Drive, Escondido, CA
Chevron Environmental Manager: Ms. Karen Streich
Consulting Co./Contact Person: SECOR / Mr. Maurice Baron, Jr.
SECOR Project No.: MTCH.91197.08
Primary Agency/Regulatory ID No.: County of San Diego Land and Water Quality Division Site Assessment and Mitigation (SAM) / H05719-001
Second Quarter EDF Confirmation Number: 6403844892

WORK PERFORMED DURING 2004:

1. Surveyed site on April 21, 2004.
2. Completed 2004 groundwater monitoring, sampling, and reporting. The sampling event occurred on May 7, 2004.

WORK PROPOSED FOR 2005:

1. Annual groundwater monitoring, sampling, and reporting.

Current Phase of Project:	Monitoring
Frequency of Sampling and Monitoring:	Annual
Are Liquid Phase Hydrocarbons (LPH) Present On-site:	No
Cumulative LPH Recovered to Date:	Unknown
LPH Recovered This Reporting Period (2004):	None
Current Remediation Techniques:	None
Permits for Discharge:	None
2004 Approximate Depth to Groundwater:	16.30 to 21.05 feet below ground surface
2004 Groundwater Gradient:	West-Northwest, 0.017 feet per foot

DISCUSSION:

2004: Depth to groundwater measurements on May 7, 2004 ranged between 16.30 and 21.05 feet below ground surface (bgs). Calculated groundwater elevations varied from 490.62 to 494.17 feet above mean sea level (MSL). The hydraulic gradient was calculated to be 0.017 feet per foot with a flow direction to the west-northwest. No measurable thickness of liquid phase hydrocarbons (LPH) was detected in any of the gauged wells during this sampling event.

The six wells were sampled following the attached purge sampling procedures, which are based on SAM guidelines. Total petroleum hydrocarbons as gasoline (TPHg), benzene, ethylbenzene, total xylenes, and tert-butyl alcohol (TBA) were detected in one well, MW-2, at concentrations of 910 micrograms per liter (μg/L), 0.66 μg/L, 19 μg/L, 39 μg/L, and 90 μg/L, respectively. Toluene, di-isopropyl ether (DIPE), ethyl-t-butyl ether (ETBE), and t-amyl-methyl ether (TAME) were not detected above laboratory detection limits in any of the samples analyzed. Methyl-tert-butyl ether (MTBE) was detected above laboratory detection limits in MW-1, MW-2, MW-5, and MW-6 at concentrations of 26 μg/L, 55 μg/L, 75 μg/L, and 2.4 μg/L, respectively.

DATE: June 22, 2004

CHEVRON ANNUAL GROUNDWATER MONITORING REPORT (CONT'D)
Chevron 9-1197, 8808 Lawrence Welk Drive, Escondido, CA

Conclusions and Recommendations: Based on these analytical results, SECOR recommends that annual groundwater sampling be continued.

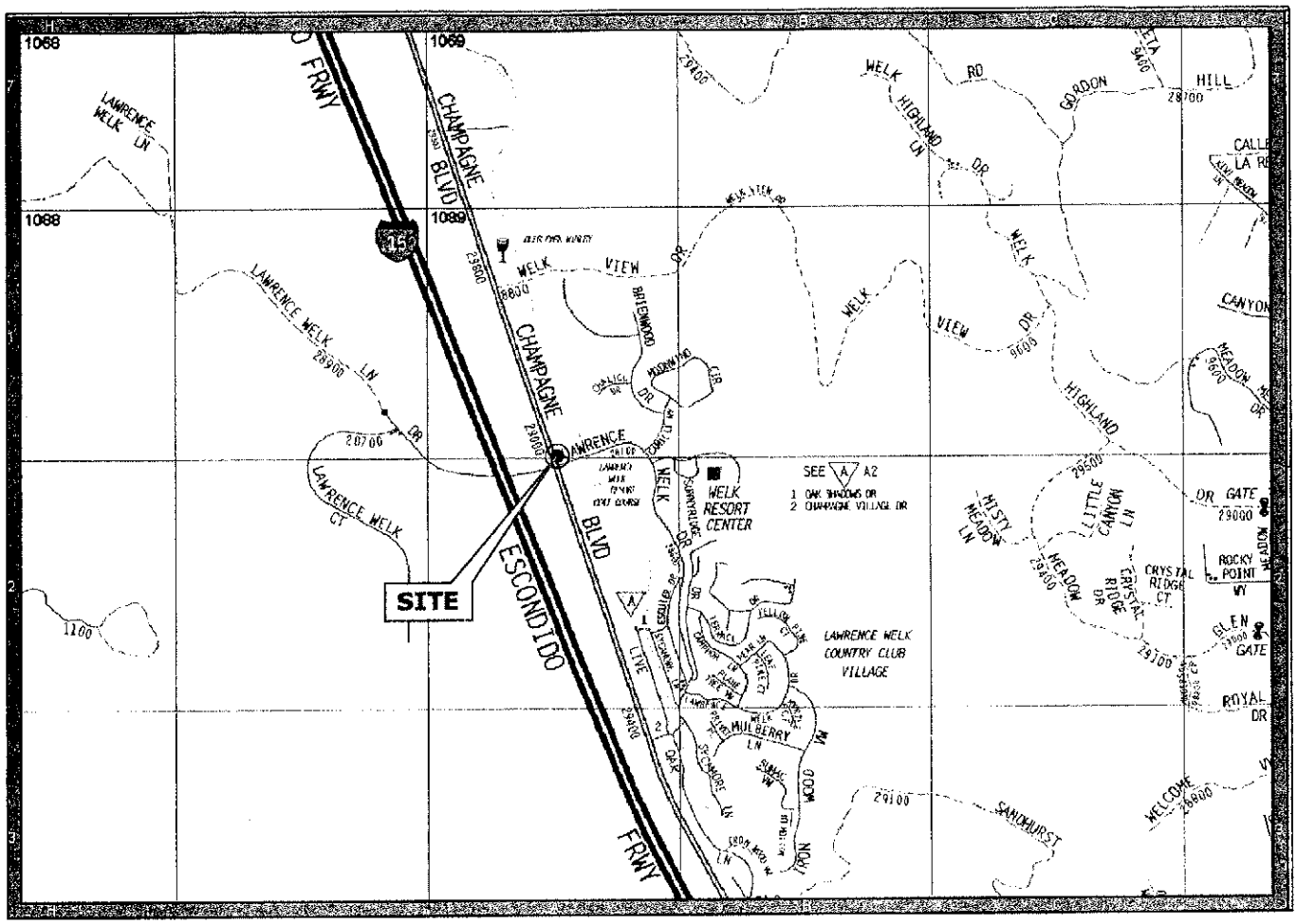
ATTACHED:

- Site Location Map (Figure 1)
- Groundwater Gradient Map – May 7, 2004 (Figure 2)
- Hydrocarbon Constituents in Groundwater Map – May 7, 2004 (Figure 3)
- Summary of Second Quarter 2004 Groundwater Levels and Chemical Analysis Results (Table 1)
- Historic Groundwater Levels and Chemical Analysis Results (Table 2)
- Hydrographs
- Laboratory Report and Chain-of-Custody Documentation
- Monitoring Well Gauging Data
- Well Purging and Sampling Logs
- Monitoring Well Purging and Sampling Procedures

Mr. Brian C Londquist
Project Scientist

Mr. Maurice Baron Jr., RG# 5256
Senior Project Manager

REGISTERED GEOLOGIST
MAURICE W. BARON JR.
No 5256
Exp 4/06
STATE OF CALIFORNIA



REFERENCE: THOMAS GUIDE CD-ROM, PAGE & GRID 1089 A1.

NORTH

0 1320 2640

APPROXIMATE SCALE IN FEET

SECOR

2655 Camino del Rio North, Suite 302
San Diego, California
619-296-6195/Fax 619-296-6199

PREPARED FOR:

CHEVRON
Former Service Station No. 9-1197
8808 Lawrence Welk Drive
Escondido, California

SITE LOCATION MAP

FIGURE: **1**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
MTCH.91197.08	RJO	RDT	RDT	1/29/04

91197SLOC.DWG

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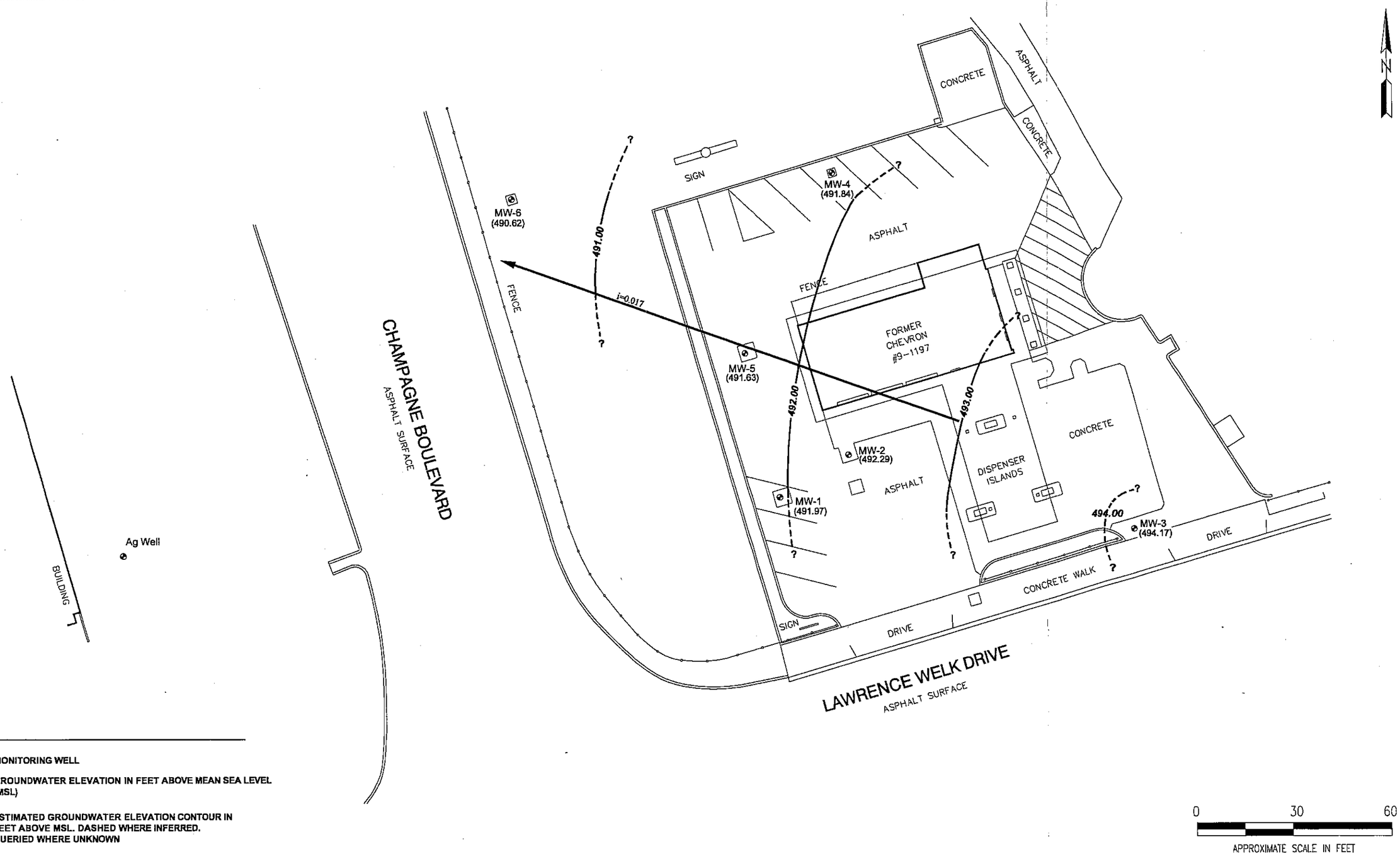


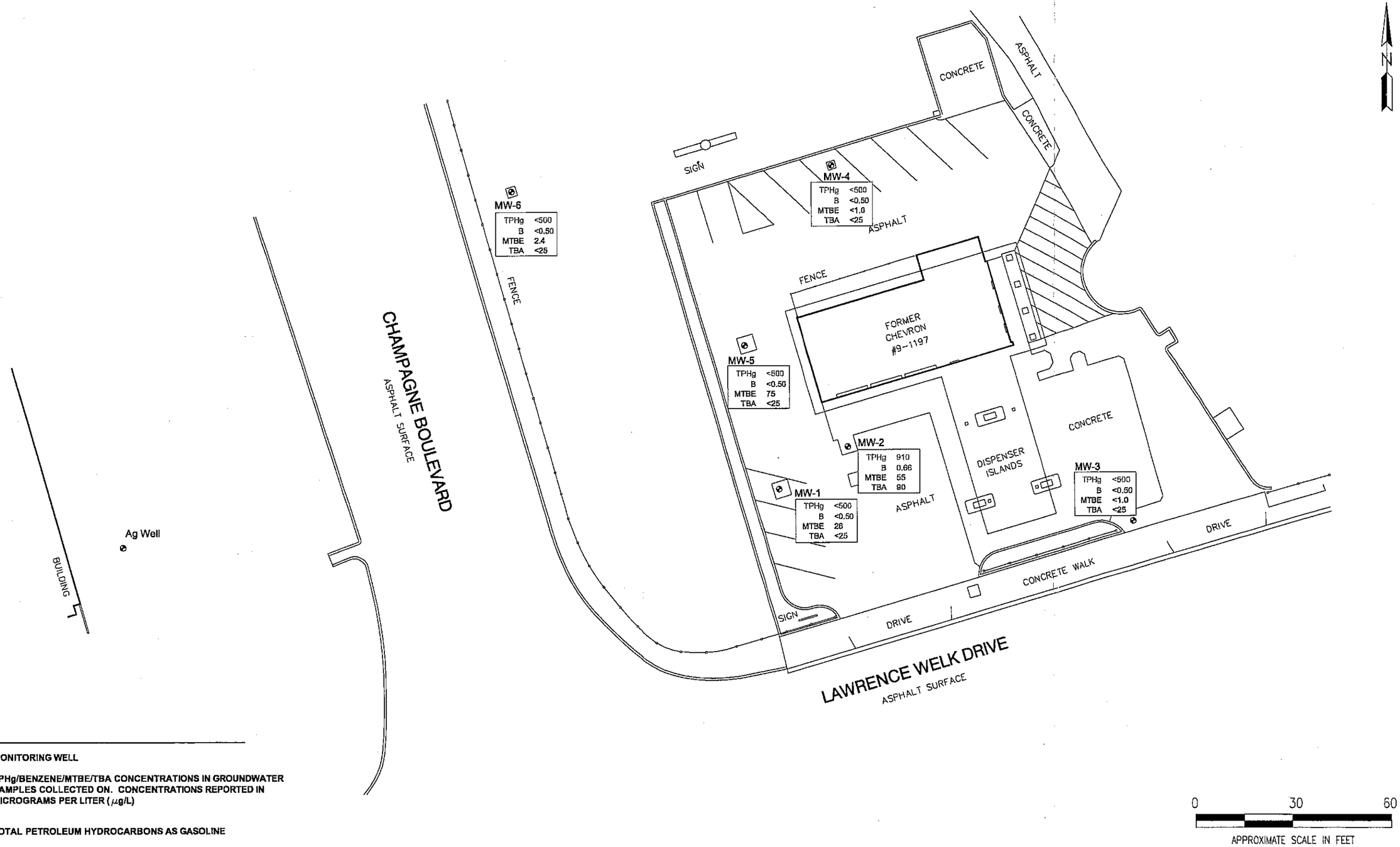
LEGEND:

MW-12	MONITORING WELL
(491.97)	GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (MSL)
? - - 492.00 —	ESTIMATED GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MSL. DASHED WHERE INFERRED. QUERIED WHERE UNKNOWN
i=0.017	APPROXIMATE DIRECTION OF GROUNDWATER FLOW AND HYDRAULIC GRADIENT (i) IN VERTICAL FEET PER HORIZONTAL FEET ON MAY 7, 2004

MAP REFERENCE: SOUTHERN CALIFORNIA SURVEY APRIL 21, 2004

DRAWN BY: PD CHECKED: APPROVED: DATE: 6/9/04 JOB No.: MTCH.91197.08 CAD FILE: 9-1197GW6-04	PREPARED BY: SECOR 2655 Camino del Rio North, Suite 302 San Diego, California	PREPARED FOR: FORMER CHEVRON STATION #9-1197 8808 LAWRENCE WELK DRIVE ESCONDIDO, CALIFORNIA	FIGURE: 2 **GROUNDWATER GRADIENT MAP** **MAY 7, 2004**

F:\CAD\ALLPROJECTS2004\WGS\CHEVRON 2004\9-1197-2K4\1197GW6-04.DWG MODIFIED BY PDODGE ON JUN 17, 2004 - 15:13



LEGEND:

MW-12	MONITORING WELL
TPHg <500 B <0.50 MTBE <1.0 TBA <25	TPHg/BENZENE/MTBE/TBA CONCENTRATIONS IN GROUNDWATER SAMPLES COLLECTED ON. CONCENTRATIONS REPORTED IN MICROGRAMS PER LITER (μg/L)
TPHg	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
B	BENZENE
MTBE	METHYL TERT-BUTYL ETHER
TBA	TERTIARY BUTYL ALCOHOL
<	BELOW LABORATORY REPORTING LIMIT INDICATED

MAP REFERENCE: SOUTHERN CALIFORNIA SURVEY APRIL 21, 2004

DRAWN BY: PD CHECKED: APPROVED: DATE: 6/9/04 JOB No.: MTCH.91197.08 CAD FILE: 9-1197HYD6-04	PREPARED BY: SECOR 2655 Camino del Rio North, Suite 302 San Diego, California	PREPARED FOR: FORMER CHEVRON STATION #9-1197 8808 LAWRENCE WELK DRIVE ESCONDIDO, CALIFORNIA	FIGURE: 3 **HYDROCARBON CONTITUENTS IN GROUNDWATER MAP** **MAY 7, 2004**

P:\CAD\ALLPROJECTS2004.DWGS\CHEVRON 2004\9-1197-2K4\1197HYD6-04.DWG MODIFIED BY PDOSE ON JUN 17, 2004 - 15:17

Table 1
Summary of Second Quarter 2004 Groundwater Levels and Chemical Analysis Results
Former Chevron Station 9-1197, 8808 Lawrence Welk Drive, Escondido, California

Well Number	Date	DTW (feet)	Groundwater Elevation (feet)*	TPH-g [1] µg/l (ppb)	Benzene [1] µg/l (ppb)	Toluene [1] µg/l (ppb)	Ethyl-benzene [1] µg/l (ppb)	Total Xylenes [1] µg/l (ppb)	MTBE [1] µg/l (ppb)	MTBE [1] µg/l (ppb)	DIPE [1] µg/l (ppb)	ETBE [1] µg/l (ppb)	TAME [1] µg/l (ppb)	TBA [1] µg/l (ppb)
MW-1	5/7/04	20.10	491.97	<500	<0.50	<0.50	<0.50	<1.5	--	26	<5.0	<5.0	<5.0	<25
MW-2	5/7/04	19.64	492.29	910	0.66	<0.50	19	39	--	55	<5.0	<5.0	<5.0	90
MW-3	5/7/04	16.30	494.17	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<25
MW-4	5/7/04	20.72	491.84	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<25
MW-5	5/7/04	21.05	491.63	<500	<0.50	<0.50	<0.50	<1.5	--	75	<5.0	<5.0	<5.0	<25
MW-6	5/7/04	20.43	490.62	<500	<0.50	<0.50	<0.50	<1.5	--	2.4	<5.0	<5.0	<5.0	<25

Notes: [1] Analyzed by EPA method 8260B.

Definitions: feet* = Feet above mean sea level, MTBE = Methyl tert-Butyl Ether, ETBE = Ethyl tert-Butyl Ether, DIPE = Di-isopropyl Ether, TAME = tert-Amyl Methyl Ether, TBA = tert-Butanol, ppb = parts per billion, µg/l = micrograms per liter, -- = Not Measured, DTW = Depth to Water, TPH = Total Petroleum Hydrocarbons.

Monitoring and sampling activities conducted by SECOR after 2/1/03. Monitoring and sampling activities conducted by Blaine Tech Services on 5/7/04. GEIMS Global ID # T0607301337.

Table 2
Historic Groundwater Levels and Chemical Analysis Results
Former Chevron Station 9-1197, 8808 Lawrence Welk Drive, Escondido, California

Well No. and Elevation (feet)*	Date	DTW (feet)	Groundwater Elevation (feet)*	Corrected Groundwater Elevation (feet)**	TPH-g [1] µg/l (ppb)	Benzene [2] µg/l (ppb)	Toluene [2] µg/l (ppb)	Ethyl-benzene [2] µg/l (ppb)	Total Xylenes [2] µg/l (ppb)	MTBE [3] µg/l (ppb)	MTBE [4] µg/l (ppb)	DIPE [4] µg/L (ppb)	ETBE [4] µg/L (ppb)	TAME [4] µg/L (ppb)	TBA [4] µg/L (ppb)
MW-1	12/20/93	14.92	495.22	497.15	ND	0.38	0.75	1.2	6.4	ND	--	--	--	--	--
510.14	3/14/94	14.65	495.49	497.42	ND	ND	ND	2.0	10.5	12.1	--	--	--	--	--
	6/13/94	16.70	493.44	495.37	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	9/20/94	21.63	488.51	490.44	700	9.2	2.5	10.5	33.6	15.6	--	--	--	--	--
	12/8/94	20.25	489.89	491.82	1830	13.6	3.0	28.8	7.0	77.5	--	--	--	--	--
	2/28/95	--	--		--	--	--	--	--	--	--	--	--	--	--
	6/5/95	16.30	493.84	495.77	ND	0.60	ND	ND	ND	20	--	--	--	--	--
	8/23/95	17.72	492.42	494.35	ND	ND	8.0	ND	25	220	--	--	--	--	--
	12/5/95	17.09	493.05	494.98	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	3/18/96	16.56	493.58	495.51	ND	ND	ND	ND	ND	--	--	--	--	--	--
	6/13/96	19.32	490.82	492.75	-	--	--	--	-	--	--	--	--	--	--
	6/18/96	19.63	490.51	492.44	ND	0.50	5.0	ND	ND	ND	--	--	--	--	--
	8/26/96	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	11/12/96	23.83	486.31	488.24	--	--	--	--	--	--	--	--	--	--	--
	3/7/97	16.90	493.24	495.17	510	8.8	ND	ND	ND	36	--	--	--	--	--
	6/3/97	19.11	491.03	492.96	ND	0.83	ND	ND	ND	14	--	--	--	--	--
	12/4/97	21.83	488.31	490.24	1300	16	ND	2.1	1.6	45	--	--	--	--	--
	11/12/98	19.45	490.69	492.62	ND	3.8	ND	ND	ND	24	--	--	--	--	--
	11/12/99	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/20/00	20.93	489.21	491.14	500	2.5	<0.50	<0.50	<1.5	46	--	--	--	--	--
	10/18/00	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/16/01	17.94	492.20	494.13	<500	<0.50	<0.50	<0.50	<1.5	--	23	<5.0	<5.0	<5.0	120
	10/2/01	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/1/02	23.89	486.25	488.18	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<2.0	<2.0	<2.0	<25
	11/11/02	24.60	--	487.47	<500	0.93	0.56	3.5	<1.5	--	<1.0	<2.0	<2.0	<2.0	<25
	12/19/03	21.52	--	490.55	<500	<0.50	<0.50	<0.50	<1.5	--	41	<5.0	<5.0	<5.0	99
512.07	5/7/04	20.10	491.97	491.97	<500	<0.50	<0.50	<0.50	<1.5	--	26	<5.0	<5.0	<5.0	<25
MW-2	12/20/93	14.79	495.28	497.14	25000	340	770	1200	5400	36	--	--	--	--	--
510.07	3/14/94	14.52	495.55	497.41	9000	446	1110	992	2280	226	--	--	--	--	--
	6/13/94	16.46	493.61	495.47	18700	321	990	955	3100	534	--	--	--	--	--
	9/20/94	21.42	488.67	490.51	--	--	--	--	--	--	--	--	--	--	--
	12/8/94	20.26	489.81	491.67	34100	256	964	1040	5560	2990	--	--	--	--	--
	2/28/95	13.72	496.35	498.21	--	--	--	--	--	--	--	--	--	--	--

Table 2
Historic Groundwater Levels and Chemical Analysis Results
Former Chevron Station 9-1197, 8808 Lawrence Welk Drive, Escondido, California

Well No. and Elevation (feet)*	Date	DTW (feet)	Groundwater Elevation (feet)*	Corrected Groundwater Elevation (feet)**	TPH-g [1] µg/l (ppb)	Benzene [2] µg/l (ppb)	Toluene [2] µg/l (ppb)	Ethyl-benzene [2] µg/l (ppb)	Total Xylenes [2] µg/l (ppb)	MTBE [3] µg/l (ppb)	MTBE [4] µg/l (ppb)	DIPE [4] µg/L (ppb)	ETBE [4] µg/L (ppb)	TAME [4] µg/L (ppb)	TBA [4] µg/L (ppb)
MW-2	6/5/95	16.14	493.93	495.79	69100	914	5490	4780	14000	6540	--	--	--	--	--
continued	8/23/95	17.40	492.67	494.53	34500	800	2800	3700	7800	2350	--	--	--	--	--
	12/5/95	16.90	493.17	495.03	7700	250	80	1600	940	1000	--	--	--	--	--
	3/18/96	16.43	493.64	495.50	7620	350	160	1300	800	--	--	--	--	--	--
	6/13/96	19.02	491.05	492.91	5170	360	60	1260	730	510	--	--	--	--	--
	8/26/96	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	11/12/96	23.89	486.18	488.04	--	--	--	--	--	--	--	--	--	--	--
	3/7/97	16.80	493.27	495.13	22000	360	890	2200	8300	780	--	--	--	--	--
	6/3/97	18.82	491.25	493.11	2700	63	18	400	310	1000	--	--	--	--	--
	12/4/97	21.65	488.42	490.28	7800	150	310	880	1300	570	--	--	--	--	--
	11/12/98	19.23	490.84	492.70	6700	46	190	520	1400	750	--	--	--	--	--
	11/12/99	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/20/00	20.52	489.55	491.41	2600	30	<5.0	350	29	240	--	--	--	--	--
	10/18/00	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/16/01	17.71	492.36	494.22	10000	49	26	1800	1700	--	100	<25	<25	<25	<250
	10/2/01	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/1/02	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
511.53	11/11/02	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	12/19/03	20.97	490.55	490.96	<2500	<25	<25	490	270	--	140	<250	<250	<250	<1200
511.93	5/7/04	19.64	492.29	492.29	910	0.66	<0.50	19	39	--	55	<5.0	<5.0	<5.0	90
MW-3	12/20/93	11.42	496.57	499.05	ND	ND	ND	ND	ND	ND	--	--	--	--	--
507.99	3/14/94	11.16	496.83	499.31	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	6/13/94	12.62	495.37	497.85	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	9/20/94	17.35	490.64	493.12	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	12/8/94	16.73	491.26	493.74	--	--	--	--	--	--	--	--	--	--	--
	2/28/95	10.68	497.31	499.79	--	--	--	--	--	--	--	--	--	--	--
	6/5/95	13.83	494.16	496.64	--	--	--	--	--	--	--	--	--	--	--
	8/23/95	14.31	493.68	496.16	ND	9.0	40	ND	50	ND	--	--	--	--	--
	12/5/95	14.35	493.64	496.12	--	--	--	--	--	--	--	--	--	--	--
	3/18/96	14.11	493.88	496.36	--	--	--	--	--	--	--	--	--	--	--
	6/13/96	15.62	492.37	494.85	--	--	--	--	--	--	--	--	--	--	--
	8/26/96	21.40	486.59	489.07	ND	ND	ND	ND	ND	ND	--	--	--	--	--

Table 2
Historic Groundwater Levels and Chemical Analysis Results
Former Chevron Station 9-1197, 8808 Lawrence Welk Drive, Escondido, California

Well No. and Elevation (feet)*	Date	DTW (feet)	Groundwater Elevation (feet)*	Corrected Groundwater Elevation (feet)**	TPH-g [1] µg/l (ppb)	Benzene [2] µg/l (ppb)	Toluene [2] µg/l (ppb)	Ethyl-benzene [2] µg/l (ppb)	Total Xylenes [2] µg/l (ppb)	MTBE [3] µg/l (ppb)	MTBE [4] µg/l (ppb)	DIPE [4] µg/L (ppb)	ETBE [4] µg/L (ppb)	TAME [4] µg/L (ppb)	TBA [4] µg/L (ppb)
MW-3	11/12/96	21.00	486.99	489.47	--	--	--	--	--	--	--	--	--	--	--
continued	3/7/97	14.55	493.44	495.92	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	6/3/97	15.51	492.48	494.96	--	--	--	--	--	--	--	--	--	--	--
	12/4/97	18.97	489.02	491.50	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	11/12/98	15.98	492.01	494.49	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	11/12/99	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/20/00	16.77	491.22	493.70	<500	<0.50	<0.50	<0.50	<1.5	2.4	--	--	--	--	--
	10/18/00	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/16/01	15.30	492.69	495.17	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<50
	10/2/01	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/1/02	19.93	488.06	490.54	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<2.0	<2.0	<2.0	<25
510.08	11/11/02	20.65	489.43	489.82	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<2.0	<2.0	<2.0	<25
	12/19/03	17.3	492.78	493.17	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<25
510.47	5/7/04	16.30	494.17	494.17	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<25
MW-4	12/20/93	15.17	494.93	497.39	ND	ND	ND	ND	1.7	ND	--	--	--	--	--
510.10	3/14/94	14.97	495.13	497.59	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	6/13/94	16.76	493.34	495.80	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	9/20/94	21.71	488.39	490.85	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	12/8/94	20.40	489.70	492.16	--	--	--	--	--	--	--	--	--	--	--
	2/28/95	--	--		--	--	--	--	--	--	--	--	--	--	--
	6/5/95	17.14	492.96	495.42	--	--	--	--	--	--	--	--	--	--	--
	8/23/95	18.17	491.93	494.39	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	12/5/95	17.79	492.31	494.77	--	--	--	--	--	--	--	--	--	--	--
	3/18/96	17.38	492.72	495.18	--	--	--	--	--	--	--	--	--	--	--
	6/13/96	19.83	490.27	492.73	--	--	--	--	--	--	--	--	--	--	--
	8/26/96	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	11/12/96	24.55	485.55	488.01	--	--	--	--	--	--	--	--	--	--	--
	3/7/97	17.80	492.30	494.76	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	6/3/97	19.58	490.52	492.98	--	--	--	--	--	--	--	--	--	--	--
	12/4/97	22.50	487.60	490.06	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	11/12/98	20.12	489.98	492.44	ND	ND	ND	ND	ND	ND	--	--	--	--	--

Table 2
Historic Groundwater Levels and Chemical Analysis Results
Former Chevron Station 9-1197, 8808 Lawrence Welk Drive, Escondido, California

Well No. and Elevation (feet)*	Date	DTW (feet)	Groundwater Elevation (feet)*	Corrected Groundwater Elevation (feet)**	TPH-g [1] µg/l (ppb)	Benzene [2] µg/l (ppb)	Toluene [2] µg/l (ppb)	Ethyl-benzene [2] µg/l (ppb)	Total Xylenes [2] µg/l (ppb)	MTBE [3] µg/l (ppb)	MTBE [4] µg/l (ppb)	DIPE [4] µg/L (ppb)	ETBE [4] µg/L (ppb)	TAME [4] µg/L (ppb)	TBA [4] µg/L (ppb)
MW-4	11/12/99	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
continued	4/20/00	20.85	489.25	491.71	<500	<0.50	<0.50	<0.50	<1.5	<1.0	--	--	--	--	--
	10/18/00	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/16/01	18.62	491.48	493.94	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<50
	10/2/01	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/1/02	23.65	486.45	488.91	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<2.0	<2.0	<2.0	<25
512.16	11/11/02	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	12/19/03	22.11	490.05	490.45	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<25
512.56	5/7/04	20.72	491.84	491.84	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<25
MW-5	3/14/94	15.47	495.16	497.21	ND	ND	5.8	ND	2.9	19.5	--	--	--	--	--
510.63	6/13/94	17.51	493.12	495.17	ND	14.8	0.86	117	2.7	16.3	--	--	--	--	--
	9/20/94	22.43	488.20	490.25	ND	16.1	1.2	24.3	23.7	ND	--	--	--	--	--
	12/8/94	21.02	489.61	491.66	1450	55	10.9	4.8	15.7	57.8	--	--	--	--	--
	2/28/95	15.00	495.63	497.68	ND	5.6	ND	1.9	ND	19.6	--	--	--	--	--
	6/5/95	17.14	493.49	495.54	525	25.3	0.90	3.8	5.2	327	--	--	--	--	--
	8/23/95	14.51	496.12	498.17	ND	11	24	ND	ND	430	--	--	--	--	--
	12/5/95	17.90	492.73	494.78	ND	ND	2.5	ND	ND	120	--	--	--	--	--
	3/18/96	17.40	493.23	495.28	625	ND	ND	ND	ND	--	--	--	--	--	--
	6/13/96	20.15	490.48	492.53	820	60	2.0	40	70	510	--	--	--	--	--
	8/26/96	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	11/12/96	23.55	487.08	489.13	--	--	--	--	--	--	--	--	--	--	--
	3/7/97	17.78	492.85	494.90	ND	2.2	ND	ND	ND	14	--	--	--	--	--
	6/3/97	19.91	490.72	492.77	ND	1.3	ND	ND	ND	190	--	--	--	--	--
	12/4/97	22.67	487.96	490.01	1100	14	ND	27	16	130	--	--	--	--	--
	11/12/98	20.34	490.29	492.34	ND	1.1	0.61	ND	ND	410	--	--	--	--	--
	11/12/99	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/20/00	21.78	488.85	490.90	<500	1.7	<1.0	<1.0	<3.0	410	--	--	--	--	--
	10/18/00	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/16/01	18.76	491.87	493.92	<500	<0.50	0.57	<0.50	<1.5	--	220	<10	<10	<10	190
	10/2/01	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/1/02	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
512.27	11/11/02	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	12/19/03	22.5	489.77	490.18	<500	<0.50	<0.50	<0.50	<1.5	--	83	<5.0	<5.0	<5.0	<25
512.68	5/7/04	21.05	491.63	491.63	<500	<0.50	<0.50	<0.50	<1.5	--	75	<5.0	<5.0	<5.0	<25

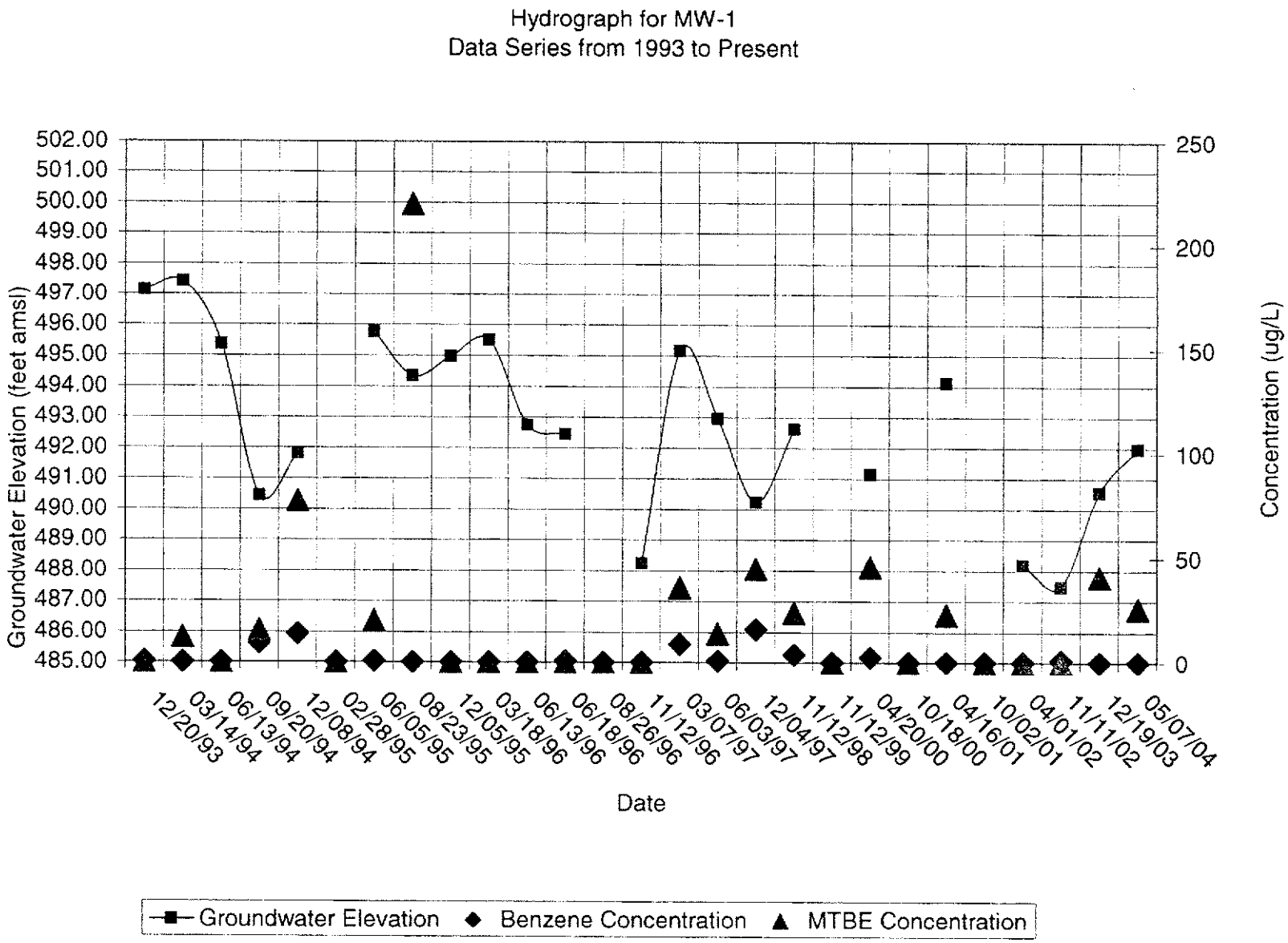
Table 2
Historic Groundwater Levels and Chemical Analysis Results
Former Chevron Station 9-1197, 8808 Lawrence Welk Drive, Escondido, California

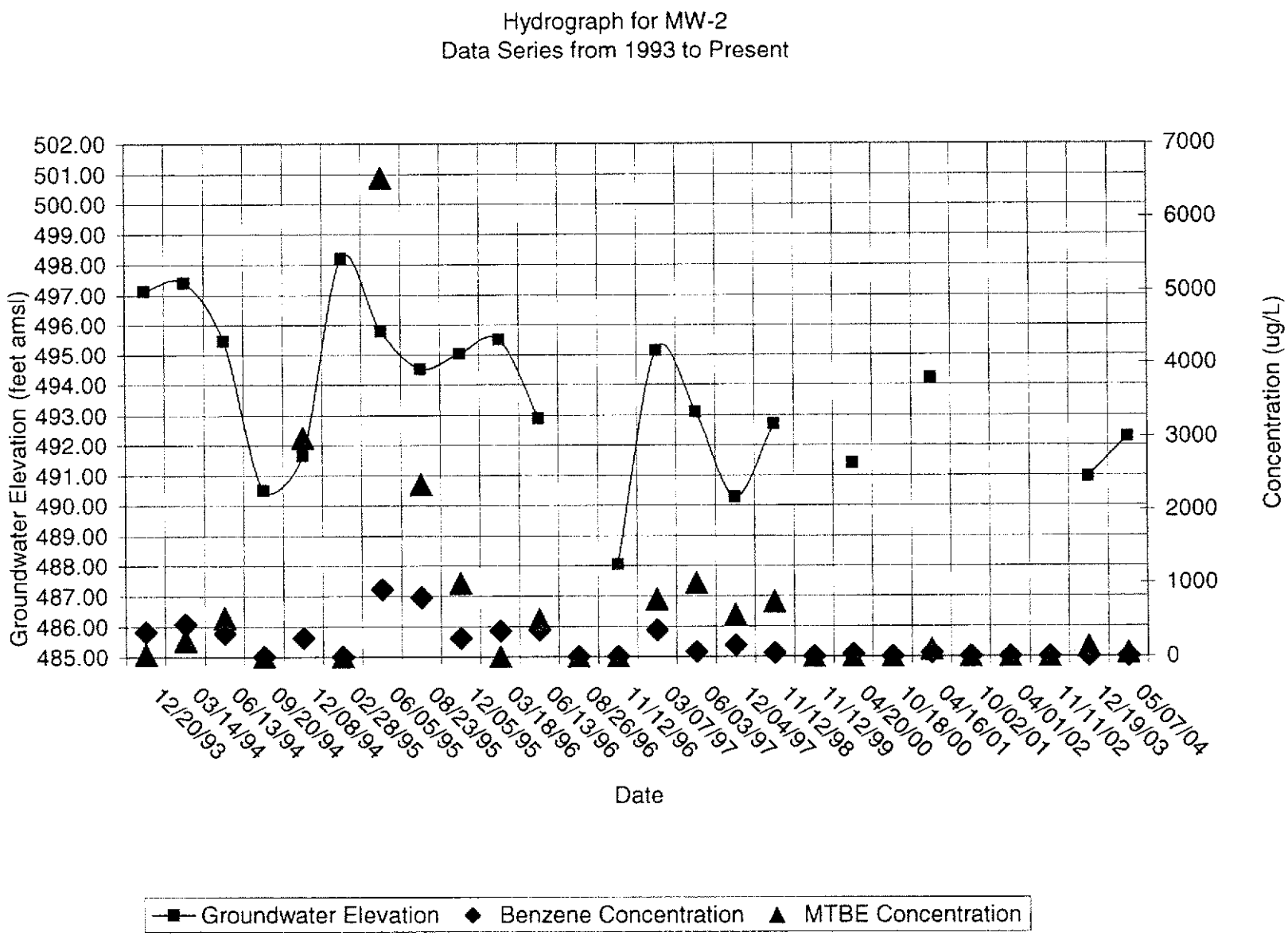
Well No. and Elevation (feet)*	Date	DTW (feet)	Groundwater Elevation (feet)*	Corrected Groundwater Elevation (feet)**	TPH-g [1] µg/l (ppb)	Benzene [2] µg/l (ppb)	Toluene [2] µg/l (ppb)	Ethyl-benzene [2] µg/l (ppb)	Total Xylenes [2] µg/l (ppb)	MTBE [3] µg/l (ppb)	MTBE [4] µg/l (ppb)	DIPE [4] µg/L (ppb)	ETBE [4] µg/L (ppb)	TAME [4] µg/L (ppb)	TBA [4] µg/L (ppb)
MW-6	3/18/96	16.19	492.43	494.86	ND	1.4	ND	1.4	3.5	--	--	--	--	--	--
508.62	6/13/96	19.32	489.30	491.73	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	8/26/96	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	11/12/96	25.54	483.08	485.51	--	--	--	--	--	--	--	--	--	--	--
	3/7/97	15.52	493.10	495.53	ND	ND	ND	ND	ND	24	--	--	--	--	--
	6/3/97	19.04	489.58	492.01	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	12/4/97	21.50	487.12	489.55	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	11/12/98	19.40	489.22	491.65	ND	ND	ND	ND	ND	17	--	--	--	--	--
	11/12/99	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/20/00	21.16	487.46	489.89	<500	<0.50	<0.50	<0.50	<1.5	33	--	--	--	--	--
	10/18/00	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/16/01	17.58	491.04	493.47	<500	<0.50	<0.50	<0.50	<1.5	--	9.0	<5.0	<5.0	<5.0	<50
	10/2/01	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/1/02	22.80	485.82	488.25	<500	<0.50	<0.50	<0.50	<1.5	--	6.2	<2.0	<2.0	<2.0	<25
510.65	11/11/02	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	12/19/03	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
511.05	5/7/04	20.43	490.62	490.62	<500	<0.50	<0.50	<0.50	<1.5	--	2.4	<5.0	<5.0	<5.0	<25
Detection Limits		NA	NA		500	0.50	0.50	0.50	1.5	1.0	1.0	2.0	2.0	2.0	25

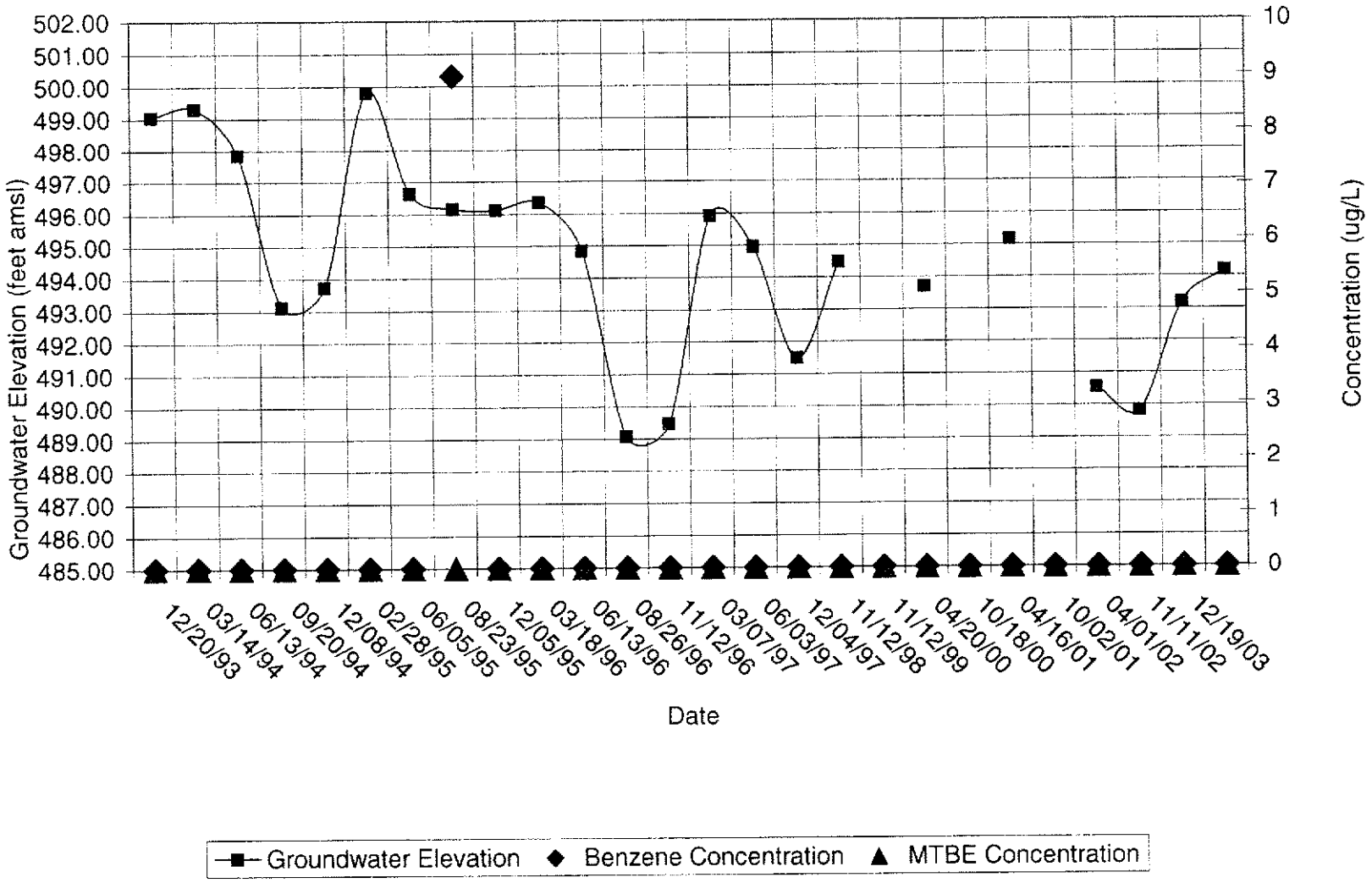
Notes: [1] Historically analyzed for Total Petroleum Hydrocarbons as Gasoline by modified EPA method 8015B. Currently analyzed by EPA method 8021B. [4] Analyzed bt EPA method 8260B
[2] Historically analyzed for BTEX by EPA method 8021B. Currently analyzed by EPA method 8260B. [3] Analyzed by EPA Method 8260B.

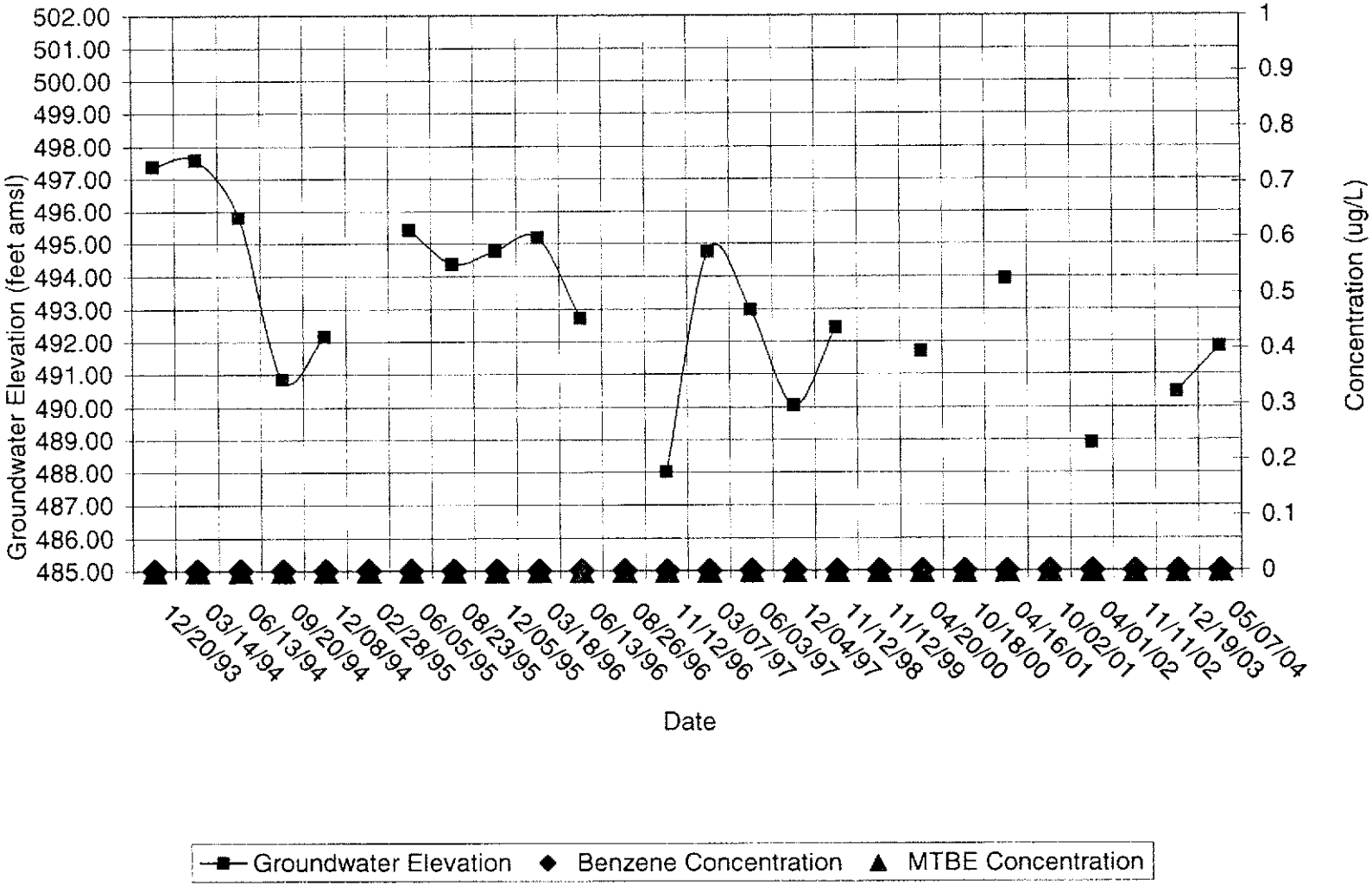
Definitions: feet* = Feet above mean sea level, ** = Groundwater elevation calculated to most recent survey data, MTBE = Methyl tert-Butyl Ether, ETBE = Ethyl tert-Butyl Ether, DIPE = Di-isopropyl Ether, TAME = tert-Amyl Methyl Ether, TBA = tert-Butanol, ppb = parts per billion, µg/l = micrograms per liter, -- = Not Measured, ND = Not Detected, DTW = Depth to Water, TPH = Total Petroleum Hydrocarbons. Monitoring and sampling activities conducted by SECOR after 2/1/03. Monitoring and sampling activities conducted by Blaine Tech Services 5/7/04.

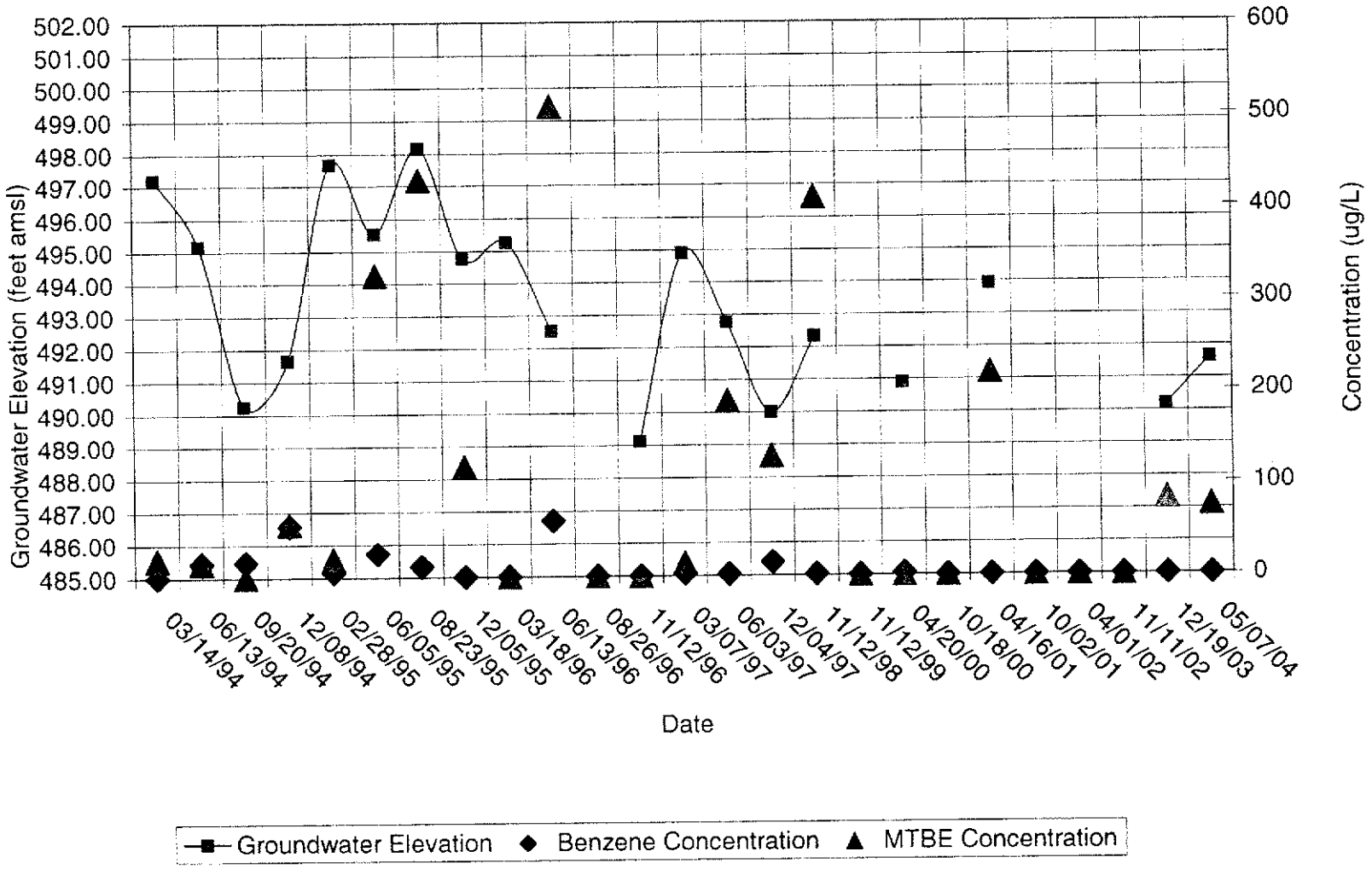
GEIMS Global ID # T0607301337. Prior to 4th Quarter 1999 sampling event, laboratory results below reporting limits were presented as ND. No purge methodologies utilized on 12/4/97 and thereafter.

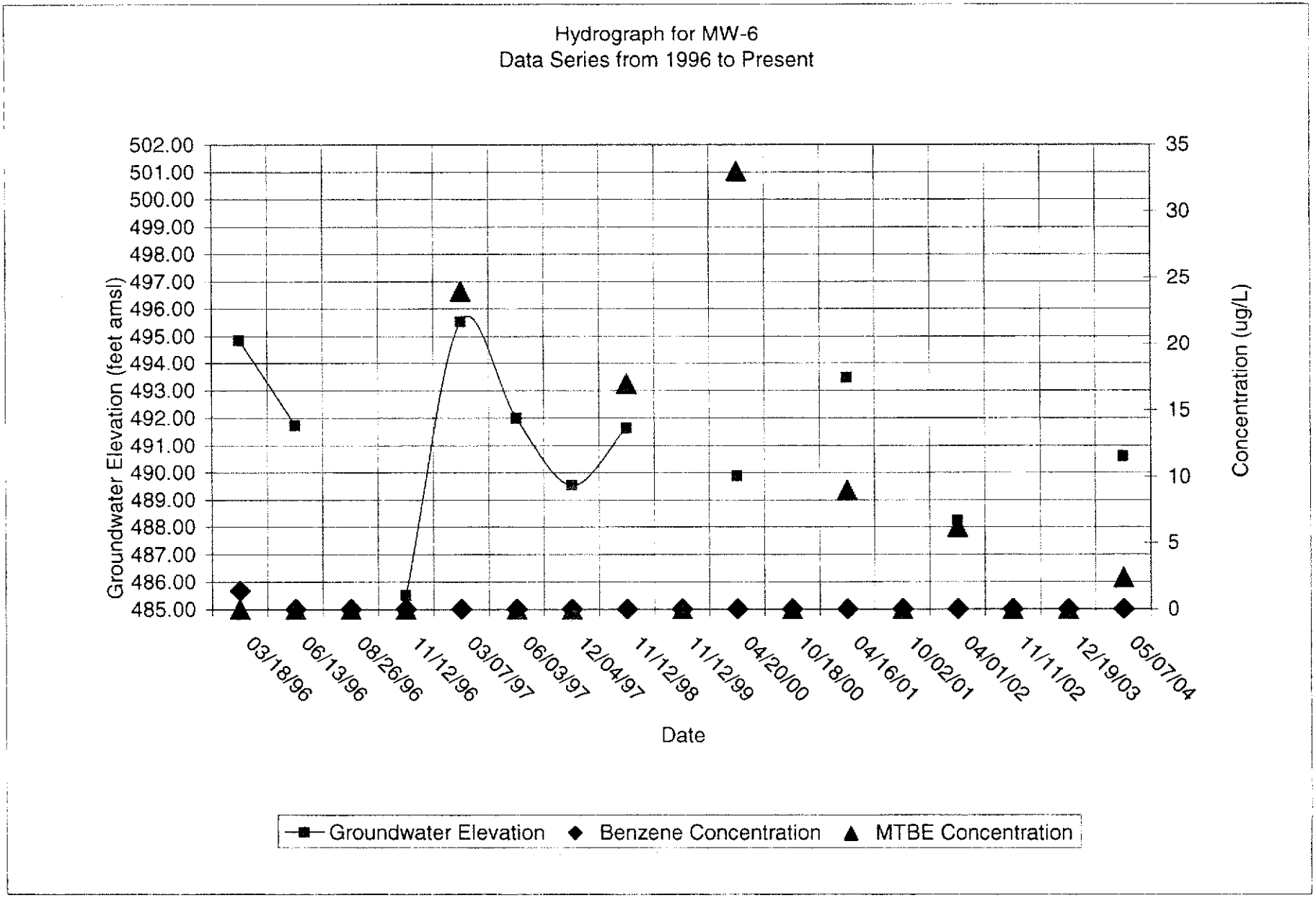

Hydrograph for MW-1
Data Series from 1993 to Present
Groundwater Elevation (feet amsl)
502.00
501.00
500.00
499.00
498.00
497.00
496.00
495.00
494.00
493.00
492.00
491.00
490.00
489.00
488.00
487.00
486.00
485.00
Concentration (ug/L)
250
200
150
100
50
0
12/20/93
03/14/94
06/13/94
09/20/94
12/08/94
02/28/95
06/05/95
08/23/95
12/05/95
03/18/96
06/13/96
06/18/96
08/26/96
11/12/96
03/07/97
06/03/97
12/04/97
11/12/98
11/12/99
04/20/00
10/18/00
04/16/01
10/02/01
04/01/02
11/11/02
12/19/03
05/07/04
Date
Groundwater Elevation
Benzene Concentration
MTBE Concentration


Hydrograph for MW-2
Data Series from 1993 to Present
Groundwater Elevation (feet amsl)
502.00
501.00
500.00
499.00
498.00
497.00
496.00
495.00
494.00
493.00
492.00
491.00
490.00
489.00
488.00
487.00
486.00
485.00
Concentration (ug/L)
7000
6000
5000
4000
3000
2000
1000
0
12/20/93
03/14/94
06/13/94
09/20/94
12/08/94
02/28/95
06/05/95
08/23/95
12/05/95
03/18/96
06/13/96
08/26/96
11/12/96
03/07/97
06/03/97
12/04/97
11/12/98
11/12/99
04/20/00
10/18/00
04/16/01
10/02/01
04/01/02
11/11/02
12/19/03
05/07/04
Date
Groundwater Elevation
Benzene Concentration
MTBE Concentration


Hydrograph for MW-3
Data Series from 1993 to Present
Groundwater Elevation (feet amsl)
502.00
501.00
500.00
499.00
498.00
497.00
496.00
495.00
494.00
493.00
492.00
491.00
490.00
489.00
488.00
487.00
486.00
485.00
Concentration (ug/L)
10
9
8
7
6
5
4
3
2
1
0
12/20/93
03/14/94
06/13/94
09/20/94
12/08/94
02/28/95
06/05/95
08/23/95
12/05/95
03/18/96
06/13/96
08/26/96
11/12/96
03/07/97
06/03/97
12/04/97
11/12/98
11/12/99
04/20/00
10/18/00
04/16/01
10/02/01
04/01/02
11/11/02
12/19/03
Date
Groundwater Elevation
Benzene Concentration
MTBE Concentration


Hydrograph for MW-4
Data Series from 1993 to Present
Groundwater Elevation (feet amsl)
502.00
501.00
500.00
499.00
498.00
497.00
496.00
495.00
494.00
493.00
492.00
491.00
490.00
489.00
488.00
487.00
486.00
485.00
Concentration (ug/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
12/20/93
03/14/94
06/13/94
09/20/94
12/08/94
02/28/95
06/05/95
08/23/95
12/05/95
03/18/96
06/13/96
08/26/96
11/12/96
03/07/97
06/03/97
12/04/97
11/12/98
11/12/99
04/20/00
10/18/00
04/16/01
10/02/01
04/01/02
11/11/02
12/19/03
05/07/04
Date
Groundwater Elevation
Benzene Concentration
MTBE Concentration


Hydrograph for MW-5
Data Series from 1994 to Present
Groundwater Elevation (feet amsl)
502.00
501.00
500.00
499.00
498.00
497.00
496.00
495.00
494.00
493.00
492.00
491.00
490.00
489.00
488.00
487.00
486.00
485.00
Concentration (ug/L)
600
500
400
300
200
100
0
03/14/94
06/13/94
09/20/94
12/08/94
02/28/95
06/05/95
08/23/95
12/05/95
03/18/96
06/13/96
08/26/96
11/12/96
03/07/97
06/03/97
12/04/97
11/12/98
11/12/99
04/20/00
10/18/00
04/16/01
10/02/01
04/01/02
11/11/02
12/19/03
05/07/04
Date
Groundwater Elevation
Benzene Concentration
MTBE Concentration


Hydrograph for MW-6
Data Series from 1996 to Present
Groundwater Elevation (feet amsl)
502.00
501.00
500.00
499.00
498.00
497.00
496.00
495.00
494.00
493.00
492.00
491.00
490.00
489.00
488.00
487.00
486.00
485.00
Concentration (ug/L)
35
30
25
20
15
10
5
0
03/18/96
06/13/96
08/26/96
11/12/96
03/07/97
06/03/97
12/04/97
11/12/98
11/12/99
04/20/00
10/18/00
04/16/01
10/02/01
04/01/02
11/11/02
12/19/03
05/07/04
Date
Groundwater Elevation
Benzene Concentration
MTBE Concentration

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LABORATORY REPORT

Prepared For: SECOR-San Diego/ChevronTexaco
2655 Camino del Rio North, Suite 302
San Diego, CA 92108
Attention: Ryan Turner

Project: Chevron 9-1197

Sampled: 05/07/04
Received: 05/07/04
Issued: 05/21/04 10:12

NELAP #01108CA CA ELAP #1197

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of Del Mar Analytical and its client. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical. The Chain(s) of Custody, 2 pages, are included and are an integral part of this report.
This entire report was reviewed and approved for release.

SAMPLE CROSS REFERENCE

LABORATORY ID	CLIENT ID	MATRIX
INE0465-01	MW-1-W-040507	Water
INE0465-02	MW-2-W-040507	Water
INE0465-03	MW-3-W-040507	Water
INE0465-04	MW-4-W-040507	Water
INE0465-05	MW-5-W-040507	Water
INE0465-06	MW-6-W-040507	Water

Reviewed By:

Heather R Bean

Del Mar Analytical, Irvine
Heather Bean For Chris Roberts
Project Manager

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SECOR-San Diego/ChevronTexaco
2655 Camino del Rio North, Suite 302
San Diego, CA 92108
Attention: Ryan Turner

Project ID: Chevron 9-1197

Report Number: INE0465

Sampled: 05/07/04
Received: 05/07/04

VOLATILE FUEL HYDROCARBONS BY GC/MS

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: INE0465-01 (MW-1-W-040507 - Water)								
Reporting Units: ug/l								
Volatile Fuel Hydrocarbons (C4-C12)	TPH by GC/MS	4E12015	500	ND	1	5/12/2004	5/12/2004	
Surrogate: Dibromofluoromethane (80-120%)				*111 %*				
Surrogate: Toluene-d8 (80-120%)				*106 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*107 %*				
Sample ID: INE0465-02 (MW-2-W-040507 - Water)								
Reporting Units: ug/l								
Volatile Fuel Hydrocarbons (C4-C12)	TPH by GC/MS	4E14020	500	**910**	1	5/14/2004	5/14/2004	
Surrogate: Dibromofluoromethane (80-120%)				*113 %*				
Surrogate: Toluene-d8 (80-120%)				*104 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*109 %*				
Sample ID: INE0465-03 (MW-3-W-040507 - Water)								
Reporting Units: ug/l								
Volatile Fuel Hydrocarbons (C4-C12)	TPH by GC/MS	4E12015	500	ND	1	5/12/2004	5/12/2004	
Surrogate: Dibromofluoromethane (80-120%)				*109 %*				
Surrogate: Toluene-d8 (80-120%)				*107 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*105 %*				
Sample ID: INE0465-04 (MW-4-W-040507 - Water)								
Reporting Units: ug/l								
Volatile Fuel Hydrocarbons (C4-C12)	TPH by GC/MS	4E12015	500	ND	1	5/12/2004	5/12/2004	
Surrogate: Dibromofluoromethane (80-120%)				*111 %*				
Surrogate: Toluene-d8 (80-120%)				*106 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*104 %*				
Sample ID: INE0465-05 (MW-5-W-040507 - Water)								
Reporting Units: ug/l								
Volatile Fuel Hydrocarbons (C4-C12)	TPH by GC/MS	4E12015	500	ND	1	5/12/2004	5/12/2004	
Surrogate: Dibromofluoromethane (80-120%)				*114 %*				
Surrogate: Toluene-d8 (80-120%)				*106 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*105 %*				
Sample ID: INE0465-06 (MW-6-W-040507 - Water)								
Reporting Units: ug/l								
Volatile Fuel Hydrocarbons (C4-C12)	TPH by GC/MS	4E12015	500	ND	1	5/12/2004	5/12/2004	
Surrogate: Dibromofluoromethane (80-120%)				*114 %*				
Surrogate: Toluene-d8 (80-120%)				*107 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*105 %*				

Del Mar Analytical, Irvine
Heather Bean For Chris Roberts
Project Manager

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SECOR-San Diego/ChevronTexaco
2655 Camino del Rio North, Suite 302
San Diego, CA 92108
Attention: Ryan Turner

Project ID: Chevron 9-1197

Report Number: INE0465

Sampled: 05/07/04
Received: 05/07/04

BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: INE0465-01 (MW-1-W-040507 - Water)								
Reporting Units: ug/l								
Benzene	EPA 8260B	4E12015	0.50	ND	1	5/12/2004	5/12/2004	
Ethylbenzene	EPA 8260B	4E12015	0.50	ND	1	5/12/2004	5/12/2004	
Toluene	EPA 8260B	4E12015	0.50	ND	1	5/12/2004	5/12/2004	
o-Xylene	EPA 8260B	4E12015	0.50	ND	1	5/12/2004	5/12/2004	
m,p-Xylenes	EPA 8260B	4E12015	1.0	ND	1	5/12/2004	5/12/2004	
Xylenes, Total	EPA 8260B	4E12015	1.5	ND	1	5/12/2004	5/12/2004	
Di-isopropyl Ether (DIPE)	EPA 8260B	4E12015	5.0	ND	1	5/12/2004	5/12/2004	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	4E12015	5.0	ND	1	5/12/2004	5/12/2004	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	4E12015	5.0	ND	1	5/12/2004	5/12/2004	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	4E12015	1.0	**26**	1	5/12/2004	5/12/2004	
tert-Butanol (TBA)	EPA 8260B	4E12015	25	ND	1	5/12/2004	5/12/2004	
Surrogate: Dibromofluoromethane (80-120%)				*111 %*				
Surrogate: Toluene-d8 (80-120%)				*106 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*107 %*				
Sample ID: INE0465-02 (MW-2-W-040507 - Water)								
Reporting Units: ug/l								
Benzene	EPA 8260B	4E14020	0.50	**0.66**	1	5/14/2004	5/14/2004	
Ethylbenzene	EPA 8260B	4E14020	0.50	**19**	1	5/14/2004	5/14/2004	
Toluene	EPA 8260B	4E14020	0.50	ND	1	5/14/2004	5/14/2004	
o-Xylene	EPA 8260B	4E14020	0.50	**2.4**	1	5/14/2004	5/14/2004	
m,p-Xylenes	EPA 8260B	4E14020	1.0	**37**	1	5/14/2004	5/14/2004	
Xylenes, Total	EPA 8260B	4E14020	1.5	**39**	1	5/14/2004	5/14/2004	
Di-isopropyl Ether (DIPE)	EPA 8260B	4E14020	5.0	ND	1	5/14/2004	5/14/2004	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	4E14020	5.0	ND	1	5/14/2004	5/14/2004	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	4E14020	5.0	ND	1	5/14/2004	5/14/2004	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	4E14020	1.0	**55**	1	5/14/2004	5/14/2004	
tert-Butanol (TBA)	EPA 8260B	4E14020	25	**90**	1	5/14/2004	5/14/2004	
Surrogate: Dibromofluoromethane (80-120%)				*113 %*				
Surrogate: Toluene-d8 (80-120%)				*104 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*109 %*				

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Heather Bean For Chris Roberts
Project Manager

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SECOR-San Diego/ChevronTexaco
2655 Camino del Rio North, Suite 302
San Diego, CA 92108
Attention: Ryan Turner

Project ID: Chevron 9-1197

Report Number: INE0465

Sampled: 05/07/04
Received: 05/07/04

BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: INE0465-03 (MW-3-W-040507 - Water)								
Reporting Units: ug/l								
Benzene	EPA 8260B	4E12015	0.50	ND	1	5/12/2004	5/12/2004	
Ethylbenzene	EPA 8260B	4E12015	0.50	ND	1	5/12/2004	5/12/2004	
Toluene	EPA 8260B	4E12015	0.50	ND	1	5/12/2004	5/12/2004	
o-Xylene	EPA 8260B	4E12015	0.50	ND	1	5/12/2004	5/12/2004	
m,p-Xylenes	EPA 8260B	4E12015	1.0	ND	1	5/12/2004	5/12/2004	
Xylenes, Total	EPA 8260B	4E12015	1.5	ND	1	5/12/2004	5/12/2004	
Di-isopropyl Ether (DIPE)	EPA 8260B	4E12015	5.0	ND	1	5/12/2004	5/12/2004	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	4E12015	5.0	ND	1	5/12/2004	5/12/2004	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	4E12015	5.0	ND	1	5/12/2004	5/12/2004	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	4E12015	1.0	ND	1	5/12/2004	5/12/2004	
tert-Butanol (TBA)	EPA 8260B	4E12015	25	ND	1	5/12/2004	5/12/2004	
Surrogate: Dibromofluoromethane (80-120%)				*109 %*				
Surrogate: Toluene-d8 (80-120%)				*107 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*105 %*				
Sample ID: INE0465-04 (MW-4-W-040507 - Water)								
Reporting Units: ug/l								
Benzene	EPA 8260B	4E12015	0.50	ND	1	5/12/2004	5/12/2004	
Ethylbenzene	EPA 8260B	4E12015	0.50	ND	1	5/12/2004	5/12/2004	
Toluene	EPA 8260B	4E12015	0.50	ND	1	5/12/2004	5/12/2004	
o-Xylene	EPA 8260B	4E12015	0.50	ND	1	5/12/2004	5/12/2004	
m,p-Xylenes	EPA 8260B	4E12015	1.0	ND	1	5/12/2004	5/12/2004	
Xylenes, Total	EPA 8260B	4E12015	1.5	ND	1	5/12/2004	5/12/2004	
Di-isopropyl Ether (DIPE)	EPA 8260B	4E12015	5.0	ND	1	5/12/2004	5/12/2004	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	4E12015	5.0	ND	1	5/12/2004	5/12/2004	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	4E12015	5.0	ND	1	5/12/2004	5/12/2004	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	4E12015	1.0	ND	1	5/12/2004	5/12/2004	
tert-Butanol (TBA)	EPA 8260B	4E12015	25	ND	1	5/12/2004	5/12/2004	
Surrogate: Dibromofluoromethane (80-120%)				*111 %*				
Surrogate: Toluene-d8 (80-120%)				*106 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*104 %*				

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SECOR-San Diego/ChevronTexaco
2655 Camino del Rio North, Suite 302
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Attention: Ryan Turner

Project ID: Chevron 9-1197

Report Number: INE0465

Sampled: 05/07/04
Received: 05/07/04

BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: INE0465-05 (MW-5-W-040507 - Water)								
Reporting Units: ug/l								
Benzene	EPA 8260B	4E12015	0.50	ND	1	5/12/2004	5/12/2004	
Ethylbenzene	EPA 8260B	4E12015	0.50	ND	1	5/12/2004	5/12/2004	
Toluene	EPA 8260B	4E12015	0.50	ND	1	5/12/2004	5/12/2004	
o-Xylene	EPA 8260B	4E12015	0.50	ND	1	5/12/2004	5/12/2004	
m,p-Xylenes	EPA 8260B	4E12015	1.0	ND	1	5/12/2004	5/12/2004	
Xylenes, Total	EPA 8260B	4E12015	1.5	ND	1	5/12/2004	5/12/2004	
Di-isopropyl Ether (DIPE)	EPA 8260B	4E12015	5.0	ND	1	5/12/2004	5/12/2004	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	4E12015	5.0	ND	1	5/12/2004	5/12/2004	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	4E12015	5.0	ND	1	5/12/2004	5/12/2004	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	4E12015	1.0	**75**	1	5/12/2004	5/12/2004	
tert-Butanol (TBA)	EPA 8260B	4E12015	25	ND	1	5/12/2004	5/12/2004	
Surrogate: Dibromofluoromethane (80-120%)				*114 %*				
Surrogate: Toluene-d8 (80-120%)				*106 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*105 %*				
Sample ID: INE0465-06 (MW-6-W-040507 - Water)								
Reporting Units: ug/l								
Benzene	EPA 8260B	4E12015	0.50	ND	1	5/12/2004	5/12/2004	
Ethylbenzene	EPA 8260B	4E12015	0.50	ND	1	5/12/2004	5/12/2004	
Toluene	EPA 8260B	4E12015	0.50	ND	1	5/12/2004	5/12/2004	
o-Xylene	EPA 8260B	4E12015	0.50	ND	1	5/12/2004	5/12/2004	
m,p-Xylenes	EPA 8260B	4E12015	1.0	ND	1	5/12/2004	5/12/2004	
Xylenes, Total	EPA 8260B	4E12015	1.5	ND	1	5/12/2004	5/12/2004	
Di-isopropyl Ether (DIPE)	EPA 8260B	4E12015	5.0	ND	1	5/12/2004	5/12/2004	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	4E12015	5.0	ND	1	5/12/2004	5/12/2004	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	4E12015	5.0	ND	1	5/12/2004	5/12/2004	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	4E12015	1.0	**2.4**	1	5/12/2004	5/12/2004	
tert-Butanol (TBA)	EPA 8260B	4E12015	25	ND	1	5/12/2004	5/12/2004	
Surrogate: Dibromofluoromethane (80-120%)				*114 %*				
Surrogate: Toluene-d8 (80-120%)				*107 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*105 %*				

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SECOR-San Diego/ChevronTexaco
2655 Camino del Rio North, Suite 302
San Diego, CA 92108
Attention: Ryan Turner

Project ID: Chevron 9-1197

Report Number: INE0465

Sampled: 05/07/04
Received: 05/07/04

METHOD BLANK/QC DATA

VOLATILE FUEL HYDROCARBONS BY GC/MS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 4E12015 Extracted: 05/12/04										
Blank Analyzed: 05/12/04 (4E12015-BLK1)										
Volatile Fuel Hydrocarbons (C4-C12)	ND	500	ug/l							
Surrogate: Dibromofluoromethane	*27.6*		*ug/l*	*25.0*		*110*	*80-120*			
Surrogate: Toluene-d8	*26.0*		*ug/l*	*25.0*		*104*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*26.3*		*ug/l*	*25.0*		*105*	*80-120*			
LCS Analyzed: 05/12/04 (4E12015-BS2)										
Volatile Fuel Hydrocarbons (C4-C12)	371	500	ug/l	500		74	65-120			
Surrogate: Dibromofluoromethane	*27.3*		*ug/l*	*25.0*		*109*	*80-120*			
Surrogate: Toluene-d8	*26.2*		*ug/l*	*25.0*		*105*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*26.5*		*ug/l*	*25.0*		*106*	*80-120*			
Matrix Spike Analyzed: 05/12/04 (4E12015-MS1)					**Source: INE0465-03**					
Volatile Fuel Hydrocarbons (C4-C12)	953	500	ug/l	1120	ND	85	60-135			
Surrogate: Dibromofluoromethane	*27.7*		*ug/l*	*25.0*		*111*	*80-120*			
Surrogate: Toluene-d8	*26.4*		*ug/l*	*25.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*26.4*		*ug/l*	*25.0*		*106*	*80-120*			
Matrix Spike Dup Analyzed: 05/12/04 (4E12015-MSD1)					**Source: INE0465-03**					
Volatile Fuel Hydrocarbons (C4-C12)	997	500	ug/l	1120	ND	89	60-135	5	20	
Surrogate: Dibromofluoromethane	*27.5*		*ug/l*	*25.0*		*110*	*80-120*			
Surrogate: Toluene-d8	*26.9*		*ug/l*	*25.0*		*108*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*26.8*		*ug/l*	*25.0*		*107*	*80-120*			
Batch: 4E14020 Extracted: 05/14/04										
Blank Analyzed: 05/14/04 (4E14020-BLK1)										
Volatile Fuel Hydrocarbons (C4-C12)	ND	500	ug/l							
Surrogate: Dibromofluoromethane	*25.4*		*ug/l*	*25.0*		*102*	*80-120*			
Surrogate: Toluene-d8	*25.4*		*ug/l*	*25.0*		*102*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*25.2*		*ug/l*	*25.0*		*101*	*80-120*			

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Attention: Ryan Turner

Project ID: Chevron 9-1197

Report Number: INE0465

Sampled: 05/07/04
Received: 05/07/04

METHOD BLANK/QC DATA

VOLATILE FUEL HYDROCARBONS BY GC/MS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 4E14020 Extracted: 05/14/04										
LCS Analyzed: 05/14/04 (4E14020-BS2)										
Volatile Fuel Hydrocarbons (C4-C12)	555	500	ug/l	500		111	65-120			
Surrogate: Dibromofluoromethane	*25.2*		*ug/l*	*25.0*		*101*	*80-120*			
Surrogate: Toluene-d8	*26.0*		*ug/l*	*25.0*		*104*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*24.7*		*ug/l*	*25.0*		*99*	*80-120*			
Matrix Spike Analyzed: 05/14/04 (4E14020-MS1)					**Source: INE0799-12**					
Volatile Fuel Hydrocarbons (C4-C12)	1270	500	ug/l	1120	22	111	60-135			
Surrogate: Dibromofluoromethane	*26.9*		*ug/l*	*25.0*		*108*	*80-120*			
Surrogate: Toluene-d8	*25.8*		*ug/l*	*25.0*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*26.1*		*ug/l*	*25.0*		*104*	*80-120*			
Matrix Spike Dup Analyzed: 05/14/04 (4E14020-MSD1)					**Source: INE0799-12**					
Volatile Fuel Hydrocarbons (C4-C12)	1360	500	ug/l	1120	22	119	60-135	7	20	
Surrogate: Dibromofluoromethane	*26.0*		*ug/l*	*25.0*		*104*	*80-120*			
Surrogate: Toluene-d8	*25.8*		*ug/l*	*25.0*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*26.6*		*ug/l*	*25.0*		*106*	*80-120*			

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Project ID: Chevron 9-1197

Report Number: INE0465

Sampled: 05/07/04
Received: 05/07/04

METHOD BLANK/QC DATA

BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 4E12015 Extracted: 05/12/04										
Blank Analyzed: 05/12/04 (4E12015-BLK1)										
Benzene	ND	0.50	ug/l							
Ethylbenzene	ND	0.50	ug/l							
Toluene	ND	0.50	ug/l							
o-Xylene	ND	0.50	ug/l							
m,p-Xylenes	ND	1.0	ug/l							
Xylenes, Total	ND	1.5	ug/l							
Di-isopropyl Ether (DIPE)	ND	5.0	ug/l							
Ethyl tert-Butyl Ether (ETBE)	ND	5.0	ug/l							
tert-Amyl Methyl Ether (TAME)	ND	5.0	ug/l							
Methyl-tert-butyl Ether (MTBE)	ND	1.0	ug/l							
tert-Butanol (TBA)	ND	25	ug/l							
Surrogate: Dibromofluoromethane	*27.6*		*ug/l*	*25.0*		*110*	*80-120*			
Surrogate: Toluene-d8	*26.0*		*ug/l*	*25.0*		*104*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*26.3*		*ug/l*	*25.0*		*105*	*80-120*			
LCS Analyzed: 05/12/04 (4E12015-BS1)										
Benzene	23.6	0.50	ug/l	25.0		94	70-120			
Ethylbenzene	24.6	0.50	ug/l	25.0		98	80-120			
Toluene	24.2	0.50	ug/l	25.0		97	70-120			
o-Xylene	24.6	0.50	ug/l	25.0		98	75-125			
m,p-Xylenes	48.4	1.0	ug/l	50.0		97	70-120			
Xylenes, Total	72.9	1.5	ug/l	75.0		97	70-120			
Di-isopropyl Ether (DIPE)	25.4	5.0	ug/l	25.0		102	65-135			
Ethyl tert-Butyl Ether (ETBE)	27.4	5.0	ug/l	25.0		110	60-140			
tert-Amyl Methyl Ether (TAME)	29.2	5.0	ug/l	25.0		117	60-140			
Methyl-tert-butyl Ether (MTBE)	29.1	1.0	ug/l	25.0		116	55-145			
tert-Butanol (TBA)	122	25	ug/l	125		98	70-140			
Surrogate: Dibromofluoromethane	*27.4*		*ug/l*	*25.0*		*110*	*80-120*			
Surrogate: Toluene-d8	*26.2*		*ug/l*	*25.0*		*105*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*26.3*		*ug/l*	*25.0*		*105*	*80-120*			

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Project ID: Chevron 9-1197

Report Number: INE0465

Sampled: 05/07/04
Received: 05/07/04

METHOD BLANK/QC DATA

BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 4E12015 Extracted: 05/12/04										
Matrix Spike Analyzed: 05/12/04 (4E12015-MS1)					**Source: INE0465-03**					
Benzene	23.9	0.50	ug/l	25.0	ND	96	70-120			
Ethylbenzene	24.4	0.50	ug/l	25.0	ND	98	70-125			
Toluene	24.6	0.50	ug/l	25.0	ND	98	65-120			
o-Xylene	24.4	0.50	ug/l	25.0	ND	98	65-125			
m,p-Xylenes	49.4	1.0	ug/l	50.0	ND	99	60-125			
Xylenes, Total	73.8	1.5	ug/l	75.0	ND	98	60-135			
Di-isopropyl Ether (DIPE)	25.6	5.0	ug/l	25.0	ND	102	65-140			
Ethyl tert-Butyl Ether (ETBE)	28.9	5.0	ug/l	25.0	ND	116	60-140			
tert-Amyl Methyl Ether (TAME)	31.9	5.0	ug/l	25.0	ND	128	55-145			
Methyl-tert-butyl Ether (MTBE)	32.2	1.0	ug/l	25.0	ND	129	50-150			
tert-Butanol (TBA)	125	25	ug/l	125	ND	100	65-145			
Surrogate: Dibromofluoromethane	*27.7*		*ug/l*	*25.0*		*111*	*80-120*			
Surrogate: Toluene-d8	*26.4*		*ug/l*	*25.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*26.4*		*ug/l*	*25.0*		*106*	*80-120*			
Matrix Spike Dup Analyzed: 05/12/04 (4E12015-MSD1)					**Source: INE0465-03**					
Benzene	24.7	0.50	ug/l	25.0	ND	99	70-120	3	20	
Ethylbenzene	25.7	0.50	ug/l	25.0	ND	103	70-125	5	20	
Toluene	25.3	0.50	ug/l	25.0	ND	101	65-120	3	20	
o-Xylene	25.4	0.50	ug/l	25.0	ND	102	65-125	4	20	
m,p-Xylenes	50.5	1.0	ug/l	50.0	ND	101	60-125	2	25	
Xylenes, Total	76.0	1.5	ug/l	75.0	ND	101	60-135	3	20	
Di-isopropyl Ether (DIPE)	26.7	5.0	ug/l	25.0	ND	107	65-140	4	25	
Ethyl tert-Butyl Ether (ETBE)	29.4	5.0	ug/l	25.0	ND	118	60-140	2	25	
tert-Amyl Methyl Ether (TAME)	31.8	5.0	ug/l	25.0	ND	127	55-145	0	25	
Methyl-tert-butyl Ether (MTBE)	31.5	1.0	ug/l	25.0	ND	126	50-150	2	25	
tert-Butanol (TBA)	123	25	ug/l	125	ND	98	65-145	2	25	
Surrogate: Dibromofluoromethane	*27.5*		*ug/l*	*25.0*		*110*	*80-120*			
Surrogate: Toluene-d8	*26.9*		*ug/l*	*25.0*		*108*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*26.8*		*ug/l*	*25.0*		*107*	*80-120*			

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2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

SECOR-San Diego/ChevronTexaco
2655 Camino del Rio North, Suite 302
San Diego, CA 92108
Attention: Ryan Turner

Project ID: Chevron 9-1197

Report Number: INE0465

Sampled: 05/07/04
Received: 05/07/04

METHOD BLANK/QC DATA

BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 4E14020 Extracted: 05/14/04										
Blank Analyzed: 05/14/04 (4E14020-BLK1)										
Benzene	ND	0.50	ug/l							
Ethylbenzene	ND	0.50	ug/l							
Toluene	ND	0.50	ug/l							
o-Xylene	ND	0.50	ug/l							
m,p-Xylenes	ND	1.0	ug/l							
Xylenes, Total	ND	1.5	ug/l							
Di-isopropyl Ether (DIPE)	ND	5.0	ug/l							
Ethyl tert-Butyl Ether (ETBE)	ND	5.0	ug/l							
tert-Amyl Methyl Ether (TAME)	ND	5.0	ug/l							
Methyl-tert-butyl Ether (MTBE)	ND	1.0	ug/l							
tert-Butanol (TBA)	ND	25	ug/l							
Surrogate: Dibromofluoromethane	*25.4*		*ug/l*	*25.0*		*102*	*80-120*			
Surrogate: Toluene-d8	*25.4*		*ug/l*	*25.0*		*102*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*25.2*		*ug/l*	*25.0*		*101*	*80-120*			
LCS Analyzed: 05/14/04 (4E14020-BS1)										
Benzene	28.5	0.50	ug/l	25.0		114	70-120			
Ethylbenzene	27.7	0.50	ug/l	25.0		111	80-120			
Toluene	28.1	0.50	ug/l	25.0		112	70-120			
o-Xylene	27.9	0.50	ug/l	25.0		112	75-125			
m,p-Xylenes	55.9	1.0	ug/l	50.0		112	70-120			
Xylenes, Total	83.8	1.5	ug/l	75.0		112	70-120			
Di-isopropyl Ether (DIPE)	31.1	5.0	ug/l	25.0		124	65-135			
Ethyl tert-Butyl Ether (ETBE)	29.9	5.0	ug/l	25.0		120	60-140			
tert-Amyl Methyl Ether (TAME)	31.2	5.0	ug/l	25.0		125	60-140			
Methyl-tert-butyl Ether (MTBE)	29.3	1.0	ug/l	25.0		117	55-145			
tert-Butanol (TBA)	129	25	ug/l	125		103	70-140			
Surrogate: Dibromofluoromethane	*27.6*		*ug/l*	*25.0*		*110*	*80-120*			
Surrogate: Toluene-d8	*26.2*		*ug/l*	*25.0*		*105*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*25.7*		*ug/l*	*25.0*		*103*	*80-120*			

Del Mar Analytical, Irvine
Heather Bean For Chris Roberts
Project Manager

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SECOR-San Diego/ChevronTexaco
2655 Camino del Rio North, Suite 302
San Diego, CA 92108
Attention: Ryan Turner

Project ID: Chevron 9-1197

Report Number: INE0465

Sampled: 05/07/04
Received: 05/07/04

METHOD BLANK/QC DATA

BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 4E14020 Extracted: 05/14/04										
Matrix Spike Analyzed: 05/14/04 (4E14020-MS1)					**Source: INE0799-12**					
Benzene	23.2	0.50	ug/l	25.0	ND	93	70-120			
Ethylbenzene	23.3	0.50	ug/l	25.0	ND	93	70-125			
Toluene	23.2	0.50	ug/l	25.0	ND	93	65-120			
o-Xylene	23.8	0.50	ug/l	25.0	ND	95	65-125			
m,p-Xylenes	47.0	1.0	ug/l	50.0	ND	94	60-125			
Xylenes, Total	70.8	1.5	ug/l	75.0	ND	94	60-135			
Di-isopropyl Ether (DIPE)	26.3	5.0	ug/l	25.0	ND	105	65-140			
Ethyl tert-Butyl Ether (ETBE)	24.8	5.0	ug/l	25.0	ND	99	60-140			
tert-Amyl Methyl Ether (TAME)	26.6	5.0	ug/l	25.0	1.6	100	55-145			
Methyl-tert-butyl Ether (MTBE)	30.1	1.0	ug/l	25.0	6.8	93	50-150			
tert-Butanol (TBA)	368	25	ug/l	125	230	110	65-145			
Surrogate: Dibromofluoromethane	*26.9*		*ug/l*	*25.0*		*108*	*80-120*			
Surrogate: Toluene-d8	*25.8*		*ug/l*	*25.0*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*26.1*		*ug/l*	*25.0*		*104*	*80-120*			
Matrix Spike Dup Analyzed: 05/14/04 (4E14020-MSD1)					**Source: INE0799-12**					
Benzene	24.4	0.50	ug/l	25.0	ND	98	70-120	5	20	
Ethylbenzene	24.6	0.50	ug/l	25.0	ND	98	70-125	5	20	
Toluene	24.3	0.50	ug/l	25.0	ND	97	65-120	5	20	
o-Xylene	25.0	0.50	ug/l	25.0	ND	100	65-125	5	20	
m,p-Xylenes	49.0	1.0	ug/l	50.0	ND	98	60-125	4	25	
Xylenes, Total	74.0	1.5	ug/l	75.0	ND	99	60-135	4	20	
Di-isopropyl Ether (DIPE)	28.1	5.0	ug/l	25.0	ND	112	65-140	7	25	
Ethyl tert-Butyl Ether (ETBE)	26.5	5.0	ug/l	25.0	ND	106	60-140	7	25	
tert-Amyl Methyl Ether (TAME)	28.8	5.0	ug/l	25.0	1.6	109	55-145	8	25	
Methyl-tert-butyl Ether (MTBE)	32.2	1.0	ug/l	25.0	6.8	102	50-150	7	25	
tert-Butanol (TBA)	357	25	ug/l	125	230	102	65-145	3	25	
Surrogate: Dibromofluoromethane	*26.0*		*ug/l*	*25.0*		*104*	*80-120*			
Surrogate: Toluene-d8	*25.8*		*ug/l*	*25.0*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*26.6*		*ug/l*	*25.0*		*106*	*80-120*			

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Project Manager

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San Diego, CA 92108
Attention: Ryan Turner

Project ID: Chevron 9-1197

Report Number: INE0465

Sampled: 05/07/04
Received: 05/07/04

DATA QUALIFIERS AND DEFINITIONS

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.

RPD Relative Percent Difference

ADDITIONAL COMMENTS

For 8260 analyses:

Due to the high water solubility of alcohols and ketones, the calibration criteria for these compounds is <30% RSD. The average % RSD of all compounds in the calibration is 15%, in accordance with EPA methods.

For Volatile Fuel Hydrocarbons (C4-C12):

Volatile Fuel Hydrocarbons (C4-C12) are quantitated against a gasoline standard. Quantitation begins immediately before TBA-d9.

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Sampled: 05/07/04
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Certification Summary

Del Mar Analytical, Irvine

Method	Matrix	NELAP	CA
EPA 8260B	Water	X	X
TPH by GC/MS	Water	X	X

NV and NELAP provide analyte specific accreditations. Analyte specific information for Del Mar Analytical may be obtained by contacting the laboratory or visiting our website at www.dmalabs.com.

Del Mar Analytical, Irvine
Heather Bean For Chris Roberts
Project Manager

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CHAIN OF CUSTODY FORM

Chevron Environmental Management Company ■ 145 S. State College Boulevard ■ Brea, CA 92822-2292 COC 1 of 1

Chevron Site Global ID: TO607301337

Chevron Site Number 9-1197

Chevron Site Address: ~~8888~~ 8808 Lawerence Welk Dr., Escondido

Chevron PM: SECOR: c/o Madelaine Montilla
2301 Leghorn, Mountain View, CA 94043

Chevron MT PM Phone No.: (650) 691-0131 x 235

MT Job No: MTCH.91197.08

Chevron Service Code: ZZ02800
X Management Transfer – SO CA Portfolio Job
☐ ~~Construction/Retail Job or~~
☐ ~~Retail and Terminal Business Unit (RTBU) Job~~

NOTE:
THIS IS A LEGAL DOCUMENT. ALL FIELDS MUST BE FILLED OUT CORRECTLY AND COMPLETELY.

Chevron Consultant: SECOR International, Inc.
Address: 2655 Camino Del Río N., Ste. 302, San Diego, CA 92108
Consultant Contact: Ryan Turner
Consultant Phone No. (619) 296-6195
Consultant Project No. MTCH.91197.08
Sampling Company: BTST
Sampled By (Print): HOTT RYALES
Sampler Signature:

Del Mar Analytical	Lancaster Laboratories	EDF Required?
X Irvine, CA ☐ Colton, CA Lab Contact: ____ Phone No: ☐ (949) 261-1022 ☐ (909) 370-4667	☐ Lancaster, PA Lab Contact: Teresa Cunningham Phone No: ☐ (717) 656-2300	☑ Yes ☐ No

ANALYSES REQUIRED

Special Instructions: INE0465

SAMPLE ID								EPA 8015B GRO ☐ DRO ☐ ORO ☐ TPHd ☐ HC SCREEN ☐	EPA 8021B BTEX ☐ MTBE ☐	EPA 8260B TPH-G ■ BTEX ■ MTBE ☐ OXYGENATES ■ HVOC ☐	EPA 6010 CA, FE, K, MG, MN, NA ☐	EPA 6010/7000 TITLE 22 METALS ☐ TTLC ☐ STLC ☐	EPA 150.1 PH ☐	EPA 310.1 ALKALINITY ☐	SM 2510B SPECIFIC CONDUCTIVITY ☐	EPA 418.1 TRPH ☐	EPA 413.1 OIL/GREASES ☐				Notes/Comments
Field Point Name	Matrix	Top Depth	Date (yymmdd)	Sample Time	Container Type	# of Containers	Preservation														
MW-1	W		040507	1214	VOA'S	4	HCl			X											
MW-2	↓		↓	1333	↓	↓	↓			X											
MW-3				1344						X											
MW-4				1043						X											
MW-5				1329						X											
MW-6	↓		↓	1138	↓	↓	↓			X											

Temp. Blank Check

Time	Temp.
0938	4°C
1144	4°C
1350	4°C
___	___
___	___

Relinquished By	Company	Date/Time:	Relinquished To	Company	Date/Time
[signature]	Blaine Tech	5/7/04 1516	Tom Blevins	DMAI	5/7/04 1516
Tom Blevins		5/7/04 1855			
			[signature]	DMAI	5/7/04 18:55

Turnaround Time:
24 Hours ☐ Standard ☒
48 hours ☐ Other ☐

Sample Integrity: (Check by lab on arrival)
Intact: ✓ On Ice: ✓ 4°C

SCOPE OF WORK as of 5/11/2004

GROUNDWATER MONITORING AT CHEVRON

SITE ADDRESS: **8808 LAWRENCE WELK DR.**
CITY: **ESCONDIDO**
COUNTY: **SAN DIEGO**

Lab: **DEL MAR**
Phone: (949) 261-1022
Release #:

Site #: 9-1197
Consultant: SECOR San Diego
Name: Brian Londquist
Phone: (619) 296-6195
Rpt due date:

Lock/Key: 3910
Gauge to: **TOC**

Engineer:
Phone #:

Required regulatory notifications/ cooperative sampling requirements:

Well I.D.	Required Analyses	Sampling Frequency	Sampling Months	Gauging Frequency	Remedial Devices	Notes & Tasks (bail SPH, install skimmer, etc.)
MW-1	**TPH-G, BTEX and OXYGENATES by 8260**	ANNUAL	APRIL	ANNUAL		**HB/FR**
MW-2	**TPH-G, BTEX and OXYGENATES by 8260**	ANNUAL	APRIL	ANNUAL		**HB/FR**
MW-3	**TPH-G, BTEX and OXYGENATES by 8260**	ANNUAL	APRIL	ANNUAL		**HB/FR**
MW-4	**TPH-G, BTEX and OXYGENATES by 8260**	ANNUAL	APRIL	ANNUAL		**HB/FR**
MW-5	**TPH-G, BTEX and OXYGENATES by 8260**	ANNUAL	APRIL	ANNUAL		**HB/FR**
MW-6	**TPH-G, BTEX and OXYGENATES by 8260**	ANNUAL	APRIL	ANNUAL		**HB/FR**

CHANGES AND SPECIAL INSTRUCTIONS:
BOTTLE SET:
-TPH-G, BTEX, Oxygenates - 4 HCL voas

WELL GAUGING DATA

Project # 040501-HK2 Date 5/7/04 Client Chevron

Site 8808 Lawrence Welk Dr Escondido

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
MW-1	4					20.10	25.51	TOC	
MW-2	4					19.64	24.39		
MW-3	4					16.30	23.05		
MW-4	4					20.72	25.20		
MW-5	4					21.05	23.88		
MW-6	4					20.43	23.80		

SAN DIEGO COUNTY CHEVRON WELL MONITORING DATA SHEET

BTS #: 040507-HR2	Site: 9-1197
Sampler: HOYT	Date: 5/7/04
Weather: ~~25.51~~ Partly cloudy	Ambient Air Temperature: 82°
Well I.D.: MW-1	Well Diameter: 2 3 4 6 8 ___
Total Well Depth: 25.51	Depth to Water: 20.10
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.18	

Purge Method: Bailer, ✓ Disposable Bailer, Middleburg, Fixed Electric Submersible, Variable Electric Submersible, Waterra, Peristaltic, Extraction Pump, Other_____

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

8.1 (Gals.) X 1.5 = 12.1 Gals.
1 Borehole Volume — Specified Volumes — Calculated Volume

CD	BD	Multiplier	CD	BD	Mulitplier	CD	BD	Multiplier
2"	8"	0.8	4"	8"	1.1	6"	10"	2.1
2"	10"	1.1	4"	10"	1.5	6"	12"	2.6
			4"	12"	2.0			

Assumes 25% borehole porosity
CD = casing diameter BD = borehole diameter

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1202	72.6	6.7	2382	71	8.1	
1210	71.7	6.7	2391	49	12.1	

Did well dewater? Yes No — Gallons actually evacuated: 12.1

Sampling Date: 5/7/04 Sampling Time: 1214 Depth to Water: 21.18

Sample I.D.: MW-1 Laboratory: Del Mar Other_____

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

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

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

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

Blaine Tech Services, Inc.,1680 Rogers Avenue, San Jose, CA 95112 (408) 573-0555

SAN DIEGO COUNTY CHEVRON WELL MONITORING DATA SHEET

BTS #: 040507-AR-2	Site: 9-1197
Sampler: HOYT	Date: 5/7/04
Weather: Sunny	Ambient Air Temperature: 85°
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 24.39	Depth to Water: 19.64
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 20.59	

Purge Method: Bailer / ✓Disposable Bailer / Middleburg / Fixed Electric Submersible / Variable Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other_____

Sampling Method: Bailer / ✓Disposable Bailer / Extraction Port / Dedicated Tubing / Other: _____

7.1 (Gals.) X 1.5 = 10.6 Gals.
1 Borehole Volume — Specified Volumes — Calculated Volume

CD	BD	Multiplier	CD	BD	Mulitplier	CD	BD	Multiplier
2"	8"	0.8	4"	8"	1.1	6"	10"	2.1
2"	10"	1.1	4"	10"	1.5	6"	12"	2.6
			4"	12"	2.0			

Assumes 25% borehole porosity
CD = casing diameter BD = borehole diameter

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1258	73.4	6.7	2130	53	7.1	
1309	73.3	6.8	2227	52	10.6	

Did well dewater? Yes (No) Gallons actually evacuated: 10.6

Sampling Date: 5/7/04 Sampling Time: 1333 Depth to Water: 19.98

Sample I.D.: MW-2 Laboratory: (DelMar) Other_____

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

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

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

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

SAN DIEGO COUNTY CHEVRON WELL MONITORING DATA SHEET

BTS #: 040507-HZ	Site: 9-1197
Sampler: HOYT	Date: 5/7/04
Weather: cloudy Partly	Ambient Air Temperature: 78°
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 23.05	Depth to Water: 16.30
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 17.65	

Purge Method: Bailer / ✓Disposable Bailer / ✓Middleburg / Fixed Electric Submersible / Variable Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other_____

Sampling Method: Bailer / ✓Disposable Bailer / Extraction Port / Dedicated Tubing / Other: _____

1 Borehole Volume (Gals.)	X Specified Volumes	= Calculated Volume Gals.
10.1	1.5	15.1

CD	BD	Multiplier	CD	BD	Mulitplier	CD	BD	Multiplier
2"	8"	0.8	4"	8"	1.1	6"	10"	2.1
2"	10"	1.1	4"	10"	1.5	6"	12"	2.6
			4"	12"	2.0			

Assumes 25% borehole porosity
CD = casing diameter BD = borehole diameter

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1113	Dewatered @ 7 gal					
1310	resumed Purge w/ Bailer					
1315	70.0	6.7	2080	83	10.1	
1327	70.7	6.6	2093	223	15.1	

Did well dewater? Yes No Gallons actually evacuated: 15.1

Sampling Date: 5/7/04 Sampling Time: 1344 Depth to Water: 17.65

Sample I.D.: MW-3 Laboratory: Del Mar Other_____

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

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

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

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

SAN DIEGO COUNTY CHEVRON WELL MONITORING DATA SHEET

BTS #: 040507-HRZ	Site: 9-1197
Sampler: HOYT	Date: 5/7/04
Weather: cloudy	Ambient Air Temperature: 82°
Well I.D.: MW-4	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 25.20	Depth to Water: 20.72
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.61	

Purge Method: Bailer / ✓Disposable Bailer / Middleburg / Fixed Electric Submersible / Variable Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other_____

Sampling Method: Bailer / ✓Disposable Bailer / Extraction Port / Dedicated Tubing / Other: _____

6.7 (Gals.) X 1.5 = 10.0 Gals.
1 Borehole Volume — Specified Volumes — Calculated Volume

CD	BD	Multiplier	CD	BD	Mulitplier	CD	BD	Multiplier
2"	8"	0.8	4"	8"	1.1	6"	10"	2.1
2"	10"	1.1	4"	10"	1.5	6"	12"	2.6
			4"	12"	2.0			

Assumes 25% borehole porosity
CD = casing diameter BD = borehole diameter

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1035	69.8	6.6	2391	99	7	
1041	69.1	6.5	2211	53	10	

Did well dewater? Yes (No) Gallons actually evacuated: 10

Sampling Date: 5/7/04 Sampling Time: 1043 Depth to Water: 21.55

Sample I.D.: MW-4 Laboratory: (Del Mar) Other_____

Analyzed for: (TPH-G) (BTEX) (OXYS) TPH-D Other: HMA

EB I.D. (if applicable): @ Time 5/7/04 Duplicate I.D. (if applicable):

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

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

SAN DIEGO COUNTY CHEVRON WELL MONITORING DATA SHEET

BTS #: 040507-HR-2	Site: 9-1197
Sampler: HOYT	Date: 5/7/04
Weather: Partly Cloudy	Ambient Air Temperature: 810
Well I.D.: MW-5	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 23.88	Depth to Water: 21.05
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.61	

Purge Method: Bailer / ✓Disposable Bailer / Middleburg / Fixed Electric Submersible / Variable Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other_____

Sampling Method: Bailer / ✓Disposable Bailer / Extraction Port / Dedicated Tubing / Other: _____

4.2 (Gals.) X 1.5 = 6.3 Gals.
1 Borehole Volume — Specified Volumes — Calculated Volume

CD	BD	Multiplier	CD	BD	Mulitplier	CD	BD	Multiplier
2"	8"	0.8	4"	8"	1.1	6"	10"	2.1
2"	10"	1.1	4"	10"	1.5	6"	12"	2.6
			4"	12"	2.0			

Assumes 25% borehole porosity
CD = casing diameter BD = borehole diameter

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1235	72.3	6.6	1940	68	4.2	
1245	71.5	6.5	1951	58	6.3	

Did well dewater? Yes (No) Gallons actually evacuated: 6.3

Sampling Date: 5/7/04 Sampling Time: 1329 Depth to Water: 21.15

Sample I.D.: MW-5 Laboratory: (Del Mar) Other_____

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

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

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

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

SAN DIEGO COUNTY CHEVRON WELL MONITORING DATA SHEET

BTS #: 040507-HR2	Site: 9-1197
Sampler: HOYT	Date: 5/7/04
Weather: Partly Cloudy	Ambient Air Temperature: 82°
Well I.D.: MW-6	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 23.80	Depth to Water: 20.43
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.10	

Purge Method: Bailer / ✓Disposable Bailer / Middleburg / Fixed Electric Submersible / Variable Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other_____

Sampling Method: Bailer / ✓Disposable Bailer / Extraction Port / Dedicated Tubing / Other: _____

5.0 (Gals.) X 1.5 = 7.5 Gals.
1 Borehole Volume — Specified Volumes — Calculated Volume

CD	BD	Multiplier	CD	BD	Mulitplier	CD	BD	Multiplier
2"	8"	0.8	4"	8"	1.1	6"	10"	2.1
2"	10"	1.1	4"	10"	1.5	6"	12"	2.6
			4"	12"	2.0			

Assumes 25% borehole porosity
CD = casing diameter BD = borehole diameter

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1129	70.3	6.4	1962	132	5	
1135	69.8	6.4	1988	117	7.5	

Did well dewater? Yes (No) Gallons actually evacuated: 7.5

Sampling Date: 5/7/04 Sampling Time: 1138 Depth to Water: 20.64

Sample I.D.: MW-6 Laboratory: (Del Mar) Other_____

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

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

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

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

CHAIN OF CUSTODY FORM

Chevron Environmental Management Company ■ 145 S. State College Boulevard ■ Brea, CA 92822-2292 COC 1 of 1

Chevron Site Global ID: TO607301337

Chevron Site Number 9-1197

Chevron Site Address: ~~8088~~ 8808 Lawerence Welk Dr., Escondido

DMA 5/7/04

Chevron PM: SECOR: c/o Madelaine Montilla
2301 Leghorn, Mountain View, CA 94043

Chevron MT PM Phone No.: (650) 691-0131 x 235

MT Job No: MTCH.91197.08

Chevron Service Code: ZZ02800
X Management Transfer – SO CA Portfolio Job
~~☐ Construction/Retail Job or~~
~~☐ Retail and Terminal Business Unit (RTBU) Job~~

NOTE:
THIS IS A LEGAL DOCUMENT. ALL FIELDS MUST BE FILLED OUT CORRECTLY AND COMPLETELY.

Chevron Consultant: SECOR International, Inc.
Address: 2655 Camino Del Río N., Ste. 302, San Diego, CA 92108
Consultant Contact: Ryan Turner
Consultant Phone No. (619) 296-6195
Consultant Project No. MTCH.91197.08
Sampling Company: BTST
Sampled By (Print): HOTT RYALES
Sampler Signature: [signature]

Del Mar Analytical
X Irvine, CA
☐ Colton, CA
Lab Contact: _____
Phone No:
☐ (949) 261-1022
☐ (909) 370-4667

Lancaster Laboratories
☐ Lancaster, PA
Lab Contact:
Teresa Cunningham
Phone No:
☐ (717) 656-2300

EDF Required?
☑ Yes
☐ No

ANALYSES REQUIRED

Field Point Name	Matrix	Top Depth	Date (yymmdd)	Sample Time	Container Type	# of Containers	Preservation	EPA 8015B GRO ☐ DRO ☐ ORO ☐ TPHd ☐ HC SCREEN ☐	EPA 8021B BTEX ☐ MTBE ☐	EPA 8260B TPH-G ☒ BTEX ☒ MTBE ☐ OXYGENATES ☒ HVOC ☐	EPA 6010 CA, FE, K, MG, MN, NA ☐	EPA 6010/7000 TITLE 22 METALS ☐ TTLC ☐ STLC ☐	EPA 310.1 ALKALINITY ☐ EPA 150.1 PH ☐	SM 2510B SPECIFIC CONDUCTIVITY ☐	EPA 413.1 OIL/GREASES ☐ EPA 418.1 TRPH ☐				Notes/Comments
MW-1	W		040507	1214	VOA'S	4	HCl			X									
MW-2	↓		↓	1333	↓	↓	↓			X									
MW-3	↓		↓	1344	↓	↓	↓			X									
MW-4	↓		↓	1043	↓	↓	↓			X									
MW-5	↓		↓	1329	↓	↓	↓			X									
MW-6	↓		↓	1138	↓	↓	↓			X									

Special Instructions

Temp. Blank Check

Time	Temp
0938	4°C
1144	4°C
1350	4°C

Relinquished By	Company	Date/Time:	Relinquished To	Company
[signature]	Blaine Tech	5/7/04 1516	Tom Blevins	DMAI 5/7/04 1516
Relinquished By	Company	Date/Time:	Relinquished To Date/Time:	Company
Relinquished By	Company	Date/Time:	Relinquished To Date/Time:	Company

Turnaround Time:
24 Hours ☐ Standard ☒
48 hours ☐ Other ☐

Sample Integrity: (Check by lab on arrival)
Intact: ____ On Ice: ____ Temp: ____

WELLHEAD INSPECTION CHECKLIST

Client Chevron Date 5/7/04

Site Address 8808 Lawrence Welk Dr Escondido

Job Number 040507-MR2 Technician MOYS

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
MW-1								✓
MW-2								✓
MW-3	✓							
MW-4	✓							
MW-5								✓
MW-6	✓							

NOTES:

CHEVRON-SOUTHERN CALIFORNIA TYPE **A** BILL OF LADING

SOURCE RECORD **BILL OF LADING**

FOR NON-HAZARDOUS PURGEWATER RECOVERED FROM GROUNDWATER WELLS AT CHEVRON FACILITIES IN THE STATE OF CALIFORNIA. THE NON-HAZARDOUS PURGE- WATER WHICH HAS BEEN RECOVERED FROM GROUND- WATER WELLS IS COLLECTED BY THE CONTRACTOR, MADE UP INTO LOADS OF APPROPRIATE SIZE AND HAULED BY PSC TO THEIR FACILITY IN LONG BEACH, CALIFORNIA.

The contractor performing this work is BLAINE TECH SERVICES, INC. (BLAINE), 13741 Danielson St. Suite E, Poway, CA (phone [310] 885-4455). Blaine Tech Services, Inc. is authorized by CHEVRON PRODUCTS COMPANY to recover, collect, apportion into loads, and haul the Non-Hazardous Well Purgewater that is drawn from wells at the CHEVRON facility indicated below and to deliver that purgewater to BLAINE. Transport routing of the Non-Hazardous Well Purgewater may be direct from one Chevron facility to BLAINE; from one Chevron facility to BLAINE via another Chevron facility; or any combination thereof. The Non-Hazardous Well Purgewater is and remains the property of Chevron Products Company.

This **Source Record BILL OF LADING** was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the Chevron facility described below:

9-1197

CHEVRON #

8808 | Lawrence Welk Dr | Escondido | CA
street number | street name | city | state

WELL I.D.	GALS.	WELL I.D.	GALS.
MW-1	12.1		
MW-2	10.6		
MW-3	15.1		
MW-4	10		
MW-5	6.3		
MW-6	7.5		

added equip. rinse water: ~~61.6~~ 6 (initialed 5/7/04)

any other adjustments:

TOTAL GALS. RECOVERED: 67.6

loaded onto BTS vehicle #: 43

BTS event #: 040507-1RR2 | time: 1345 | date: 5/7/04

signature: [signature]

* *

REC'D AT: Blaine Tech Poway | time: 1450 | date: 5/7/04

unloaded by signature: [signature]

DATE: June 22, 2004

CHEVRON ANNUAL GROUNDWATER MONITORING REPORT (CONT'D)
Chevron 9-1197, 8808 Lawrence Welk Drive, Escondido, CA

MONITORING WELL PURGING AND SAMPLING PROCEDURES

Monitoring well purging and sampling methods follow the procedures outlined by the County of San Diego, Environmental Health Services, Site Assessment and Mitigation (SAM) Manual.

Purging Procedures

A. Using a decontaminated instrument (i.e., tape measure, continuity meter, or interface probe) measure the depth to groundwater in reference to the measuring point at the top of the casing. Measure the total depth of the well to calculate the height and volume of water in the borehole.

B. Based on previously obtained data, if a monitoring well is suspected of containing LPH, lower a transparent bailer into the well to evaluate the presence of hydrocarbon sheen on the water table.

C. Decontaminate the purge pump and/or PVC bailers by scrubbing in Alconox detergent solution, followed by a tap water rinse and then a deionized water rinse.

D. Purge, by pumping, bailing, or using a vacuum truck with dedicated tubing, approximately one borehole volume of groundwater as calculated according to the thickness of the water column and the diameter of the borehole.

E. Conduct field measurements (i.e., pH and conductivity) after approximately one borehole volume has been purged, or if the water level in the well is so low as to prevent further purging (dry).

   1. If the well has not been purged dry, continue to bail and/or pump and conduct field measurements again following removal of each successive one-half borehole volume of water.

      a) If the first and second series of measurements vary by less than ten percent, the well has been adequately purged. Allow the well to recover to 80 percent of its static condition and begin the sampling procedure.

      b) If the measurements vary by ten percent or greater, repeat Step E1 above.

   2. If the well has been purged dry, measure the water level and allow the well to recharge to 80 percent, or for two hours, whichever occurs first. Calculate the percent recovery.

      a) If the well recovers to less than 80 percent within two hours, it is a slow recharging well. Repeat Step E1 above.

DATE: June 22, 2004

CHEVRON ANNUAL GROUNDWATER MONITORING REPORT (CONT'D)
Chevron 9-1197, 8808 Lawrence Welk Drive, Escondido, CA

Sampling Procedures

A. Use a disposable bailer to collect the groundwater sample.

B. Fit the stopcock onto the base of the bailer and transfer the groundwater sample into the appropriate container(s). Where applicable, some containers are completely filled to achieve zero headspace. Label the samples according to location and date of collection.

C. Enter the samples into Chevron Chain-of-Custody protocol and preserve on ice until delivery to the analytical laboratory. Complete the Well Development or Purging/Sampling Log to be stored in the project file.

When requested by the client, collect the bailer rinsate blank of deionized water to check decontamination procedure. In addition, trip blanks prepared by the laboratory and kept with the samples may be included to check for cross contamination of samples within the cooler. Additional and/or alternate QA/QC samples can be collected and analyzed upon client request.

SECOR

SECOR INTERNATIONAL INCORPORATED

www.secor.com

2655 Camino Del Rio N. Suite 302
San Diego, CA 92108
619-296-6195 TEL
619-296-6199 FAX

DATE: December 14, 2004

CHEVRONTEXACO ANNUAL GROUNDWATER MONITORING REPORT

Station No.:	9-1197
Address:	8808 Lawrence Welk Drive, Escondido, CA
Chevron Environmental Manager:	Ms. Karen Streich
Consulting Co./Contact Person:	SECOR / Mr. Maurice Baron, Jr.
SECOR Project No.:	MTCH.91197.08
Primary Agency/Regulatory ID No.:	County of San Diego Land and Water Quality Division Site Assessment and Mitigation (SAM) / H05719-001
Fourth Quarter EDF Confirmation Number:	4285239875

WORK PERFORMED DURING FOURTH QUARTER 2004:

1. Completed Fourth Quarter 2004 groundwater monitoring, sampling, and reporting. The sampling event took place on November 5, 2004.

WORK PROPOSED FOR 2005:

1. Annual groundwater monitoring, sampling, and reporting.
2. Submit revised Sensitive Receptor Survey.

Current Phase of Project:	Monitoring
Frequency of Sampling and Monitoring:	Annual
Are Liquid Phase Hydrocarbons (LPH) Present On-site:	No
Cumulative LPH Recovered to Date:	Unknown
LPH Recovered This Reporting Period (4th Quarter 2004):	None
Current Remediation Techniques:	None
Permits for Discharge:	None
Fourth Quarter Approximate Depth to Groundwater:	18.63 to 22.95 feet below top of casing
Fourth Groundwater Gradient:	West-Northwest, 0.015 feet per foot

DISCUSSION:

Fourth Quarter: Depth to groundwater measurements on November 5, 2004 ranged between 18.63 and 22.95 feet below top of casing. Calculated groundwater elevations varied from 488.55 to 491.84 feet above mean sea level (MSL). The hydraulic gradient was calculated to be 0.015 feet per foot with a flow direction to the northwest. No measurable thickness of liquid phase hydrocarbons (LPH) was detected in any of the gauged wells during this sampling event.

The six monitoring wells were sampled following the attached purge sampling procedures, which are based on SAM guidelines. Total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and total xylenes were detected in one well, MW-2, at concentrations of 3,200 micrograms per liter (μg/L), 110 μg/L, 240 μg/L, 100 μg/L, and 810 μg/L, respectively. Methyl-tert-butyl ether (MTBE) was detected above laboratory detection limits in MW-1, MW-2, MW-5, and MW-6 at concentrations of 1.2 μg/L, 19 μg/L, 4.8 μg/L, and 3.1 μg/L, respectively. Di-isopropyl ether (DIPE), ethyl-t-butyl ether (ETBE), tert-butyl alcohol (TBA), and t-amyl-methyl ether (TAME) were not detected above laboratory detection limits in any of the samples analyzed.

DATE: December 14, 2004

CHEVRONTEXACO ANNUAL GROUNDWATER MONITORING REPORT (CONT'D)
Chevron 9-1197, 8808 Lawrence Welk Drive, Escondido, CA

An off-site agricultural well was also purged and sampled during this sampling event. This well was purged by allowing the well to run for approximately 15 minutes before collecting a sample from the faucet on the well. TPHg, BTEX, MTBE, DIPE, ETBE, TAME, and TBA were not detected at or above LMDLs in the samples collected from the agricultural well. Dissolved oxygen concentrations ranged from 0.14 milligrams per liter (mg/L) in MW-5 to 4.40 mg/l in the off-site agricultural well. Ferrous iron (Fe^{+2}) was detected at a concentration of 1.0 mg/L in MW-5. Oxygen reduction potential (ORP) ranged from 39 millivolts (mV) in MW-1 to -90 mV in MW-2.

Conclusions and Recommendations: The DO, Fe+2, and ORP measurements support the presence of natural attenuation (NA) of dissolved phase hydrocarbons in the ground water at the Site. Based on the following observations SECOR is respectfully requesting that the SAM grant regulatory closure for the Site.

- The plume has been well defined and concentrations of analytes are decreasing to stable.
- NA is supported as a reduction mechanism for the concentration of analytes in the plume.
- The ground water gradient direction and magnitude is generally stable.
- The closest sensitive receptor (agricultural well) appears to be cross gradient from the Site and based on the analytical results presented in this report, has not been impacted.
- No other sensitive receptors (schools, day care centers, convalescent homes, hospitals, etc) within a ½-mile radius of the Site.
- The South Fork of Moose Canyon Creek, the closest surface body of water in a ¼-mile radius of the Site, is located northeast (up and cross gradient) from the Site.
- There is no "free product" or "sheen" at the Site.
- The Site is not overlying a "sensitive aquifer".
- A number of wells either "dewater" or are classified as "slow rechargers" suggesting a very limited capacity for water production.
- There are no plans to develop the ground water in the area of the Site by any agency as a source of potable water.
- TPHg and benzene, although elevated in only well MW-2, appear to be reduced to "non-detectable" concentrations in down gradient wells by NA processes.
- Detectable MTBE concentrations at the source well MW-2 do not exceed 19 µg/L for this reporting period, have been declining (historically) in MW-2, and indicate a progressive decline to 3.1 µg/L in MW-6, the most down gradient well.
- The past presence of TBA in MW-2 is suggestive of the NA of MTBE at the Site.

DATE: December 14, 2004

CHEVRONTEXACO ANNUAL GROUNDWATER MONITORING REPORT (CONT'D)
Chevron 9-1197, 8808 Lawrence Welk Drive, Escondido, CA

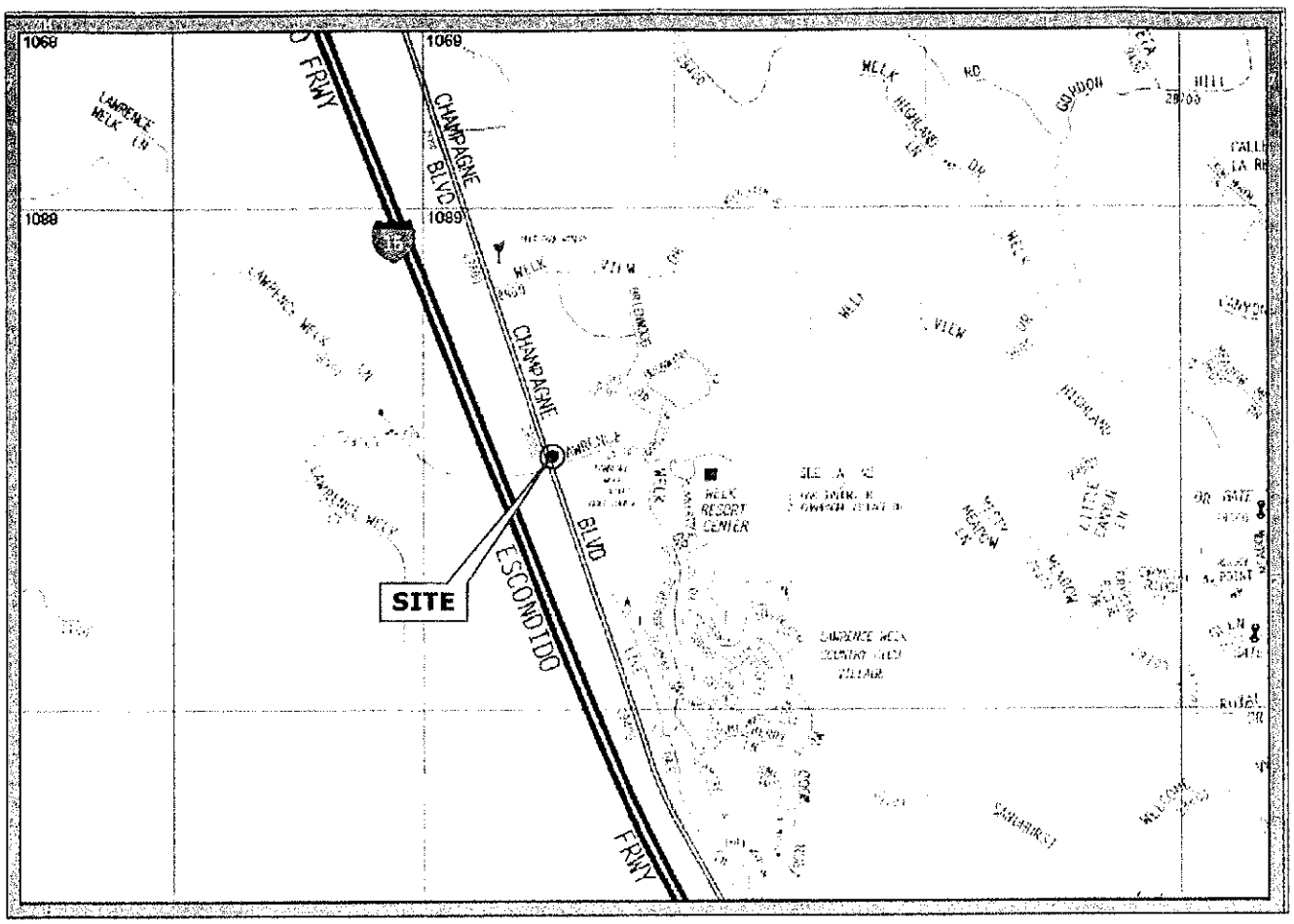
ATTACHED:

- Site Location Map (Figure 1)
- Groundwater Gradient Map – November 5, 2004 (Figure 2)
- Hydrocarbon Constituents in Groundwater Map – November 5, 2004 (Figure 3)
- Bio Attenuation Parameters Map – November 5, 2004 (Figure 4)
- Summary of Fourth Quarter 2004 Groundwater Levels and Chemical Analysis Results (Table 1)
- Historic Groundwater Levels and Chemical Analysis Results (Table 2)
- Hydrographs
- Laboratory Report and Chain-of-Custody Documentation
- Monitoring Well Gauging Data
- Well Purging and Sampling Logs
- Monitoring Well Purging and Sampling Procedures

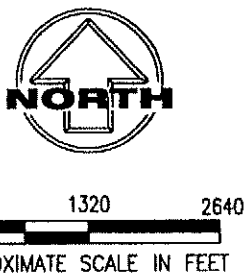
Mr. Brian C Londquist
Project Scientist

Mr. Maurice Baron Jr., RG# 5256
Senior Project Manager

REGISTERED GEOLOGIST
MAURICE W. BARON JR.
No 5256
Exp 4/06
STATE OF CALIFORNIA

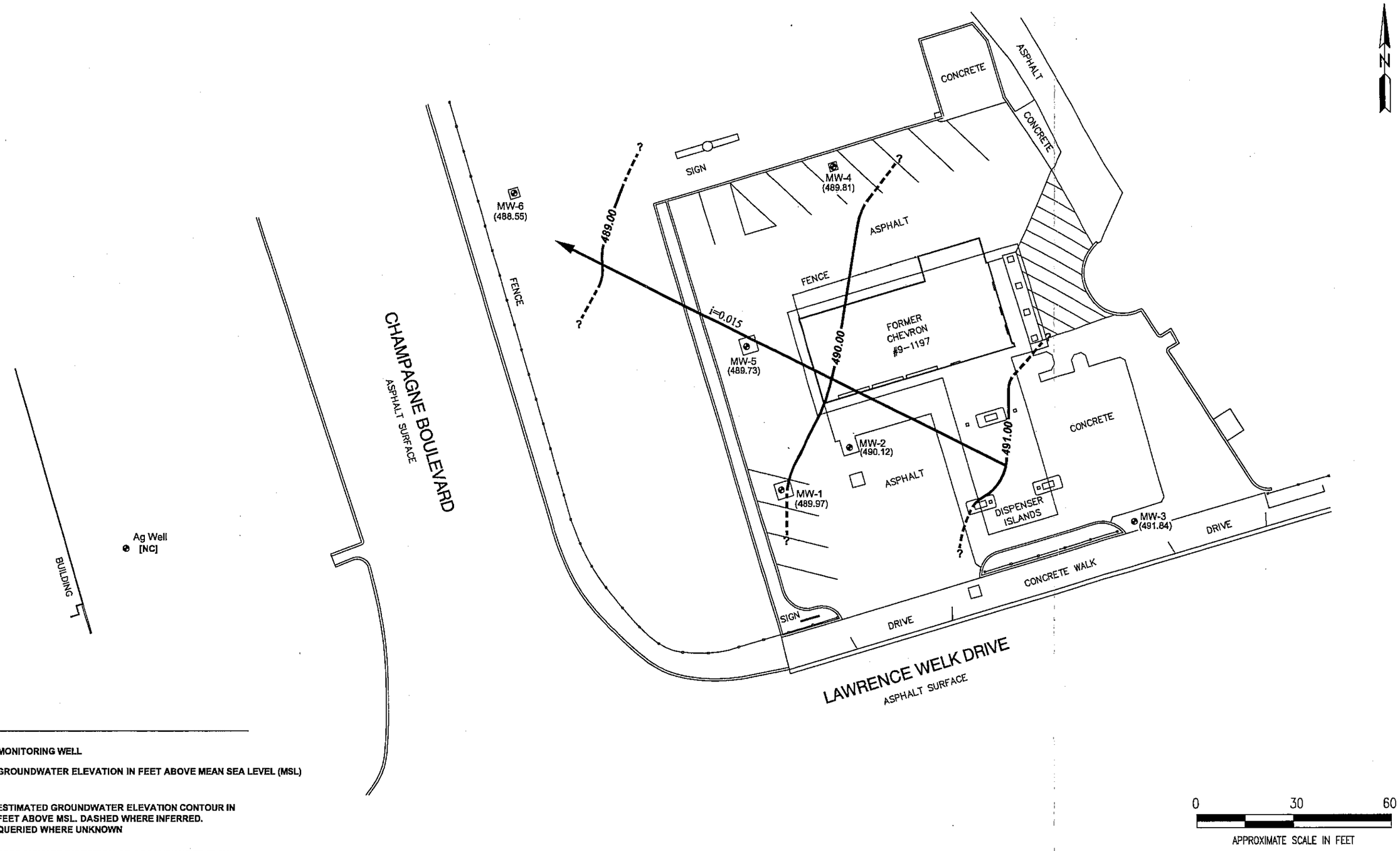


REFERENCE: THOMAS GUIDE CD-ROM, PAGE & GRID 1089 A1.



SECOR 2655 Camino del Rio North, Suite 302 San Diego, California 619-296-6195/Fax 619-296-6199	PREPARED FOR: CHEVRON Former Service Station No. 9-1197 8808 Lawrence Welk Drive Escondido, California	SITE LOCATION MAP		FIGURE: 1
	JOB NUMBER: MTCH.91197.08 / DRAWN BY: RJO	CHECKED BY: RDT	APPROVED BY: RDT	DATE: 1/29/04

91197SLOC.DWG



LEGEND:

MW-12	MONITORING WELL
(488.55)	GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (MSL)
? —— 490.00 ——	ESTIMATED GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MSL. DASHED WHERE INFERRED. QUERIED WHERE UNKNOWN
i=0.015	APPROXIMATE DIRECTION OF GROUNDWATER FLOW AND HYDRAULIC GRADIENT (I) IN VERTICAL FEET PER HORIZONTAL FEET ON NOVEMBER 5, 2004
[NC]	NOT CALCULATED

MAP REFERENCE: SOUTHERN CALIFORNIA SURVEY APRIL 21, 2004

DRAWN BY: LGH CHECKED: APPROVED: DATE: 11/30/04 JOB No.: MTCH.91197.08 CAD FILE: 9-1197GW11-04	PREPARED BY: SECOR 2655 Camino del Rio North, Suite 302 San Diego, California	PREPARED FOR: FORMER CHEVRON STATION #9-1197 8808 LAWRENCE WELK DRIVE ESCONDIDO, CALIFORNIA	FIGURE: 2 **GROUNDWATER GRADIENT MAP** **NOVEMBER 5, 2004**

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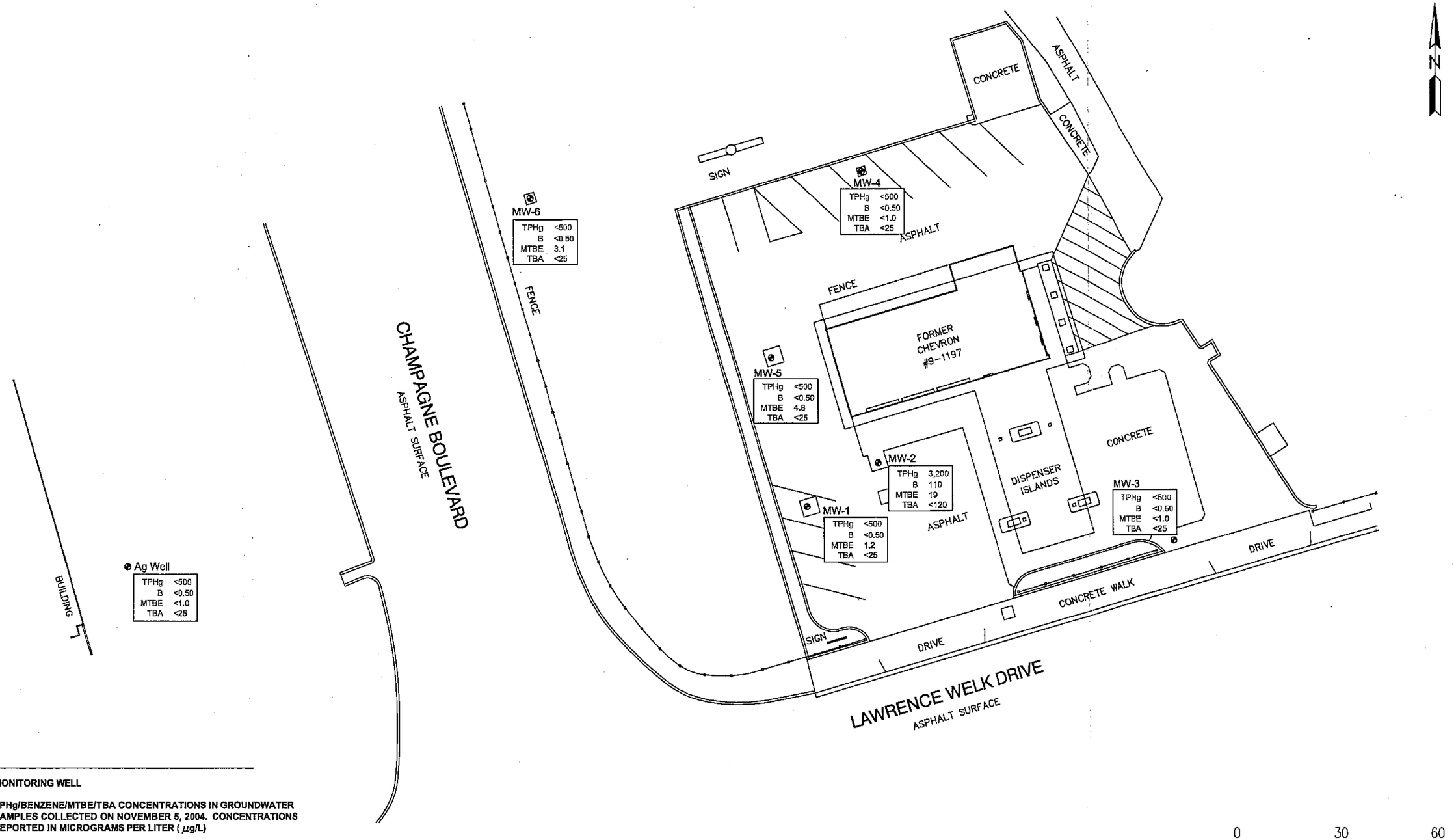

LEGEND:

MW-12	MONITORING WELL
TPHg <500 B <0.50 MTBE <1.0 TBA <25	TPHg/BENZENE/MTBE/TBA CONCENTRATIONS IN GROUNDWATER SAMPLES COLLECTED ON NOVEMBER 5, 2004. CONCENTRATIONS REPORTED IN MICROGRAMS PER LITER ($\mu g/L$)
TPHg	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
B	BENZENE
MTBE	METHYL TERT-BUTYL ETHER
TBA	TERTIARY BUTYL ALCOHOL
<	BELOW LABORATORY REPORTING LIMIT INDICATED

MAP REFERENCE: SOUTHERN CALIFORNIA SURVEY APRIL 21, 2004

DRAWN BY: LGH CHECKED: MWBaum Jr APPROVED: MWBaum Jr DATE: 11/30/04 JOB No.: MTCH.91197.08 CAD FILE: 9-1197CON11-04	PREPARED BY: SECOR 2655 Camino del Rio North, Suite 302 San Diego, California	PREPARED FOR: FORMER CHEVRON STATION #9-1197 8808 LAWRENCE WELK DRIVE ESCONDIDO, CALIFORNIA	FIGURE: 3 **HYDROCARBON CONTITUENTS IN GROUNDWATER MAP NOVEMBER 5, 2004**

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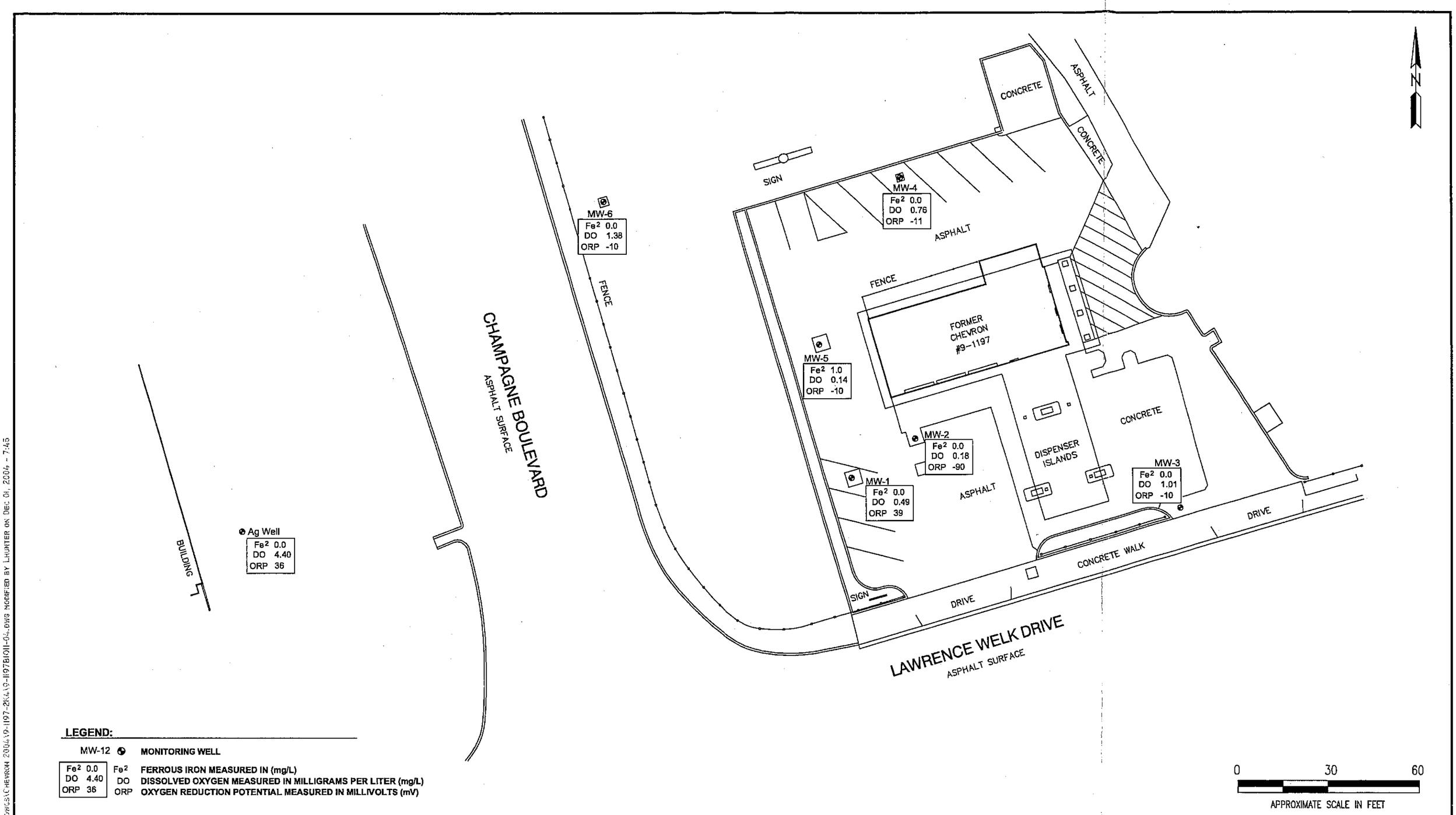

LEGEND:

MW-12 — MONITORING WELL

Fe2 0.0	Fe2	FERROUS IRON MEASURED IN (mg/L)
DO 4.40	DO	DISSOLVED OXYGEN MEASURED IN MILLIGRAMS PER LITER (mg/L)
ORP 36	ORP	OXYGEN REDUCTION POTENTIAL MEASURED IN MILLIVOLTS (mV)

MAP REFERENCE: SOUTHERN CALIFORNIA SURVEY APRIL 21, 2004

DRAWN BY: LGH CHECKED: M W Bauman Jr. APPROVED: M W Bauman Jr. DATE: 11/30/04 JOB No.: MTCH.91197.08 CAD FILE: 9-1197BIO11-04	PREPARED BY: SECOR 2655 Camino del Rio North, Suite 302 San Diego, California	PREPARED FOR: FORMER CHEVRON STATION #9-1197 8808 LAWRENCE WELK DRIVE ESCONDIDO, CALIFORNIA	FIGURE: 4 **BIO ATTENUATION PARAMETERS** **NOVEMBER 5, 2004**

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Table 1
Summary of Fourth Quarter 2004 Groundwater Levels and Chemical Analysis Results
Former Chevron Station 9-1197, 8808 Lawrence Welk Drive, Escondido, California

Well Number	Date	DTW (feet)	Groundwater Elevation (feet)*	TPH-g [1] µg/l (ppb)	Benzene [1] µg/l (ppb)	Toluene [1] µg/l (ppb)	Ethyl-benzene [1] µg/l (ppb)	Total Xylenes [1] µg/l (ppb)	MTBE [1] µg/l (ppb)	DIPE [1] µg/l (ppb)	ETBE [1] µg/l (ppb)	TAME [1] µg/l (ppb)	TBA [1] µg/l (ppb)
MW-1	11/5/04	22.10	489.97	<500	<0.50	<0.50	<0.50	<1.5	1.2	<5.0	<5.0	<5.0	<25
MW-2	11/5/04	21.81	490.12	3200	110	240	100	810	19	<25	<25	<25	<120
MW-3	11/5/04	18.63	491.84	<500	<0.50	<0.50	<0.50	<1.5	<1.0	<5.0	<5.0	<5.0	<25
MW-4	11/5/04	22.75	489.81	<500	<0.50	<0.50	<0.50	<1.5	<1.0	<5.0	<5.0	<5.0	<25
MW-5	11/5/04	22.95	489.73	<500	<0.50	<0.50	<0.50	<1.5	4.8	<5.0	<5.0	<5.0	<25
MW-6	11/5/04	22.50	488.55	<500	<0.50	<0.50	<0.50	<1.5	3.1	<5.0	<5.0	<5.0	<25

Notes: [1] Analyzed by EPA method 8260B.

Definitions: feet* = Feet above mean sea level, MTBE = Methyl tert-Butyl Ether, ETBE = Ethyl tert-Butyl Ether, DIPE = Di-isopropyl Ether, TAME = tert-Amyl Methyl Ether, TBA = tert-Butanol, ppb = parts per billion, µg/l = micrograms per liter, -- = Not Measured, DTW = Depth to Water, TPH = Total Petroleum Hydrocarbons.

Monitoring and sampling activities conducted by SECOR after 2/1/03. Monitoring and sampling activities conducted by Blaine Tech Services on 11/5/04. GEIMS Global ID # T0607301337.

Table 2
Historic Groundwater Levels and Chemical Analysis Results
Former Chevron Station 9-1197, 8808 Lawrence Welk Drive, Escondido, California

Well No. and Elevation (feet)*	Date	DTW (feet)	Groundwater Elevation (feet)*	Corrected Groundwater Elevation (feet)**	TPH-g [1] µg/l (ppb)	Benzene [2] µg/l (ppb)	Toluene [2] µg/l (ppb)	Ethyl-benzene [2] µg/l (ppb)	Total Xylenes [2] µg/l (ppb)	MTBE [3] µg/l (ppb)	MTBE [4] µg/l (ppb)	DIPE [4] µg/L (ppb)	ETBE [4] µg/L (ppb)	TAME [4] µg/L (ppb)	TBA [4] µg/L (ppb)
MW-1	12/20/93	14.92	495.22	497.15	ND	0.38	0.75	1.2	6.4	ND	--	--	--	--	--
510.14	3/14/94	14.65	495.49	497.42	ND	ND	ND	2.0	10.5	12.1	--	--	--	--	--
	6/13/94	16.70	493.44	495.37	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	9/20/94	21.63	488.51	490.44	700	9.2	2.5	10.5	33.6	15.6	--	--	--	--	--
	12/8/94	20.25	489.89	491.82	1830	13.6	3.0	28.8	7.0	77.5	--	--	--	--	--
	2/28/95	--	--		--	--	--	--	--	--	--	--	--	--	--
	6/5/95	16.30	493.84	495.77	ND	0.60	ND	ND	ND	20	--	--	--	--	--
	8/23/95	17.72	492.42	494.35	ND	ND	8.0	ND	25	220	--	--	--	--	--
	12/5/95	17.09	493.05	494.98	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	3/18/96	16.56	493.58	495.51	ND	ND	ND	ND	ND	--	--	--	--	--	--
	6/13/96	19.32	490.82	492.75	-	--	--	--	-	--	--	--	--	--	--
	6/18/96	19.63	490.51	492.44	ND	0.50	5.0	ND	ND	ND	--	--	--	--	--
	8/26/96	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	11/12/96	23.83	486.31	488.24	--	--	--	--	--	--	--	--	--	--	--
	3/7/97	16.90	493.24	495.17	510	8.8	ND	ND	ND	36	--	--	--	--	--
	6/3/97	19.11	491.03	492.96	ND	0.83	ND	ND	ND	14	--	--	--	--	--
	12/4/97	21.83	488.31	490.24	1300	16	ND	2.1	1.6	45	--	--	--	--	--
	11/12/98	19.45	490.69	492.62	ND	3.8	ND	ND	ND	24	--	--	--	--	--
	11/12/99	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/20/00	20.93	489.21	491.14	500	2.5	<0.50	<0.50	<1.5	46	--	--	--	--	--
	10/18/00	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/16/01	17.94	492.20	494.13	<500	<0.50	<0.50	<0.50	<1.5	--	23	<5.0	<5.0	<5.0	120
	10/2/01	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/1/02	23.89	486.25	488.18	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<2.0	<2.0	<2.0	<25
	11/11/02	24.60	--	487.47	<500	0.93	0.56	3.5	<1.5	--	<1.0	<2.0	<2.0	<2.0	<25
	12/19/03	21.52	--	490.55	<500	<0.50	<0.50	<0.50	<1.5	--	41	<5.0	<5.0	<5.0	99
512.07	5/7/04	20.10	491.97	491.97	<500	<0.50	<0.50	<0.50	<1.5	--	26	<5.0	<5.0	<5.0	<25
	11/5/04	22.10	489.97	489.97	<500	<0.50	<0.50	<0.50	<1.5	--	1.2	<5.0	<5.0	<5.0	<25
MW-2	12/20/93	14.79	495.28	497.14	25000	340	770	1200	5400	36	--	--	--	--	--
510.07	3/14/94	14.52	495.55	497.41	9000	446	1110	992	2280	226	--	--	--	--	--
	6/13/94	16.46	493.61	495.47	18700	321	990	955	3100	534	--	--	--	--	--
	9/20/94	21.42	488.67	490.51	--	--	--	--	--	--	--	--	--	--	--
	12/8/94	20.26	489.81	491.67	34100	256	964	1040	5560	2990	--	--	--	--	--
	2/28/95	13.72	496.35	498.21	--	--	--	--	--	--	--	--	--	--	--

Table 2
Historic Groundwater Levels and Chemical Analysis Results
Former Chevron Station 9-1197, 8808 Lawrence Welk Drive, Escondido, California

Well No. and Elevation (feet)*	Date	DTW (feet)	Groundwater Elevation (feet)*	Corrected Groundwater Elevation (feet)**	TPH-g [1] µg/l (ppb)	Benzene [2] µg/l (ppb)	Toluene [2] µg/l (ppb)	Ethyl-benzene [2] µg/l (ppb)	Total Xylenes [2] µg/l (ppb)	MTBE [3] µg/l (ppb)	MTBE [4] µg/l (ppb)	DIPE [4] µg/L (ppb)	ETBE [4] µg/L (ppb)	TAME [4] µg/L (ppb)	TBA [4] µg/L (ppb)
MW-2	6/5/95	16.14	493.93	495.79	69100	914	5490	4780	14000	6540	--	--	--	--	--
continued	8/23/95	17.40	492.67	494.53	34500	800	2800	3700	7800	2350	--	--	--	--	--
	12/5/95	16.90	493.17	495.03	7700	250	80	1600	940	1000	--	--	--	--	--
	3/18/96	16.43	493.64	495.50	7620	350	160	1300	800	--	--	--	--	--	--
	6/13/96	19.02	491.05	492.91	5170	360	60	1260	730	510	--	--	--	--	--
	8/26/96	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	11/12/96	23.89	486.18	488.04	--	--	--	--	--	--	--	--	--	--	--
	3/7/97	16.80	493.27	495.13	22000	360	890	2200	8300	780	--	--	--	--	--
	6/3/97	18.82	491.25	493.11	2700	63	18	400	310	1000	--	--	--	--	--
	12/4/97	21.65	488.42	490.28	7800	150	310	880	1300	570	--	--	--	--	--
	11/12/98	19.23	490.84	492.70	6700	46	190	520	1400	750	--	--	--	--	--
	11/12/99	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/20/00	20.52	489.55	491.41	2600	30	<5.0	350	29	240	--	--	--	--	--
	10/18/00	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/16/01	17.71	492.36	494.22	10000	49	26	1800	1700	--	100	<25	<25	<25	<250
	10/2/01	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/1/02	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
511.53	11/11/02	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	12/19/03	20.97	490.55	490.96	<2500	<25	<25	490	270	--	140	<250	<250	<250	<1200
511.93	5/7/04	19.64	492.29	492.29	910	0.66	<0.50	19	39	--	55	<5.0	<5.0	<5.0	90
	11/5/04	21.81	490.12	490.12	3200	110	240	100	810	--	19	<25	<25	<25	<120
MW-3	12/20/93	11.42	496.57	499.05	ND	ND	ND	ND	ND	ND	--	--	--	--	--
507.99	3/14/94	11.16	496.83	499.31	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	6/13/94	12.62	495.37	497.85	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	9/20/94	17.35	490.64	493.12	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	12/8/94	16.73	491.26	493.74	--	--	--	--	--	--	--	--	--	--	--
	2/28/95	10.68	497.31	499.79	--	--	--	--	--	--	--	--	--	--	--
	6/5/95	13.83	494.16	496.64	--	--	--	--	--	--	--	--	--	--	--
	8/23/95	14.31	493.68	496.16	ND	9.0	40	ND	50	ND	--	--	--	--	--
	12/5/95	14.35	493.64	496.12	--	--	--	--	--	--	--	--	--	--	--
	3/18/96	14.11	493.88	496.36	--	--	--	--	--	--	--	--	--	--	--
	6/13/96	15.62	492.37	494.85	--	--	--	--	--	--	--	--	--	--	--
	8/26/96	21.40	486.59	489.07	ND	ND	ND	ND	ND	ND	--	--	--	--	--

Table 2
Historic Groundwater Levels and Chemical Analysis Results
Former Chevron Station 9-1197, 8808 Lawrence Welk Drive, Escondido, California

Well No. and Elevation (feet)*	Date	DTW (feet)	Groundwater Elevation (feet)*	Corrected Groundwater Elevation (feet)**	TPH-g [1] µg/l (ppb)	Benzene [2] µg/l (ppb)	Toluene [2] µg/l (ppb)	Ethyl-benzene [2] µg/l (ppb)	Total Xylenes [2] µg/l (ppb)	MTBE [3] µg/l (ppb)	MTBE [4] µg/l (ppb)	DIPE [4] µg/L (ppb)	ETBE [4] µg/L (ppb)	TAME [4] µg/L (ppb)	TBA [4] µg/L (ppb)
MW-3	11/12/96	21.00	486.99	489.47	--	--	--	--	--	--	--	--	--	--	--
continued	3/7/97	14.55	493.44	495.92	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	6/3/97	15.51	492.48	494.96	--	--	--	--	--	--	--	--	--	--	--
	12/4/97	18.97	489.02	491.50	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	11/12/98	15.98	492.01	494.49	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	11/12/99	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/20/00	16.77	491.22	493.70	<500	<0.50	<0.50	<0.50	<1.5	2.4	--	--	--	--	--
	10/18/00	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/16/01	15.30	492.69	495.17	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<50
	10/2/01	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/1/02	19.93	488.06	490.54	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<2.0	<2.0	<2.0	<25
510.08	11/11/02	20.65	489.43	489.82	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<2.0	<2.0	<2.0	<25
	12/19/03	17.3	492.78	493.17	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<25
510.47	5/7/04	16.30	494.17	494.17	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<25
	11/5/04	18.63	491.84	491.84	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<25
MW-4	12/20/93	15.17	494.93	497.39	ND	ND	ND	ND	1.7	ND	--	--	--	--	--
510.10	3/14/94	14.97	495.13	497.59	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	6/13/94	16.76	493.34	495.80	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	9/20/94	21.71	488.39	490.85	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	12/8/94	20.40	489.70	492.16	--	--	--	--	--	--	--	--	--	--	--
	2/28/95	--	--		--	--	--	--	--	--	--	--	--	--	--
	6/5/95	17.14	492.96	495.42	--	--	--	--	--	--	--	--	--	--	--
	8/23/95	18.17	491.93	494.39	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	12/5/95	17.79	492.31	494.77	--	--	--	--	--	--	--	--	--	--	--
	3/18/96	17.38	492.72	495.18	--	--	--	--	--	--	--	--	--	--	--
	6/13/96	19.83	490.27	492.73	--	--	--	--	--	--	--	--	--	--	--
	8/26/96	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	11/12/96	24.55	485.55	488.01	--	--	--	--	--	--	--	--	--	--	--
	3/7/97	17.80	492.30	494.76	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	6/3/97	19.58	490.52	492.98	--	--	--	--	--	--	--	--	--	--	--
	12/4/97	22.50	487.60	490.06	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	11/12/98	20.12	489.98	492.44	ND	ND	ND	ND	ND	ND	--	--	--	--	--

Table 2
Historic Groundwater Levels and Chemical Analysis Results
Former Chevron Station 9-1197, 8808 Lawrence Welk Drive, Escondido, California

Well No. and Elevation (feet)*	Date	DTW (feet)	Groundwater Elevation (feet)*	Corrected Groundwater Elevation (feet)**	TPH-g [1] µg/l (ppb)	Benzene [2] µg/l (ppb)	Toluene [2] µg/l (ppb)	Ethyl-benzene [2] µg/l (ppb)	Total Xylenes [2] µg/l (ppb)	MTBE [3] µg/l (ppb)	MTBE [4] µg/l (ppb)	DIPE [4] µg/L (ppb)	ETBE [4] µg/L (ppb)	TAME [4] µg/L (ppb)	TBA [4] µg/L (ppb)
MW-4	11/12/99	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
continued	4/20/00	20.85	489.25	491.71	<500	<0.50	<0.50	<0.50	<1.5	<1.0	--	--	--	--	--
	10/18/00	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/16/01	18.62	491.48	493.94	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<50
	10/2/01	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/1/02	23.65	486.45	488.91	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<2.0	<2.0	<2.0	<25
512.16	11/11/02	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	12/19/03	22.11	490.05	490.45	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<25
512.56	5/7/04	20.72	491.84	491.84	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<25
	11/5/04	22.75	489.81	489.81	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<25
MW-5	3/14/94	15.47	495.16	497.21	ND	ND	5.8	ND	2.9	19.5	--	--	--	--	--
510.63	6/13/94	17.51	493.12	495.17	ND	14.8	0.86	117	2.7	16.3	--	--	--	--	--
	9/20/94	22.43	488.20	490.25	ND	16.1	1.2	24.3	23.7	ND	--	--	--	--	--
	12/8/94	21.02	489.61	491.66	1450	55	10.9	4.8	15.7	57.8	--	--	--	--	--
	2/28/95	15.00	495.63	497.68	ND	5.6	ND	1.9	ND	19.6	--	--	--	--	--
	6/5/95	17.14	493.49	495.54	525	25.3	0.90	3.8	5.2	327	--	--	--	--	--
	8/23/95	14.51	496.12	498.17	ND	11	24	ND	ND	430	--	--	--	--	--
	12/5/95	17.90	492.73	494.78	ND	ND	2.5	ND	ND	120	--	--	--	--	--
	3/18/96	17.40	493.23	495.28	625	ND	ND	ND	ND	--	--	--	--	--	--
	6/13/96	20.15	490.48	492.53	820	60	2.0	40	70	510	--	--	--	--	--
	8/26/96	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	11/12/96	23.55	487.08	489.13	--	--	--	--	--	--	--	--	--	--	--
	3/7/97	17.78	492.85	494.90	ND	2.2	ND	ND	ND	14	--	--	--	--	--
	6/3/97	19.91	490.72	492.77	ND	1.3	ND	ND	ND	190	--	--	--	--	--
	12/4/97	22.67	487.96	490.01	1100	14	ND	27	16	130	--	--	--	--	--
	11/12/98	20.34	490.29	492.34	ND	1.1	0.61	ND	ND	410	--	--	--	--	--
	11/12/99	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/20/00	21.78	488.85	490.90	<500	1.7	<1.0	<1.0	<3.0	410	--	--	--	--	--
	10/18/00	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/16/01	18.76	491.87	493.92	<500	<0.50	0.57	<0.50	<1.5	--	220	<10	<10	<10	190
	10/2/01	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/1/02	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
512.27	11/11/02	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	12/19/03	22.5	489.77	490.18	<500	<0.50	<0.50	<0.50	<1.5	--	83	<5.0	<5.0	<5.0	<25
512.68	5/7/04	21.05	491.63	491.63	<500	<0.50	<0.50	<0.50	<1.5	--	75	<5.0	<5.0	<5.0	<25
	11/5/04	22.95	489.73	489.73	<500	<0.50	<0.50	<0.50	<1.5	--	4.8	<5.0	<5.0	<5.0	<25

Table 2
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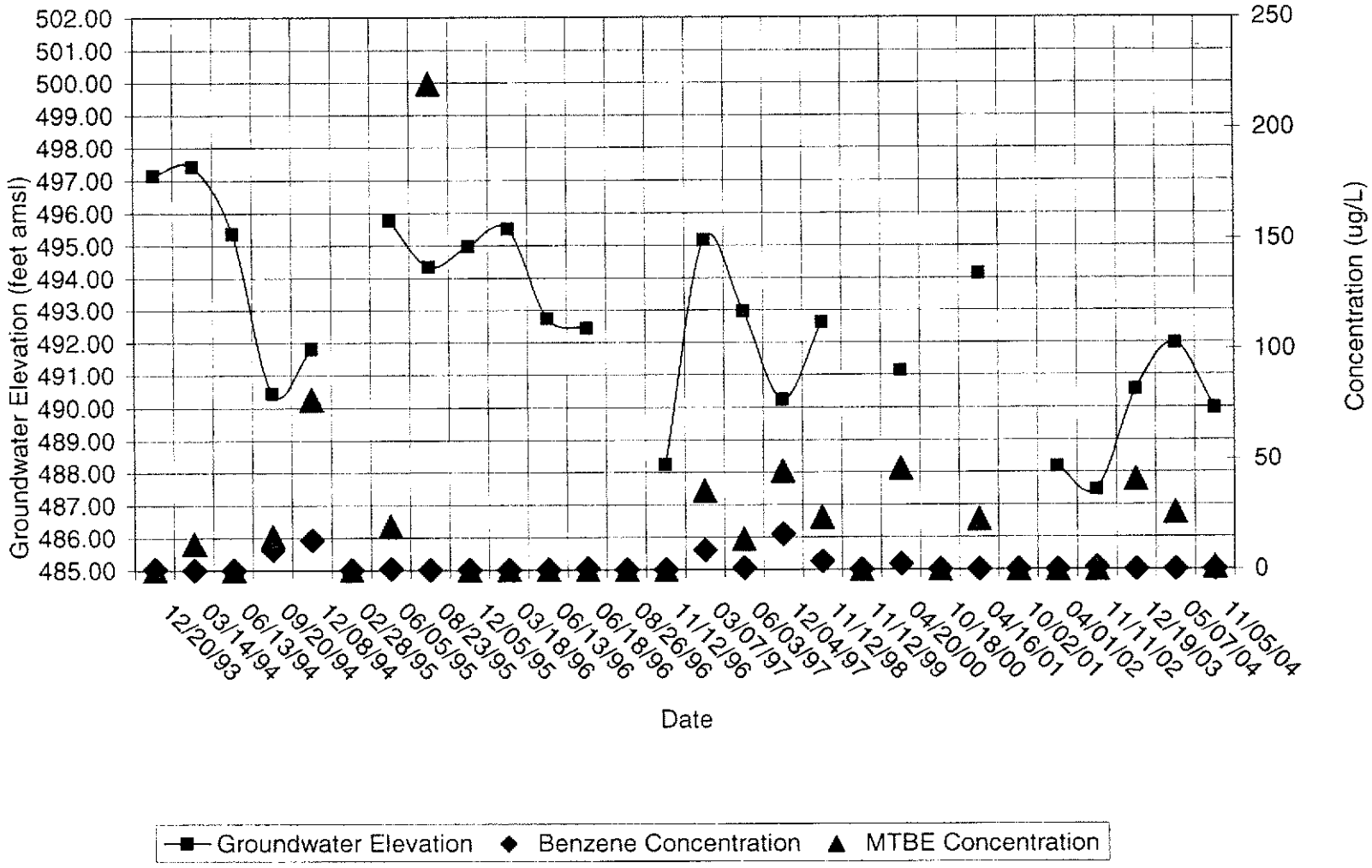
Former Chevron Station 9-1197, 8808 Lawrence Welk Drive, Escondido, California

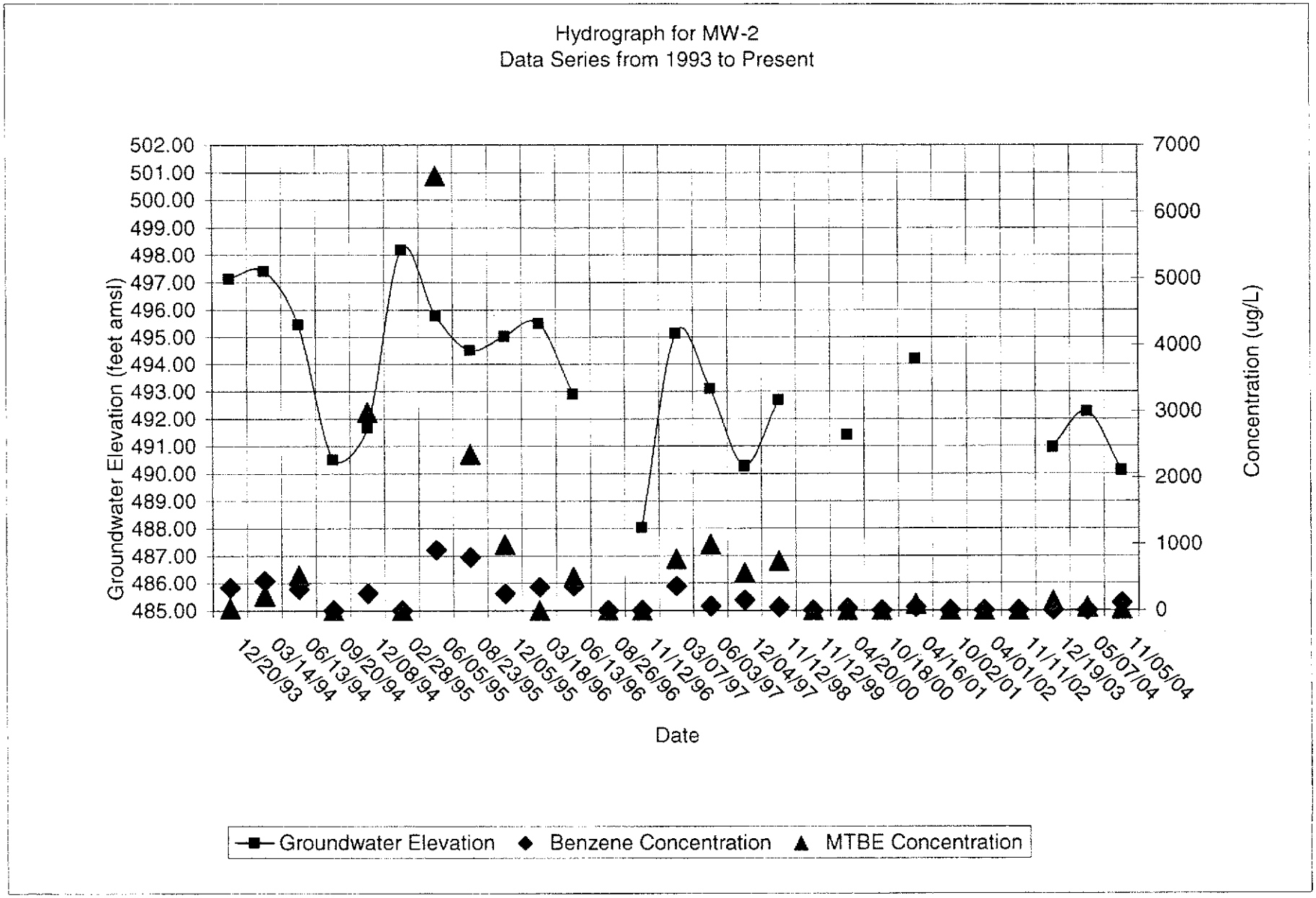
Well No. and Elevation (feet)*	Date	DTW (feet)	Groundwater Elevation (feet)*	Corrected Groundwater Elevation (feet)**	TPH-g [1] µg/l (ppb)	Benzene [2] µg/l (ppb)	Toluene [2] µg/l (ppb)	Ethyl-benzene [2] µg/l (ppb)	Total Xylenes [2] µg/l (ppb)	MTBE [3] µg/l (ppb)	MTBE [4] µg/l (ppb)	DIPE [4] µg/L (ppb)	ETBE [4] µg/L (ppb)	TAME [4] µg/L (ppb)	TBA [4] µg/L (ppb)
MW-6	3/18/96	16.19	492.43	494.86	ND	1.4	ND	1.4	3.5	--	--	--	--	--	--
508.62	6/13/96	19.32	489.30	491.73	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	8/26/96	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	11/12/96	25.54	483.08	485.51	--	--	--	--	--	--	--	--	--	--	--
	3/7/97	15.52	493.10	495.53	ND	ND	ND	ND	ND	24	--	--	--	--	--
	6/3/97	19.04	489.58	492.01	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	12/4/97	21.50	487.12	489.55	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	11/12/98	19.40	489.22	491.65	ND	ND	ND	ND	ND	17	--	--	--	--	--
	11/12/99	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/20/00	21.16	487.46	489.89	<500	<0.50	<0.50	<0.50	<1.5	33	--	--	--	--	--
	10/18/00	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/16/01	17.58	491.04	493.47	<500	<0.50	<0.50	<0.50	<1.5	--	9.0	<5.0	<5.0	<5.0	<50
	10/2/01	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	4/1/02	22.80	485.82	488.25	<500	<0.50	<0.50	<0.50	<1.5	--	6.2	<2.0	<2.0	<2.0	<25
510.65	11/11/02	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
	12/19/03	DRY	DRY		--	--	--	--	--	--	--	--	--	--	--
511.05	5/7/04	20.43	490.62	490.62	<500	<0.50	<0.50	<0.50	<1.5	--	2.4	<5.0	<5.0	<5.0	<25
	11/5/04	22.50	488.55	488.55	<500	<0.50	<0.50	<0.50	<1.5	--	3.1	<5.0	<5.0	<5.0	<25
Detection Limits		NA	NA	NA	500	0.50	0.50	0.50	1.5	1.0	1.0	2.0	2.0	2.0	25

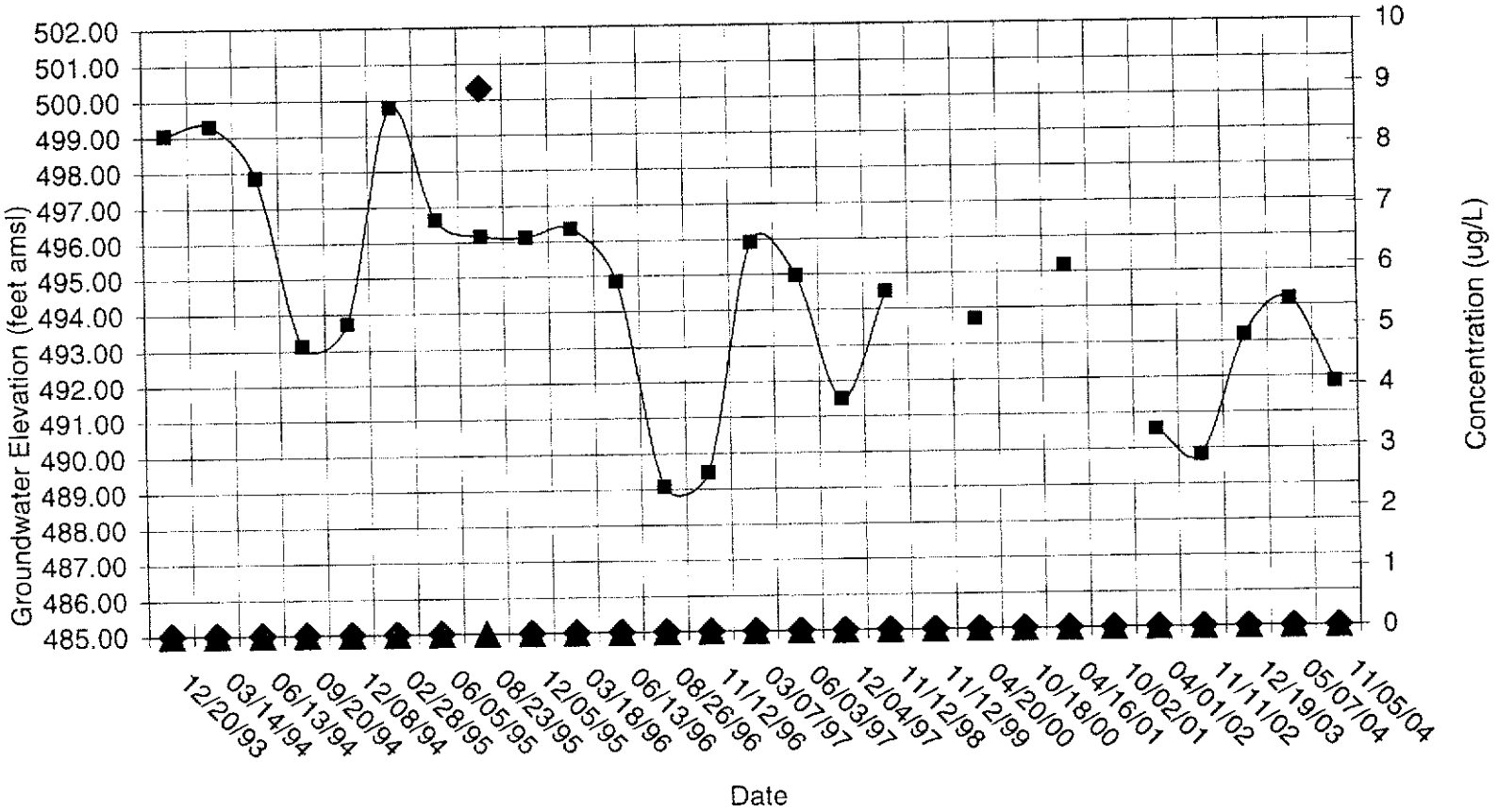
Notes: [1] Historically analyzed for Total Petroleum Hydrocarbons as Gasoline by modified EPA method 8015B. Currently analyzed by EPA method 8021B. [4] Analyzed bt EPA method 8260B
[2] Historically analyzed for BTEX by EPA method 8021B. Currently analyzed by EPA method 8260B. [3] Analyzed by EPA Method 8260B.

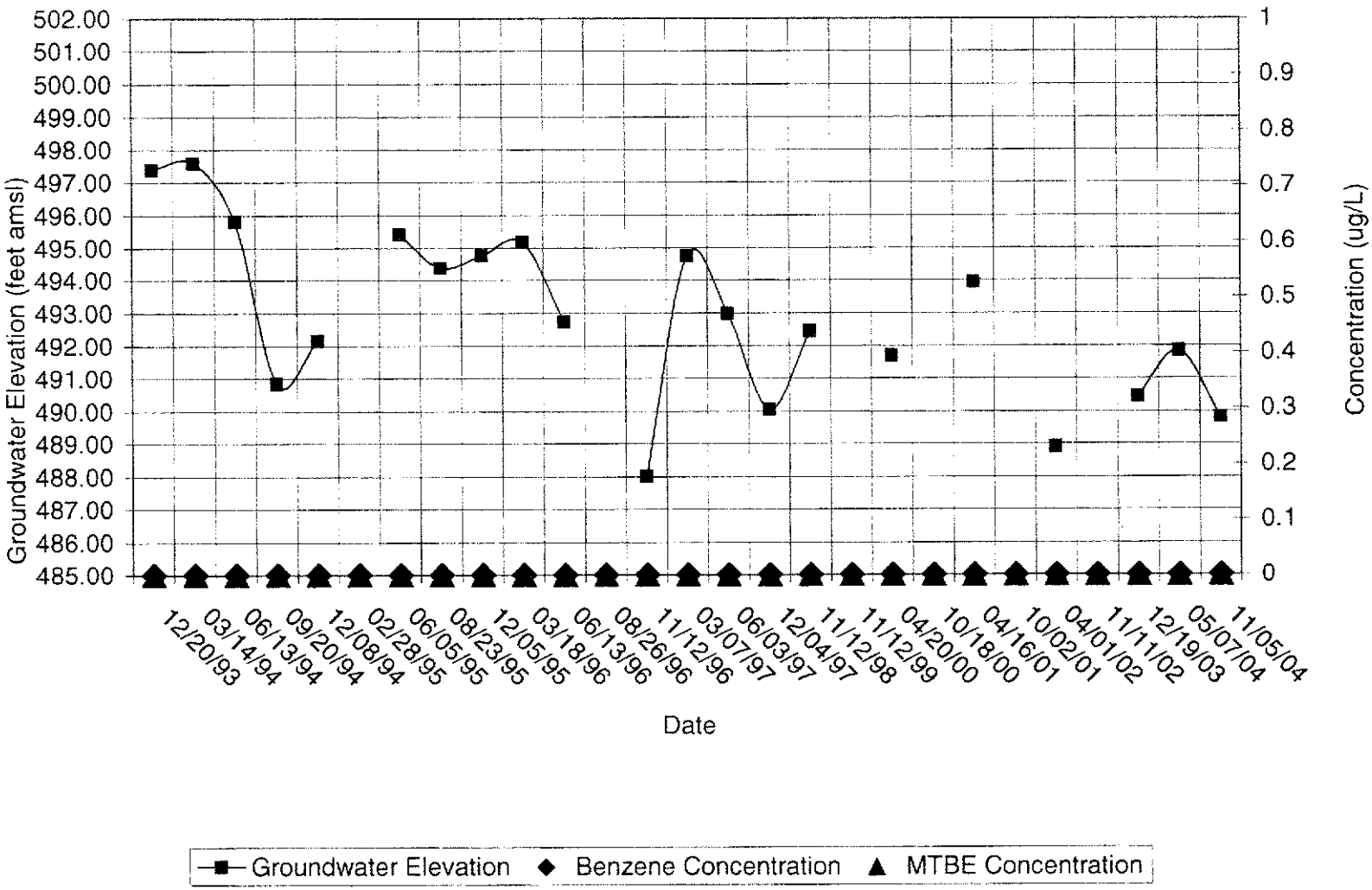
Definitions: feet* = Feet above mean sea level, ** = Groundwater elevation calculated to most recent survey data, MTBE = Methyl tert-Butyl Ether, ETBE = Ethyl tert-Butyl Ether, DIPE = Di-isopropyl Ether, TAME = tert-Amyl Methyl Ether, TBA = tert-Butanol, ppb = parts per billion, µg/l = micrograms per liter, -- = Not Measured, ND = Not Detected, DTW = Depth to Water, TPH = Total Petroleum Hydrocarbons. Monitoring and sampling activities conducted by SECOR after 2/1/03. Monitoring and sampling activities conducted by Blaine Tech Services 11/5/04.

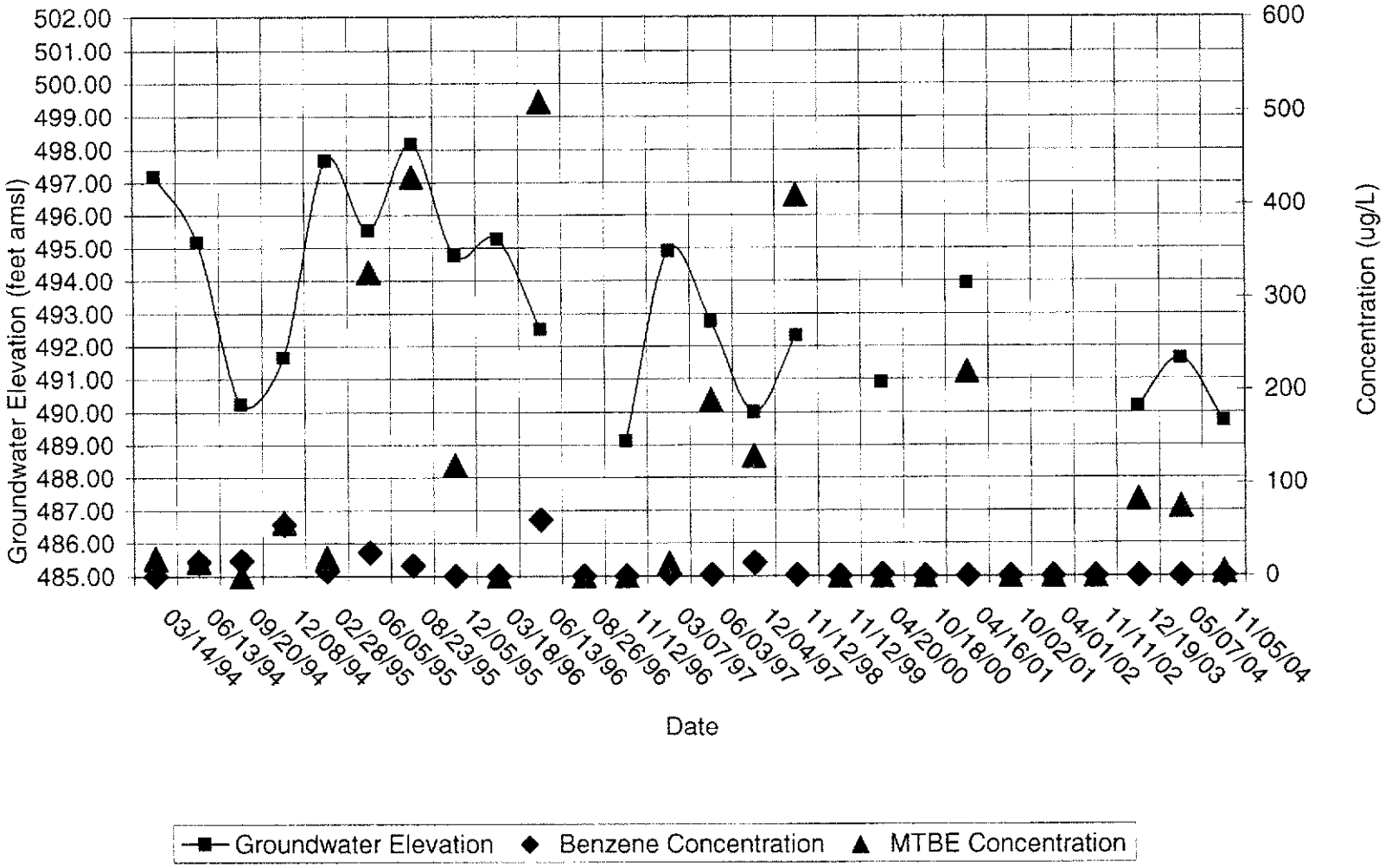
GEIMS Global ID # T0607301337. Prior to 4th Quarter 1999 sampling event, laboratory results below reporting limits were presented as ND. No purge methodologies utilized on 12/4/97 and thereafter.

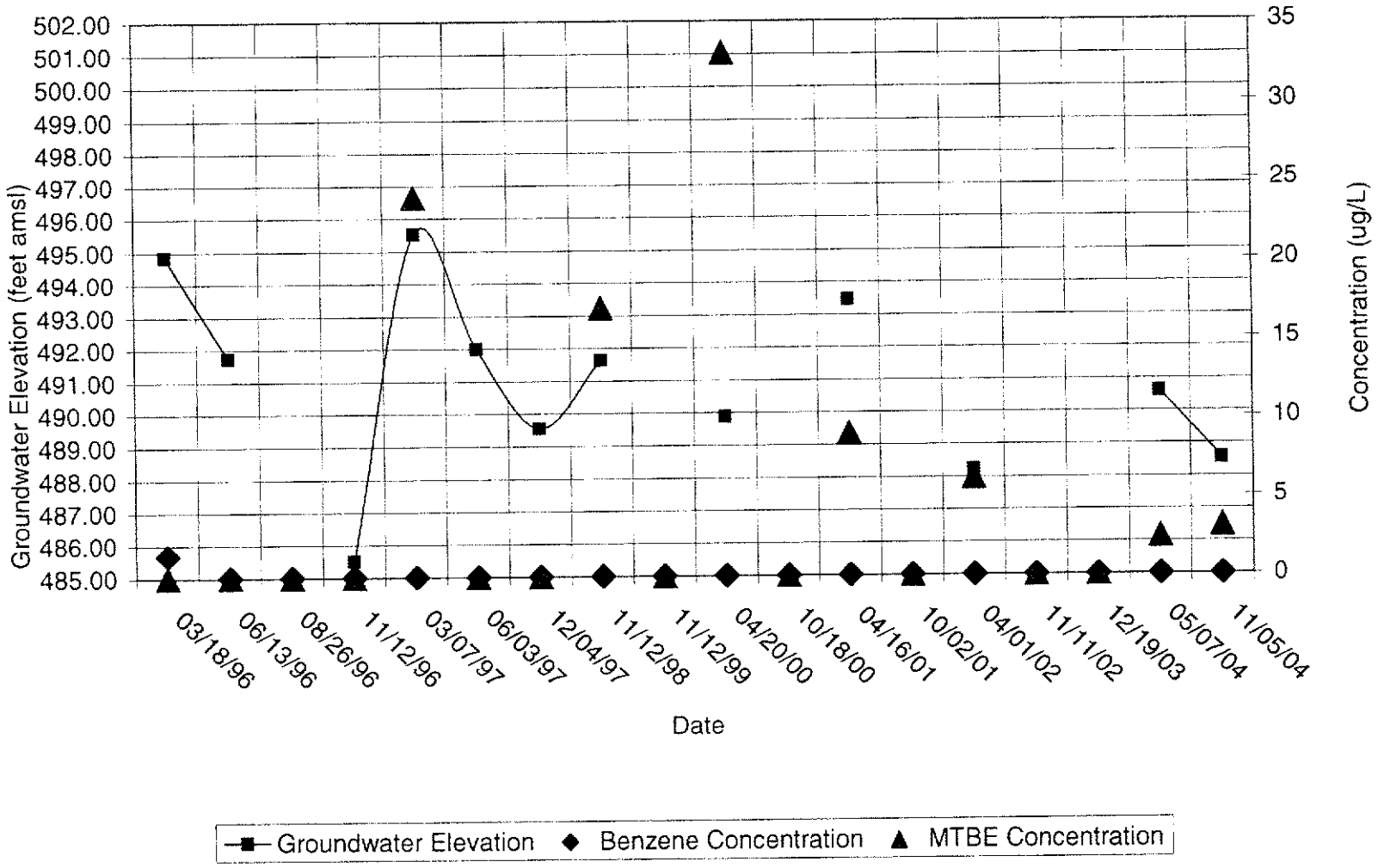

Hydrograph for MW-1
Data Series from 1993 to Present
Groundwater Elevation (feet amsl)
502.00
501.00
500.00
499.00
498.00
497.00
496.00
495.00
494.00
493.00
492.00
491.00
490.00
489.00
488.00
487.00
486.00
485.00
Concentration (ug/L)
250
200
150
100
50
0
12/20/93
03/14/94
06/13/94
09/20/94
12/08/94
02/28/95
06/05/95
08/23/95
12/05/95
03/18/96
06/13/96
06/18/96
08/26/96
11/12/96
03/07/97
06/03/97
12/04/97
11/12/98
11/12/99
04/20/00
10/18/00
04/16/01
10/02/01
04/01/02
11/11/02
12/19/03
05/07/04
11/05/04
Date
Groundwater Elevation
Benzene Concentration
MTBE Concentration


Hydrograph for MW-2
Data Series from 1993 to Present
Groundwater Elevation (feet amsl)
502.00
501.00
500.00
499.00
498.00
497.00
496.00
495.00
494.00
493.00
492.00
491.00
490.00
489.00
488.00
487.00
486.00
485.00
Concentration (ug/L)
7000
6000
5000
4000
3000
2000
1000
0
12/20/93
03/14/94
06/13/94
09/20/94
12/08/94
02/28/95
06/05/95
08/23/95
12/05/95
03/18/96
06/13/96
08/26/96
11/12/96
03/07/97
06/03/97
12/04/97
11/12/98
11/12/99
04/20/00
10/18/00
04/16/01
10/02/01
04/01/02
11/11/02
12/19/03
05/07/04
11/05/04
Date
Groundwater Elevation
Benzene Concentration
MTBE Concentration


Hydrograph for MW-3
Data Series from 1993 to Present
Groundwater Elevation (feet amsl)
502.00
501.00
500.00
499.00
498.00
497.00
496.00
495.00
494.00
493.00
492.00
491.00
490.00
489.00
488.00
487.00
486.00
485.00
Concentration (ug/L)
10
9
8
7
6
5
4
3
2
1
0
12/20/93
03/14/94
06/13/94
09/20/94
12/08/94
02/28/95
06/05/95
08/23/95
12/05/95
03/18/96
06/13/96
08/26/96
11/12/96
03/07/97
06/03/97
12/04/97
11/12/98
11/12/99
04/20/00
10/18/00
04/16/01
10/02/01
04/01/02
11/11/02
12/19/03
05/07/04
11/05/04
Date
Groundwater Elevation
Benzene Concentration
MTBE Concentration


Hydrograph for MW-4
Data Series from 1993 to Present
Groundwater Elevation (feet amsl)
502.00
501.00
500.00
499.00
498.00
497.00
496.00
495.00
494.00
493.00
492.00
491.00
490.00
489.00
488.00
487.00
486.00
485.00
Concentration (ug/L)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
12/20/93
03/14/94
06/13/94
09/20/94
12/08/94
02/28/95
06/05/95
08/23/95
12/05/95
03/18/96
06/13/96
08/26/96
11/12/96
03/07/97
06/03/97
12/04/97
11/12/98
11/12/99
04/20/00
10/18/00
04/16/01
10/02/01
04/01/02
11/11/02
12/19/03
05/07/04
11/05/04
Date
Groundwater Elevation
Benzene Concentration
MTBE Concentration


Hydrograph for MW-5
Data Series from 1994 to Present
Groundwater Elevation (feet amsl)
502.00
501.00
500.00
499.00
498.00
497.00
496.00
495.00
494.00
493.00
492.00
491.00
490.00
489.00
488.00
487.00
486.00
485.00
Concentration (ug/L)
600
500
400
300
200
100
0
03/14/94
06/13/94
09/20/94
12/08/94
02/28/95
06/05/95
08/23/95
12/05/95
03/18/96
06/13/96
08/26/96
11/12/96
03/07/97
06/03/97
12/04/97
11/12/98
11/12/99
04/20/00
10/18/00
04/16/01
10/02/01
04/01/02
11/11/02
12/19/03
05/07/04
11/05/04
Date
Groundwater Elevation
Benzene Concentration
MTBE Concentration


Hydrograph for MW-6
Data Series from 1996 to Present
Groundwater Elevation (feet amsl)
502.00
501.00
500.00
499.00
498.00
497.00
496.00
495.00
494.00
493.00
492.00
491.00
490.00
489.00
488.00
487.00
486.00
485.00
Concentration (ug/L)
35
30
25
20
15
10
5
0
03/18/96
06/13/96
08/26/96
11/12/96
03/07/97
06/03/97
12/04/97
11/12/98
11/12/99
04/20/00
10/18/00
04/16/01
10/02/01
04/01/02
11/11/02
12/19/03
05/07/04
11/05/04
Date
Groundwater Elevation
Benzene Concentration
MTBE Concentration

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LABORATORY REPORT

Prepared For: SECOR-San Diego/ChevronTexaco
2655 Camino del Rio North, Suite 302
San Diego, CA 92108
Attention: Maurice Baron

Project: Chevron 9-1197

Sampled: 11/05/04
Received: 11/08/04
Issued: 11/22/04 16:23

NELAP #01108CA CA ELAP #1197 CSDLAC #10117

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of Del Mar Analytical and its client. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical. The Chain of Custody, 1 page, is included and is an integral part of this report.

This entire report was reviewed and approved for release.

SAMPLE CROSS REFERENCE

LABORATORY ID	CLIENT ID	MATRIX
INK0572-01	MW-1-W-041105	Water
INK0572-02	MW-2-W-041105	Water
INK0572-03	MW-3-W-041105	Water
INK0572-04	MW-4-W-041105	Water
INK0572-05	MW-5-W-041105	Water
INK0572-06	MW-6-W-041105	Water
INK0572-07	AG.WELL-W-041105	Water

Reviewed By:

Del Mar Analytical, Irvine
Chris Roberts For Kathleen A. Robb
Project Manager

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SECOR-San Diego/ChevronTexaco
2655 Camino del Rio North, Suite 302
San Diego, CA 92108
Attention: Maurice Baron

Project ID: Chevron 9-1197

Report Number: INK0572

Sampled: 11/05/04
Received: 11/08/04

VOLATILE FUEL HYDROCARBONS BY GC/MS

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: INK0572-01 (MW-1-W-041105 - Water)								
Reporting Units: ug/l								
Volatile Fuel Hydrocarbons (C4-C12)	TPH by GC/MS	4K16038	500	ND	1	11/16/2004	11/17/2004	
Surrogate: Dibromofluoromethane (80-120%)				*101 %*				
Surrogate: Toluene-d8 (80-120%)				*102 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*100 %*				
Sample ID: INK0572-02 (MW-2-W-041105 - Water)								
Reporting Units: ug/l								
Volatile Fuel Hydrocarbons (C4-C12)	TPH by GC/MS	4K17010	2500	**3200**	5	11/17/2004	11/17/2004	
Surrogate: Dibromofluoromethane (80-120%)				*97 %*				
Surrogate: Toluene-d8 (80-120%)				*106 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*96 %*				
Sample ID: INK0572-03 (MW-3-W-041105 - Water)								
Reporting Units: ug/l								
Volatile Fuel Hydrocarbons (C4-C12)	TPH by GC/MS	4K16038	500	ND	1	11/16/2004	11/17/2004	
Surrogate: Dibromofluoromethane (80-120%)				*104 %*				
Surrogate: Toluene-d8 (80-120%)				*102 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*102 %*				
Sample ID: INK0572-04 (MW-4-W-041105 - Water)								
Reporting Units: ug/l								
Volatile Fuel Hydrocarbons (C4-C12)	TPH by GC/MS	4K17022	500	ND	1	11/17/2004	11/18/2004	
Surrogate: Dibromofluoromethane (80-120%)				*104 %*				
Surrogate: Toluene-d8 (80-120%)				*105 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*97 %*				
Sample ID: INK0572-05 (MW-5-W-041105 - Water)								
Reporting Units: ug/l								
Volatile Fuel Hydrocarbons (C4-C12)	TPH by GC/MS	4K17022	500	ND	1	11/17/2004	11/18/2004	
Surrogate: Dibromofluoromethane (80-120%)				*102 %*				
Surrogate: Toluene-d8 (80-120%)				*106 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*102 %*				
Sample ID: INK0572-06 (MW-6-W-041105 - Water)								
Reporting Units: ug/l								
Volatile Fuel Hydrocarbons (C4-C12)	TPH by GC/MS	4K17022	500	ND	1	11/17/2004	11/18/2004	
Surrogate: Dibromofluoromethane (80-120%)				*106 %*				
Surrogate: Toluene-d8 (80-120%)				*105 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*97 %*				

Del Mar Analytical, Irvine
Chris Roberts For Kathleen A. Robb
Project Manager

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SECOR-San Diego/ChevronTexaco
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San Diego, CA 92108
Attention: Maurice Baron

Project ID: Chevron 9-1197

Report Number: INK0572

Sampled: 11/05/04
Received: 11/08/04

VOLATILE FUEL HYDROCARBONS BY GC/MS

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: INK0572-07 (AG.WELL-W-041105 - Water)								
Reporting Units: ug/l								
Volatile Fuel Hydrocarbons (C4-C12)	TPH by GC/MS	4K17022	500	ND	1	11/17/2004	11/18/2004	
Surrogate: Dibromofluoromethane (80-120%)				*102 %*				
Surrogate: Toluene-d8 (80-120%)				*105 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*97 %*				

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Project Manager

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SECOR-San Diego/ChevronTexaco
2655 Camino del Rio North, Suite 302
San Diego, CA 92108
Attention: Maurice Baron

Project ID: Chevron 9-1197

Report Number: INK0572

Sampled: 11/05/04
Received: 11/08/04

BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: INK0572-01 (MW-1-W-041105 - Water)								
Reporting Units: ug/l								
Benzene	EPA 8260B	4K16038	0.50	ND	1	11/16/2004	11/17/2004	
Ethylbenzene	EPA 8260B	4K16038	0.50	ND	1	11/16/2004	11/17/2004	
Toluene	EPA 8260B	4K16038	0.50	ND	1	11/16/2004	11/17/2004	
o-Xylene	EPA 8260B	4K16038	0.50	ND	1	11/16/2004	11/17/2004	
m,p-Xylenes	EPA 8260B	4K16038	1.0	ND	1	11/16/2004	11/17/2004	
Xylenes, Total	EPA 8260B	4K16038	1.5	ND	1	11/16/2004	11/17/2004	
Di-isopropyl Ether (DIPE)	EPA 8260B	4K16038	5.0	ND	1	11/16/2004	11/17/2004	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	4K16038	5.0	ND	1	11/16/2004	11/17/2004	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	4K16038	5.0	ND	1	11/16/2004	11/17/2004	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	4K16038	1.0	**1.2**	1	11/16/2004	11/17/2004	
tert-Butanol (TBA)	EPA 8260B	4K16038	25	ND	1	11/16/2004	11/17/2004	
Surrogate: Dibromofluoromethane (80-120%)				*101 %*				
Surrogate: Toluene-d8 (80-120%)				*102 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*100 %*				
Sample ID: INK0572-02 (MW-2-W-041105 - Water)								
Reporting Units: ug/l								
Benzene	EPA 8260B	4K17010	2.5	**110**	5	11/17/2004	11/17/2004	
Ethylbenzene	EPA 8260B	4K17010	2.5	**100**	5	11/17/2004	11/17/2004	
Toluene	EPA 8260B	4K17010	2.5	**240**	5	11/17/2004	11/17/2004	
o-Xylene	EPA 8260B	4K17010	2.5	**330**	5	11/17/2004	11/17/2004	
m,p-Xylenes	EPA 8260B	4K17010	5.0	**480**	5	11/17/2004	11/17/2004	
Xylenes, Total	EPA 8260B	4K17010	7.5	**810**	5	11/17/2004	11/17/2004	
Di-isopropyl Ether (DIPE)	EPA 8260B	4K17010	25	ND	5	11/17/2004	11/17/2004	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	4K17010	25	ND	5	11/17/2004	11/17/2004	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	4K17010	25	ND	5	11/17/2004	11/17/2004	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	4K17010	5.0	**19**	5	11/17/2004	11/17/2004	
tert-Butanol (TBA)	EPA 8260B	4K17010	120	ND	5	11/17/2004	11/17/2004	
Surrogate: Dibromofluoromethane (80-120%)				*97 %*				
Surrogate: Toluene-d8 (80-120%)				*106 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*96 %*				

Del Mar Analytical, Irvine
Chris Roberts For Kathleen A. Robb
Project Manager

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Project ID: Chevron 9-1197

Report Number: INK0572

Sampled: 11/05/04
Received: 11/08/04

BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: INK0572-03 (MW-3-W-041105 - Water)								
Reporting Units: ug/l								
Benzene	EPA 8260B	4K16038	0.50	ND	1	11/16/2004	11/17/2004	
Ethylbenzene	EPA 8260B	4K16038	0.50	ND	1	11/16/2004	11/17/2004	
Toluene	EPA 8260B	4K16038	0.50	ND	1	11/16/2004	11/17/2004	
o-Xylene	EPA 8260B	4K16038	0.50	ND	1	11/16/2004	11/17/2004	
m,p-Xylenes	EPA 8260B	4K16038	1.0	ND	1	11/16/2004	11/17/2004	
Xylenes, Total	EPA 8260B	4K16038	1.5	ND	1	11/16/2004	11/17/2004	
Di-isopropyl Ether (DIPE)	EPA 8260B	4K16038	5.0	ND	1	11/16/2004	11/17/2004	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	4K16038	5.0	ND	1	11/16/2004	11/17/2004	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	4K16038	5.0	ND	1	11/16/2004	11/17/2004	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	4K16038	1.0	ND	1	11/16/2004	11/17/2004	
tert-Butanol (TBA)	EPA 8260B	4K16038	25	ND	1	11/16/2004	11/17/2004	
Surrogate: Dibromofluoromethane (80-120%)				*104 %*				
Surrogate: Toluene-d8 (80-120%)				*102 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*102 %*				
Sample ID: INK0572-04 (MW-4-W-041105 - Water)								
Reporting Units: ug/l								
Benzene	EPA 8260B	4K17022	0.50	ND	1	11/17/2004	11/18/2004	
Ethylbenzene	EPA 8260B	4K17022	0.50	ND	1	11/17/2004	11/18/2004	
Toluene	EPA 8260B	4K17022	0.50	ND	1	11/17/2004	11/18/2004	
o-Xylene	EPA 8260B	4K17022	0.50	ND	1	11/17/2004	11/18/2004	
m,p-Xylenes	EPA 8260B	4K17022	1.0	ND	1	11/17/2004	11/18/2004	
Xylenes, Total	EPA 8260B	4K17022	1.5	ND	1	11/17/2004	11/18/2004	
Di-isopropyl Ether (DIPE)	EPA 8260B	4K17022	5.0	ND	1	11/17/2004	11/18/2004	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	4K17022	5.0	ND	1	11/17/2004	11/18/2004	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	4K17022	5.0	ND	1	11/17/2004	11/18/2004	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	4K17022	1.0	ND	1	11/17/2004	11/18/2004	
tert-Butanol (TBA)	EPA 8260B	4K17022	25	ND	1	11/17/2004	11/18/2004	
Surrogate: Dibromofluoromethane (80-120%)				*104 %*				
Surrogate: Toluene-d8 (80-120%)				*105 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*97 %*				

Del Mar Analytical, Irvine
Chris Roberts For Kathleen A. Robb
Project Manager

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SECOR-San Diego/ChevronTexaco
2655 Camino del Rio North, Suite 302
San Diego, CA 92108
Attention: Maurice Baron

Project ID: Chevron 9-1197

Report Number: INK0572

Sampled: 11/05/04
Received: 11/08/04

BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: INK0572-05 (MW-5-W-041105 - Water)								
Reporting Units: ug/l								
Benzene	EPA 8260B	4K17022	0.50	ND	1	11/17/2004	11/18/2004	
Ethylbenzene	EPA 8260B	4K17022	0.50	ND	1	11/17/2004	11/18/2004	
Toluene	EPA 8260B	4K17022	0.50	ND	1	11/17/2004	11/18/2004	
o-Xylene	EPA 8260B	4K17022	0.50	ND	1	11/17/2004	11/18/2004	
m,p-Xylenes	EPA 8260B	4K17022	1.0	ND	1	11/17/2004	11/18/2004	
Xylenes, Total	EPA 8260B	4K17022	1.5	ND	1	11/17/2004	11/18/2004	
Di-isopropyl Ether (DIPE)	EPA 8260B	4K17022	5.0	ND	1	11/17/2004	11/18/2004	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	4K17022	5.0	ND	1	11/17/2004	11/18/2004	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	4K17022	5.0	ND	1	11/17/2004	11/18/2004	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	4K17022	1.0	**4.8**	1	11/17/2004	11/18/2004	
tert-Butanol (TBA)	EPA 8260B	4K17022	25	ND	1	11/17/2004	11/18/2004	
Surrogate: Dibromofluoromethane (80-120%)				*102 %*				
Surrogate: Toluene-d8 (80-120%)				*106 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*102 %*				
Sample ID: INK0572-06 (MW-6-W-041105 - Water)								
Reporting Units: ug/l								
Benzene	EPA 8260B	4K17022	0.50	ND	1	11/17/2004	11/18/2004	
Ethylbenzene	EPA 8260B	4K17022	0.50	ND	1	11/17/2004	11/18/2004	
Toluene	EPA 8260B	4K17022	0.50	ND	1	11/17/2004	11/18/2004	
o-Xylene	EPA 8260B	4K17022	0.50	ND	1	11/17/2004	11/18/2004	
m,p-Xylenes	EPA 8260B	4K17022	1.0	ND	1	11/17/2004	11/18/2004	
Xylenes, Total	EPA 8260B	4K17022	1.5	ND	1	11/17/2004	11/18/2004	
Di-isopropyl Ether (DIPE)	EPA 8260B	4K17022	5.0	ND	1	11/17/2004	11/18/2004	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	4K17022	5.0	ND	1	11/17/2004	11/18/2004	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	4K17022	5.0	ND	1	11/17/2004	11/18/2004	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	4K17022	1.0	**3.1**	1	11/17/2004	11/18/2004	
tert-Butanol (TBA)	EPA 8260B	4K17022	25	ND	1	11/17/2004	11/18/2004	
Surrogate: Dibromofluoromethane (80-120%)				*106 %*				
Surrogate: Toluene-d8 (80-120%)				*105 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*97 %*				

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Chris Roberts For Kathleen A. Robb
Project Manager

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SECOR-San Diego/ChevronTexaco
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Project ID: Chevron 9-1197

Report Number: INK0572

Sampled: 11/05/04
Received: 11/08/04

BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: INK0572-07 (AG.WELL-W-041105 - Water)								
Reporting Units: ug/l								
Benzene	EPA 8260B	4K17022	0.50	ND	1	11/17/2004	11/18/2004	
Ethylbenzene	EPA 8260B	4K17022	0.50	ND	1	11/17/2004	11/18/2004	
Toluene	EPA 8260B	4K17022	0.50	ND	1	11/17/2004	11/18/2004	
o-Xylene	EPA 8260B	4K17022	0.50	ND	1	11/17/2004	11/18/2004	
m,p-Xylenes	EPA 8260B	4K17022	1.0	ND	1	11/17/2004	11/18/2004	
Xylenes, Total	EPA 8260B	4K17022	1.5	ND	1	11/17/2004	11/18/2004	
Di-isopropyl Ether (DIPE)	EPA 8260B	4K17022	5.0	ND	1	11/17/2004	11/18/2004	
Ethyl tert-Butyl Ether (ETBE)	EPA 8260B	4K17022	5.0	ND	1	11/17/2004	11/18/2004	
tert-Amyl Methyl Ether (TAME)	EPA 8260B	4K17022	5.0	ND	1	11/17/2004	11/18/2004	
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	4K17022	1.0	ND	1	11/17/2004	11/18/2004	
tert-Butanol (TBA)	EPA 8260B	4K17022	25	ND	1	11/17/2004	11/18/2004	
Surrogate: Dibromofluoromethane (80-120%)				*102 %*				
Surrogate: Toluene-d8 (80-120%)				*105 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*97 %*				

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Chris Roberts For Kathleen A. Robb
Project Manager

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Attention: Maurice Baron

Project ID: Chevron 9-1197

Report Number: INK0572

Sampled: 11/05/04
Received: 11/08/04

METHOD BLANK/QC DATA

VOLATILE FUEL HYDROCARBONS BY GC/MS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 4K16038 Extracted: 11/16/04										
Blank Analyzed: 11/16/04 (4K16038-BLK1)										
Volatile Fuel Hydrocarbons (C4-C12)	ND	500	ug/l							
Surrogate: Dibromofluoromethane	*25.8*		*ug/l*	*25.0*		*103*	*80-120*			
Surrogate: Toluene-d8	*25.9*		*ug/l*	*25.0*		*104*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*25.6*		*ug/l*	*25.0*		*102*	*80-120*			
LCS Analyzed: 11/16/04 (4K16038-BS2)										
Volatile Fuel Hydrocarbons (C4-C12)	354	500	ug/l	500		71	65-125			
Surrogate: Dibromofluoromethane	*25.6*		*ug/l*	*25.0*		*102*	*80-120*			
Surrogate: Toluene-d8	*25.7*		*ug/l*	*25.0*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*25.3*		*ug/l*	*25.0*		*101*	*80-120*			
Matrix Spike Analyzed: 11/17/04 (4K16038-MS1)					**Source: INK0571-07**					
Volatile Fuel Hydrocarbons (C4-C12)	1120	500	ug/l	1120	91	92	60-140			
Surrogate: Dibromofluoromethane	*26.2*		*ug/l*	*25.0*		*105*	*80-120*			
Surrogate: Toluene-d8	*25.8*		*ug/l*	*25.0*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*25.5*		*ug/l*	*25.0*		*102*	*80-120*			
Matrix Spike Dup Analyzed: 11/17/04 (4K16038-MSD1)					**Source: INK0571-07**					
Volatile Fuel Hydrocarbons (C4-C12)	1110	500	ug/l	1120	91	91	60-140	1	20	
Surrogate: Dibromofluoromethane	*25.9*		*ug/l*	*25.0*		*104*	*80-120*			
Surrogate: Toluene-d8	*25.8*		*ug/l*	*25.0*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*25.1*		*ug/l*	*25.0*		*100*	*80-120*			
Batch: 4K17010 Extracted: 11/17/04										
Blank Analyzed: 11/17/04 (4K17010-BLK1)										
Volatile Fuel Hydrocarbons (C4-C12)	ND	500	ug/l							
Surrogate: Dibromofluoromethane	*23.9*		*ug/l*	*25.0*		*96*	*80-120*			
Surrogate: Toluene-d8	*26.5*		*ug/l*	*25.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*23.3*		*ug/l*	*25.0*		*93*	*80-120*			

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Chris Roberts For Kathleen A. Robb
Project Manager

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Project ID: Chevron 9-1197

Report Number: INK0572

Sampled: 11/05/04
Received: 11/08/04

METHOD BLANK/QC DATA

VOLATILE FUEL HYDROCARBONS BY GC/MS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 4K17010 Extracted: 11/17/04										
LCS Analyzed: 11/17/04 (4K17010-BS2)										
Volatile Fuel Hydrocarbons (C4-C12)	405	500	ug/l	500		81	65-125			
Surrogate: Dibromofluoromethane	*24.6*		*ug/l*	*25.0*		*98*	*80-120*			
Surrogate: Toluene-d8	*26.8*		*ug/l*	*25.0*		*107*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*23.9*		*ug/l*	*25.0*		*96*	*80-120*			
Matrix Spike Analyzed: 11/17/04 (4K17010-MS1)					**Source: INK0569-10**					
Volatile Fuel Hydrocarbons (C4-C12)	1370	500	ug/l	1120	94	114	60-140			
Surrogate: Dibromofluoromethane	*24.6*		*ug/l*	*25.0*		*98*	*80-120*			
Surrogate: Toluene-d8	*26.4*		*ug/l*	*25.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*24.3*		*ug/l*	*25.0*		*97*	*80-120*			
Matrix Spike Dup Analyzed: 11/17/04 (4K17010-MSD1)					**Source: INK0569-10**					
Volatile Fuel Hydrocarbons (C4-C12)	1330	500	ug/l	1120	94	110	60-140	3	20	
Surrogate: Dibromofluoromethane	*24.6*		*ug/l*	*25.0*		*98*	*80-120*			
Surrogate: Toluene-d8	*26.4*		*ug/l*	*25.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*24.3*		*ug/l*	*25.0*		*97*	*80-120*			
Batch: 4K17022 Extracted: 11/17/04										
Blank Analyzed: 11/17/04 (4K17022-BLK1)										
Volatile Fuel Hydrocarbons (C4-C12)	ND	500	ug/l							
Surrogate: Dibromofluoromethane	*23.9*		*ug/l*	*25.0*		*96*	*80-120*			
Surrogate: Toluene-d8	*26.2*		*ug/l*	*25.0*		*105*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*23.1*		*ug/l*	*25.0*		*92*	*80-120*			
LCS Analyzed: 11/17/04 (4K17022-BS2)										
Volatile Fuel Hydrocarbons (C4-C12)	560	500	ug/l	500		112	65-125			
Surrogate: Dibromofluoromethane	*24.4*		*ug/l*	*25.0*		*98*	*80-120*			
Surrogate: Toluene-d8	*26.7*		*ug/l*	*25.0*		*107*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*23.7*		*ug/l*	*25.0*		*95*	*80-120*			

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Chris Roberts For Kathleen A. Robb
Project Manager

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Project ID: Chevron 9-1197

Report Number: INK0572

Sampled: 11/05/04
Received: 11/08/04

METHOD BLANK/QC DATA

VOLATILE FUEL HYDROCARBONS BY GC/MS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 4K17022 Extracted: 11/17/04										
Matrix Spike Analyzed: 11/17/04 (4K17022-MS1)					**Source: INK0569-06**					
Volatile Fuel Hydrocarbons (C4-C12)	1420	500	ug/l	1120	ND	127	60-140			
Surrogate: Dibromofluoromethane	*25.7*		*ug/l*	*25.0*		*103*	*80-120*			
Surrogate: Toluene-d8	*26.4*		*ug/l*	*25.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*25.0*		*ug/l*	*25.0*		*100*	*80-120*			
Matrix Spike Dup Analyzed: 11/17/04 (4K17022-MSD1)					**Source: INK0569-06**					
Volatile Fuel Hydrocarbons (C4-C12)	1370	500	ug/l	1120	ND	122	60-140	4	20	
Surrogate: Dibromofluoromethane	*25.1*		*ug/l*	*25.0*		*100*	*80-120*			
Surrogate: Toluene-d8	*26.3*		*ug/l*	*25.0*		*105*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*25.1*		*ug/l*	*25.0*		*100*	*80-120*			

Del Mar Analytical, Irvine
Chris Roberts For Kathleen A. Robb
Project Manager

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Project ID: Chevron 9-1197

Report Number: INK0572

Sampled: 11/05/04
Received: 11/08/04

METHOD BLANK/QC DATA

BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 4K16038 Extracted: 11/16/04										
Blank Analyzed: 11/16/04 (4K16038-BLK1)										
Benzene	ND	0.50	ug/l							
Ethylbenzene	ND	0.50	ug/l							
Toluene	ND	0.50	ug/l							
o-Xylene	ND	0.50	ug/l							
m,p-Xylenes	ND	1.0	ug/l							
Xylenes, Total	ND	1.5	ug/l							
Di-isopropyl Ether (DIPE)	ND	5.0	ug/l							
Ethyl tert-Butyl Ether (ETBE)	ND	5.0	ug/l							
tert-Amyl Methyl Ether (TAME)	ND	5.0	ug/l							
Methyl-tert-butyl Ether (MTBE)	ND	1.0	ug/l							
tert-Butanol (TBA)	ND	25	ug/l							
Surrogate: Dibromofluoromethane	*25.8*		*ug/l*	*25.0*		*103*	*80-120*			
Surrogate: Toluene-d8	*25.9*		*ug/l*	*25.0*		*104*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*25.6*		*ug/l*	*25.0*		*102*	*80-120*			
LCS Analyzed: 11/16/04 (4K16038-BS1)										
Benzene	23.6	0.50	ug/l	25.0		94	70-120			
Ethylbenzene	23.0	0.50	ug/l	25.0		92	80-120			
Toluene	23.6	0.50	ug/l	25.0		94	75-120			
o-Xylene	22.4	0.50	ug/l	25.0		90	75-125			
m,p-Xylenes	45.0	1.0	ug/l	50.0		90	75-120			
Xylenes, Total	67.4	1.5	ug/l	75.0		90	75-125			
Di-isopropyl Ether (DIPE)	26.7	5.0	ug/l	25.0		107	65-135			
Ethyl tert-Butyl Ether (ETBE)	26.7	5.0	ug/l	25.0		107	60-140			
tert-Amyl Methyl Ether (TAME)	29.0	5.0	ug/l	25.0		116	60-140			
Methyl-tert-butyl Ether (MTBE)	30.1	1.0	ug/l	25.0		120	55-145			
tert-Butanol (TBA)	109	25	ug/l	125		87	70-140			
Surrogate: Dibromofluoromethane	*26.4*		*ug/l*	*25.0*		*106*	*80-120*			
Surrogate: Toluene-d8	*25.7*		*ug/l*	*25.0*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*25.6*		*ug/l*	*25.0*		*102*	*80-120*			

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Project Manager

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SECOR-San Diego/ChevronTexaco
2655 Camino del Rio North, Suite 302
San Diego, CA 92108
Attention: Maurice Baron

Project ID: Chevron 9-1197

Report Number: INK0572

Sampled: 11/05/04
Received: 11/08/04

METHOD BLANK/QC DATA

BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 4K16038 Extracted: 11/16/04										
Matrix Spike Analyzed: 11/17/04 (4K16038-MS1)					**Source: INK0571-07**					
Benzene	25.3	0.50	ug/l	25.0	3.1	89	70-120			
Ethylbenzene	24.0	0.50	ug/l	25.0	1.0	92	70-130			
Toluene	30.0	0.50	ug/l	25.0	8.0	88	70-120			
o-Xylene	23.2	0.50	ug/l	25.0	0.99	89	65-125			
m,p-Xylenes	48.1	1.0	ug/l	50.0	4.6	87	65-130			
Xylenes, Total	71.3	1.5	ug/l	75.0	5.6	88	65-135			
Di-isopropyl Ether (DIPE)	25.5	5.0	ug/l	25.0	ND	102	65-140			
Ethyl tert-Butyl Ether (ETBE)	23.8	5.0	ug/l	25.0	ND	95	60-140			
tert-Amyl Methyl Ether (TAME)	24.6	5.0	ug/l	25.0	ND	98	55-145			
Methyl-tert-butyl Ether (MTBE)	23.7	1.0	ug/l	25.0	ND	95	50-155			
tert-Butanol (TBA)	170	25	ug/l	125	57	90	65-145			
Surrogate: Dibromofluoromethane	*26.2*		*ug/l*	*25.0*		*105*	*80-120*			
Surrogate: Toluene-d8	*25.8*		*ug/l*	*25.0*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*25.5*		*ug/l*	*25.0*		*102*	*80-120*			
Matrix Spike Dup Analyzed: 11/17/04 (4K16038-MSD1)					**Source: INK0571-07**					
Benzene	25.6	0.50	ug/l	25.0	3.1	90	70-120	1	20	
Ethylbenzene	23.6	0.50	ug/l	25.0	1.0	90	70-130	2	20	
Toluene	30.0	0.50	ug/l	25.0	8.0	88	70-120	0	20	
o-Xylene	23.0	0.50	ug/l	25.0	0.99	88	65-125	1	20	
m,p-Xylenes	48.2	1.0	ug/l	50.0	4.6	87	65-130	0	25	
Xylenes, Total	71.2	1.5	ug/l	75.0	5.6	87	65-135	0	20	
Di-isopropyl Ether (DIPE)	24.8	5.0	ug/l	25.0	ND	99	65-140	3	25	
Ethyl tert-Butyl Ether (ETBE)	23.2	5.0	ug/l	25.0	ND	93	60-140	3	25	
tert-Amyl Methyl Ether (TAME)	23.3	5.0	ug/l	25.0	ND	93	55-145	5	30	
Methyl-tert-butyl Ether (MTBE)	22.8	1.0	ug/l	25.0	ND	91	50-155	4	25	
tert-Butanol (TBA)	179	25	ug/l	125	57	98	65-145	5	25	
Surrogate: Dibromofluoromethane	*25.9*		*ug/l*	*25.0*		*104*	*80-120*			
Surrogate: Toluene-d8	*25.8*		*ug/l*	*25.0*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*25.1*		*ug/l*	*25.0*		*100*	*80-120*			

Del Mar Analytical, Irvine
Chris Roberts For Kathleen A. Robb
Project Manager

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SECOR-San Diego/ChevronTexaco
2655 Camino del Rio North, Suite 302
San Diego, CA 92108
Attention: Maurice Baron

Project ID: Chevron 9-1197

Report Number: INK0572

Sampled: 11/05/04
Received: 11/08/04

METHOD BLANK/QC DATA

BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 4K17010 Extracted: 11/17/04										
Blank Analyzed: 11/17/04 (4K17010-BLK1)										
Benzene	ND	0.50	ug/l							
Ethylbenzene	ND	0.50	ug/l							
Toluene	ND	0.50	ug/l							
o-Xylene	ND	0.50	ug/l							
m,p-Xylenes	ND	1.0	ug/l							
Xylenes, Total	ND	1.5	ug/l							
Di-isopropyl Ether (DIPE)	ND	5.0	ug/l							
Ethyl tert-Butyl Ether (ETBE)	ND	5.0	ug/l							
tert-Amyl Methyl Ether (TAME)	ND	5.0	ug/l							
Methyl-tert-butyl Ether (MTBE)	ND	1.0	ug/l							
tert-Butanol (TBA)	ND	25	ug/l							
Surrogate: Dibromofluoromethane	*23.9*		*ug/l*	*25.0*		*96*	*80-120*			
Surrogate: Toluene-d8	*26.5*		*ug/l*	*25.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*23.3*		*ug/l*	*25.0*		*93*	*80-120*			
LCS Analyzed: 11/17/04 (4K17010-BS1)										
Benzene	20.7	0.50	ug/l	25.0		83	70-120			
Ethylbenzene	21.7	0.50	ug/l	25.0		87	80-120			
Toluene	21.2	0.50	ug/l	25.0		85	75-120			
o-Xylene	21.2	0.50	ug/l	25.0		85	75-125			
m,p-Xylenes	43.0	1.0	ug/l	50.0		86	75-120			
Xylenes, Total	64.3	1.5	ug/l	75.0		86	75-125			
Di-isopropyl Ether (DIPE)	20.7	5.0	ug/l	25.0		83	65-135			
Ethyl tert-Butyl Ether (ETBE)	20.7	5.0	ug/l	25.0		83	60-140			
tert-Amyl Methyl Ether (TAME)	21.7	5.0	ug/l	25.0		87	60-140			
Methyl-tert-butyl Ether (MTBE)	21.1	1.0	ug/l	25.0		84	55-145			
tert-Butanol (TBA)	108	25	ug/l	125		86	70-140			
Surrogate: Dibromofluoromethane	*24.5*		*ug/l*	*25.0*		*98*	*80-120*			
Surrogate: Toluene-d8	*26.6*		*ug/l*	*25.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*24.2*		*ug/l*	*25.0*		*97*	*80-120*			

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SECOR-San Diego/ChevronTexaco
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Attention: Maurice Baron

Project ID: Chevron 9-1197

Report Number: INK0572

Sampled: 11/05/04
Received: 11/08/04

METHOD BLANK/QC DATA

BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 4K17010 Extracted: 11/17/04										
Matrix Spike Analyzed: 11/17/04 (4K17010-MS1)					**Source: INK0569-10**					
Benzene	25.8	0.50	ug/l	25.0	ND	103	70-120			
Ethylbenzene	26.3	0.50	ug/l	25.0	ND	105	70-130			
Toluene	26.1	0.50	ug/l	25.0	ND	104	70-120			
o-Xylene	25.2	0.50	ug/l	25.0	ND	101	65-125			
m,p-Xylenes	51.4	1.0	ug/l	50.0	ND	103	65-130			
Xylenes, Total	76.6	1.5	ug/l	75.0	ND	102	65-135			
Di-isopropyl Ether (DIPE)	26.6	5.0	ug/l	25.0	ND	106	65-140			
Ethyl tert-Butyl Ether (ETBE)	26.7	5.0	ug/l	25.0	ND	107	60-140			
tert-Amyl Methyl Ether (TAME)	28.6	5.0	ug/l	25.0	ND	114	55-145			
Methyl-tert-butyl Ether (MTBE)	28.3	1.0	ug/l	25.0	ND	113	50-155			
tert-Butanol (TBA)	130	25	ug/l	125	ND	104	65-145			
Surrogate: Dibromofluoromethane	*24.6*		*ug/l*	*25.0*		*98*	*80-120*			
Surrogate: Toluene-d8	*26.4*		*ug/l*	*25.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*24.3*		*ug/l*	*25.0*		*97*	*80-120*			
Matrix Spike Dup Analyzed: 11/17/04 (4K17010-MSD1)					**Source: INK0569-10**					
Benzene	25.8	0.50	ug/l	25.0	ND	103	70-120	0	20	
Ethylbenzene	26.5	0.50	ug/l	25.0	ND	106	70-130	1	20	
Toluene	26.0	0.50	ug/l	25.0	ND	104	70-120	0	20	
o-Xylene	25.6	0.50	ug/l	25.0	ND	102	65-125	2	20	
m,p-Xylenes	51.9	1.0	ug/l	50.0	ND	104	65-130	1	25	
Xylenes, Total	77.5	1.5	ug/l	75.0	ND	103	65-135	1	20	
Di-isopropyl Ether (DIPE)	26.6	5.0	ug/l	25.0	ND	106	65-140	0	25	
Ethyl tert-Butyl Ether (ETBE)	26.6	5.0	ug/l	25.0	ND	106	60-140	0	25	
tert-Amyl Methyl Ether (TAME)	28.2	5.0	ug/l	25.0	ND	113	55-145	1	30	
Methyl-tert-butyl Ether (MTBE)	27.1	1.0	ug/l	25.0	ND	108	50-155	4	25	
tert-Butanol (TBA)	139	25	ug/l	125	ND	111	65-145	7	25	
Surrogate: Dibromofluoromethane	*24.6*		*ug/l*	*25.0*		*98*	*80-120*			
Surrogate: Toluene-d8	*26.4*		*ug/l*	*25.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*24.3*		*ug/l*	*25.0*		*97*	*80-120*			

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Chris Roberts For Kathleen A. Robb
Project Manager

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Attention: Maurice Baron

Project ID: Chevron 9-1197

Report Number: INK0572

Sampled: 11/05/04
Received: 11/08/04

METHOD BLANK/QC DATA

BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 4K17022 Extracted: 11/17/04										
Blank Analyzed: 11/17/04 (4K17022-BLK1)										
Benzene	ND	0.50	ug/l							
Ethylbenzene	ND	0.50	ug/l							
Toluene	ND	0.50	ug/l							
o-Xylene	ND	0.50	ug/l							
m,p-Xylenes	ND	1.0	ug/l							
Xylenes, Total	ND	1.5	ug/l							
Di-isopropyl Ether (DIPE)	ND	5.0	ug/l							
Ethyl tert-Butyl Ether (ETBE)	ND	5.0	ug/l							
tert-Amyl Methyl Ether (TAME)	ND	5.0	ug/l							
Methyl-tert-butyl Ether (MTBE)	ND	1.0	ug/l							
tert-Butanol (TBA)	ND	25	ug/l							
Surrogate: Dibromofluoromethane	*23.9*		*ug/l*	*25.0*		*96*	*80-120*			
Surrogate: Toluene-d8	*26.2*		*ug/l*	*25.0*		*105*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*23.1*		*ug/l*	*25.0*		*92*	*80-120*			
LCS Analyzed: 11/17/04 (4K17022-BS1)										
Benzene	25.6	0.50	ug/l	25.0		102	70-120			
Ethylbenzene	26.0	0.50	ug/l	25.0		104	80-120			
Toluene	25.7	0.50	ug/l	25.0		103	75-120			
o-Xylene	25.2	0.50	ug/l	25.0		101	75-125			
m,p-Xylenes	51.3	1.0	ug/l	50.0		103	75-120			
Xylenes, Total	76.4	1.5	ug/l	75.0		102	75-125			
Di-isopropyl Ether (DIPE)	26.7	5.0	ug/l	25.0		107	65-135			
Ethyl tert-Butyl Ether (ETBE)	26.2	5.0	ug/l	25.0		105	60-140			
tert-Amyl Methyl Ether (TAME)	27.2	5.0	ug/l	25.0		109	60-140			
Methyl-tert-butyl Ether (MTBE)	26.8	1.0	ug/l	25.0		107	55-145			
tert-Butanol (TBA)	123	25	ug/l	125		98	70-140			
Surrogate: Dibromofluoromethane	*24.8*		*ug/l*	*25.0*		*99*	*80-120*			
Surrogate: Toluene-d8	*26.3*		*ug/l*	*25.0*		*105*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*24.2*		*ug/l*	*25.0*		*97*	*80-120*			

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Project ID: Chevron 9-1197

Report Number: INK0572

Sampled: 11/05/04
Received: 11/08/04

METHOD BLANK/QC DATA

BTEX/OXYGENATES by GC/MS (EPA 8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 4K17022 Extracted: 11/17/04										
Matrix Spike Analyzed: 11/17/04 (4K17022-MS1)					**Source: INK0569-06**					
Benzene	26.0	0.50	ug/l	25.0	ND	104	70-120			
Ethylbenzene	26.9	0.50	ug/l	25.0	ND	108	70-130			
Toluene	26.6	0.50	ug/l	25.0	0.54	104	70-120			
o-Xylene	25.8	0.50	ug/l	25.0	ND	103	65-125			
m,p-Xylenes	52.2	1.0	ug/l	50.0	ND	104	65-130			
Xylenes, Total	78.0	1.5	ug/l	75.0	ND	104	65-135			
Di-isopropyl Ether (DIPE)	27.7	5.0	ug/l	25.0	ND	111	65-140			
Ethyl tert-Butyl Ether (ETBE)	27.3	5.0	ug/l	25.0	ND	109	60-140			
tert-Amyl Methyl Ether (TAME)	27.8	5.0	ug/l	25.0	ND	111	55-145			
Methyl-tert-butyl Ether (MTBE)	27.8	1.0	ug/l	25.0	ND	111	50-155			
tert-Butanol (TBA)	129	25	ug/l	125	8.5	96	65-145			
Surrogate: Dibromofluoromethane	*25.7*		*ug/l*	*25.0*		*103*	*80-120*			
Surrogate: Toluene-d8	*26.4*		*ug/l*	*25.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*25.0*		*ug/l*	*25.0*		*100*	*80-120*			
Matrix Spike Dup Analyzed: 11/17/04 (4K17022-MSD1)					**Source: INK0569-06**					
Benzene	25.8	0.50	ug/l	25.0	ND	103	70-120	1	20	
Ethylbenzene	26.0	0.50	ug/l	25.0	ND	104	70-130	3	20	
Toluene	26.2	0.50	ug/l	25.0	0.54	103	70-120	2	20	
o-Xylene	25.2	0.50	ug/l	25.0	ND	101	65-125	2	20	
m,p-Xylenes	51.6	1.0	ug/l	50.0	ND	103	65-130	1	25	
Xylenes, Total	76.8	1.5	ug/l	75.0	ND	102	65-135	2	20	
Di-isopropyl Ether (DIPE)	26.9	5.0	ug/l	25.0	ND	108	65-140	3	25	
Ethyl tert-Butyl Ether (ETBE)	26.5	5.0	ug/l	25.0	ND	106	60-140	3	25	
tert-Amyl Methyl Ether (TAME)	27.1	5.0	ug/l	25.0	ND	108	55-145	3	30	
Methyl-tert-butyl Ether (MTBE)	26.8	1.0	ug/l	25.0	ND	107	50-155	4	25	
tert-Butanol (TBA)	161	25	ug/l	125	8.5	122	65-145	22	25	
Surrogate: Dibromofluoromethane	*25.1*		*ug/l*	*25.0*		*100*	*80-120*			
Surrogate: Toluene-d8	*26.3*		*ug/l*	*25.0*		*105*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*25.1*		*ug/l*	*25.0*		*100*	*80-120*			

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Project Manager

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Sampled: 11/05/04
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DATA QUALIFIERS AND DEFINITIONS

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.

RPD Relative Percent Difference

ADDITIONAL COMMENTS

For 8260 analyses:

Due to the high water solubility of alcohols and ketones, the calibration criteria for these compounds is <30% RSD.
The average % RSD of all compounds in the calibration is 15%, in accordance with EPA methods.

For Volatile Fuel Hydrocarbons (C4-C12):

Volatile Fuel Hydrocarbons (C4-C12) are quantitated against a gasoline standard. Quantitation begins immediately before TBA-d9.

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1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (949) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

SECOR-San Diego/ChevronTexaco
2655 Camino del Rio North, Suite 302
San Diego, CA 92108
Attention: Maurice Baron

Project ID: Chevron 9-1197

Report Number: INK0572

Sampled: 11/05/04
Received: 11/08/04

Certification Summary

Del Mar Analytical, Irvine

Method	Matrix	NELAP	CA
EPA 8260B	Water	X	X
TPH by GC/MS	Water	X	X

NV and NELAP provide analyte specific accreditations. Analyte specific information for Del Mar Analytical may be obtained by contacting the laboratory or visiting our website at www.dmalabs.com.

Del Mar Analytical, Irvine
Chris Roberts For Kathleen A. Robb
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

CHAIN OF CUSTODY FORM

Chevron Environmental Management Company ■ 145 S. State College Boulevard ■ Brea, CA 92822-2292 COC 1 of 1

Chevron Site Global ID: TO607301337

Chevron Site Number 9-1197

Chevron Site Address: 8808 Lawerence Welk Dr., Escondido

Chevron PM: SECOR: c/o Madelaine Montilla
2301 Leghorn, Mountain View, CA 94043

Chevron MT PM Phone No.: (650) 691-0131 x 235

MT Job No: MTCH.91197.08

Chevron Service Code: *ZZ02800*
X Management Transfer – SO CA Portfolio Job
~~☐ Construction/Retail Job or~~
~~☐ Retail and Terminal Business Unit (RTBU) Job~~

NOTE:
THIS IS A LEGAL DOCUMENT. ALL FIELDS MUST BE FILLED OUT CORRECTLY AND COMPLETELY.

Chevron Consultant: SECOR International, Inc.
Address: 2301 Leghorn, Mountain View, CA 94043
Consultant Contact: Maurice Baron
Consultant Phone No. (650) 691-0131
Consultant Project No. MTCH.91197.08
Sampling Company: BTST
Sampled By (Print): Chris Davis
Sampler Signature: [signature]

Del Mar Analytical
X Irvine, CA
☐ Colton, CA
Lab Contact: _____
Phone No:
☐ (949) 261-1022
☐ (909) 370-4667

Lancaster Laboratories
☐ Lancaster, PA
Lab Contact:
Teresa Cunningham
Phone No:
☐ (717) 656-2300

EDF Required?
☑ Yes
☐ No

ANALYSES REQUIRED

Special Instructions: INK0572

Temp. Blank Check

Time	Temp.
800	1°C
1200	1°C
1600	1°C

Field Point Name	Matrix	Top Depth	Date (yymmdd)	Sample Time	Container Type	# of Containers	Preservation	EPA 8015B GRO ☐ DRO ☐ ORO ☐ TPHd ☐ HC SCREEN ☐	EPA 8021B BTEX ☐ MTBE ☐	EPA 8260B TPH-G ☒ BTEX ☒ MTBE ☐ OXYGENATES ☒ HVOC ☐	EPA 6010 CA, FE, K, MG, MN, NA ☐	EPA 6010/7000 TITLE 22 METALS ☐ TTLC ☐ STLC ☐	EPA 310.1 ALKALINITY ☐ / EPA 150.1 PH ☐	SM 2510B SPECIFIC CONDUCTIVITY ☐	EPA 413.1 OIL/GREASES ☐ / EPA 418.1 TRPH ☐				Notes/Comments
MW-1	W		041105	1237	VOA	4	HCL			X									
MW-2	↓		↓	1322	↓	↓	↓			X									
MW-3	↓		↓	1410	↓	↓	↓			X									
MW-4	↓		↓	938	↓	↓	↓			X									
MW-5	↓		↓	1400	↓	↓	↓			X									
MW-6	↓		↓	1030	↓	↓	↓			X									
Ag. Well	↓		↓	1354	↓	↓	↓			X									

INITIAL RS

Relinquished By	Company	Date/Time	Relinquished To	Company
Chris Davis	BTS	11/8/04 1145	Locked Refrigerator	
			DMAE 11-8-04 1145	[signature]
[signature]		11/8/04 1730		11/8/04 1730

Turnaround Time:
24 Hours ☐ Standard ☒
48 hours ☐ Other ☐

Sample Integrity: (Check by lab on arrival)
Intact ☐ On Ice ☐ Temp: 2°C

SCOPE OF WORK as of 11/4/2004

GROUNDWATER MONITORING AT CHEVRON

SITE ADDRESS: **8808 LAWRENCE WELK DR.** Lab: **DEL MAR**
CITY: **ESCONDIDO** Phone: (949) 261-1022
COUNTY: **SAN DIEGO** Release #:

Lock/Key: 3910 Engineer:
Gauge to: **TOC** Phone #:

Site #: 9-1197
Consultant: SECOR Mountain View
Name: Maurice Baron
Phone: (650)691-0131
Rpt due date:

Required regulatory notifications/ cooperative sampling requirements:

Well I.D.	Required Analyses	Sampling Frequency	Sampling Months	Gauging Frequency	Remedial Devices	Notes & Tasks (bail SPH, install skimmer, etc.)
MW-1	**TPH-G, BTEX and OXYGENATES by 8260**	ANNUAL	APRIL	ANNUAL		**HB/FR**
MW-2	**TPH-G, BTEX and OXYGENATES by 8260**	ANNUAL	APRIL	ANNUAL		**HB/FR**
MW-3	**TPH-G, BTEX and OXYGENATES by 8260**	ANNUAL	APRIL	ANNUAL		**HB/FR**
MW-4	**TPH-G, BTEX and OXYGENATES by 8260**	ANNUAL	APRIL	ANNUAL		**HB/FR**
MW-5	**TPH-G, BTEX and OXYGENATES by 8260**	ANNUAL	APRIL	ANNUAL		**HB/FR**
MW-6	**TPH-G, BTEX and OXYGENATES by 8260**	ANNUAL	APRIL	ANNUAL		**HB/FR**
Ag. Well	**TPH-G, BTEX and OXYGENATES by 8260**	Confirm With PC	APRIL	Confirm With PC		**Sample from cleaned fuacet**

CHANGES AND SPECIAL INSTRUCTIONS:
BOTTLE SET:
-TPH-G, BTEX, Oxygenates - 4 HCL voas

WELL GAUGING DATA

Project # 041105-001 Date 11/5/04 Client Chevron

Site 8808 Lawrence Welk dr, Escondido

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
MW-1	4					22.10	25.47		
MW-2	4					21.81	24.38		
MW-3	4					18.63	23.05		
MW-4	4					22.75	25.16		
MW-5	4					22.95	23.83		
MW-6	4					22.50	23.80		

SAN DIEGO COUNTY CHEVRON WELL MONITORING DATA SHEET

BTS #: 041105-CD1	Site: 9-1197
Sampler: CD	Date: 11/5/04
Weather: Sunny	Ambient Air Temperature: 71°F
Well I.D.: MW-1	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 25.47	Depth to Water: 22.10
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 22.77	

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

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

5.1 (Gals.) X 1.5 = 7.65 Gals.
1 Borehole Volume — Specified Volumes — Calculated Volume

CD	BD	Multiplier	CD	BD	Mulitplier	CD	BD	Multiplier
2"	8"	0.8	4"	8"	1.1	6"	10"	2.1
2"	10"	1.1	4"	10"	1.5	6"	12"	2.6
			4"	12"	2.0			

Assumes 25% borehole porosity
CD = casing diameter BD = borehole diameter

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1055	72.5	7.2	3003	76	5.5	
1108	72.1	7.1	2947	22	8	
						Fe++ 0.0

Did well dewater? Yes (No) Gallons actually evacuated: 8

Sampling Date: 11/5/04 Sampling Time: 1237 Depth to Water: 22.10

Sample I.D.: MW-1 Laboratory: (Del Mar) Other_____

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

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

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

D.O. (if req'd):	Pre-purge:	mg/L	(Post-purge):	0.49 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	(Post-purge):	39 mV

SAN DIEGO COUNTY CHEVRON WELL MONITORING DATA SHEET

BTS #: 041105-CD1	Site: ~~9-1179~~ 9-1197
Sampler: CD	Date: 11/5/04
Weather: Sunny	Ambient Air Temperature: 72°F
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 24.38	Depth to Water: 21.81
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 22.32	

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

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

3.9 (Gals.) X 1.5 = 5.85 Gals.
1 Borehole Volume — Specified Volumes — Calculated Volume

CD	BD	Multiplier	CD	BD	Mulitplier	CD	BD	Multiplier
2"	8"	0.8	4"	8"	1.1	6"	10"	2.1
2"	10"	1.1	4"	10"	1.5	6"	12"	2.6
			4"	12"	2.0			

Assumes 25% borehole porosity
CD = casing diameter BD = borehole diameter

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1208	72.9	6.3	1940	103	4	
	— Well dewatered @ 4 gal					
1254	72.8	6.3	2036	177	6	
						Fe^{++} 0.0

Did well dewater? (Yes) No Gallons actually evacuated: 6

Sampling Date: 11/5/04 Sampling Time: 1327 Depth to Water: 22.30

Sample I.D.: MW-2 Laboratory: (Del Mar) Other_____

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

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

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

D.O. (if req'd):	Pre-purge:	mg/L	~~Post-purge:~~	~~0.10~~ 0.18 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	~~Post-purge:~~	-90 mV

SAN DIEGO COUNTY CHEVRON WELL MONITORING DATA SHEET

BTS #: 041105-01	Site: 9-1197
Sampler: CD	Date: 11/5/04
Weather: Sunny	Ambient Air Temperature:
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 23.05	Depth to Water: 18.63
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 19.51	

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

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

6.6 (Gals.) X 1.5 = 9.9 Gals.
1 Borehole Volume — Specified Volumes — Calculated Volume

CD	BD	Multiplier	CD	BD	Mulitplier	CD	BD	Multiplier
2"	8"	0.8	4"	8"	1.1	6"	10"	2.1
2"	10"	1.1	4"	10"	1.5	6"	12"	2.6
			4"	12"	2.0			

Assumes 25% borehole porosity
CD = casing diameter BD = borehole diameter

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
956	- Well dewatered @ 3 gal					
1226	72.7	6.3	1605	12.4	7	
	- Well dewatered @ 7 gal					
1315	72.3	6.3	1712	26	10	Well dewatered
						Fe^{+4} 0.0

Did well dewater? (Yes) No Gallons actually evacuated: 10

Sampling Date: 11/5/04 Sampling Time: ~~1402~~ 1410 Depth to Water: 19.50

Sample I.D.: MW-3 Laboratory: (Del Mar) Other_____

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

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

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

D.O. (if req'd):	Pre-purge:	mg/L	(Post-purge):	1.01	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	(Post-purge):	-10	mV

SAN DIEGO COUNTY CHEVRON WELL MONITORING DATA SHEET

BTS #: 041105-01	Site: 9-1997
Sampler: [illegible]	Date: 11/5/04
Weather: Sunny	Ambient Air Temperature: 64°F
Well I.D.: MW-4	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 25.16	Depth to Water: 22.75
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 23.23	

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

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

3.6 (Gals.) X 1.5 = 5.4 Gals.
1 Borehole Volume — Specified Volumes — Calculated Volume

CD	BD	Multiplier	CD	BD	Mulitplier	CD	BD	Multiplier
2"	8"	0.8	4"	8"	1.1	6"	10"	2.1
2"	10"	1.1	4"	10"	1.5	6"	12"	2.6
			4"	12"	2.0			

Assumes 25% borehole porosity
CD = casing diameter BD = borehole diameter

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
924	67.8	6.5	2069	124	4	
928	67.4	6.4	2039	42	5.5	
						FeH 0.0

Did well dewater? Yes (No) Gallons actually evacuated: 5.5

Sampling Date: 11/5/04 Sampling Time: 938 Depth to Water: 23.20

Sample I.D.: MW-4 Laboratory: (Del Mar) Other_____

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

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

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

D.O. (if req'd):	Pre-purge:	mg/L	(Post-purge):	0.76 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	(Post-purge):	-11 mV

SAN DIEGO COUNTY CHEVRON WELL MONITORING DATA SHEET

BTS #: 041105-CD1	Site: 9-1197
Sampler: CD	Date: 11/5/04
Weather: sunny	Ambient Air Temperature: 76 °F
Well I.D.: MW-5	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 23.83	Depth to Water: 22.95
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 23.12	

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

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

1.3 (Gals.) X 1.5 = 1.95 Gals.
1 Borehole Volume — Specified Volumes — Calculated Volume

CD	BD	Multiplier	CD	BD	Mulitplier	CD	BD	Multiplier
2"	8"	0.8	4"	8"	1.1	6"	10"	2.1
2"	10"	1.1	4"	10"	1.5	6"	12"	2.6
			4"	12"	2.0			

Assumes 25% borehole porosity
CD = casing diameter BD = borehole diameter

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1152	— Well dewatered @ .5 gal					
	— Slow Recharging Well					
1400	68.7	6.3	5262	7	—	
						Fe^{++} 1.0 mg/L

Did well dewater? (Yes) No Gallons actually evacuated 0.5

Sampling Date: 11/5/04 Sampling Time: 1400 Depth to Water: 23.31

Sample I.D.: MW-5 Laboratory: (Del Mar) Other_____

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

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

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

D.O. (if req'd):	Pre-purge:	mg/L	(Post-purge):	0.14 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	(Post-purge):	-10 mV

SAN DIEGO COUNTY CHEVRON WELL MONITORING DATA SHEET

BTS #: 041105-DD1	Site: 9-1197
Sampler: DD	Date: 11/5/04
Weather: Sunny	Ambient Air Temperature: 68°F
Well I.D.: MW-6	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 23.80	Depth to Water: 22.50
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 22.76	

Purge Method: Bailer, (Disposable Bailer), Positive Air Displacement, Fixed Electric Submersible, Variable Electric Submersible, Waterra, Peristaltic, Extraction Pump, Other ___

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

2.0 (Gals.) X 1.5 = 3.0 Gals.
1 Borehole Volume — Specified Volumes — Calculated Volume

CD	BD	Multiplier	CD	BD	Multiplier	CD	BD	Multiplier
2"	8"	0.8	4"	8"	1.1	6"	10"	2.1
2"	10"	1.1	4"	10"	1.5	6"	12"	2.6
			4"	12"	2.0			

Assumes 25% borehole porosity
CD = casing diameter BD = borehole diameter

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1016	66.7	6.7	1900	315	2	
1024	68.0	6.7	1906	103	3	
						Fe^{+2} 0.0

Did well dewater? Yes (No) Gallons actually evacuated: 3

Sampling Date: ~~11/5~~ 11/5/04 Sampling Time: 1030 Depth to Water: 22.76

Sample I.D.: MW-6 Laboratory: (Del Mar) Other ___

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

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

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

D.O. (if req'd):	Pre-purge:	mg/L	(Post-purge):	1.38 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	(Post-purge):	-10 mV

SAN DIEGO COUNTY CHEVRON WELL MONITORING DATA SHEET

BTS #: 041105-CD1	Site: 9-1179
Sampler: CD	Date: 11/5/04
Weather: Partly Cloudy	Ambient Air Temperature:
Well I.D.: Ag. Well	Well Diameter: 2 3 4 6 8 ___
Total Well Depth:	Depth to Water:
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

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

___(Gals.) X ___ = ___ Gals.
1 Borehole Volume — Specified Volumes — Calculated Volume

CD	BD	Multiplier	CD	BD	Mulitplier	CD	BD	Multiplier
2"	8"	0.8	4"	8"	1.1	6"	10"	2.1
2"	10"	1.1	4"	10"	1.5	6"	12"	2.6
			4"	12"	2.0			

Assumes 25% borehole porosity
CD = casing diameter BD = borehole diameter

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
— Opened faucet and Purged for 15 Min. Prior						
to sampling						
— Cleaned faucet prior to Purging & Sampling						
1354	67.8	6.5	2320	1	—	Fe++ 0.0

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: 11/5/04 Sampling Time: 1354 Depth to Water:

Sample I.D.: Ag. Well Laboratory: Del Mar Other ___

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

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

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	4.40 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	36 mV

CHAIN OF CUSTODY FORM

Chevron Environmental Management Company ▪ 145 S. State College Boulevard ▪ Brea, CA 92822-2292 COC 1 of 1

Chevron Site Global ID: TO607301337

Chevron Site Number 9-1197

Chevron Site Address: 8808 Lawerence Welk Dr., Escondido

Chevron PM: SECOR: c/o Madelaine Montilla
2301 Leghorn, Mountain View, CA 94043

Chevron MT PM Phone No.: (650) 691-0131 x 235

MT Job No: MTCH.91197.08

Chevron Service Code: *ZZ02800*
X Management Transfer – SO CA Portfolio Job
~~☐ Construction/Retail Job or~~
~~☐ Retail and Terminal Business Unit (RTBU) Job~~

NOTE:
THIS IS A LEGAL DOCUMENT. ALL FIELDS MUST BE FILLED OUT CORRECTLY AND COMPLETELY.

Chevron Consultant: SECOR International, Inc.
Address: 2301 Leghorn, Mountain View, CA 94043
Consultant Contact: Maurice Baron
Consultant Phone No. (650) 691-0131
Consultant Project No. MTCH.91197.08
Sampling Company: BTST
Sampled By (Print): Chris Davis
Sampler Signature: [signature]

Del Mar Analytical	Lancaster Laboratories	EDF Required?
X Irvine, CA ☐ Colton, CA Lab Contact: _____ Phone No: ☐ (949) 261-1022 ☐ (909) 370-4667	☐ Lancaster, PA Lab Contact: Teresa Cunningham Phone No: ☐ (717) 656-2300	☑ Yes ☐ No

ANALYSES REQUIRED

SAMPLE ID								EPA 8015B GRO ☐ DRO ☐ ORO ☐ TPHd ☐ HC SCREEN ☐	EPA 8021B BTEX ☐ MTBE ☐	EPA 8260B TPH-GX ☐ BTEX ☐ MTBE ☐ OXYGENATES ☒ HVOC ☐	EPA 6010 CA, FE, K, MG, MN, NA ☐	EPA 6010/7000 TITLE 22 METALS ☐ TTLC ☐ STLC ☐	EPA 150.1 PH ☐ / EPA 310.1 ALKALINITY ☐	SM 2510B SPECIFIC CONDUCTIVITY ☐	EPA 418.1 TRPH ☐ / EPA 413.1 OIL/GREASES ☐				Special Instructions
Field Point Name	Matrix	Top Depth	Date (yymmdd)	Sample Time	Container Type	# of Containers	Preservation												Notes/Comments
MW-1	W		041105	1237	VOA	4	HCL			X									
MW-2	↓		↓	1322	↓	↓	↓			X									
MW-3	↓		↓	1440	↓	↓	↓			X									
MW-4	↓		↓	938	↓	↓	↓			X									
MW-5	↓		↓	1400	↓	↓	↓			X									
MW-6	↓		↓	1030	↓	↓	↓			X									
Ag. Well	↓		↓	1354	↓	↓	↓			X									

Temp. Blank Check

Time	Temp
600	°C
1200	°C
1600	°C

Relinquished By	Company	Date/Time:	Relinquished To	Company
Chris Davis	BTS	11/5/04	Date/Time: Locked Refrigerator	
Relinquished By	Company	Date/Time:	Relinquished To Date/Time:	Company
Relinquished By	Company	Date/Time:	Relinquished To Date/Time:	Company

Turnaround Time:
24 Hours ☐ Standard ☒
48 hours ☐ Other ☐

Sample Integrity: (Check by lab on arrival)
Intact: ____ On Ice: ____ Temp: ____

WELLHEAD INSPECTION CHECKLIST

Client Chevron Date 11/5/04

Site Address 8808 Lawrence Welk dr. Escondido

Job Number 041105-001 Technician CD

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
MW-1								X
MW-2								X
MW-3	X							
MW-4	X							
MW-5								X
MW-6	X							

NOTES:

CHEVRON-SOUTHERN CALIFORNIA TYPE **A** BILL OF LADING

SOURCE RECORD **BILL OF LADING**

FOR NON-HAZARDOUS PURGEWATER RECOVERED FROM GROUNDWATER WELLS AT CHEVRON FACILITIES IN THE STATE OF CALIFORNIA. THE NON-HAZARDOUS PURGE- WATER WHICH HAS BEEN RECOVERED FROM GROUND- WATER WELLS IS COLLECTED BY THE CONTRACTOR, MADE UP INTO LOADS OF APPROPRIATE SIZE AND HAULED BY PSC TO THEIR FACILITY IN LONG BEACH, CALIFORNIA.

The contractor performing this work is BLAINE TECH SERVICES, INC. (BLAINE), 5482 Complex St., Suite 111 San Diego, CA 92123 (phone [310] 885-4455). Blaine Tech Services, Inc. is authorized by CHEVRON PRODUCTS COMPANY to recover, collect, apportion into loads, and haul the Non-Hazardous Well Purgewater that is drawn from wells at the CHEVRON facility indicated below and to deliver that purgewater to BLAINE. Transport routing of the Non-Hazardous Well Purgewater may be direct from one Chevron facility to BLAINE; from one Chevron facility to BLAINE via another Chevron facility; or any combination thereof. The Non-Hazardous Well Purgewater is and remains the property of Chevron Products Company.

This **Source Record BILL OF LADING** was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the Chevron facility described below:

9-1197

CHEVRON #

8605 Lawrence Walk Dr Escondido Ca

street number street name city state

WELL I.D.	GALS.	WELL I.D.	GALS.
MW-1	8		
MW-2	6		
MW-3	10		
MW-4	5.5		
MW-5	0.5		
MW-6	3		

added equip. rinse water 10

any other adjustments

TOTAL GALS. RECOVERED 43

loaded onto BTS vehicle # 55

BTS event # 041105-01

time

date 11/5/01

signature

* *

REC'D AT BTS

time 1700

date 11/5/01

unloaded by

signature

L.W Dr

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME 8808 Lawrence Welldr

PROJECT NUMBER 041105-001

EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
pHrometer	614012	11/5/04 1530	PH 4,7,10 Cond 3900	4,7,10 3900	✓	72.1	[illegible]
Turbidimeter	01 03000285405	↓	0-10 0-100 0-1000	7 51 725	✓	✓	[illegible]

DATE: December 14, 2004

CHEVRONTEXACO ANNUAL GROUNDWATER MONITORING REPORT (CONT'D)
Chevron 9-1197, 8808 Lawrence Welk Drive, Escondido, CA

MONITORING WELL PURGING AND SAMPLING PROCEDURES

Monitoring well purging and sampling methods follow the procedures outlined by the County of San Diego, Environmental Health Services, Site Assessment and Mitigation (SAM) Manual.

Purging Procedures

A. Using a decontaminated instrument (i.e., tape measure, continuity meter, or interface probe) measure the depth to groundwater in reference to the measuring point at the top of the casing. Measure the total depth of the well to calculate the height and volume of water in the borehole.

B. Based on previously obtained data, if a monitoring well is suspected of containing LPH, lower a transparent bailer into the well to evaluate the presence of hydrocarbon sheen on the water table.

C. Decontaminate the purge pump and/or PVC bailers by scrubbing in Alconox detergent solution, followed by a tap water rinse and then a deionized water rinse.

D. Purge, by pumping, bailing, or using a vacuum truck with dedicated tubing, approximately one borehole volume of groundwater as calculated according to the thickness of the water column and the diameter of the borehole.

E. Conduct field measurements (i.e., pH and conductivity) after approximately one borehole volume has been purged, or if the water level in the well is so low as to prevent further purging (dry).

   1. If the well has not been purged dry, continue to bail and/or pump and conduct field measurements again following removal of each successive one-half borehole volume of water.

      a) If the first and second series of measurements vary by less than ten percent, the well has been adequately purged. Allow the well to recover to 80 percent of its static condition and begin the sampling procedure.

      b) If the measurements vary by ten percent or greater, repeat Step E1 above.

   2. If the well has been purged dry, measure the water level and allow the well to recharge to 80 percent, or for two hours, whichever occurs first. Calculate the percent recovery.

      a) If the well recovers to less than 80 percent within two hours, it is a slow recharging well. Repeat Step E1 above.

DATE: December 14, 2004

CHEVRONTEXACO ANNUAL GROUNDWATER MONITORING REPORT (CONT'D)
Chevron 9-1197, 8808 Lawrence Welk Drive, Escondido, CA

Sampling Procedures

A. Use a disposable bailer to collect the groundwater sample.

B. Fit the stopcock onto the base of the bailer and transfer the groundwater sample into the appropriate container(s). Where applicable, some containers are completely filled to achieve zero headspace. Label the samples according to location and date of collection.

C. Enter the samples into ChevronTexaco Chain-of-Custody protocol and preserve on ice until delivery to the analytical laboratory. Complete the Well Development or Purging/Sampling Log to be stored in the project file.

When requested by the client, collect the bailer rinsate blank of deionized water to check decontamination procedure. In addition, trip blanks prepared by the laboratory and kept with the samples may be included to check for cross contamination of samples within the cooler. Additional and/or alternate QA/QC samples can be collected and analyzed upon client request.

SECOR

SECOR
INTERNATIONAL
INCORPORATED

www.secor.com
2655 Camino Del Rio N. Suite 302
San Diego, CA 92108
619-296-6195 TEL
619-296-6199 FAX

DATE: July 21, 2005

CHEVRONTEXACO ANNUAL GROUNDWATER MONITORING REPORT

Station No.: 9-1197
Address: 8808 Lawrence Welk Drive, Escondido, CA
Chevron Environmental Manager: Mr. Dana Thurman
Consulting Co./Contact Person: SECOR / Mr. Maurice Baron Jr.
SECOR Project No.: MTCH.91197.08
Primary Agency/Regulatory ID No.: County of San Diego Land and Water Quality Division Site Assessment and Mitigation (SAM) / H05719-001
Second Quarter EDF Confirmation Number: 2034922838

WORK PERFORMED DURING SECOND QUARTER 2005:

1. Completed Second Quarter 2005 groundwater monitoring, sampling, and reporting. The sampling event took place on May 5, 2005.

WORK PROPOSED DURING THIRD QUARTER 2005:

1. Submit Corrective Action Plan with the revised Sensitive Receptor Survey and request regulatory closure for the Site.

Current Phase of Project:	Monitoring
Frequency of Sampling and Monitoring:	Annual
Are Liquid Phase Hydrocarbons (LPH) Present On-site:	No
Cumulative LPH Recovered to Date:	Unknown
LPH Recovered This Reporting Period (2nd Quarter 2005):	None
Current Remediation Techniques:	None
Permits for Discharge:	None
Second Quarter Approximate Depth to Groundwater:	14.30 to 18.13 feet below top of casing
Second Groundwater Gradient:	Northwest, 0.0089 feet per foot

DISCUSSION:

Second Quarter: Depth-to-static water (DTW) measurements in Site groundwater monitoring wells (MWs) on May 5, 2005 ranged between 14.30 and 18.13 feet below top of casing (bTOC). Calculated groundwater elevations varied from 493.82 to 496.17 feet above mean sea level (MSL). The hydraulic gradient was calculated to be 0.0089 vertical feet per horizontal foot (ft/ft), with a flow direction to the northwest. No measurable thicknesses of liquid-phase hydrocarbons (LPH) were detected in any of the gauged Site MWs during this sampling event.

All six Site MWs were sampled following the attached purge sampling procedures, which are based on SAM guidelines. Total petroleum hydrocarbons as gasoline (TPHg) were detected above laboratory detection limits (LDLs) in the samples collected from wells MW-2 and MW-5, at concentrations of 4,100 micrograms per liter (μg/L) and 25 μg/L, respectively. Benzene, toluene, ethylbenzene, and total xylenes all were detected above LDLs in one well sampled (MW-2) at concentrations of 2.0 μg/L, 0.6 μg/L, 240 μg/L, and 250 μg/L, respectively. Methyl-tert-butyl ether (MTBE) was detected above LDLs in the samples collected from wells MW-1, MW-2, MW-5, and

DATE: July 21, 2005

CHEVRONTEXACO ANNUAL GROUNDWATER MONITORING REPORT (CONT'D)
Former Chevron 9-1197, 8808 Lawrence Welk Drive, Escondido, CA

MW-6 at concentrations of 2.0 μg/L, 62 μg/L, 71 μg/L, and 14 μg/L, respectively. Tert-butyl alcohol (TBA) was detected above LDLs in the samples collected for MW-2 and MW-5 at concentrations of 110 μg/L and 13 μg/L, respectively. Di-isopropyl ether (DIPE), ethyl-tert-butyl ether (ETBE), and tert-amyl-methyl ether (TAME) were not detected above LDLs in any of the samples analyzed.

Conclusions and Recommendations: SECOR recommends that annual groundwater gauging and sampling be continued, until such time that the Site can be shown to qualify for administrative closure.

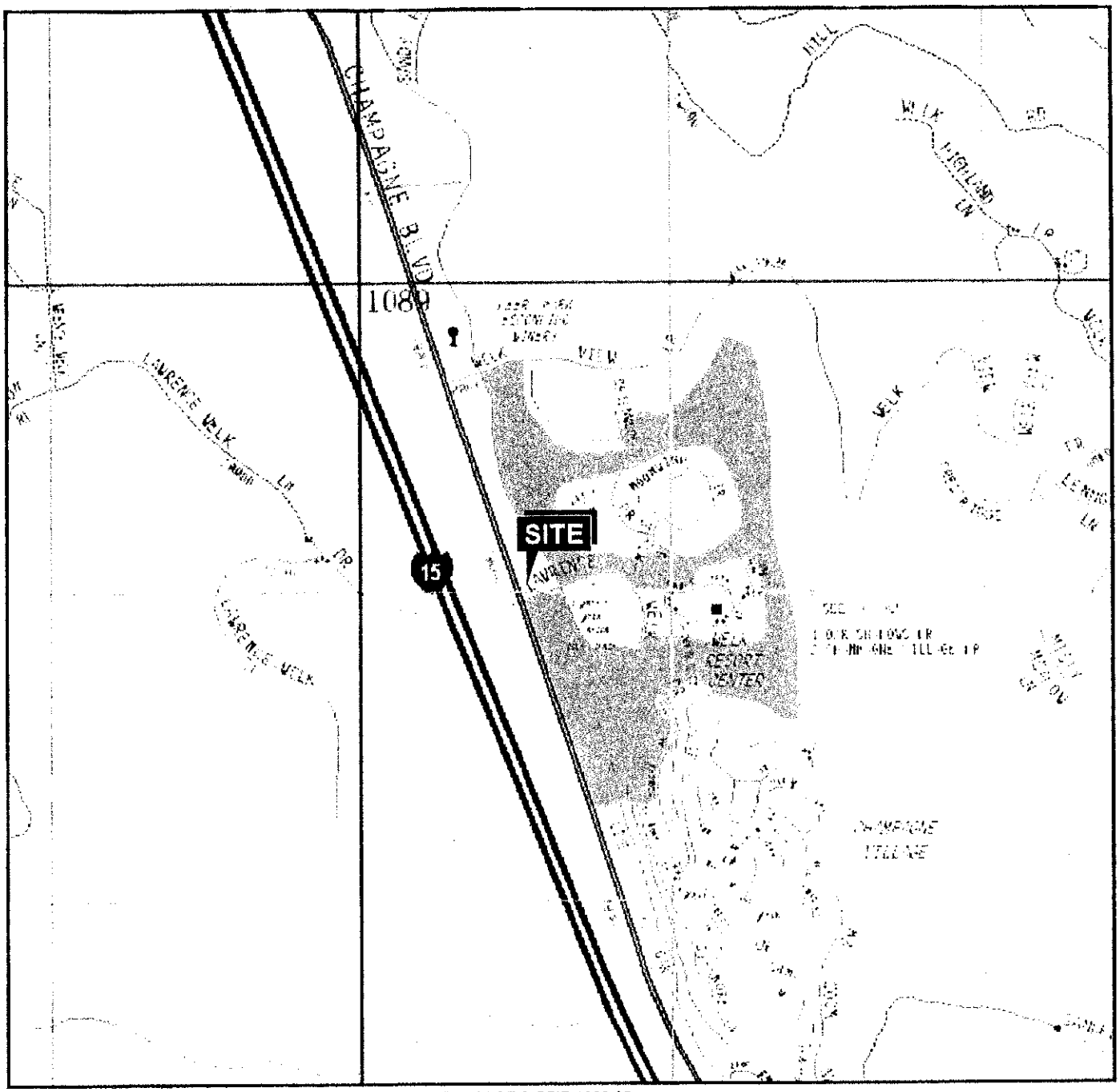
ATTACHED:

- Site Location Map (Figure 1)
- Groundwater Gradient Map – May 5, 2005 (Figure 2)
- Hydrocarbon Constituents in Groundwater Map – May 5, 2005 (Figure 3)
- Second Quarter 2005 Groundwater Levels and Chemical Analysis Results (Table 1)
- Historic Groundwater Levels and Chemical Analysis Results (Table 2)
- Hydrographs
- Laboratory Report and Chain-of-Custody Documentation
- Monitoring Well Gauging Data
- Well Purging and Sampling Logs
- Monitoring Well Purging and Groundwater Sampling Procedures

REGISTERED GEOLOGIST NO. 514 CLIFFORD R. POLLOCK Certified Engineering Geologist No. EG514 Expires 11/30/06 STATE OF CALIFORNIA

Reed Thornberry
Project Scientist

Clifford R. Pollock, CHG# 514
Principal Engineering Geologist



REFERENCE: SAN DIEGO 2003 THE THOMAS GUIDE CD-ROM, PAGE & GRID 1089 A2.

N

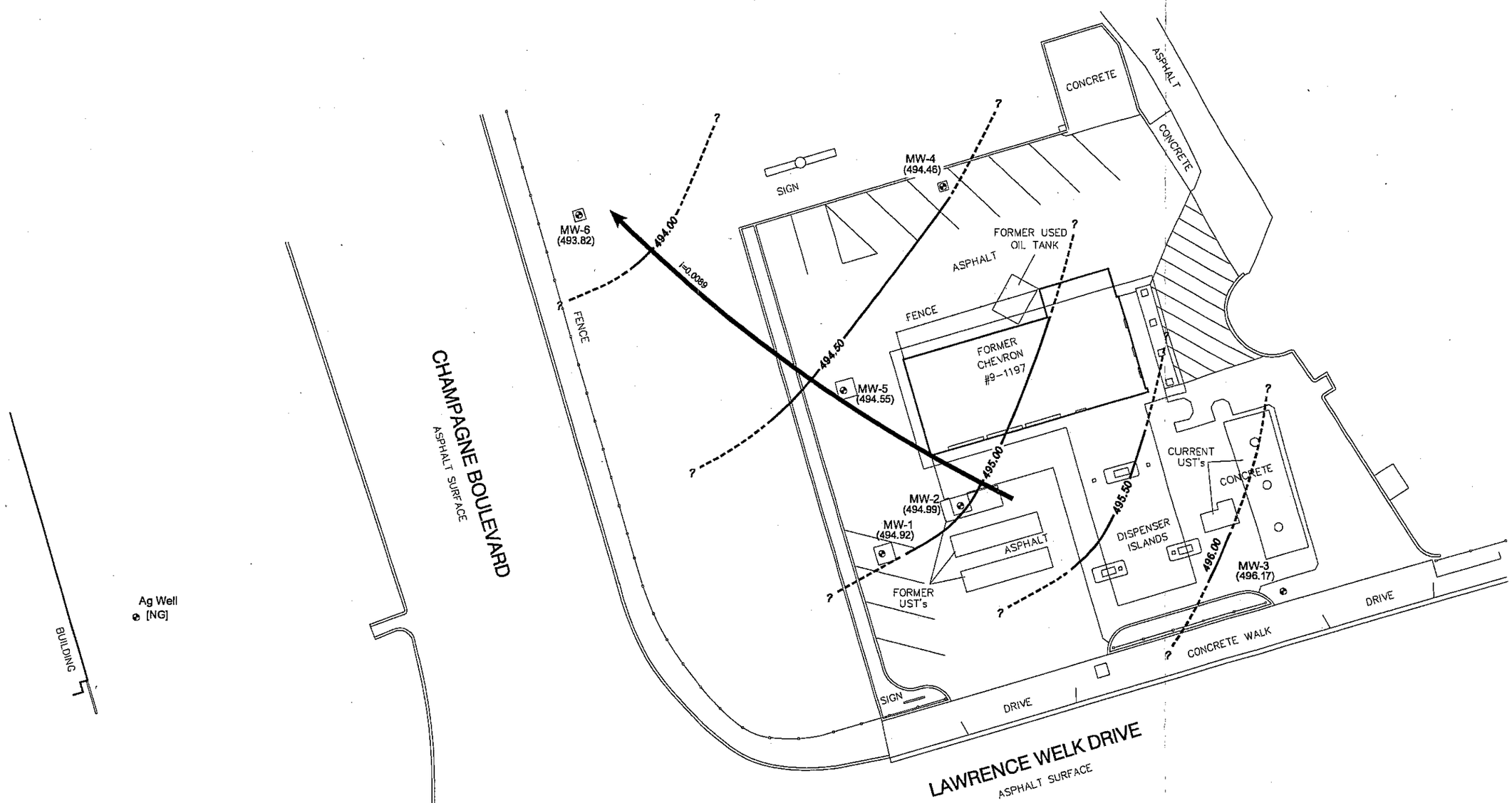
0 1320 2640

APPROXIMATE SCALE (FEET)

SECOR
2655 Camino del Rio North, Suite 302
San Diego, California 92108
PHONE (619) 296-6195 FAX (619) 296-6199

FOR:			FIGURE:
FORMER CHEVRON STATION #9-1197 8808 Lawrence Welk Drive Escondido, California		SITE LOCATION MAP	1

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
MTCH.91197.08	RO	RT		5/12/05



LEGEND:

MW-1	MONITORING WELL
(493.82)	GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (MSL)
?---494.00---	ESTIMATED GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MSL. DASHED WHERE INFERRED. QUERIED WHERE UNKNOWN.
i=0.0089	APPROXIMATE DIRECTION OF GROUNDWATER FLOW AND HYDRAULIC GRADIENT (i)
[NG]	NOT GAUGED
—·—·—	APPROXIMATE PROPERTY BOUNDARY

0 30 60

APPROXIMATE SCALE (FEET)

MAP REFERENCE:
SITE AREA MAP ADAPTED FROM SOUTHERN CALIFORNIA SURVEY REPORT, DATED 5/07/2004

SECOR
2655 CAMINO DEL RIO NORTH, SUITE 302
SAN DIEGO, CALIFORNIA
PHONE: (619) 296-6195/296-6199 (FAX)

PREPARED FOR:
FORMER
CHEVRON STATION # 9-1197
8808 LAWRENCE WELK DRIVE
ESCONDIDO, CALIFORNIA

GROUNDWATER GRADIENT MAP
MAY 5, 2005

FIGURE: 2

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
MTCH.91197.08	PD			5/25/05

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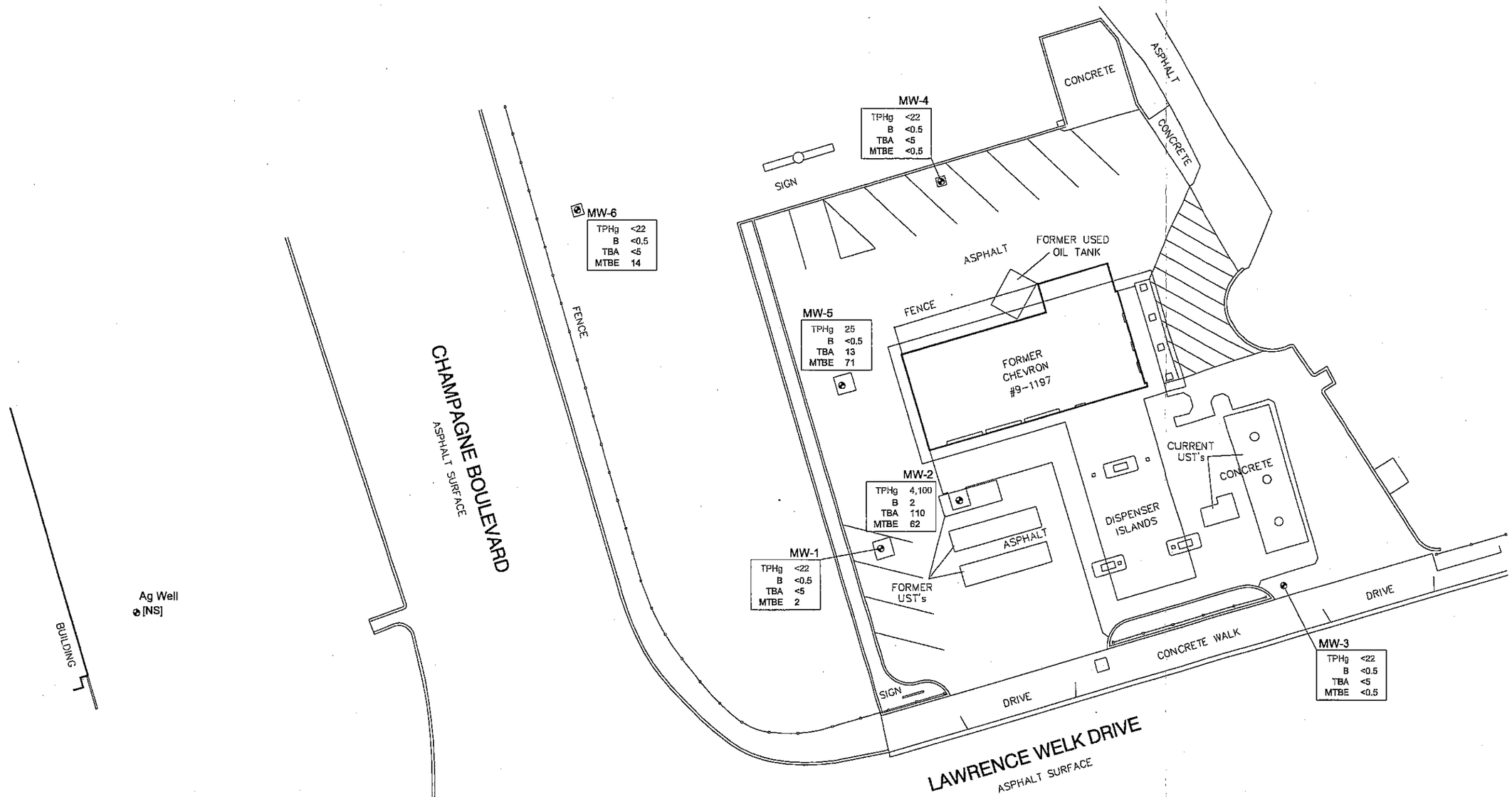
9-1197GW5-05



LEGEND:

MW-1	MONITORING WELL
TPHg <22 B <0.5 TBA <5 MTBE 14	TPHg/BENZENE/TBA/MTBE CONCENTRATIONS IN GROUNDWATER SAMPLES. CONCENTRATIONS REPORTED IN MICROGRAMS PER LITER (μg/L)
TPHg	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
B	BENZENE
TBA	TERT-BUTYL ALCOHOL
MTBE	METHYL TERT-BUTYL ETHER
<	BELOW LABORATORY REPORTING LIMIT INDICATED
[NS]	NOT SAMPLED
—·—·—	APPROXIMATE PROPERTY BOUNDARY

0 30 60

APPROXIMATE SCALE (FEET)

MAP REFERENCE:
SITE AREA MAP ADAPTED FROM SOUTHERN CALIFORNIA SURVEY REPORT, DATED 5/07/2004

SECOR
2655 CAMINO DEL RIO NORTH, SUITE 302
SAN DIEGO, CALIFORNIA
PHONE: (619) 296-6195/296-6199 (FAX)

PREPARED FOR:
FORMER
CHEVRON STATION # 9-1197
8808 LAWRENCE WELK DRIVE
ESCONDIDO, CALIFORNIA

HYDROCARBON CONSTITUENTS IN GROUNDWATER MAP
MAY 5, 2005

FIGURE: 3

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
MTCH.91197.08	PD			5/25/05

FILEPATH:Q:\CADD-08\Projects 2005\ChevronTexaco\9-1197-2k5\9-1197CON5-05.dwg|pdodge|Jul 20, 2005 at 14:22|Layout: Layout1

9-1197CON5-05

Table 1
Second Quarter 2005 Groundwater Levels and Chemical Analysis Results
Former Chevron Station 9-1197, 8808 Lawrence Welk Drive, Escondido, California

Well Number	Date	DTW (feet)	Groundwater Elevation (feet)*	TPH-g [1] µg/l (ppb)	Benzene [1] µg/l (ppb)	Toluene [1] µg/l (ppb)	Ethyl-benzene [1] µg/l (ppb)	Total Xylenes [1] µg/l (ppb)	MTBE [1] µg/l (ppb)	DIPE [1] µg/l (ppb)	ETBE [1] µg/l (ppb)	TAME [1] µg/l (ppb)	TBA [1] µg/l (ppb)
MW-1	5/5/05	17.15	494.92	<22	<0.5	<0.5	<0.5	<0.5	2.0	<0.5	<0.5	<0.5	<5.0
MW-2	5/5/05	16.94	494.99	4100	2.0	0.6	240	250	62	<0.5	<0.5	<0.5	110
MW-3	5/5/05	14.30	496.17	<22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0
MW-4	5/5/05	18.10	494.46	<22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0
MW-5	5/5/05	18.13	494.55	25	<0.5	<0.5	<0.5	<0.5	71	<0.5	<0.5	<0.5	13
MW-6	5/5/05	17.23	493.82	<22	<0.5	<0.5	<0.5	<0.5	14	<0.5	<0.5	<0.5	<5.0

Notes: [1] Analyzed by EPA method 8260B.

Definitions: DTW = Depth to Water, feet* = Feet above mean sea level, TPHg = Total Petroleum Hydrocarbons as Gasoline, MTBE = Methyl tert-Butyl Ether, DIPE = Di-isopropyl Ether, ETBE = Ethyl tert-Butyl Ether, TAME = tert-Amyl Methyl Ether, TBA = tert-Butyl Alcohol, µg/l = micrograms per liter, ppb = parts per billion.

Monitoring and sampling activities conducted by Blaine Tech Services on 5/5/05. GEIMS Global ID # T0607301337.

Table 2
Historic Groundwater Levels and Chemical Analysis Results
Former Chevron Station 9-1197, 8808 Lawrence Welk Drive, Escondido, California

Well No. and Elevation (feet)*	Date	DTW (feet)	Groundwater Elevation (feet)*	Corrected Groundwater Elevation (feet)**	TPH-g [1] µg/l (ppb)	Benzene [2] µg/l (ppb)	Toluene [2] µg/l (ppb)	Ethyl-benzene [2] µg/l (ppb)	Total Xylenes [2] µg/l (ppb)	MTBE [3] µg/l (ppb)	MTBE [4] µg/l (ppb)	DIPE [4] µg/L (ppb)	ETBE [4] µg/L (ppb)	TAME [4] µg/L (ppb)	TBA [4] µg/L (ppb)
MW-1	12/20/93	14.92	495.22	497.15	ND	0.38	0.75	1.2	6.4	ND	--	--	--	--	--
510.14	3/14/94	14.65	495.49	497.42	ND	ND	ND	2.0	10.5	12.1	--	--	--	--	--
	6/13/94	16.70	493.44	495.37	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	9/20/94	21.63	488.51	490.44	700	9.2	2.5	10.5	33.6	15.6	--	--	--	--	--
	12/8/94	20.25	489.89	491.82	1830	13.6	3.0	28.8	7.0	77.5	--	--	--	--	--
	2/28/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/5/95	16.30	493.84	495.77	ND	0.60	ND	ND	ND	20	--	--	--	--	--
	8/23/95	17.72	492.42	494.35	ND	ND	8.0	ND	25	220	--	--	--	--	--
	12/5/95	17.09	493.05	494.98	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	3/18/96	16.56	493.58	495.51	ND	ND	ND	ND	ND	--	--	--	--	--	--
	6/13/96	19.32	490.82	492.75	--	--	--	--	--	--	--	--	--	--	--
	6/18/96	19.63	490.51	492.44	ND	0.50	5.0	ND	ND	ND	--	--	--	--	--
	8/26/96	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	11/12/96	23.83	486.31	488.24	--	--	--	--	--	--	--	--	--	--	--
	3/7/97	16.90	493.24	495.17	510	8.8	ND	ND	ND	36	--	--	--	--	--
	6/3/97	19.11	491.03	492.96	ND	0.83	ND	ND	ND	14	--	--	--	--	--
	12/4/97	21.83	488.31	490.24	1300	16	ND	2.1	1.6	45	--	--	--	--	--
	11/12/98	19.45	490.69	492.62	ND	3.8	ND	ND	ND	24	--	--	--	--	--
	11/12/99	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/20/00	20.93	489.21	491.14	500	2.5	<0.50	<0.50	<1.5	46	--	--	--	--	--
	10/18/00	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/16/01	17.94	492.20	494.13	<500	<0.50	<0.50	<0.50	<1.5	--	23	<5.0	<5.0	<5.0	120
	10/2/01	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/1/02	23.89	486.25	488.18	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<2.0	<2.0	<2.0	<25
	11/11/02	24.60	--	487.47	<500	0.93	0.56	3.5	<1.5	--	<1.0	<2.0	<2.0	<2.0	<25
	12/19/03	21.52	--	490.55	<500	<0.50	<0.50	<0.50	<1.5	--	41	<5.0	<5.0	<5.0	99
512.07	5/7/04	20.10	491.97	491.97	<500	<0.50	<0.50	<0.50	<1.5	--	26	<5.0	<5.0	<5.0	<25
	11/5/04	22.10	489.97	489.97	<500	<0.50	<0.50	<0.50	<1.5	--	1.2	<5.0	<5.0	<5.0	<25
	5/5/05	17.15	494.92	494.92	<22	<0.5	<0.5	<0.5	<0.5	--	2.0	<0.5	<0.5	<0.5	<5.0
MW-2	12/20/93	14.79	495.28	497.14	25000	340	770	1200	5400	36	--	--	--	--	--
510.07	3/14/94	14.52	495.55	497.41	9000	446	1110	992	2280	226	--	--	--	--	--
	6/13/94	16.46	493.61	495.47	18700	321	990	955	3100	534	--	--	--	--	--
	9/20/94	21.42	488.67	490.51	--	--	--	--	--	--	--	--	--	--	--
	12/8/94	20.26	489.81	491.67	34100	256	964	1040	5560	2990	--	--	--	--	--
	2/28/95	13.72	496.35	498.21	--	--	--	--	--	--	--	--	--	--	--
MW-2	6/5/95	16.14	493.93	495.79	69100	914	5490	4780	14000	6540	--	--	--	--	--
continued	8/23/95	17.40	492.67	494.53	34500	800	2800	3700	7800	2350	--	--	--	--	--
	12/5/95	16.90	493.17	495.03	7700	250	80	1600	940	1000	--	--	--	--	--
	3/18/96	16.43	493.64	495.50	7620	350	160	1300	800	--	--	--	--	--	--
	6/13/96	19.02	491.05	492.91	5170	360	60	1260	730	510	--	--	--	--	--
	8/26/96	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	11/12/96	23.89	486.18	488.04	--	--	--	--	--	--	--	--	--	--	--
	3/7/97	16.80	493.27	495.13	22000	360	890	2200	8300	780	--	--	--	--	--

Table 2
Historic Groundwater Levels and Chemical Analysis Results
Former Chevron Station 9-1197, 8808 Lawrence Welk Drive, Escondido, California

Well No. and Elevation (feet)*	Date	DTW (feet)	Groundwater Elevation (feet)*	Corrected Groundwater Elevation (feet)**	TPH-g [1] µg/l (ppb)	Benzene [2] µg/l (ppb)	Toluene [2] µg/l (ppb)	Ethyl-benzene [2] µg/l (ppb)	Total Xylenes [2] µg/l (ppb)	MTBE [3] µg/l (ppb)	MTBE [4] µg/l (ppb)	DIPE [4] µg/L (ppb)	ETBE [4] µg/L (ppb)	TAME [4] µg/L (ppb)	TBA [4] µg/L (ppb)
	6/3/97	18.82	491.25	493.11	2700	63	18	400	310	1000	--	--	--	--	--
	12/4/97	21.65	488.42	490.28	7800	150	310	880	1300	570	--	--	--	--	--
	11/12/98	19.23	490.84	492.70	6700	46	190	520	1400	750	--	--	--	--	--
	11/12/99	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/20/00	20.52	489.55	491.41	2600	30	<5.0	350	29	240	--	--	--	--	--
	10/18/00	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/16/01	17.71	492.36	494.22	10000	49	26	1800	1700	--	100	<25	<25	<25	<250
	10/2/01	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/1/02	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
511.53	11/11/02	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	12/19/03	20.97	490.55	490.96	<2500	<25	<25	490	270	--	140	<250	<250	<250	<1200
511.93	5/7/04	19.64	492.29	492.29	910	0.66	<0.50	19	39	--	55	<5.0	<5.0	<5.0	90
	11/5/04	21.81	490.12	490.12	3200	110	240	100	810	--	19	<25	<25	<25	<120
	5/5/05	16.94	494.99	494.99	4100	2.0	0.6	240	250	--	62	<0.5	<0.5	<0.5	110
MW-3	12/20/93	11.42	496.57	499.05	ND	ND	ND	ND	ND	ND	--	--	--	--	--
507.99	3/14/94	11.16	496.83	499.31	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	6/13/94	12.62	495.37	497.85	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	9/20/94	17.35	490.64	493.12	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	12/8/94	16.73	491.26	493.74	--	--	--	--	--	--	--	--	--	--	--
	2/28/95	10.68	497.31	499.79	--	--	--	--	--	--	--	--	--	--	--
	6/5/95	13.83	494.16	496.64	--	--	--	--	--	--	--	--	--	--	--
	8/23/95	14.31	493.68	496.16	ND	9.0	40	ND	50	ND	--	--	--	--	--
	12/5/95	14.35	493.64	496.12	--	--	--	--	--	--	--	--	--	--	--
	3/18/96	14.11	493.88	496.36	--	--	--	--	--	--	--	--	--	--	--
	6/13/96	15.62	492.37	494.85	--	--	--	--	--	--	--	--	--	--	--
	8/26/96	21.40	486.59	489.07	ND	ND	ND	ND	ND	ND	--	--	--	--	--
MW-3	11/12/96	21.00	486.99	489.47	--	--	--	--	--	--	--	--	--	--	--
continued	3/7/97	14.55	493.44	495.92	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	6/3/97	15.51	492.48	494.96	--	--	--	--	--	--	--	--	--	--	--
	12/4/97	18.97	489.02	491.50	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	11/12/98	15.98	492.01	494.49	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	11/12/99	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/20/00	16.77	491.22	493.70	<500	<0.50	<0.50	<0.50	<1.5	2.4	--	--	--	--	--
	10/18/00	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/16/01	15.30	492.69	495.17	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<50
	10/2/01	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/1/02	19.93	488.06	490.54	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<2.0	<2.0	<2.0	<25
510.08	11/11/02	20.65	489.43	489.82	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<2.0	<2.0	<2.0	<25
	12/19/03	17.3	492.78	493.17	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<25
510.47	5/7/04	16.30	494.17	494.17	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<25
	11/5/04	18.63	491.84	491.84	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<25
	5/5/05	14.30	496.17	496.17	<22	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<5.0

Table 2
Historic Groundwater Levels and Chemical Analysis Results
Former Chevron Station 9-1197, 8808 Lawrence Welk Drive, Escondido, California

Well No. and Elevation (feet)*	Date	DTW (feet)	Groundwater Elevation (feet)*	Corrected Groundwater Elevation (feet)**	TPH-g [1] µg/l (ppb)	Benzene [2] µg/l (ppb)	Toluene [2] µg/l (ppb)	Ethyl-benzene [2] µg/l (ppb)	Total Xylenes [2] µg/l (ppb)	MTBE [3] µg/l (ppb)	MTBE [4] µg/l (ppb)	DIPE [4] µg/L (ppb)	ETBE [4] µg/L (ppb)	TAME [4] µg/L (ppb)	TBA [4] µg/L (ppb)
MW-4	12/20/93	15.17	494.93	497.39	ND	ND	ND	ND	1.7	ND	--	--	--	--	--
510.10	3/14/94	14.97	495.13	497.59	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	6/13/94	16.76	493.34	495.80	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	9/20/94	21.71	488.39	490.85	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	12/8/94	20.40	489.70	492.16	--	--	--	--	--	--	--	--	--	--	--
	2/28/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/5/95	17.14	492.96	495.42	--	--	--	--	--	--	--	--	--	--	--
	8/23/95	18.17	491.93	494.39	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	12/5/95	17.79	492.31	494.77	--	--	--	--	--	--	--	--	--	--	--
	3/18/96	17.38	492.72	495.18	--	--	--	--	--	--	--	--	--	--	--
	6/13/96	19.83	490.27	492.73	--	--	--	--	--	--	--	--	--	--	--
	8/26/96	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	11/12/96	24.55	485.55	488.01	--	--	--	--	--	--	--	--	--	--	--
	3/7/97	17.80	492.30	494.76	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	6/3/97	19.58	490.52	492.98	--	--	--	--	--	--	--	--	--	--	--
	12/4/97	22.50	487.60	490.06	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	11/12/98	20.12	489.98	492.44	ND	ND	ND	ND	ND	ND	--	--	--	--	--
MW-4	11/12/99	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
continued	4/20/00	20.85	489.25	491.71	<500	<0.50	<0.50	<0.50	<1.5	<1.0	--	--	--	--	--
	10/18/00	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/16/01	18.62	491.48	493.94	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<50
	10/2/01	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/1/02	23.65	486.45	488.91	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<2.0	<2.0	<2.0	<25
512.16	11/11/02	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	12/19/03	22.11	490.05	490.45	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<25
512.56	5/7/04	20.72	491.84	491.84	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<25
	11/5/04	22.75	489.81	489.81	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<25
	5/5/05	18.10	494.46	494.46	<22	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<5.0
MW-5	3/14/94	15.47	495.16	497.21	ND	ND	5.8	ND	2.9	19.5	--	--	--	--	--
510.63	6/13/94	17.51	493.12	495.17	ND	14.8	0.86	117	2.7	16.3	--	--	--	--	--
	9/20/94	22.43	488.20	490.25	ND	16.1	1.2	24.3	23.7	ND	--	--	--	--	--
	12/8/94	21.02	489.61	491.66	1450	55	10.9	4.8	15.7	57.8	--	--	--	--	--
	2/28/95	15.00	495.63	497.68	ND	5.6	ND	1.9	ND	19.6	--	--	--	--	--
	6/5/95	17.14	493.49	495.54	525	25.3	0.90	3.8	5.2	327	--	--	--	--	--
	8/23/95	14.51	496.12	498.17	ND	11	24	ND	ND	430	--	--	--	--	--
	12/5/95	17.90	492.73	494.78	ND	ND	2.5	ND	ND	120	--	--	--	--	--
	3/18/96	17.40	493.23	495.28	625	ND	ND	ND	ND	--	--	--	--	--	--
	6/13/96	20.15	490.48	492.53	820	60	2.0	40	70	510	--	--	--	--	--
	8/26/96	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	11/12/96	23.55	487.08	489.13	--	--	--	--	--	--	--	--	--	--	--
	3/7/97	17.78	492.85	494.90	ND	2.2	ND	ND	ND	14	--	--	--	--	--
	6/3/97	19.91	490.72	492.77	ND	1.3	ND	ND	ND	190	--	--	--	--	--
	12/4/97	22.67	487.96	490.01	1100	14	ND	27	16	130	--	--	--	--	--

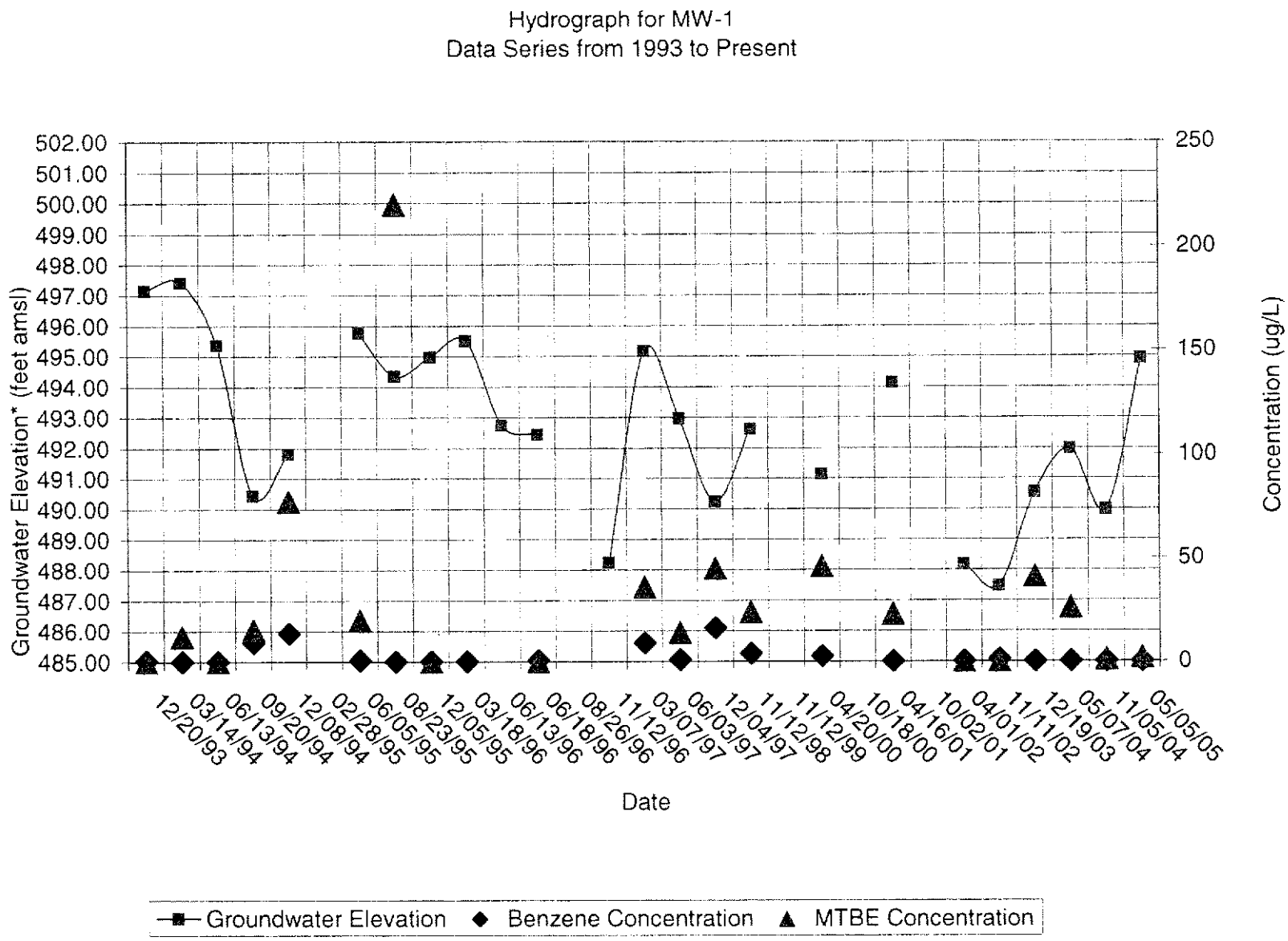
Table 2
Historic Groundwater Levels and Chemical Analysis Results
Former Chevron Station 9-1197, 8808 Lawrence Welk Drive, Escondido, California

Well No. and Elevation (feet)*	Date	DTW (feet)	Groundwater Elevation (feet)*	Corrected Groundwater Elevation (feet)**	TPH-g [1] µg/l (ppb)	Benzene [2] µg/l (ppb)	Toluene [2] µg/l (ppb)	Ethyl-benzene [2] µg/l (ppb)	Total Xylenes [2] µg/l (ppb)	MTBE [3] µg/l (ppb)	MTBE [4] µg/l (ppb)	DIPE [4] µg/L (ppb)	ETBE [4] µg/L (ppb)	TAME [4] µg/L (ppb)	TBA [4] µg/L (ppb)
	11/12/98	20.34	490.29	492.34	ND	1.1	0.61	ND	ND	410	--	--	--	--	--
	11/12/99	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/20/00	21.78	488.85	490.90	<500	1.7	<1.0	<1.0	<3.0	410	--	--	--	--	--
	10/18/00	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/16/01	18.76	491.87	493.92	<500	<0.50	0.57	<0.50	<1.5	--	220	<10	<10	<10	190
	10/2/01	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/1/02	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
512.27	11/11/02	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	12/19/03	22.5	489.77	490.18	<500	<0.50	<0.50	<0.50	<1.5	--	83	<5.0	<5.0	<5.0	<25
512.68	5/7/04	21.05	491.63	491.63	<500	<0.50	<0.50	<0.50	<1.5	--	75	<5.0	<5.0	<5.0	<25
	11/5/04	22.95	489.73	489.73	<500	<0.50	<0.50	<0.50	<1.5	--	4.8	<5.0	<5.0	<5.0	<25
	5/5/05	18.13	494.55	494.55	25	<0.5	<0.5	<0.5	<0.5	--	71	<0.5	<0.5	<0.5	13
MW-6	3/18/96	16.19	492.43	494.86	ND	1.4	ND	1.4	3.5	--	--	--	--	--	--
508.62	6/13/96	19.32	489.30	491.73	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	8/26/96	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	11/12/96	25.54	483.08	485.51	--	--	--	--	--	--	--	--	--	--	--
	3/7/97	15.52	493.10	495.53	ND	ND	ND	ND	ND	24	--	--	--	--	--
	6/3/97	19.04	489.58	492.01	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	12/4/97	21.50	487.12	489.55	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	11/12/98	19.40	489.22	491.65	ND	ND	ND	ND	ND	17	--	--	--	--	--
	11/12/99	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/20/00	21.16	487.46	489.89	<500	<0.50	<0.50	<0.50	<1.5	33	--	--	--	--	--
	10/18/00	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/16/01	17.58	491.04	493.47	<500	<0.50	<0.50	<0.50	<1.5	--	9.0	<5.0	<5.0	<5.0	<50
	10/2/01	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/1/02	22.80	485.82	488.25	<500	<0.50	<0.50	<0.50	<1.5	--	6.2	<2.0	<2.0	<2.0	<25
510.65	11/11/02	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	12/19/03	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
511.05	5/7/04	20.43	490.62	490.62	<500	<0.50	<0.50	<0.50	<1.5	--	2.4	<5.0	<5.0	<5.0	<25
	11/5/04	22.50	488.55	488.55	<500	<0.50	<0.50	<0.50	<1.5	--	3.1	<5.0	<5.0	<5.0	<25
	5/5/05	17.23	493.82	493.82	<22	<0.5	<0.5	<0.5	<0.5	--	14	<0.5	<0.5	<0.5	<5.0

Notes: [1] Historically analyzed by modified EPA method 8015B. Currently analyzed by EPA method 8260B. [2] Historically analyzed by EPA method 8021B. Currently analyzed by EPA method 8260B.
[3] Analyzed by EPA Method 8021B. [4] Analyzed bt EPA method 8260B.

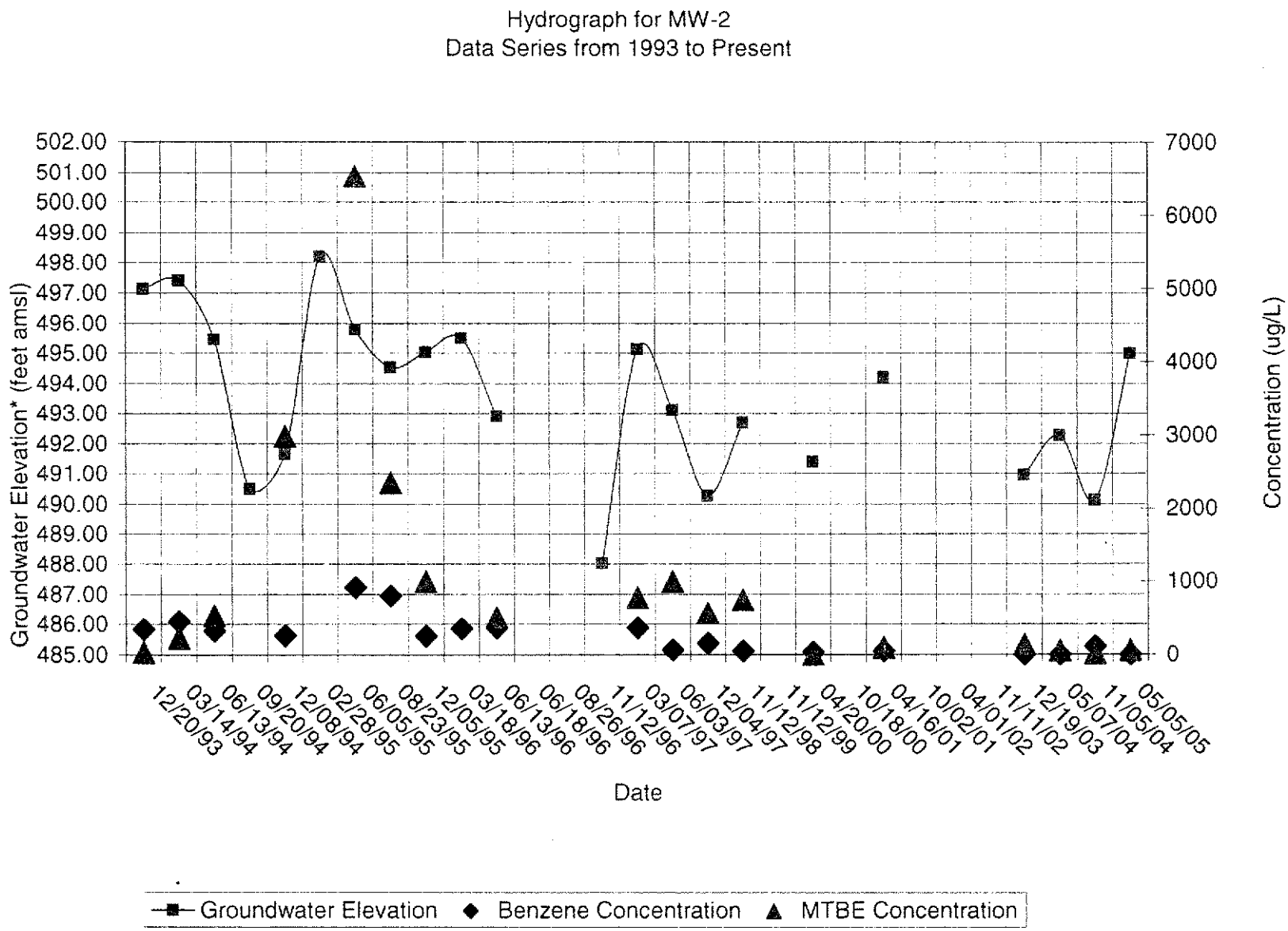
Definitions: DTW = Depth to Water, feet* = Feet above mean sea level, ** = Groundwater elevation calculated to most recent survey data, TPHg = Total Petroleum Hydrocarbons as Gasoline, MTBE = Methyl tert-Butyl Ether, DIPE = Di-isopropyl Ether, ETBE = Ethyl tert-Butyl Ether, TAME = tert-Amyl Methyl Ether, TBA = tert-Butyl Alcohol, µg/l = micrograms per liter, ppb = parts per billion, -- = Not Measured, ND = Not Detected.
Monitoring and sampling activities conducted by SECOR after 2/1/03. Monitoring and sampling activities conducted by Blaine Tech Services 5/5/05. GEIMS Global ID # T0607301337.
Prior to 4th Quarter 1999 sampling event, laboratory results below reporting limits were presented as ND.

Former Chevron Station 9-1197, 8808 Lawrence Welk Drive, Escondido, California



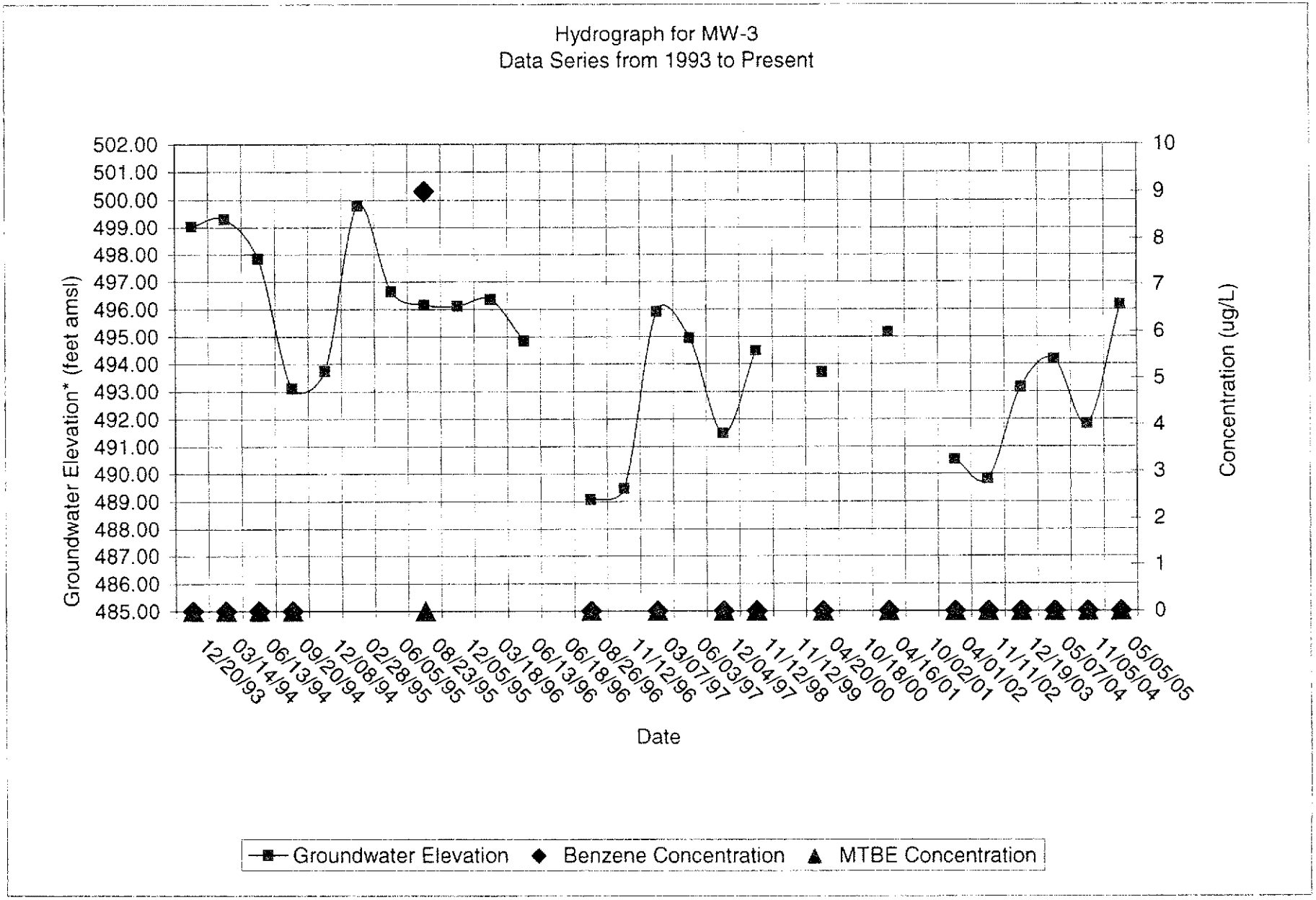
*Groundwater elevations calculated using survey data collected on April 21, 2004

Former Chevron Station 9-1197, 8808 Lawrence Welk Drive, Escondido, California



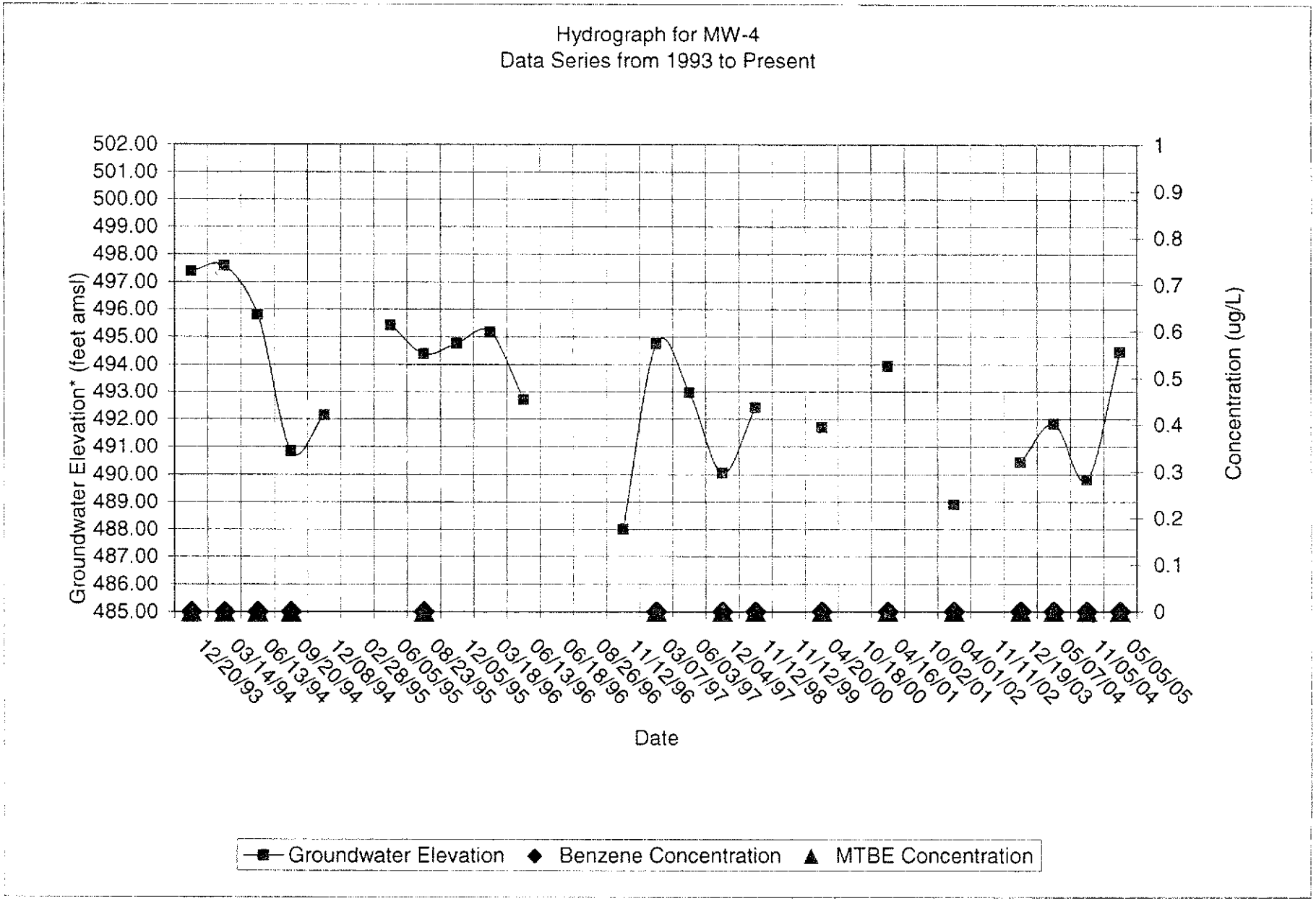
*Groundwater elevations calculated using survey data collected on April 21, 2004

Former Chevron Station 9-1197, 8808 Lawrence Welk Drive, Escondido, California



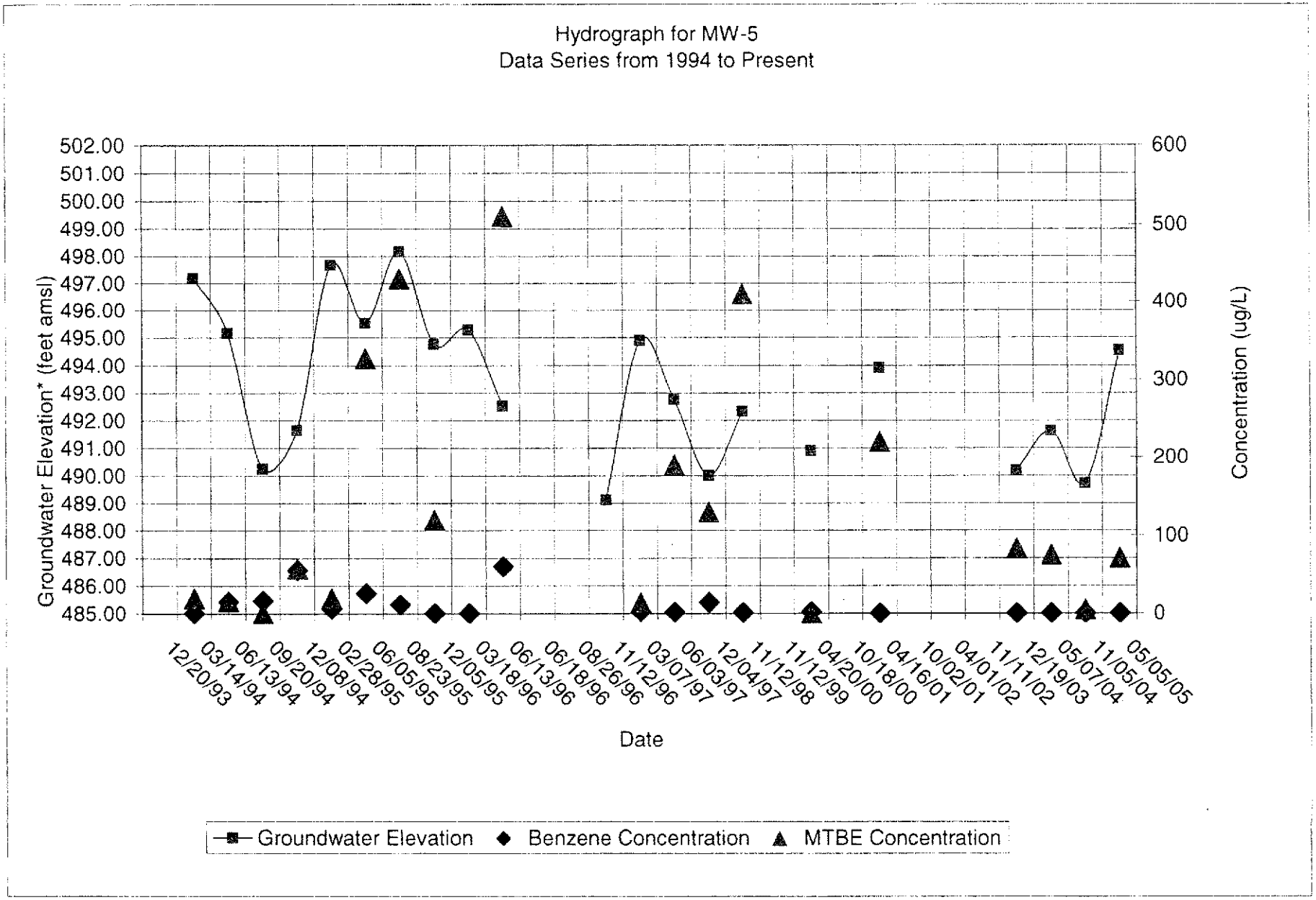
*Groundwater elevations calculated using survey data collected on April 21, 2004

Former Chevron Station 9-1197, 8808 Lawrence Welk Drive, Escondido, California



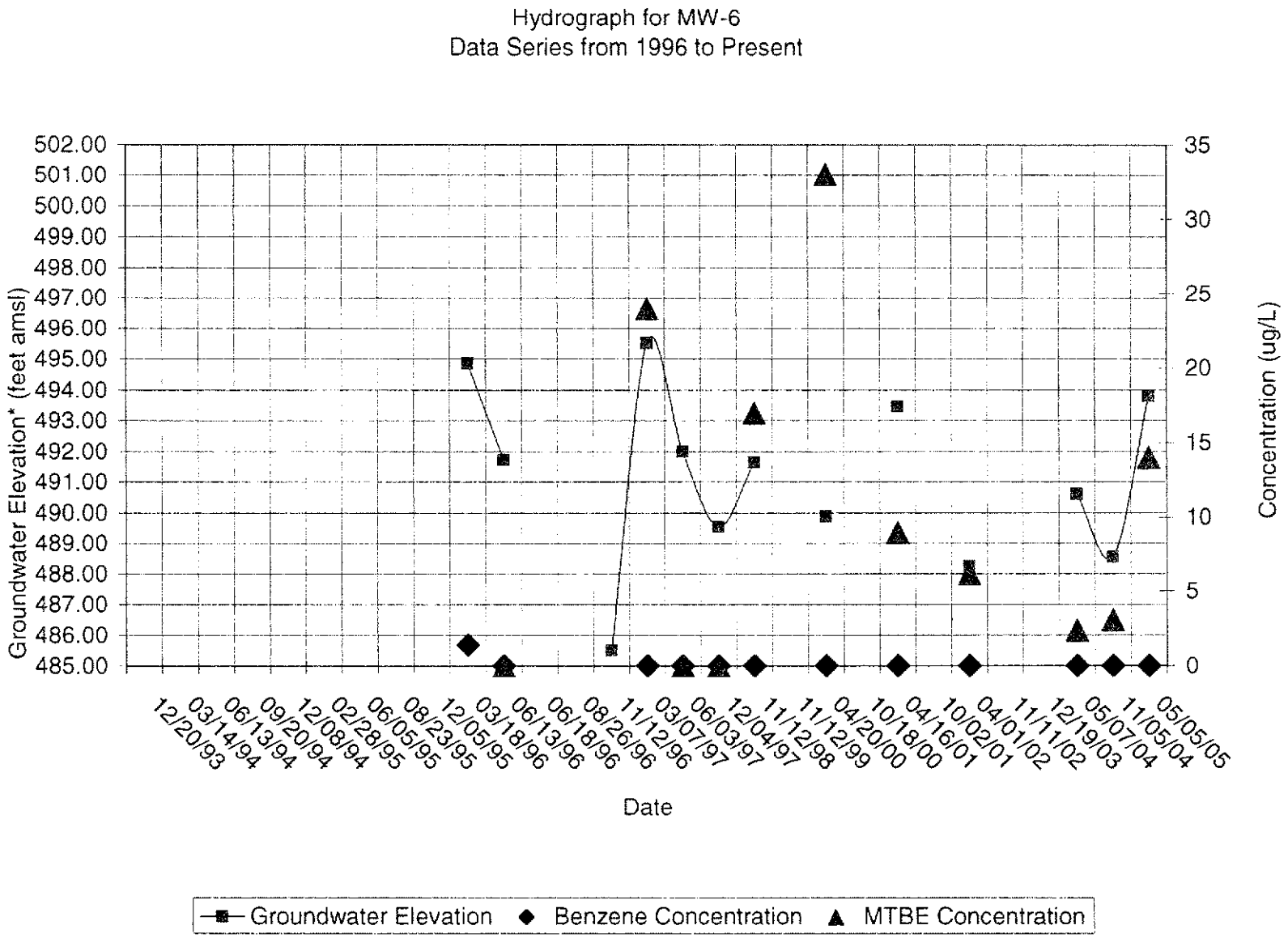
*Groundwater elevations calculated using survey data collected on April 21, 2004

Former Chevron Station 9-1197, 8808 Lawrence Welk Drive, Escondido, California



*Groundwater elevations calculated using survey data collected on April 21, 2004

Former Chevron Station 9-1197, 8808 Lawrence Welk Drive, Escondido, California



*Groundwater elevations calculated using survey data collected on April 21, 2004

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared for:

ChevronTexaco C/O Secor Int.
2301 Leghorn Street
Mountainview CA 94043

650-691-0131

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 942658. Samples arrived at the laboratory on Saturday, May 07, 2005. The PO# for this group is 99011184 and the release number is MTI.

Client Description			Lancaster Labs Number
MW-1-050505	NA	Water	4520382
MW-2-050505	NA	Water	4520383
MW-3-050505	NA	Water	4520384
MW-4-050505	NA	Water	4520385
MW-5-050505	NA	Water	4520386
MW-6-050505	NA	Water	4520387

ELECTRONIC COPY TO	ChevronTexaco C/O Secor Int.	Attn: Madeline Montilla
1 COPY TO	ChevronTexaco C/O Secor Int.	Attn: Maurice Baron

Lancaster Laboratories

Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax 717-656-2681 • www.lancasterlabs.com

Questions? Contact your Client Services Representative
Teresa L Cunningham at (717) 656-2300.

Respectfully Submitted,

Robin C. Runkle
Senior Chemist

Lancaster Laboratories

Analysis Report

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Lancaster Laboratories Sample No. WW 4520382

MW-1-050505 NA Water
Facility# 91197 MTI# MTCH.91197.08 BTST
8808 Lawerence Welk Dr T0607301337 MW-1
Collected:05/05/2005 15:23 by SB

Account Number: 11522

Submitted: 05/07/2005 10:00
Reported: 05/23/2005 at 13:35
Discard: 06/23/2005

ChevronTexaco C/O Secor Int.
2301 Leghorn Street
Mountainview CA 94043

LAWM1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
06056	BTEX+5 Oxygenates by 8260B					
02010	Methyl Tertiary Butyl Ether	1634-04-4	2.	0.5	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	0.5	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	5.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1
06184	TPH GRO in water by 8260B					
06383	C6-C12-TPH-GRO	n.a.	N.D.	22.	ug/l	1

State of California Lab Certification No. 2116
Trip blank vials were not received by the laboratory for this sample group.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
06056	BTEX+5 Oxygenates by 8260B	SW-846 8260B	1	05/12/2005 22:45	Emiley A King	1
06184	TPH GRO in water by 8260B	SW-846 8260B	1	05/12/2005 22:45	Emiley A King	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	05/12/2005 22:45	Emiley A King	n.a.

Lancaster Laboratories

Analysis Report

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Lancaster Laboratories Sample No. WW 4520383

MW-2-050505 NA Water
Facility# 91197 MTI# MTCH.91197.08 BTST
8808 Lawerence Welk Dr T0607301337 MW-2
Collected:05/05/2005 15:55 by SB

Account Number: 11522

Submitted: 05/07/2005 10:00
Reported: 05/23/2005 at 13:35
Discard: 06/23/2005

ChevronTexaco C/O Secor Int.
2301 Leghorn Street
Mountainview CA 94043

LAWM2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
06056	BTEX+5 Oxygenates by 8260B					
02010	Methyl Tertiary Butyl Ether	1634-04-4	62.	0.5	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	0.5	ug/l	1
02015	t-Butyl alcohol	75-65-0	110.	5.	ug/l	1
05401	Benzene	71-43-2	2.	0.5	ug/l	1
05407	Toluene	108-88-3	0.6	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	240.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	250.	0.5	ug/l	1
06184	TPH GRO in water by 8260B					
06383	C6-C12-TPH-GRO	n.a.	4,100.	22.	ug/l	1

State of California Lab Certification No. 2116
Trip blank vials were not received by the laboratory for this sample group.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
06056	BTEX+5 Oxygenates by 8260B	SW-846 8260B	1	05/16/2005 14:49	Anita M Dale	1
06184	TPH GRO in water by 8260B	SW-846 8260B	1	05/16/2005 14:49	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	05/16/2005 14:49	Anita M Dale	n.a.

Lancaster Laboratories

Analysis Report

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Lancaster Laboratories Sample No. WW 4520384

MW-3-050505 NA Water
Facility# 91197 MTI# MTCH.91197.08 BTST
8808 Lawerence Welk Dr T0607301337 MW-3
Collected:05/05/2005 16:10 by SB

Account Number: 11522

Submitted: 05/07/2005 10:00
Reported: 05/23/2005 at 13:35
Discard: 06/23/2005

ChevronTexaco C/O Secor Int.
2301 Leghorn Street
Mountainview CA 94043

LAWM3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
06056	BTEX+5 Oxygenates by 8260B					
02010	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	0.5	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	5.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1
06184	TPH GRO in water by 8260B					
06383	C6-C12-TPH-GRO	n.a.	N.D.	22.	ug/l	1

State of California Lab Certification No. 2116
Trip blank vials were not received by the laboratory for this sample group.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
06056	BTEX+5 Oxygenates by 8260B	SW-846 8260B	1	05/12/2005 23:09	Emiley A King	1
06184	TPH GRO in water by 8260B	SW-846 8260B	1	05/12/2005 23:09	Emiley A King	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	05/12/2005 23:09	Emiley A King	n.a.

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Analysis Report

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Lancaster Laboratories Sample No. WW 4520385

MW-4-050505 NA Water
Facility# 91197 MTI# MTCH.91197.08 BTST
8808 Lawerence Welk Dr T0607301337 MW-4
Collected:05/05/2005 15:31 by SB

Account Number: 11522

Submitted: 05/07/2005 10:00
Reported: 05/23/2005 at 13:35
Discard: 06/23/2005

ChevronTexaco C/O Secor Int.
2301 Leghorn Street
Mountainview CA 94043

LAWM4

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
06056	BTEX+5 Oxygenates by 8260B					
02010	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	0.5	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	5.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1
06184	TPH GRO in water by 8260B					
06383	C6-C12-TPH-GRO	n.a.	N.D.	22.	ug/l	1

State of California Lab Certification No. 2116
Trip blank vials were not received by the laboratory for this sample group.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
06056	BTEX+5 Oxygenates by 8260B	SW-846 8260B	1	05/12/2005 23:55	Emiley A King	1
06184	TPH GRO in water by 8260B	SW-846 8260B	1	05/12/2005 23:55	Emiley A King	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	05/12/2005 23:55	Emiley A King	n.a.

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Analysis Report

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Lancaster Laboratories Sample No. WW 4520386

MW-5-050505 NA Water
Facility# 91197 MTI# MTCH.91197.08 BTST
8808 Lawerence Welk Dr T0607301337 MW-5
Collected:05/05/2005 16:00 by SB

Account Number: 11522

Submitted: 05/07/2005 10:00
Reported: 05/23/2005 at 13:35
Discard: 06/23/2005

ChevronTexaco C/O Secor Int.
2301 Leghorn Street
Mountainview CA 94043

LAWM5

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
06056	BTEX+5 Oxygenates by 8260B					
02010	Methyl Tertiary Butyl Ether	1634-04-4	71.	0.5	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	0.5	ug/l	1
02015	t-Butyl alcohol	75-65-0	13.	5.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1
06184	TPH GRO in water by 8260B					
06383	C6-C12-TPH-GRO	n.a.	25.	22.	ug/l	1

State of California Lab Certification No. 2116
Trip blank vials were not received by the laboratory for this sample group.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
06056	BTEX+5 Oxygenates by 8260B	SW-846 8260B	1	05/13/2005 00:19	Emiley A King	1
06184	TPH GRO in water by 8260B	SW-846 8260B	1	05/13/2005 00:19	Emiley A King	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	05/13/2005 00:19	Emiley A King	n.a.

Lancaster Laboratories

Analysis Report

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Lancaster Laboratories Sample No. WW 4520387

MW-6-050505 NA Water
Facility# 91197 MTI# MTCH.91197.08 BTST
8808 Lawerence Welk Dr T0607301337 MW-6
Collected:05/05/2005 15:00 by SB

Account Number: 11522

Submitted: 05/07/2005 10:00
Reported: 05/23/2005 at 13:35
Discard: 06/23/2005

ChevronTexaco C/O Secor Int.
2301 Leghorn Street
Mountainview CA 94043

LAWM6

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
06056	BTEX+5 Oxygenates by 8260B					
02010	Methyl Tertiary Butyl Ether	1634-04-4	14.	0.5	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	0.5	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	5.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1
06184	TPH GRO in water by 8260B					
06383	C6-C12-TPH-GRO	n.a.	N.D.	22.	ug/l	1

State of California Lab Certification No. 2116
Trip blank vials were not received by the laboratory for this sample group.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
06056	BTEX+5 Oxygenates by 8260B	SW-846 8260B	1	05/13/2005 00:42	Emiley A King	1
06184	TPH GRO in water by 8260B	SW-846 8260B	1	05/13/2005 00:42	Emiley A King	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	05/13/2005 00:42	Emiley A King	n.a.

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Analysis Report

Quality Control Summary

Client Name: ChevronTexaco C/O Secor Int.
Reported: 05/23/05 at 01:35 PM

Group Number: 942658

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: W051321AA	Sample number(s): 4520382,4520384-4520387							
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	104	102	77-127	1	30
di-Isopropyl ether	N.D.	0.5	ug/l	102	101	67-130	1	30
Ethyl t-butyl ether	N.D.	0.5	ug/l	102	100	74-120	1	30
t-Amyl methyl ether	N.D.	0.5	ug/l	102	100	79-113	2	30
t-Butyl alcohol	N.D.	5.	ug/l	92	94	57-141	2	30
Benzene	N.D.	0.5	ug/l	106	103	85-117	3	30
Toluene	N.D.	0.5	ug/l	101	99	85-115	2	30
Ethylbenzene	N.D.	0.5	ug/l	102	98	82-119	4	30
Xylene (Total)	N.D.	0.5	ug/l	102	98	83-113	3	30
C6-C12-TPH-GRO	N.D.	22.	ug/l	100	97	70-130	3	30
Batch number: W051361AA	Sample number(s): 4520383							
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	96	95	77-127	2	30
di-Isopropyl ether	N.D.	0.5	ug/l	95	93	67-130	3	30
Ethyl t-butyl ether	N.D.	0.5	ug/l	94	95	74-120	1	30
t-Amyl methyl ether	N.D.	0.5	ug/l	95	93	79-113	3	30
t-Butyl alcohol	N.D.	5.	ug/l	94	94	57-141	0	30
Benzene	N.D.	0.5	ug/l	100	98	85-117	2	30
Toluene	N.D.	0.5	ug/l	100	97	85-115	3	30
Ethylbenzene	N.D.	0.5	ug/l	101	97	82-119	4	30
Xylene (Total)	N.D.	0.5	ug/l	101	97	83-113	3	30
C6-C12-TPH-GRO	N.D.	22.	ug/l	97	94	70-130	2	30

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: W051321AA	Sample number(s): 4520382,4520384-4520387								
Methyl Tertiary Butyl Ether	103		69-134						
di-Isopropyl ether	103		75-130						
Ethyl t-butyl ether	102		78-119						
t-Amyl methyl ether	100		77-117						
t-Butyl alcohol	92		51-147						
Benzene	109		83-128						
Toluene	102		83-127						
Ethylbenzene	103		82-129						
Xylene (Total)	102		82-130						
Batch number: W051361AA	Sample number(s): 4520383								
Methyl Tertiary Butyl Ether	102	100	69-134	2	30				

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

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Analysis Report

Quality Control Summary

Client Name: ChevronTexaco C/O Secor Int. Group Number: 942658
Reported: 05/23/05 at 01:35 PM

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
di-Isopropyl ether	97	97	75-130	1	30				
Ethyl t-butyl ether	99	99	78-119	0	30				
t-Amyl methyl ether	99	95	77-117	4	30				
t-Butyl alcohol	72	76	51-147	5	30				
Benzene	106	102	83-128	4	30				
Toluene	104	101	83-127	2	30				
Ethylbenzene	104	102	82-129	3	30				
Xylene (Total)	103	100	82-130	2	30				

Surrogate Quality Control

Analysis Name: BTEX+5 Oxygenates by 8260B
Batch number: W051321AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
4520382	94	88	90	92
4520384	95	89	89	92
4520385	96	88	89	93
4520386	95	90	90	93
4520387	96	88	90	92
Blank	96	88	91	93
LCS	96	91	91	98
LCSD	94	89	92	98
MS	95	88	91	97
Limits:	81-120	82-112	85-112	83-113

Analysis Name: BTEX+5 Oxygenates by 8260B
Batch number: W051361AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
4520383	92	88	94	97
Blank	93	89	92	93
LCS	94	91	95	97
LCSD	92	91	94	95
MS	96	93	94	96
MSD	94	91	93	97
Limits:	81-120	82-112	85-112	83-113

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

Account# 11522 Group# 942658 Sample# 4520382-87

CHAIN OF CUSTODY FORM

Chevron Environmental Management Company ■ 145 S. State College Boulevard ■ Brea, CA 92822-2292 COC 1 of 1

Chevron Site Global ID: TO607301337

Chevron Site Number 9-1197

Chevron Site Address: 8808 Lawerence Welk Dr., Escondido

Chevron PM: SECOR: c/o Madelaine Montilla
2301 Leghorn, Mountain View, CA 94043

Chevron MT PM Phone No.: (650) 691-0131 x 235

MT Job No: MTCH.91197.08

Chevron Service Code: *ZZ02800*
X Management Transfer – SO CA Portfolio Job
~~☐ Construction/Retail Job or~~
~~☐ Retail and Terminal Business Unit (RTBU) Job~~

NOTE:
THIS IS A LEGAL DOCUMENT. ALL FIELDS MUST BE FILLED OUT CORRECTLY AND COMPLETELY.

Chevron Consultant: SECOR International, Inc.
Address: 2301 Leghorn, Mountain View, CA 94043
Consultant Contact: Maurice Baron
Consultant Phone No. (650) 691-0131
Consultant Project No. MTCH.91197.08
Sampling Company: BTST
Sampled By (Print): Sean Boykin
Sampler Signature: Sean Boykin

Del Mar Analytical
☐ Irvine, CA
☐ Colton, CA
Lab Contact: _____
Phone No:
☐ (949) 261-1022
☐ (909) 370-4667

Lancaster Laboratories
☒ Lancaster, PA
Lab Contact:
Teresa Cunningham
Phone No:
☒ (717) 656-2300

EDF Required?
☑ Yes
☐ No

ANALYSES REQUIRED

Field Point Name	Matrix	Top Depth	Date (yymmdd)	Sample Time	Container Type	# of Containers	Preservation	EPA 8015B GRO ☐ DRO ☐ ORO ☐ TPHd ☐ HC Screen ☐	EPA 8021B BTEX ☐ MTBE ☐	EPA 8260B TPH-G ☑ BTEX ☑ MTBE ☐ Oxygenates ☑ HVOC ☐	EPA 6010 CA, FE, K, MG, MN, NA ☐	EPA 6010/7000 TITLE 22 METALS ☐ TTLC ☐ STLC ☐	EPA 150.1 PH ☐	EPA 310.1 ALKALINITY ☐	SM 2510B SPECIFIC CONDUCTIVITY ☐	EPA 418.1 TRPH ☐	EPA 413.1 OIL/GREASES ☐				Notes/Comments
MW-1	W		050505	1523	VOA	4	HCL			X											
MW-2				1555						X											
MW-3				1610						X											
MW-4				1531						X											
MW-5				1600						X											
MW-6				1500						X											

Special Instructions

Temp. Blank Check Time	Temp.
1300	3°C
1600	3°C

Relinquished By	Company	Date/Time:	Relinquished To	Date/Time:	Company
Sean Boykin	BTS	5/5/05 1730		5/5/05 1730	BTS Locked Refrigerator
Sean Boykin	BTS	5/6/05 815		5/6/05 815	Fed EX
			Nathan Chlopf	5/7/05 1000	

Turnaround Time:
24 Hours ☐ Standard ☑
48 hours ☐ Other ☐

Sample Integrity: (Check by lab on arrival)
Intact: ✓ On Ice: ✓ Temp 3.9°C

Lancaster Laboratories
2425 New Holland Pike • Lancaster, PA 17601

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	**BMQL**	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	**MPN**	Most Probable Number
IU	International Units	**CP Units**	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	**NTU**	nephelometric turbidity units
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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SCOPE OF WORK as of 4/19/2005

GROUNDWATER MONITORING AT CHEVRON

SITE ADDRESS: **8808 LAWRENCE WELK DR.**
CITY: **ESCONDIDO**
COUNTY: **SAN DIEGO**

Lab: **LANCASTER**
Phone: (717) 656-2300
Release #:

Site #: 9-1197
Consultant: SECOR Mountain View
Name: Maurice Baron
Phone: (650)691-0131
Rpt due date:

Lock/Key: 3910
Gauge to: **TOC**

Engineer:
Phone #:

Required regulatory notifications/ cooperative sampling requirements:

Well I.D.	Required Analyses	Sampling Frequency	Sampling Months	Gauging Frequency	Remedial Devices	Notes & Tasks (bail SPH, install skimmer, etc.)
MW-1	**TPH-G, BTEX and OXYGENATES by 8260**	**ANNUAL**	**APRIL**	**ANNUAL**		**HB/FR**
MW-2	**TPH-G, BTEX and OXYGENATES by 8260**	**ANNUAL**	**APRIL**	**ANNUAL**		**HB/FR**
MW-3	**TPH-G, BTEX and OXYGENATES by 8260**	**ANNUAL**	**APRIL**	**ANNUAL**		**HB/FR**
MW-4	**TPH-G, BTEX and OXYGENATES by 8260**	**ANNUAL**	**APRIL**	**ANNUAL**		**HB/FR**
MW-5	**TPH-G, BTEX and OXYGENATES by 8260**	**ANNUAL**	**APRIL**	**ANNUAL**		**HB/FR**
MW-6	**TPH-G, BTEX and OXYGENATES by 8260**	**ANNUAL**	**APRIL**	**ANNUAL**		**HB/FR**

CHANGES AND SPECIAL INSTRUCTIONS:
BOTTLE SET:
-TPH-G, BTEX, Oxygenates - 4 HCL voas

WELL GAUGING DATA

Project # 050505-BS2 Date 5/5/05 Client Chevron

Site 8808 Lawrence Welk Dr. - Escondido

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
MW-1	4					17.15	25.45		
MW-2	4					16.94	24.34		
MW-3	4					14.30	23.02		
MW-4	4					18.10	25.21		
MW-5	4					18.13	23.83		
MW-6	4					17.23	23.83		
~~Ag. Well~~									

SAN DIEGO COUNTY CHEVRON WELL MONITORING DATA SHEET

BTS #: 050505-BS2	Site: 9-1197
Sampler: SB	Date: 5/5/05
Weather: Cloudy	Ambient Air Temperature: 67°F
Well I.D.: MW-1	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 25.45	Depth to Water: 17.15
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 18.81	

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

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

12.4 (Gals.) X 1.5 = 18.6 Gals.
1 Borehole Volume Specified Volumes Calculated Volume

CD	BD	Multiplier	CD	BD	Mulitplier	CD	BD	Multiplier
2"	8"	0.8	4"	8"	1.1	6"	10"	2.1
2"	10"	1.1	4"	10"	1.5	6"	12"	2.6
			4"	12"	2.0			

Assumes 25% borehole porosity
CD = casing diameter BD = borehole diameter

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1413	69.5	7.1	1316	206	12.5	
1415	70.0	6.9	1455	13	19	

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

Sampling Date: 5/5/05 Sampling Time: 1523 Depth to Water: 17.15

Sample I.D.: MW-1 Laboratory: Del Mar (Other) Lancaster

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

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

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

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

SAN DIEGO COUNTY CHEVRON WELL MONITORING DATA SHEET

BTS #: 050505-BS1	Site: 9-1197
Sampler: SB	Date: 5/5/05
Weather: Cloudy	Ambient Air Temperature: 69°F
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 24.34	Depth to Water: 16.94
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 18.42	

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

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

11.1 (Gals.) X 1.5 = 16.6 Gals.
1 Borehole Volume — Specified Volumes — Calculated Volume

CD	BD	Multiplier	CD	BD	Mulitplier	CD	BD	Multiplier
2"	8"	0.8	4"	8"	1.1	6"	10"	2.1
2"	10"	1.1	4"	10"	1.5	6"	12"	2.6
			4"	12"	2.0			

Assumes 25% borehole porosity
CD = casing diameter BD = borehole diameter

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1354	—	well	Dewatered @ 6		gal. —	
1513	70.5	6.6	1613	28	11.5	
1514	— well		Dewatered @ 12		gal. —	
1532	72.0	6.7	1772	18	17	

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

Sampling Date: 5/5/05 Sampling Time: 1555 Depth to Water: 17.30

Sample I.D.: MW-2 Laboratory: Del Mar (Other) Lancaster

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

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

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

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

SAN DIEGO COUNTY CHEVRON WELL MONITORING DATA SHEET

BTS #: 050505 - BS1	Site: 9-1197
Sampler: SB	Date: 5/5/05
Weather: Cloudy	Ambient Air Temperature: 67°F
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 23.02	Depth to Water: 14.30
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 16.04	

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

Sampling Method: ~~Bailer~~ SB / (Disposable Bailer) / Extraction Port / Dedicated Tubing / Other:

13.0 (Gals.) X 1.5 = 19.6 Gals.
1 Borehole Volume — Specified Volumes — Calculated Volume

CD	BD	Multiplier	CD	BD	Mulitplier	CD	BD	Multiplier
2"	8"	0.8	4"	8"	1.1	6"	10"	2.1
2"	10"	1.1	4"	10"	1.5	6"	12"	2.6
			4"	12"	2.0			

Assumes 25% borehole porosity
CD = casing diameter BD = borehole diameter

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1406	—	well	Dewatered	@ 6	gal. —	
1438	67.7	6.7	1888	22	13	
1439	— well	Dewatered	@ 14	gal. —		
1502	67.8	6.8	2010	57	20	

Did well dewater? (Yes) No — Gallons actually evacuated: 20

Sampling Date: 5/5/05 — Sampling Time: 1610 — Depth to Water: 14.30

Sample I.D.: MW-3 — Laboratory: Del Mar (Other) Lancaster

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

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

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

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

SAN DIEGO COUNTY CHEVRON WELL MONITORING DATA SHEET

BTS #: 050505-BS2	Site: 9-1197
Sampler: SB	Date: 5/5/05
Weather: Cloudy	Ambient Air Temperature: 66°F
Well I.D.: MW-4	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 25.21	Depth to Water: 18.10
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 19.52	

Purge Method: Bailer / Disposable Bailer / Positive Air Displacement / Fixed Electric Submersible / Variable Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other_____

Sampling Method: Bailer / Disposable Bailer / Extraction Port / Dedicated Tubing / Other:

10.6 (Gals.) X 1.5 = 15.9 Gals.
1 Borehole Volume — Specified Volumes — Calculated Volume

CD	BD	Multiplier	CD	BD	Mulitplier	CD	BD	Multiplier
2"	8"	0.8	4"	8"	1.1	6"	10"	2.1
2"	10"	1.1	4"	10"	1.5	6"	12"	2.6
			4"	12"	2.0			

Assumes 25% borehole porosity
CD = casing diameter BD = borehole diameter

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1422	—	well	Dewatered @		6 gal.	
1427	67.0	6.5	1838	13	11	
1435	67.6	6.4	1847	11	16	

Did well dewater? (Yes) ~~No~~ SB — Gallons actually evacuated: 16

Sampling Date: 5/5/05 Sampling Time: 1531 Depth to Water: 18.15

Sample I.D.: MW-4 Laboratory: Del Mar (Other) Lancaster

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

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

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

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

SAN DIEGO COUNTY CHEVRON WELL MONITORING DATA SHEET

BTS #: 050505-BS2	Site: 9-1197
Sampler: SB	Date: 5/5/05
Weather: Cloudy	Ambient Air Temperature: 69°F
Well I.D.: MW-5	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 23.83	Depth to Water: 18.13
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 19.27	

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

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

8.5 (Gals.) X 1.5 = 12.8 Gals.
1 Borehole Volume — Specified Volumes — Calculated Volume

CD	BD	Multiplier	CD	BD	Mulitplier	CD	BD	Multiplier
2"	8"	0.8	4"	8"	1.1	6"	10"	2.1
2"	10"	1.1	4"	10"	1.5	6"	12"	2.6
			4"	12"	2.0			

Assumes 25% borehole porosity
CD = casing diameter BD = borehole diameter

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1345	—	Well Dewatered @ 5 gal. —				
		~~Slow Recharging Well~~ SB				
1400	69.4	6.9	1563	16	8.5	
1505	69.7	6.8	1650	21	13	
~~1545~~ SB						

Did well dewater? (Yes) No — Gallons actually evacuated: ~~8~~ SB 13

Sampling Date: 5/5/05 — Sampling Time: 1600 — Depth to Water: 18.27

Sample I.D.: MW-5 — Laboratory: Del Mar (Other) Lancaster

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

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

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

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

SAN DIEGO COUNTY CHEVRON WELL MONITORING DATA SHEET

BTS #: 050505-BS2	Site: 9-1197
Sampler: SB	Date: 5/5/05
Weather: Cloudy	Ambient Air Temperature: 66°F
Well I.D.: MW-6	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 23.83	Depth to Water: 17.23
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 18.55	

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

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

9.9 (Gals.) X 1.5 = 14.8 Gals.
1 Borehole Volume — Specified Volumes — Calculated Volume

CD	BD	Multiplier	CD	BD	Mulitplier	CD	BD	Multiplier
2"	8"	0.8	4"	8"	1.1	6"	10"	2.1
2"	10"	1.1	4"	10"	1.5	6"	12"	2.6
			4"	12"	2.0			

Assumes 25% borehole porosity
CD = casing diameter BD = borehole diameter

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1447	66.8	6.7	1989	40	10	
1448	67.1	6.6	2039	102	15	

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

Sampling Date: 5/5/05 Sampling Time: 1500 Depth to Water: 18.55

Sample I.D.: MW-6 Laboratory: Del Mar (Other) Lancaster

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

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

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

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

CHAIN OF CUSTODY FORM

Chevron Environmental Management Company ■ 145 S. State College Boulevard ■ Brea, CA 92822-2292 COC 1 of 1

Chevron Site Global ID: TC607301337

Chevron Site Number 9-1197

Chevron Site Address: 8808 Lawerence Welk Dr., Escondido

Chevron PM: SECOR: c/o Madelaine Montilla
2301 Leghorn, Mountain View, CA 94043

Chevron MT PM Phone No.: (650) 691-0131 x 235

MT Job No: MTCH.91197.08

Chevron Service Code: *ZZ02800*
X Management Transfer – SO CA Portfolio Job
~~☐ Construction/Retail Job or~~
~~☐ Retail and Terminal Business Unit (RTBU) Job~~

NOTE:
THIS IS A LEGAL DOCUMENT. ALL FIELDS MUST BE FILLED OUT CORRECTLY AND COMPLETELY.

Chevron Consultant: SECOR International, Inc.
Address: 2301 Leghorn, Mountain View, CA 94043
Consultant Contact: Maurice Baron
Consultant Phone No. (650) 691-0131
Consultant Project No. MTCH.91197.08
Sampling Company: BTST
Sampled By (Print): Sean Boykin
Sampler Signature: Sean Boykin

Del Mar Analytical
☐ Irvine, CA
☐ Colton, CA
Lab Contact: _____
Phone No:
☐ (949) 261-1022
☐ (909) 370-4667

Lancaster Laboratories
☒ Lancaster, PA
Lab Contact:
Teresa Cunningham
Phone No:
☒ (717) 656-2300

EDF Required?
☑ Yes
☐ No

ANALYSES REQUIRED

SAMPLE ID: Field Point Name	Matrix	Top Depth	Date (yymmdd)	Sample Time	Container Type	# of Containers	Preservation	EPA 8015B GRO ☐ DRO ☐ ORO ☐ TPHd ☐ HC SCREEN ☐	EPA 8021B BTEX ☐ MTBE ☐	EPA 8260B TPH-G ☑ BTEX ☑ MTBE ☐ OXYGENATES ☑ HVOC ☐	EPA 6010 CA, FE, K, MG, MN, NA ☐	EPA 6010/7000 TITLE 22 METALS ☐ TTLC ☐ STLC ☐	EPA 150.1 PH ☐ EPA 310.1 ALKALINITY ☐	SM 2510B SPECIFIC CONDUCTIVITY ☐	EPA 418.1 TRPH ☐ EPA 413.1 OIL/GREASES ☐				Notes/Comments
MW-1	W		050505	1523	VOA	4	HCL			X									
MW-2	↓		↓	1555	↓	↓	↓			X									
MW-3	↓		↓	1610	↓	↓	↓			X									
MW-4	↓		↓	1531	↓	↓	↓			X									
MW-5	↓		↓	1600	↓	↓	↓			X									
MW-6	↓		↓	1500	↓	↓	↓			X									

Special Instructions

Temp. Blank Check

Time	Ter
1300	3°C
1600	3°C

Relinquished By	Company	Date/Time:	Relinquished To	Company
Sean Boykin	BTS	5/5/05 1730	Date/Time: 5/5/05 1730	BTS Locked Refrigerator
Relinquished By	Company	Date/Time:	Relinquished To Date/Time:	Company
Relinquished By	Company	Date/Time:	Relinquished To Date/Time:	Company

Turnaround Time:
24 Hours ☐ Standard ☑
48 hours ☐ Other ☐

Sample Integrity: (Check by lab on arrival)
Intact: ____ On Ice: ____ Temp: ____

WELLHEAD INSPECTION CHECKLIST

Client: Chevron Date: 5/5/05

Site Address: 8808 Lawrence Welk Dr. - Escondido

Job Number: 050505-B52 Technician: SB

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
MW-1	X							
MW-2	X							
MW-3	X							
MW-4	X							
MW-5	X							
MW-6	X							

NOTES:

CHEVRON-SOUTHERN CALIFORNIA TYPE **A** BILL OF LADING

SOURCE RECORD **BILL OF LADING**

FOR NON-HAZARDOUS PURGEWATER RECOVERED FROM GROUNDWATER WELLS AT CHEVRON FACILITIES IN THE STATE OF CALIFORNIA. THE NON-HAZARDOUS PURGE- WATER WHICH HAS BEEN RECOVERED FROM GROUND- WATER WELLS IS COLLECTED BY THE CONTRACTOR, MADE UP INTO LOADS OF APPROPRIATE SIZE AND HAULED BY PSC TO THEIR FACILITY IN LONG BEACH, CALIFORNIA.

The contractor performing this work is BLAINE TECH SERVICES, INC. (BLAINE), 5482 Complex St., Suite 111 San Diego, CA 92123 (phone [310] 885-4455). Blaine Tech Services, Inc. is authorized by CHEVRON PRODUCTS COMPANY to recover, collect, apportion into loads, and haul the Non-Hazardous Well Purgewater that is drawn from wells at the CHEVRON facility indicated below and to deliver that purgewater to BLAINE. Transport routing of the Non-Hazardous Well Purgewater may be direct from one Chevron facility to BLAINE; from one Chevron facility to BLAINE via another Chevron facility; or any combination thereof. The Non-Hazardous Well Purgewater is and remains the property of Chevron Products Company.

This **Source Record BILL OF LADING** was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the Chevron facility described below:

9-1197
CHEVRON #

8808	Lawrence Welk Dr.	Escondido	CA
street number	street name	city	state

WELL I.D.	GALS.	WELL I.D.	GALS.
MW-1	19		
MW-2	17		
MW-3	20		
MW-4	16		
MW-5	13		
MW-6	15		

added equip. rinse water 20

any other adjustments

TOTAL GALS. RECOVERED 120

loaded onto BTS vehicle # 54

BTS event # 050505-BS2 time 1630 date 5/5/05

signature Sean Boyle

* *

REC'D AT BTS time 1730 date 5/5/05

unloaded by signature Sean Boyle

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME Chevron 9-1197				PROJECT NUMBER 050505-BS2			
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
Ultrameter	609552	~~1400~~ SB 1300	pH 4, 7, 10 cond 3900	4, 7, 10 3900	yes	69.5	SB

DATE: July 21, 2005

CHEVRONTEXACO ANNUAL GROUNDWATER MONITORING REPORT (CONT'D)
Former Chevron 9-1197, 8808 Lawrence Welk Drive, Escondido, CA

MONITORING WELL PURGING AND GROUNDWATER SAMPLING PROCEDURES

Monitoring well purging and sampling methods follow the procedures outlined by the County of San Diego, Environmental Health Services, Site Assessment and Mitigation (SAM) Manual.

Purging Procedures

A. Using a decontaminated instrument (i.e., tape measure, continuity meter, or interface probe) measure the depth to groundwater in reference to the measuring point at the top of the casing. Measure the total depth of the well to calculate the height and volume of water in the borehole.

B. Based on previously obtained data, if a monitoring well is suspected of containing LPH, lower a transparent bailer into the well to evaluate the presence of hydrocarbon sheen on the water table.

C. Decontaminate the purge pump and/or PVC bailers by scrubbing in Alconox detergent solution, followed by a tap water rinse and then a deionized water rinse.

D. Purge, by pumping, bailing, or using a vacuum truck with dedicated tubing, approximately one borehole volume of groundwater as calculated according to the thickness of the water column and the diameter of the borehole.

E. Conduct field measurements (i.e., pH and conductivity) after approximately one borehole volume has been purged, or if the water level in the well is so low as to prevent further purging (dry).

   1. If the well has not been purged dry, continue to bail and/or pump and conduct field measurements again following removal of each successive one-half borehole volume of water.

      a) If the first and second series of measurements vary by less than ten percent, the well has been adequately purged. Allow the well to recover to 80 percent of its static condition and begin the sampling procedure.

      b) If the measurements vary by ten percent or greater, repeat Step E1 above.

   2. If the well has been purged dry, measure the water level and allow the well to recharge to 80 percent, or for two hours, whichever occurs first. Calculate the percent recovery.

      a) If the well recovers to less than 80 percent within two hours, it is a slow recharging well. Repeat Step E1 above.

DATE: July 21, 2005

CHEVRONTEXACO ANNUAL GROUNDWATER MONITORING REPORT (CONT'D)
Former Chevron 9-1197, 8808 Lawrence Welk Drive, Escondido, CA

Sampling Procedures

A. Use a disposable bailer to collect the groundwater sample.

B. Fit the stopcock onto the base of the bailer and transfer the groundwater sample into the appropriate container(s). Where applicable, some containers are completely filled to achieve zero headspace. Label the samples according to location and date of collection.

C. Enter the samples into ChevronTexaco Chain-of-Custody protocol and preserve on ice until delivery to the analytical laboratory. Complete the Well Development or Purging/Sampling Log to be stored in the project file.

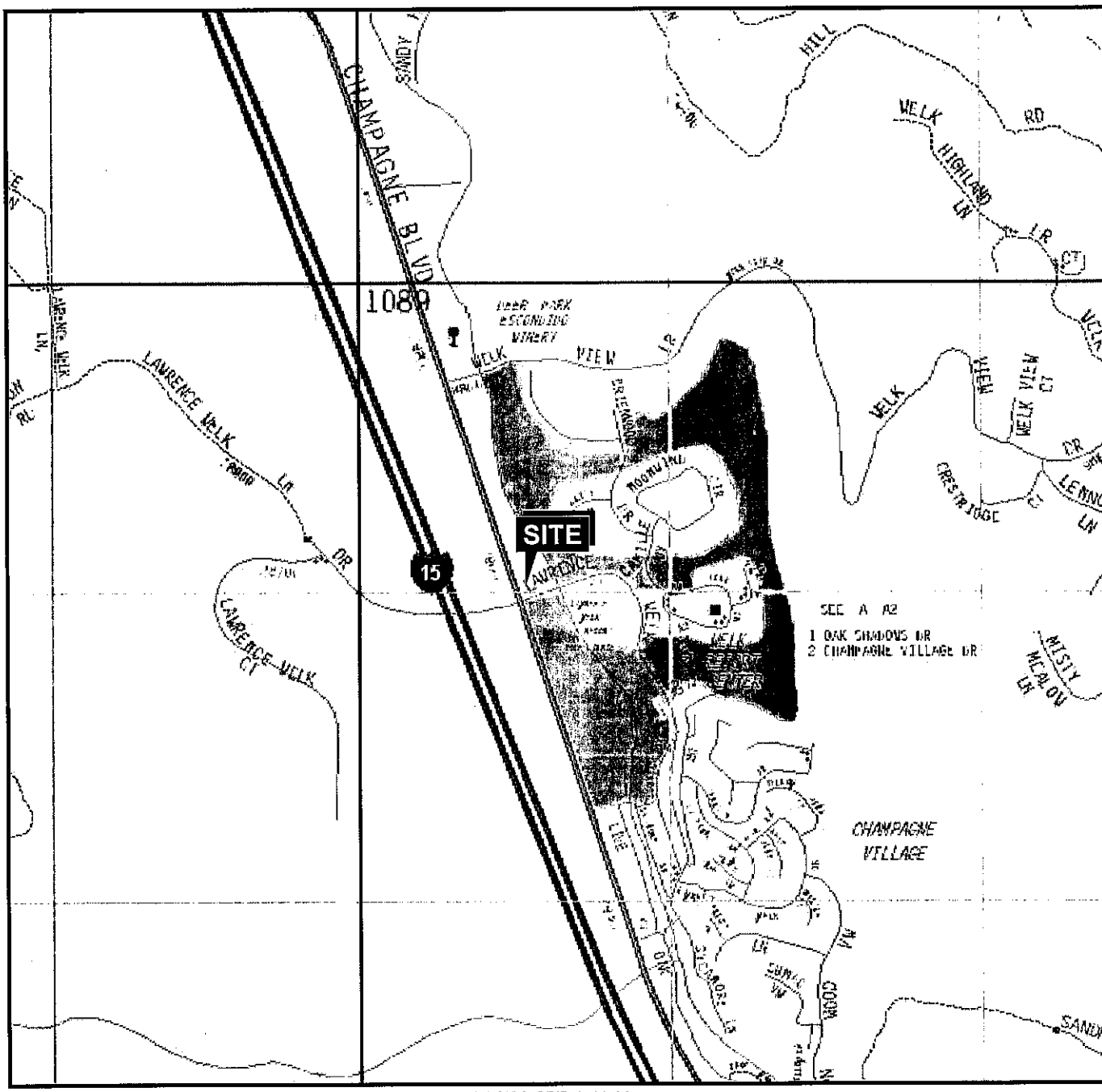
When requested by the client, collect the bailer rinsate blank of deionized water to check decontamination procedure. In addition, trip blanks prepared by the laboratory and kept with the samples may be included to check for cross contamination of samples within the cooler. Additional and/or alternate QA/QC samples can be collected and analyzed upon client request.

FIGURES

FORMER CHEVRON STATION # 9-1197

8808 LAWRENCE WELK DRIVE
ESCONDIDO, CALIFORNIA, 92026

MTCH.91197.08
August 1, 2005



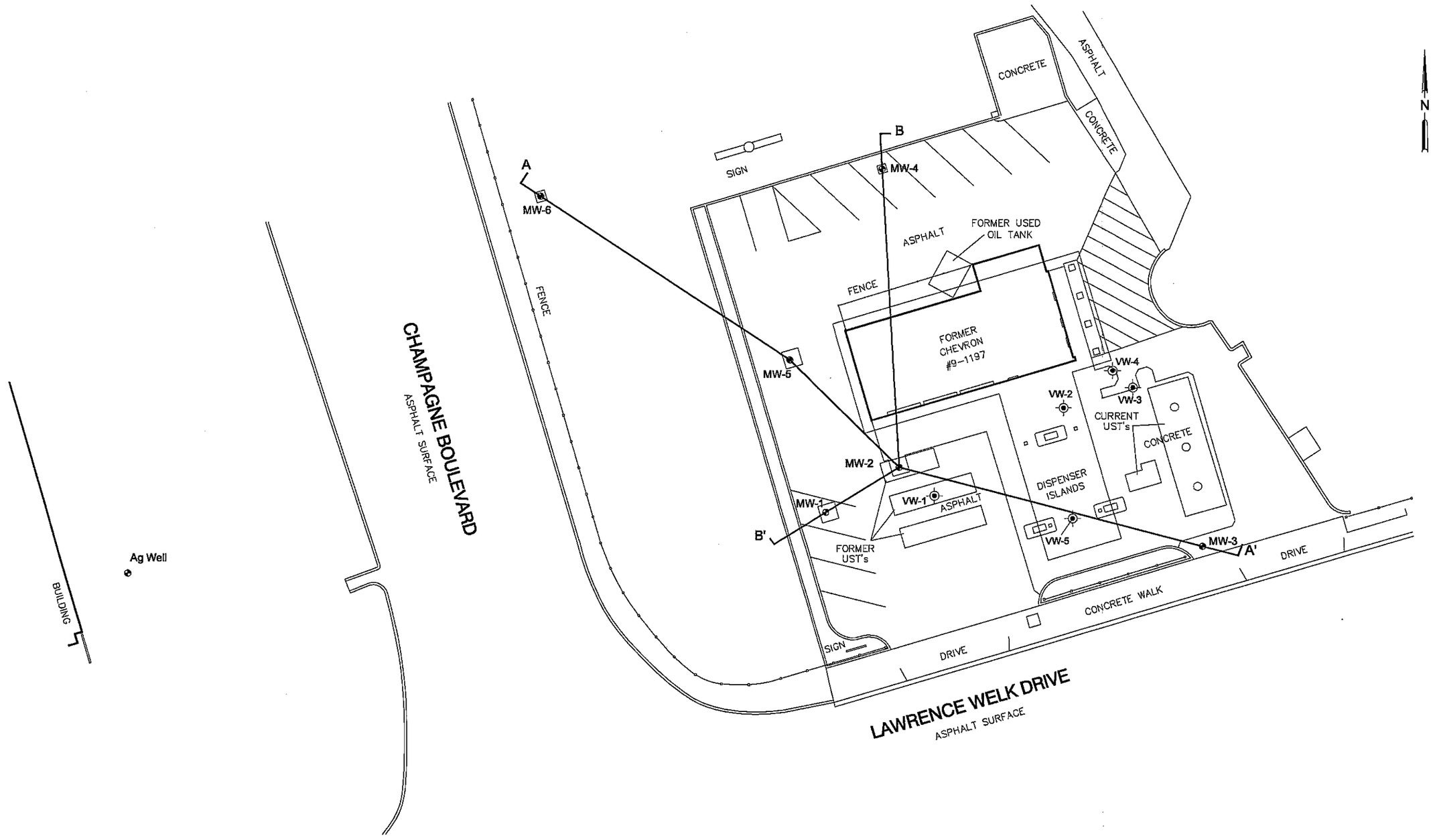
REFERENCE: SAN DIEGO 2003 THE THOMAS GUIDE CD-ROM, PAGE & GRID 1089 A2.

N

0 1320 2640

APPROXIMATE SCALE (FEET)

SECOR 2655 Camino del Rio North, Suite 302 San Diego, California 92108 PHONE:(619) 296-6195 FAX:(619) 296-6199	FOR: FORMER CHEVRON STATION #9-1197 8808 Lawrence Welk Drive Escondido, California		SITE LOCATION MAP		FIGURE: 1
	JOB NUMBER: MTCH.91197.08	DRAWN BY: RO	CHECKED BY: RT	APPROVED BY:	DATE: 5/12/05



LEGEND:

MW-1	MONITORING WELL
VW-1	VAPOR EXTRACTION WELL
A A'	CROSS-SECTION LINE

0 30 60

APPROXIMATE SCALE (FEET)

MAP REFERENCE:
SITE AREA MAP ADAPTED FROM SOUTHERN CALIFORNIA SURVEY REPORT, DATED 5/07/2004

SECOR
2655 CAMINO DEL RIO NORTH, SUITE 302
SAN DIEGO, CALIFORNIA
PHONE: (619) 296-6195/296-6199 (FAX)

PREPARED FOR:
FORMER
CHEVRON STATION # 9-1197
8808 LAWRENCE WELK DRIVE
ESCONDIDO, CALIFORNIA

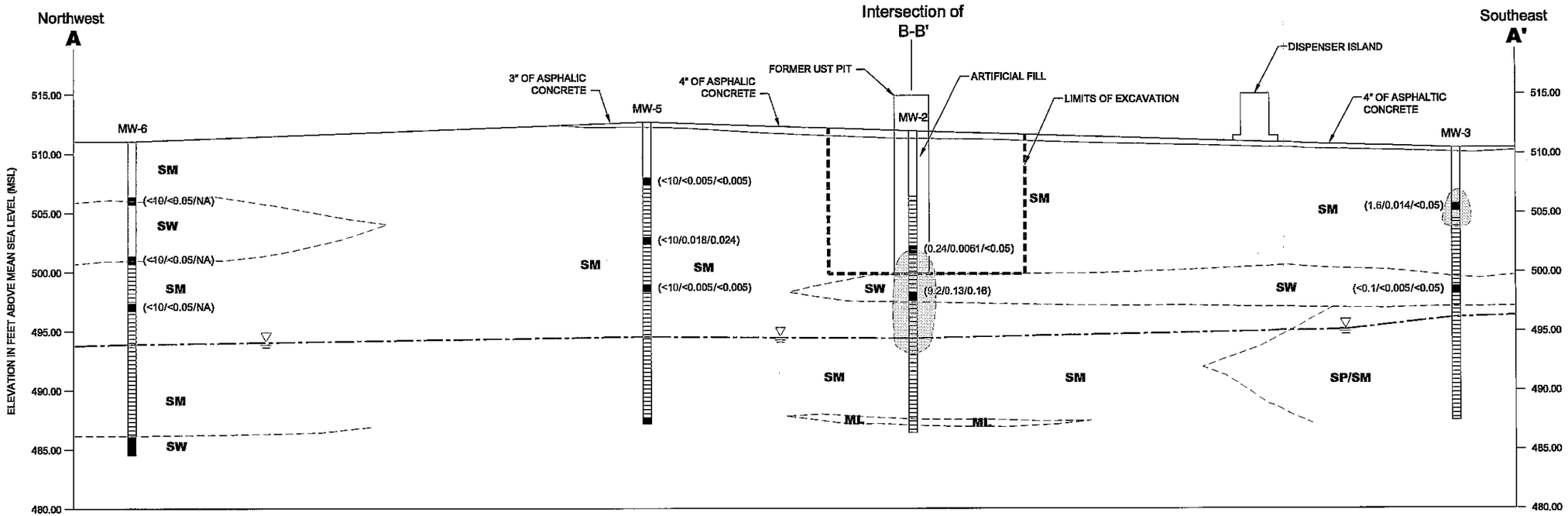
SITE PLAN AND
CROSS SECTION TRACES

FIGURE: 2

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
MTCH.91197.08	BDF	RT		05/04/05

FILEPATH:Q:\CADD-08\Projects 2005\ChevronTexaco\9-1197-2k5\9-1197SP11-04.dwg|pdodge|Jul 11, 2005 at 13:53|Layout: Layout1

9-1197SP11-04



LEGEND:

MW-6 BORING/WELL IDENTIFICATION

-INDICATES BACKFILLED BOREHOLE

-BLANK PVC CASING INTERVAL

-SCREEENED PVC WELL INTERVAL

(<10/<0.05/NA) SOIL SAMPLE LOCATION WITH TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (TPHg), BENZENE, AND METHYL TERT-BUTYL ETHER (MTBE) CONCENTRATIONS MEASURED IN MILLIGRAMS PER KILOGRAM (mg/kg).

< LESS THAN REPORTING LIMIT INDICATED

INFERRED SOIL CONTACT

APPROXIMATE DEPTH TO GROUNDWATER ON MAY 5, 2005

ESTIMATED EXTENT OF RESIDUAL PETROLEUM HYDROCARBONS IN SOIL

LIMITS OF EXCAVATION

ML SILT

SW WELL GRADED SAND

SM SILTY SAND

SP/SM POORLY GRADED SAND AND SILTY SAND

0 20 40
HORIZONTAL SCALE IN FEET

0 10 20
VERTICAL SCALE IN FEET

SECOR
2655 CAMINO DEL RIO NORTH, SUITE 302
SAN DIEGO, CALIFORNIA
PHONE: (619) 296-6195/296-6199 (FAX)

PREPARED FOR:
FORMER CHEVRON STATION # 9-1197
8808 Lawence Welk Drive
Escondido, California

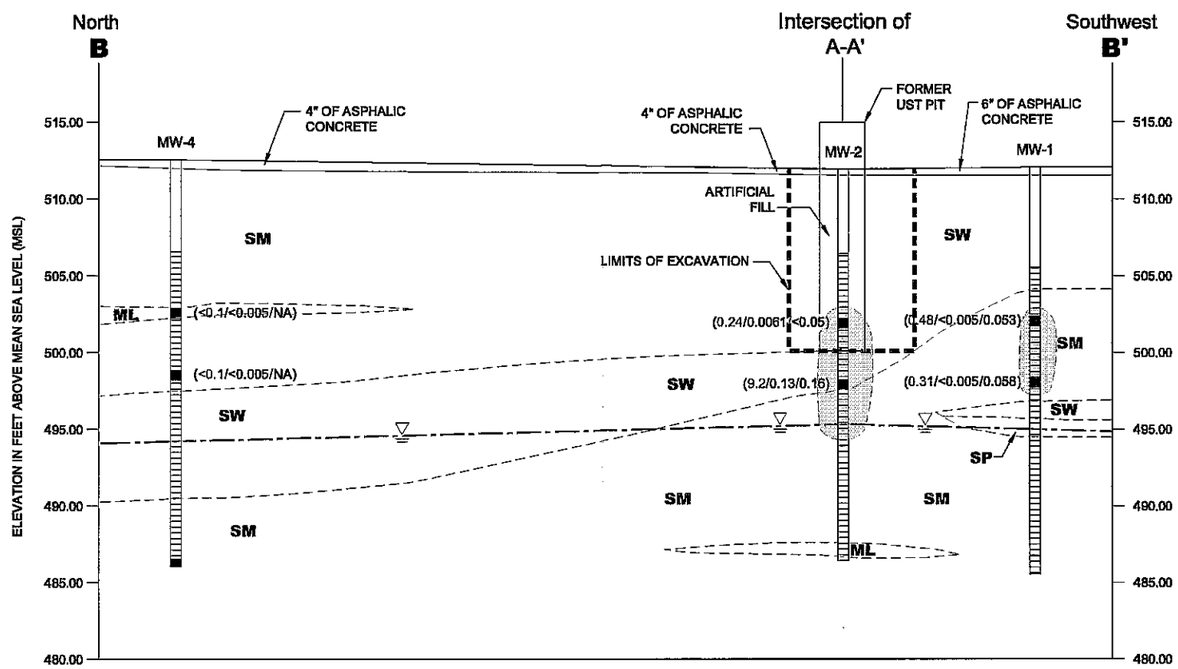
GEOLOGIC CROSS SECTION
A-A'

FIGURE: 3

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
MTCH.91197.08	PD			5/23/05

FILEPATH:Q:\CADD-08\Projects 2005\ChevronTexaco\9-1197-2k5\9-1197XSEC-A.dwg|pdodge|Jul 12, 2005 at 9:59|Layout: Model

9-1197XSEC-A.DWG



LEGEND:

MW-4 BORING/WELL IDENTIFICATION

-INDICATES BACKFILLED BOREHOLE

-BLANK PVC CASING INTERVAL

-SCREEENED PVC WELL INTERVAL

(<0.1/<0.005/NA) SOIL SAMPLE LOCATION WITH TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (TPHg), BENZENE, AND METHYL TERT-BUTYL ETHER (MTBE) CONCENTRATIONS MEASURED IN MILLIGRAMS PER KILOGRAM (mg/kg).

< LESS THAN REPORTING LIMIT INDICATED

INFERRED SOIL CONTACT

APPROXIMATE DEPTH TO GROUNDWATER ON MAY 5, 2005

ESTIMATED EXTENT OF RESIDUAL PETROLEUM HYDROCARBONS IN SOIL

LIMITS OF EXCAVATION

ML SILT

SW WELL GRADED SAND

SP POORLY GRADED SAND

SM SILTY SAND

0 20 40
HORIZONTAL SCALE IN FEET

0 10 20
VERTICAL SCALE IN FEET

SECOR
2655 CAMINO DEL RIO NORTH, SUITE 302
SAN DIEGO, CALIFORNIA
PHONE: (619) 296-6195/296-6199 (FAX)

PREPARED FOR:
FORMER CHEVRON STATION # 9-1197
8808 Lawence Welk Drive
Escondido, California

GEOLOGIC CROSS SECTION
B-B'

FIGURE: 4

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
MTCH.91197.08	PD			5/23/05

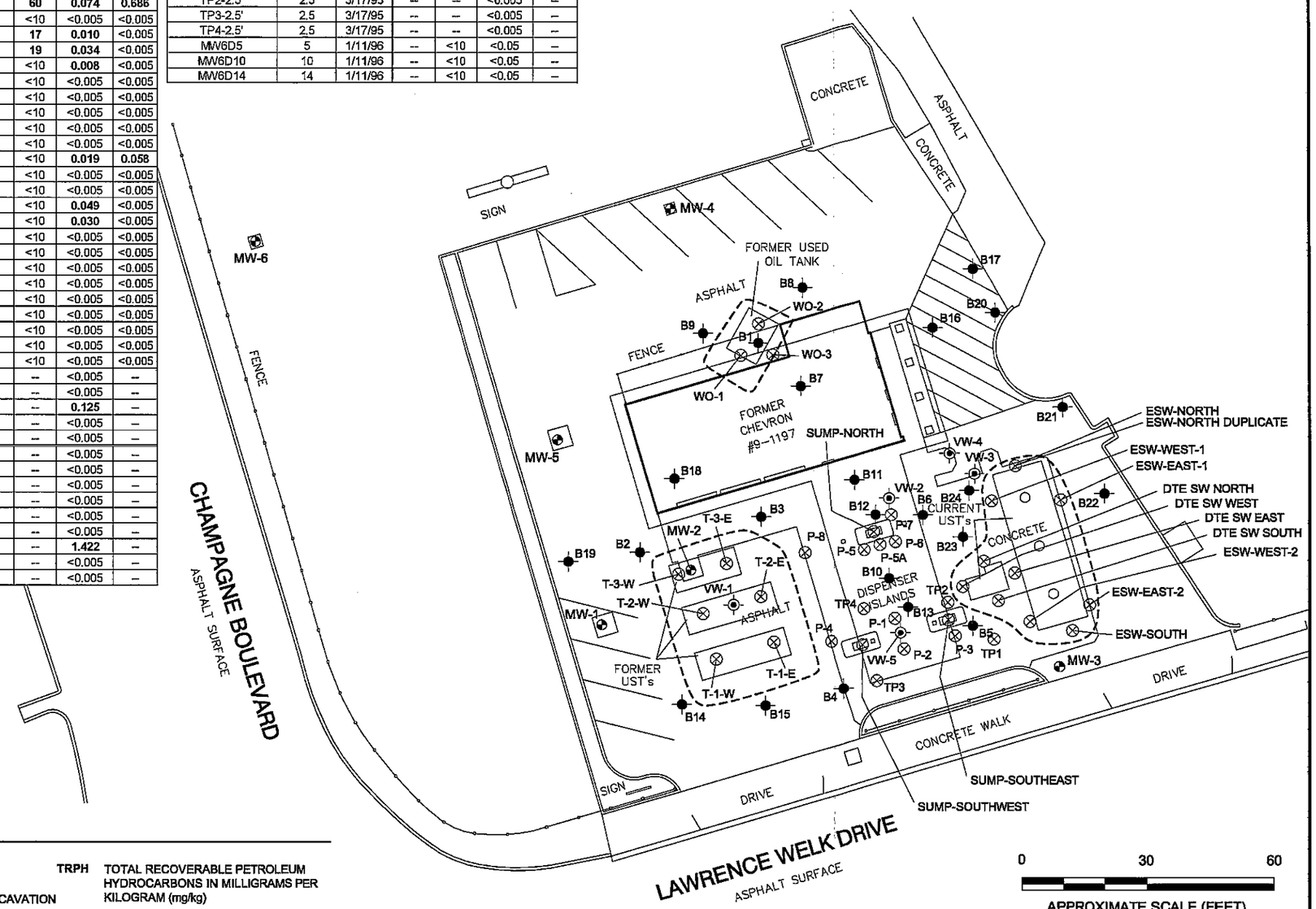
FILEPATH:Q:\CADD-08\Projects 2005\ChevronTexaco\9-1197-2k5\9-1197XSEC-B.dwg|pdodge|Jul 12, 2005 at 9:59|Layout: Model

9-1197XSEC-B.DWG

Sample ID	Sample Depth (ft bgs)	Date Sampled	TRPH	TPHg	Benzene	MTBE
T-1-W	16	10/21/93	--	<0.1	--	--
T-1-E	15	10/21/93	--	0.25	--	--
T-2-W	16.8	10/21/93	--	9.2	--	--
T-2-E	17	10/21/93	--	2.4	--	--
T-3-W	16	10/21/93	--	4300	--	--
T-3-E	16	10/21/93	--	5400	<2	--
WO-1	9.2	10/21/93	<10	--	--	--
WO-2	8.8	10/21/93	<10	--	--	--
WO-3	7	10/21/93	23000	--	<2	--
P1	2.5	11/2/93	--	61	--	--
P2	3	11/2/93	--	0.44	--	--
P3	3	11/2/93	--	0.11	--	--
P4	4	11/2/93	--	<0.1	--	--
P5	3.5	11/2/93	--	0.15	--	--
P6	3.5	11/2/93	--	8.5	--	--
P7	3.5	11/2/93	--	28	--	--
P8	5	11/2/93	--	490	--	--
P1-D5	5	11/2/93	--	3300	<1	--
P2-D6	6	11/2/93	--	<0.1	<0.005	--
P3-D3.5	3.5	11/2/93	--	<0.1	<0.005	--
P5A-D6.5	6.5	11/2/93	--	0.26	<0.005	--
P6-D6	6	11/2/93	--	110	<0.1	--
P7-D6	6	11/2/93	--	980	1.8	--
P8-D6	6	11/2/93	--	120	<0.1	--
B1D5	5	12/13/93	11	<0.1	<0.005	--
B1D10	10	12/13/93	<10	<0.1	<0.005	--
B2D10	10	12/13/93	--	4.1	<0.03	<0.3
B2D14	14	12/13/93	--	13	0.040	<0.3
B3D5	5	12/13/93	--	<0.1	<0.005	<0.05
B3D10	10	12/13/93	--	13	<0.03	<0.3
B3D14	14	12/13/93	--	3.8	0.028	<0.05
B4D5	5	12/13/93	--	<0.1	<0.005	<0.05
B4D10	10	12/13/93	--	0.13	<0.005	<0.05
B4D14	14	12/13/93	--	<0.1	<0.005	<0.05
B5D5	5	12/14/93	--	<0.1	<0.005	<0.05
B5D10	10	12/14/93	--	0.14	<0.005	<0.05
B6D5	5	12/14/93	--	0.59	0.079	<0.05
B6D10	10	12/14/93	--	2.0	0.072	<0.05
B7D5	5	12/16/93	11	<0.1	<0.005	--
B7D10	10	12/17/93	<10	0.46	<0.005	--
B7D13.5	13.5	12/17/93	<10	0.16	<0.005	--
B8D10	10	12/16/93	<10	<0.1	<0.005	--
B8D14	14	12/16/93	<10	<0.1	<0.005	--
B9D10	10	12/16/93	<10	0.38	<0.005	--
B9D14	14	12/16/93	<10	<0.1	<0.005	--
B10D5	5	12/17/93	--	0.14	<0.005	<0.05
B10D10	10	12/17/93	--	<0.1	<0.005	<0.05
B10D13	13	12/17/93	--	<0.1	<0.005	<0.05
B11D5	5	12/17/93	--	190	<0.03	<1.0
B11D10	10	12/17/93	--	2.4	0.014	<0.05
B11D13	13	12/17/93	--	0.12	<0.005	<0.05
B12D5.5	5.5	12/17/93	--	2400	3.7	2.4
B12D10	10	12/17/93	--	0.58	0.012	<0.05
B13D5	5	12/17/93	--	0.10	<0.005	0.96
B13D10	10	12/17/93	--	<0.1	<0.005	<0.05
B13D12	12	12/17/93	--	<0.1	<0.005	<0.05
MW1D10	10	12/13/93	--	0.48	<0.005	0.053
MW1D14	14	12/13/93	--	0.31	<0.005	0.058
MW2D10	10	12/13/93	--	0.24	0.0061	<0.05
MW2D14	14	12/13/93	--	9.2	0.13	0.16
MW3D5	5	12/13/93	--	1.6	0.014	<0.05
MW3D12	12	12/13/93	--	<0.1	<0.005	<0.05
MW4D10	10	12/13/93	<10	<0.1	<0.005	--
MW4D14	14	12/13/93	<10	<0.1	<0.005	--
B14D10	10	3/8/94	--	<10	<0.005	<0.005
B14D13	13	3/8/94	--	<10	<0.005	<0.005
B15D5	5	3/8/94	--	<10	<0.005	<0.005
B15D10	10	3/8/94	--	<10	<0.005	<0.005
B15D13	13	3/8/94	--	<10	<0.005	<0.005
B16D5	5	3/8/94	--	<10	<0.005	<0.005
B16D10	10	3/8/94	--	<10	0.046	0.019
B16D12	12	3/8/94	--	<10	0.011	0.024
B17D5	5	3/8/94	--	<10	<0.005	<0.005
B17D10	10	3/8/94	--	<10	<0.005	<0.005

Sample ID	Sample Depth (ft bgs)	Date Sampled	TRPH	TPHg	Benzene	MTBE
B17D12	12	3/8/94	--	<10	<0.005	<0.005
VW1D5	5	3/8/94	--	<10	<0.005	<0.005
VW1D10	10	3/8/94	--	30	<0.005	0.022
VW1D14	14	3/8/94	--	<10	<0.005	0.024
MW5D5	5	3/8/94	--	<10	<0.005	<0.005
MW5D10	10	3/8/94	--	<10	0.018	0.024
MW5D14	14	3/8/94	--	<10	<0.005	<0.005
VW2D5	5	3/11/94	--	70	0.073	0.207
VW2D9	9	3/11/94	--	<10	0.072	0.014
VW2D13	13	3/11/94	--	60	0.074	0.686
VW3D5	5	3/11/94	--	<10	<0.005	<0.005
VW3D9	9	3/11/94	--	17	0.010	<0.005
VW3D9.5	9.5	3/11/94	--	19	0.034	<0.005
VW3D12	12	3/11/94	--	<10	0.008	<0.005
B18D5	5	3/11/94	--	<10	<0.005	<0.005
B18D10	10	3/11/94	--	<10	<0.005	<0.005
B18D14	14	3/11/94	--	<10	<0.005	<0.005
B19D5	5	3/11/94	--	<10	<0.005	<0.005
B19D9.5	9.5	3/11/94	--	<10	<0.005	<0.005
B19D10	10	3/11/94	--	<10	0.019	0.058
B19D13	13	3/11/94	--	<10	<0.005	<0.005
VW4D6	6	4/12/94	--	<10	<0.005	<0.005
VW4D9	9	4/12/94	--	<10	0.049	<0.005
VW4D12	12	4/12/94	--	<10	0.030	<0.005
B20D6	6	4/12/94	--	<10	<0.005	<0.005
B20D9	9	4/12/94	--	<10	<0.005	<0.005
B20D12.5	12.5	4/12/94	--	<10	<0.005	<0.005
B21D6	6	4/12/94	--	<10	<0.005	<0.005
B21D9	9	4/12/94	--	<10	<0.005	<0.005
B21D11	11	4/12/94	--	<10	<0.005	<0.005
B22D6	6	4/12/94	--	<10	<0.005	<0.005
B22D8.5	8.5	4/12/94	--	<10	<0.005	<0.005
B22D11	11	4/12/94	--	<10	<0.005	<0.005
ESW-North	Unknown	3/1/95	--	--	<0.005	--
ESW-North Duplicate	Unknown	3/1/95	--	--	<0.005	--
ESW-West1	Unknown	3/1/95	--	--	0.125	--
ESW-West2	Unknown	3/1/95	--	--	<0.005	--
ESW-East1	Unknown	3/1/95	--	--	<0.005	--
ESW-East2	Unknown	3/1/95	--	--	<0.005	--
ESW-South	Unknown	3/1/95	--	--	<0.005	--
DTE SW East 8'	8	3/15/94	--	--	<0.005	--
DTE SW West 8'	8	3/15/94	--	--	<0.005	--
DTE SW North 10'	10	3/15/94	--	--	<0.005	--
DTE SW South 6'	6	3/15/94	--	--	<0.005	--
Sump North 2'	2	3/15/94	--	--	1.422	--
Sump Southeast 3'	3	3/15/94	--	--	<0.005	--
Sump Southwest 2'	2	3/15/94	--	--	<0.005	--

Sample ID	Sample Depth (ft bgs)	Date Sampled	TRPH	TPHg	Benzene	MTBE
VW5D5	5	3/17/95	--	--	<0.005	--
VW5D10	10	3/17/95	--	--	<0.005	--
B23D3	3	3/17/95	--	--	<0.005	--
B23D6	6	3/17/95	--	--	5.94	--
B23D10	10	3/17/95	--	--	<0.005	--
B24D3	3	3/17/95	--	--	<0.005	--
B24D6	6	3/17/95	--	--	0.034	--
B24D10	10	3/17/95	--	--	<0.005	--
TP1-2.5'	2.5	3/17/95	--	--	<0.005	--
TP2-2.5'	2.5	3/17/95	--	--	<0.005	--
TP3-2.5'	2.5	3/17/95	--	--	<0.005	--
TP4-2.5'	2.5	3/17/95	--	--	<0.005	--
MW6D5	5	1/11/96	--	<10	<0.05	--
MW6D10	10	1/11/96	--	<10	<0.05	--
MW6D14	14	1/11/96	--	<10	<0.05	--



LEGEND:

MW-1	MONITORING WELL	TRPH	TOTAL RECOVERABLE PETROLEUM HYDROCARBONS IN MILLIGRAMS PER KILOGRAM (mg/kg)
- - - - - -	APPROXIMATE LIMITS OF EXCAVATION	TPHg	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (mg/kg)
P-1	SOIL SAMPLE LOCATION	MTBE	METHYL TERT-BUTYL ETHER (mg/kg)
B-1	SOIL BORING LOCATION	<	BELOW LABORATORY REPORTING LIMIT INDICATED
VW-1	VAPOR EXTRACTION WELL	--	NOT ANALYZED
ft bgs	FEET BELOW GROUND SURFACE		

MAP REFERENCE: SOUTHERN CALIFORNIA SURVEY, MAY 7, 2004.

SECOR
2655 CAMINO DEL RIO NORTH, SUITE 302
SAN DIEGO, CALIFORNIA
PHONE: (619) 296-6195/296-6199 (FAX)

FOR:
FORMER
CHEVRON STATION # 9-1197
8808 LAWRENCE WELK DRIVE
ESCONDIDO, CALIFORNIA

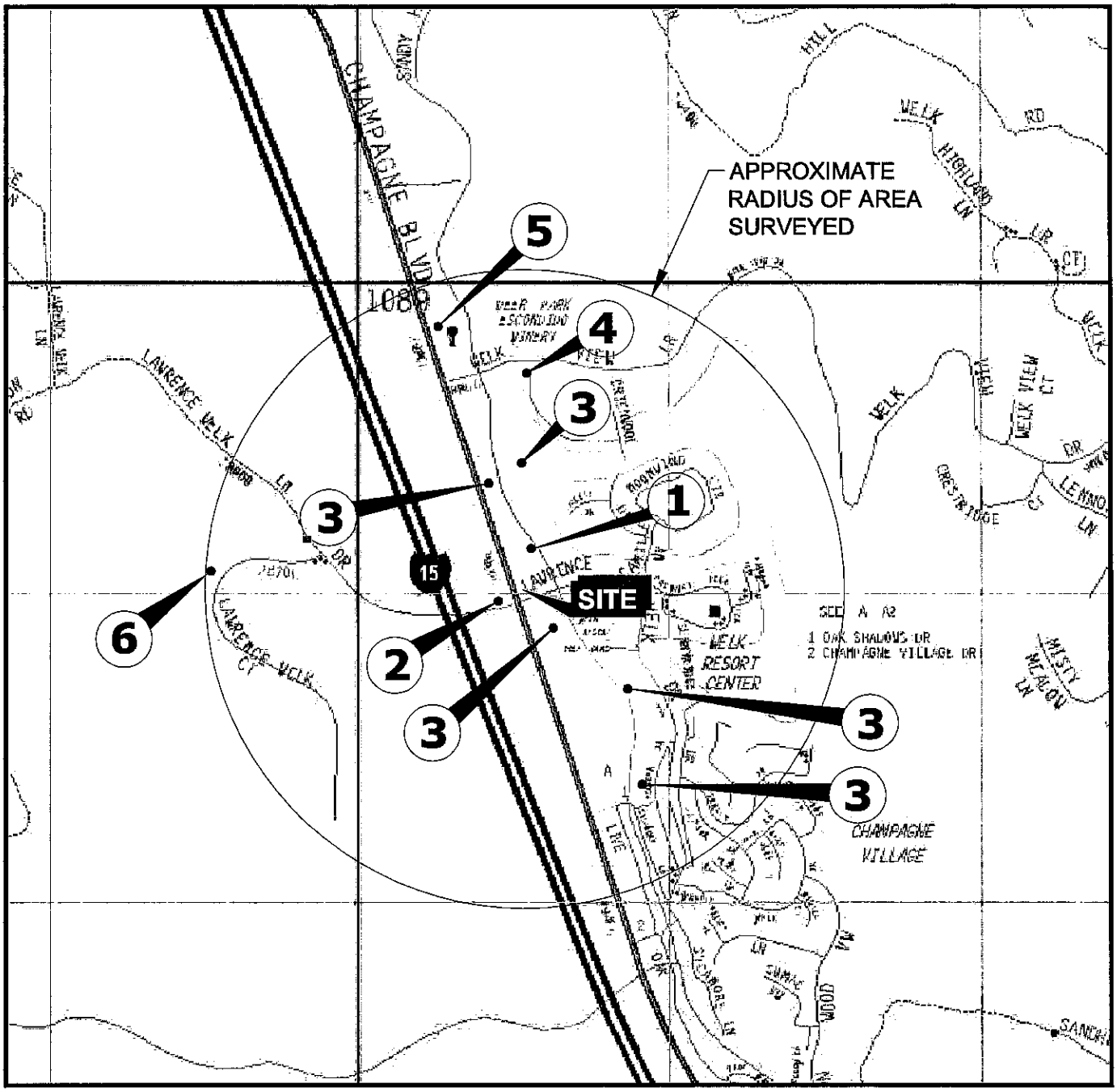
PETROLEUM HYDROCARBON DISTRIBUTION IN SOIL MAP

FIGURE: 5

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
MTCH.91197.08	BDF	RT		05/04/05

FILEPATH:Q:\CADD-08\PROJECTS 2005\CHEVRONTEXACO\9-1197-2K5\9-1197PETROL11-04.DWG|PDODGE|JUL 11, 2005 AT 13:52|LAYOUT: LAYOUT1

9-1197PETROL11-04



REFERENCE: SAN DIEGO 2003 THE THOMAS GUIDE CD-ROM, PAGE & GRID 1089 A2.

1. Moosa Creek
2. Active Agricultural Well (Golf Country Mini Storage)
3. Active irrigation well(s) (Lawrence Welk Resort and Golf Course)
4. Active irrigation well(s) (Deer Park Winery)
5. Inactive water supply well (Undeveloped Field)
6. Active watervent pipe(s) (Lawrence Welk Lane/Court Neighborhood)

N

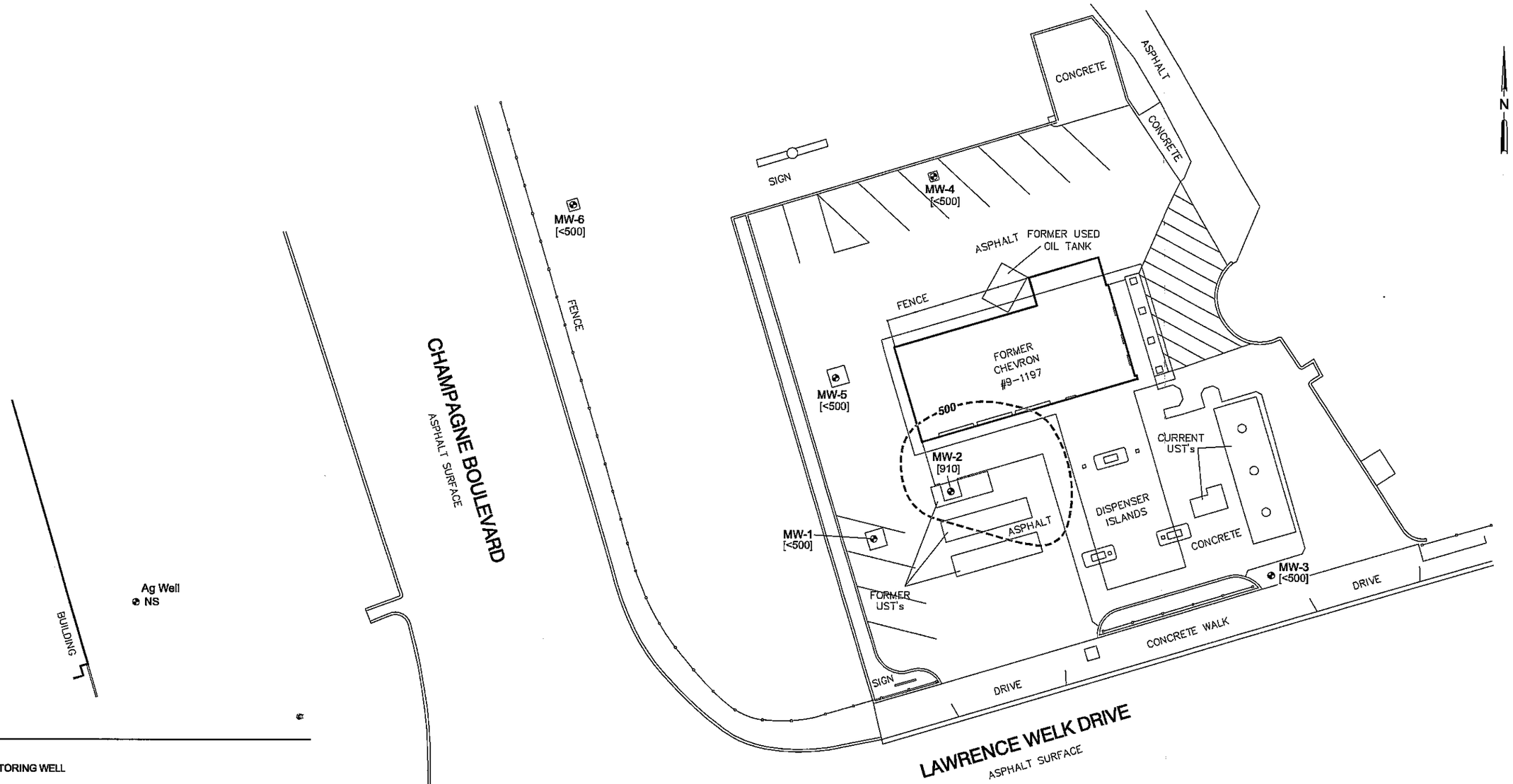
0 1320 2640

APPROXIMATE SCALE (FEET)

SECOR 2655 CAMINO DEL RIO NORTH, SUITE 302 SAN DIEGO, CALIFORNIA PHONE: (619) 296-6195/296-6199 (FAX)	FOR: FORMER CHEVRON STATION # 9-1197 8808 Lawence Welk Drive Escondido, California	SENSITIVE RECEPTOR SURVEY AREA RADIUS MAP		FIGURE: 6
	JOB NUMBER: MTCH.91197.08	DRAWN BY: PD	CHECKED BY:	APPROVED BY:	DATE: 5/23/05

FILEPATH:Q:\CADD-08\PROJECTS 2005\CHEVRONTEXACO\9-1197-2K5\9-1197SSRSAR.DWG|PDODGE|JUL 11, 2005 AT 13:53|LAYOUT: STLOC

9-1197SSRSAR.DWG



LEGEND:

MW-12	MONITORING WELL
[<500]	TPHg CONCENTRATION IN MICROGRAMS PER LITER (μg/L)
500 ?	ESTIMATED TPHg ISOCONCENTRATION CONTOUR IN μg/L. DASHED WHERE INFERRED. QUERIED WHERE UNKNOWN
TPHg	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
<	BELOW LABORATORY REPORTING LIMIT
NS	NOT SAMPLED

0 30 60

APPROXIMATE SCALE (FEET)

MAP REFERENCE: SOUTHERN CALIFORNIA SURVEY, MAY 7, 2004.

SECOR
2655 CAMINO DEL RIO NORTH, SUITE 302
SAN DIEGO, CALIFORNIA
PHONE: (619) 296-6195/296-6199 (FAX)

PREPARED FOR:

FORMER CHEVRON STATION # 9-1197
8808 Lawence Welk Drive
Escondido, California

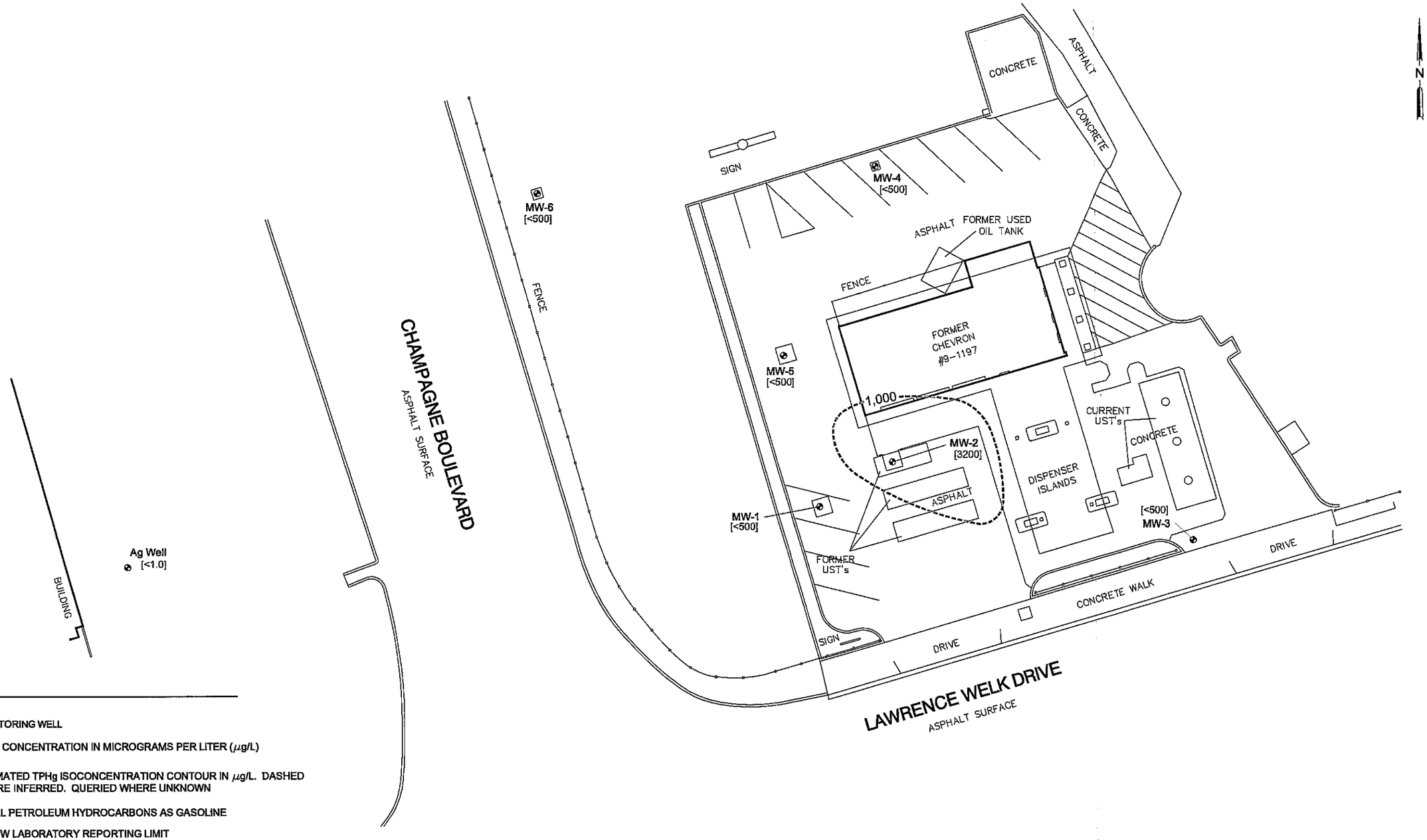
TPHg ISOCONCENTRATION MAP
MAY 7, 2004

FIGURE: 7

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
MTCH.91197.08	PD			5/23/05

FILEPATH:Q:\CADD-08\Projects 2005\ChevronTexaco\9-1197-2k5\9-1197TPHg5-04.dwg|pdodge|Jul 11, 2005 at 13:52|Layout: Layout1

9-1197TPHg5-04.dwg



LEGEND:

MW-12	MONITORING WELL
[<500]	TPHg CONCENTRATION IN MICROGRAMS PER LITER (μg/L)
1,000	ESTIMATED TPHg ISOCONCENTRATION CONTOUR IN μg/L. DASHED WHERE INFERRED. QUERIED WHERE UNKNOWN
TPHg	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
<	BELOW LABORATORY REPORTING LIMIT

0 30 60

APPROXIMATE SCALE (FEET)

MAP REFERENCE: SOUTHERN CALIFORNIA SURVEY, MAY 7, 2004.

SECOR
2655 CAMINO DEL RIO NORTH, SUITE 302
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PREPARED FOR:
FORMER
CHEVRON STATION # 9-1197
8808 LAWRENCE WELK DRIVE
ESCONDIDO, CALIFORNIA

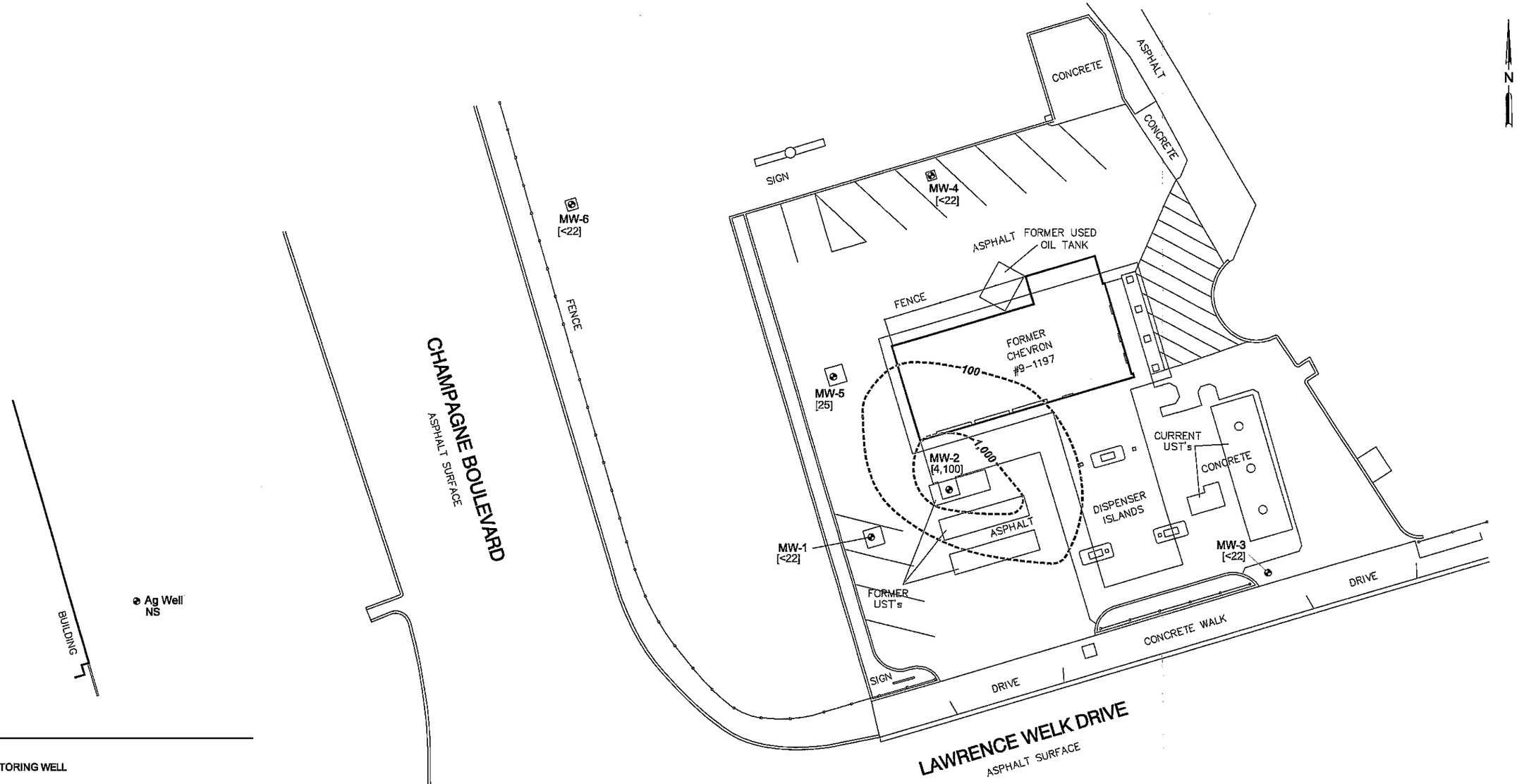
TPHg ISOCONCENTRATION MAP
NOVEMBER 5, 2004

FIGURE: 8

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
MTCH.91197.08	BDF	RT		05/04/05

FILEPATH:Q:\CADD-08\Projects 2005\ChevronTexaco\9-1197-2k5\9-1197TPHg11-04.dwg|pdodge|Jul 11, 2005 at 13:52|Layout: Layout1

9-1197TPHg11-04



LEGEND:

MW-12	MONITORING WELL
[<22]	TPHg CONCENTRATION IN MICROGRAMS PER LITER (μg/L)
100 ?	ESTIMATED TPHg ISOCONCENTRATION CONTOUR IN μg/L. DASHED WHERE INFERRED. QUERIED WHERE UNKNOWN
TPHg	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
<	BELOW LABORATORY REPORTING LIMIT
NS	NOT SAMPLED

0 30 60

APPROXIMATE SCALE (FEET)

MAP REFERENCE: SOUTHERN CALIFORNIA SURVEY, MAY 7, 2004.

SECOR
2655 CAMINO DEL RIO NORTH, SUITE 302
SAN DIEGO, CALIFORNIA
PHONE: (619) 296-6195/296-6199 (FAX)

PREPARED FOR:
FORMER
CHEVRON STATION # 9-1197
8808 LAWRENCE WELK DRIVE
ESCONDIDO, CALIFORNIA

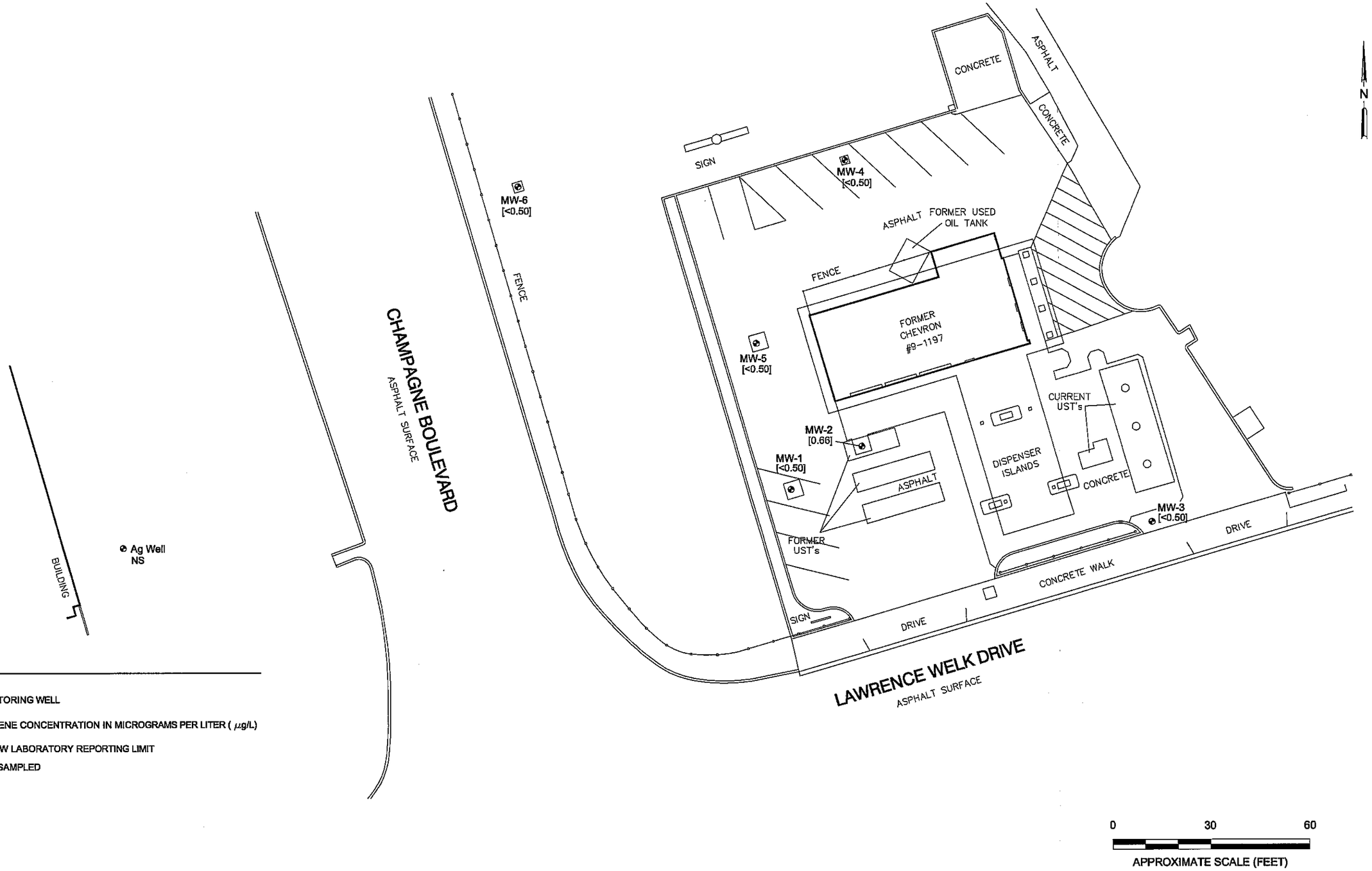
TPHg ISOCONCENTRATION MAP
MAY 5, 2005

FIGURE: 9

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
MTCH.91197.08	PD			05/26/05

FILEPATH:Q:\CADD-08\Projects 2005\ChevronTexaco\9-1197-2k5\9-1197TPHg5-05.dwg|pdodge|Jul 11, 2005 at 13:52|Layout: Layout1

9-1197TPHg5-05



LEGEND:

MW-12	MONITORING WELL
[<0.50]	BENZENE CONCENTRATION IN MICROGRAMS PER LITER ($\mu g/L$)
<	BELOW LABORATORY REPORTING LIMIT
NS	NOT SAMPLED

MAP REFERENCE: SOUTHERN CALIFORNIA SURVEY, MAY 7, 2004.

SECOR
2655 CAMINO DEL RIO NORTH, SUITE 302
SAN DIEGO, CALIFORNIA
PHONE: (619) 296-6195/296-6199 (FAX)

FOR:
FORMER
CHEVRON STATION # 9-1197
8808 LAWRENCE WELK DRIVE
ESCONDIDO, CALIFORNIA

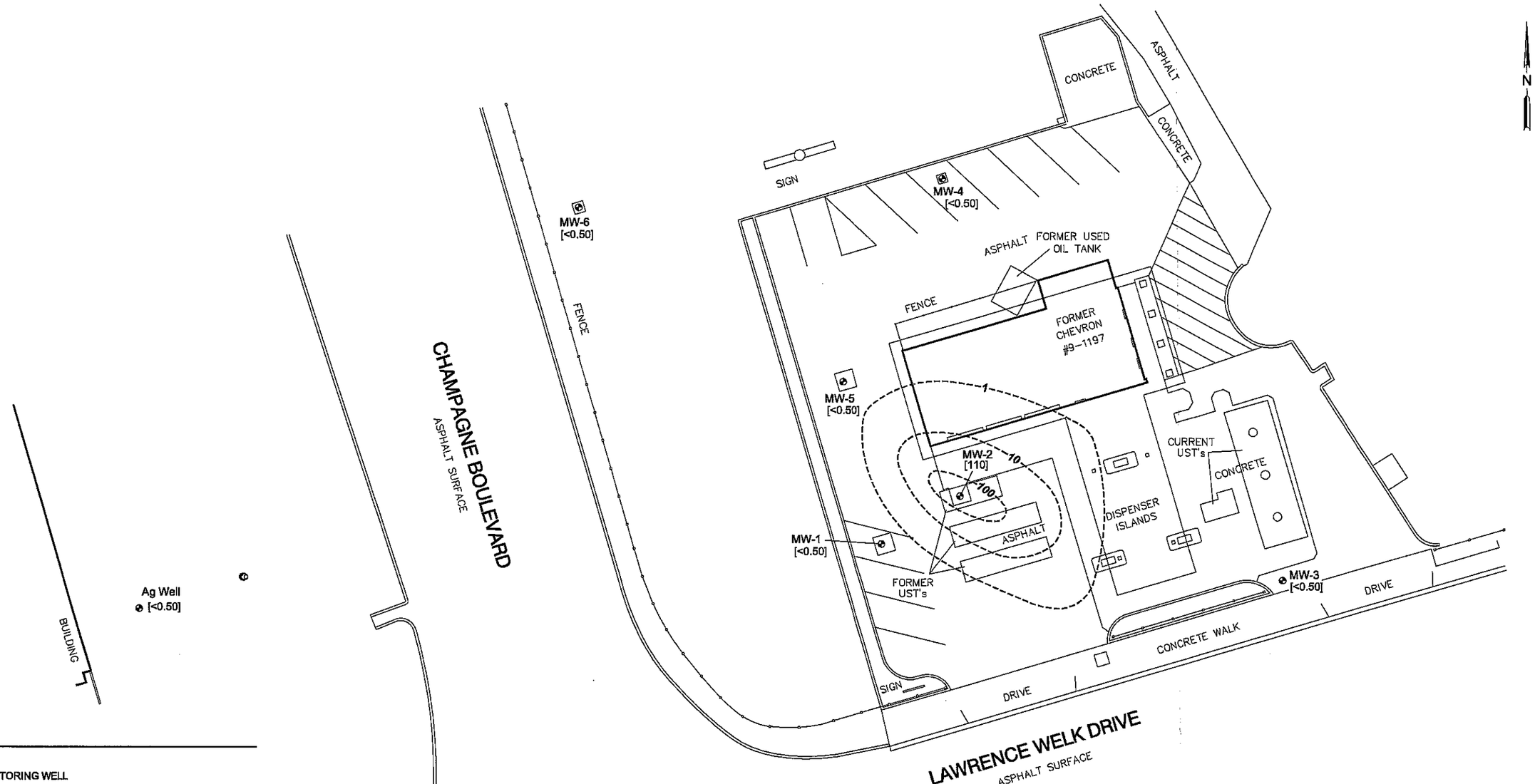
ANALYTICAL RESULTS FOR BENZENE IN GROUNDWATER MAP - MAY 7, 2004

FIGURE: 10

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
MTCH.91197.08	BDF	RT		05/04/05

FILEPATH:Q:\CADD-08\PROJECTS 2005\CHEVRONTEXACO\9-1197-2K5\9-1197BENZ5-04.DWG|PDODGE|JUL 12, 2005 AT 10:28|LAYOUT: LAYOUT1

9-1197BENZ5-04.dwg



LEGEND:

MW-12 — MONITORING WELL

[<0.50] — BENZENE CONCENTRATION IN MICROGRAMS PER LITER ($\mu g/L$)

< — BELOW LABORATORY REPORTING LIMIT

10 / ? — ESTIMATED MTBE ISOCONCENTRATION CONTOUR IN $\mu g/L$, QUERIED WHERE UNKNOWN

0 30 60

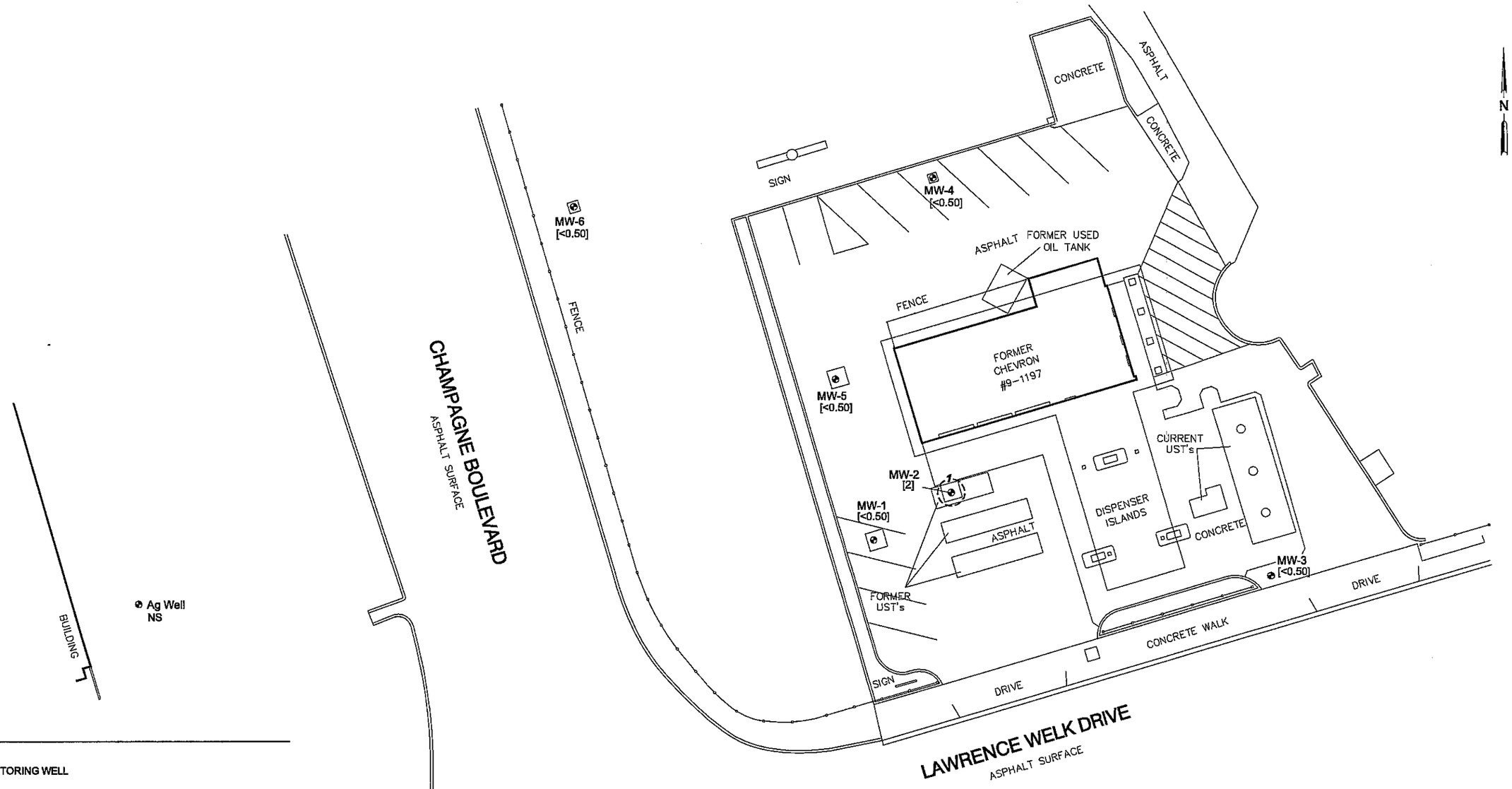
APPROXIMATE SCALE (FEET)

MAP REFERENCE: SOUTHERN CALIFORNIA SURVEY, MAY 7, 2004.

SECOR 2655 CAMINO DEL RIO NORTH, SUITE 302 SAN DIEGO, CALIFORNIA PHONE: (619) 296-6195/296-6199 (FAX)	FOR: FORMER CHEVRON STATION # 9-1197 8808 LAWRENCE WELK DRIVE ESCONDIDO, CALIFORNIA		BENZENE ISOCONCENTRATION MAP NOVEMBER 5, 2004		FIGURE: 11
	JOB NUMBER: MTCH.91197.08	DRAWN BY: PD	CHECKED BY:	APPROVED BY:	DATE: 5/26/05

FILEPATH:Q:\CADD-08\PROJECTS 2005\CHEVRONTEXACO\9-1197-2K5\9-1197BENZ11-04.DWG|PDODGE|JUL 11, 2005 AT 13:52|LAYOUT: LAYOUT1

9-1197BENZ11-04



LEGEND:

MW-12	MONITORING WELL
[<0.50]	BENZENE CONCENTRATION IN MICROGRAMS PER LITER (μg/L)
<	BELOW LABORATORY REPORTING LIMIT
NS	NOT SAMPLED
1 / ?	ESTIMATED MTBE ISOCONCENTRATION CONTOUR IN μg/L, QUERIED WHERE UNKNOWN

0 30 60

APPROXIMATE SCALE (FEET)

MAP REFERENCE: SOUTHERN CALIFORNIA SURVEY, MAY 7, 2004.

SECOR
2655 CAMINO DEL RIO NORTH, SUITE 302
SAN DIEGO, CALIFORNIA
PHONE: (619) 296-6195/296-6199 (FAX)

FOR:
FORMER
CHEVRON STATION # 9-1197
8808 LAWRENCE WELK DRIVE
ESCONDIDO, CALIFORNIA

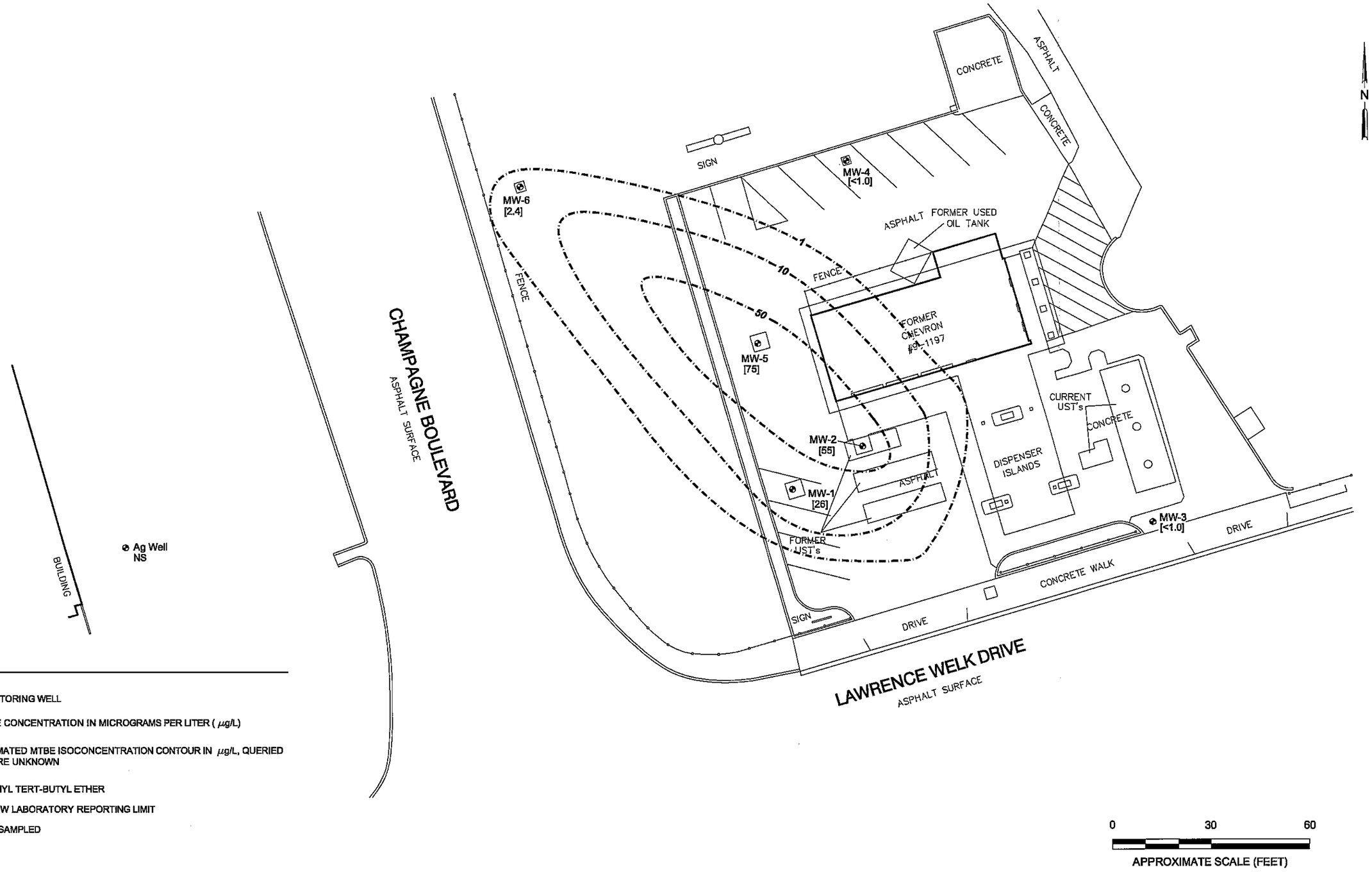
BENZENE ISOCONCENTRATION MAP
MAY 5, 2005

FIGURE: 12

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
MTCH.91197.08	BDF	RT		05/04/05

FILEPATH:Q:\CADD-08\PROJECTS 2005\CHEVRONTEXACO\9-1197-2K5\9-1197BENZ5-04.DWG|PDODGE|JUL 12, 2005 AT 10:29|LAYOUT: LAYOUT1

9-1197BENZ5-04.dwg



LEGEND:

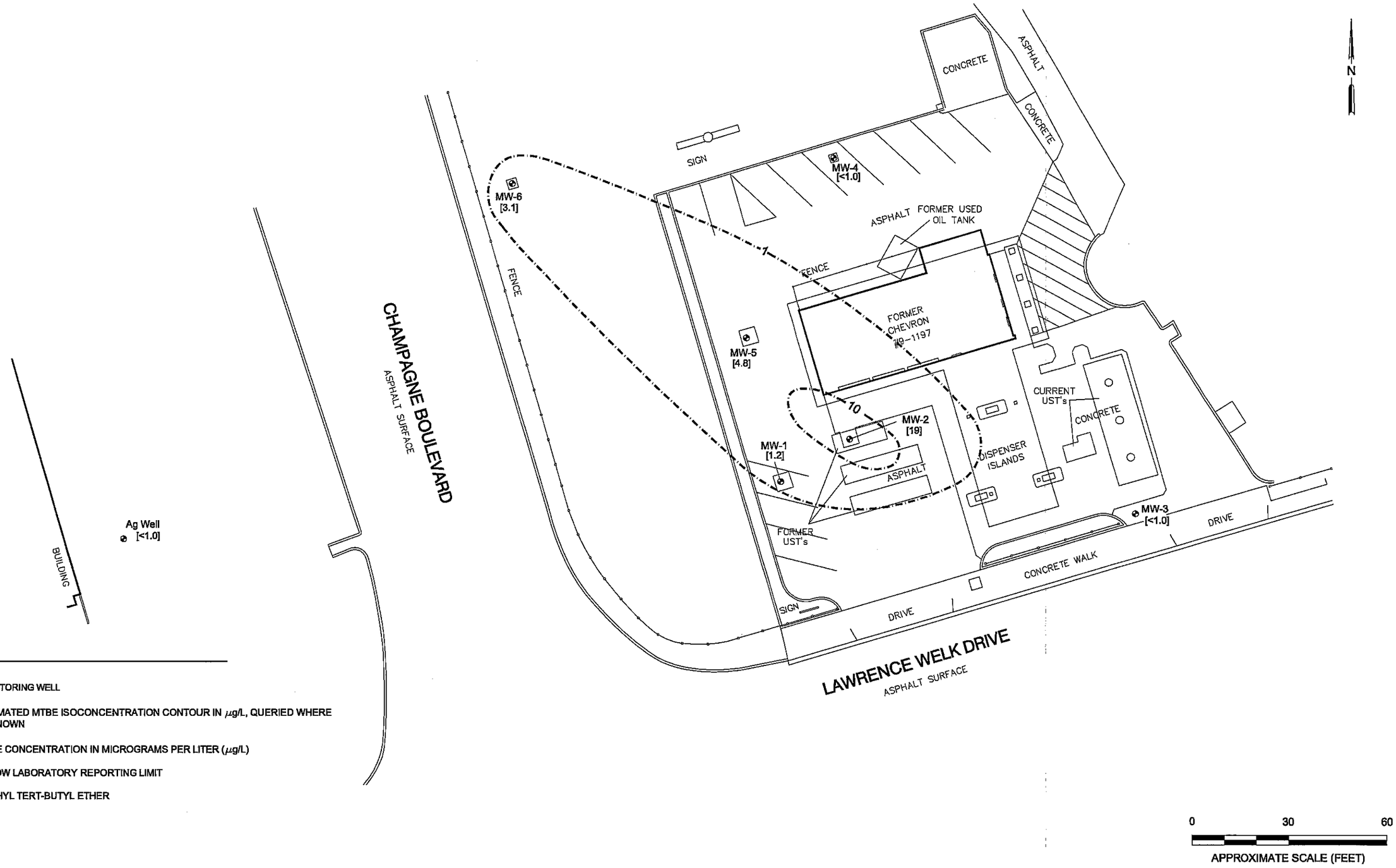
MW-12	MONITORING WELL
[<1.0]	MTBE CONCENTRATION IN MICROGRAMS PER LITER ($\mu g/L$)
10 ?	ESTIMATED MTBE ISOCONCENTRATION CONTOUR IN $\mu g/L$, QUERIED WHERE UNKNOWN
MTBE	METHYL TERT-BUTYL ETHER
<	BELOW LABORATORY REPORTING LIMIT
NS	NOT SAMPLED

MAP REFERENCE: SOUTHERN CALIFORNIA SURVEY, MAY 7, 2004.

SECOR 2655 CAMINO DEL RIO NORTH, SUITE 302 SAN DIEGO, CALIFORNIA PHONE: (619) 296-6195/296-6199 (FAX)	FOR: FORMER CHEVRON STATION # 9-1197 8808 LAWRENCE WELK DRIVE ESCONDIDO, CALIFORNIA		MTBE ISOCONCENTRATION MAP MAY 7, 2004	FIGURE: 13
	JOB NUMBER: MTCH.91197.08	DRAWN BY: BDF	CHECKED BY: RT	APPROVED BY:	DATE: 05/04/05

FILEPATH:Q:\CADD-08\PROJECTS 2005\CHEVRONTEXACO\9-1197-2K5\9-1197MTBE5-04.DWG|PDODGE|JUL 11, 2005 AT 13:51|LAYOUT: LAYOUT|

9-1197MTBE5-04.dwg



LEGEND:

MW-12	MONITORING WELL
10 ?	ESTIMATED MTBE ISOCONCENTRATION CONTOUR IN μg/L, QUERIED WHERE UNKNOWN
[<1.0]	MTBE CONCENTRATION IN MICROGRAMS PER LITER (μg/L)
<	BELOW LABORATORY REPORTING LIMIT
MTBE	METHYL TERT-BUTYL ETHER

MAP REFERENCE: SOUTHERN CALIFORNIA SURVEY, MAY 7, 2004.

SECOR
2655 CAMINO DEL RIO NORTH, SUITE 302
SAN DIEGO, CALIFORNIA
PHONE: (619) 296-6195/296-6199 (FAX)

FOR:
FORMER
CHEVRON STATION # 9-1197
8808 LAWRENCE WELK DRIVE
ESCONDIDO, CALIFORNIA

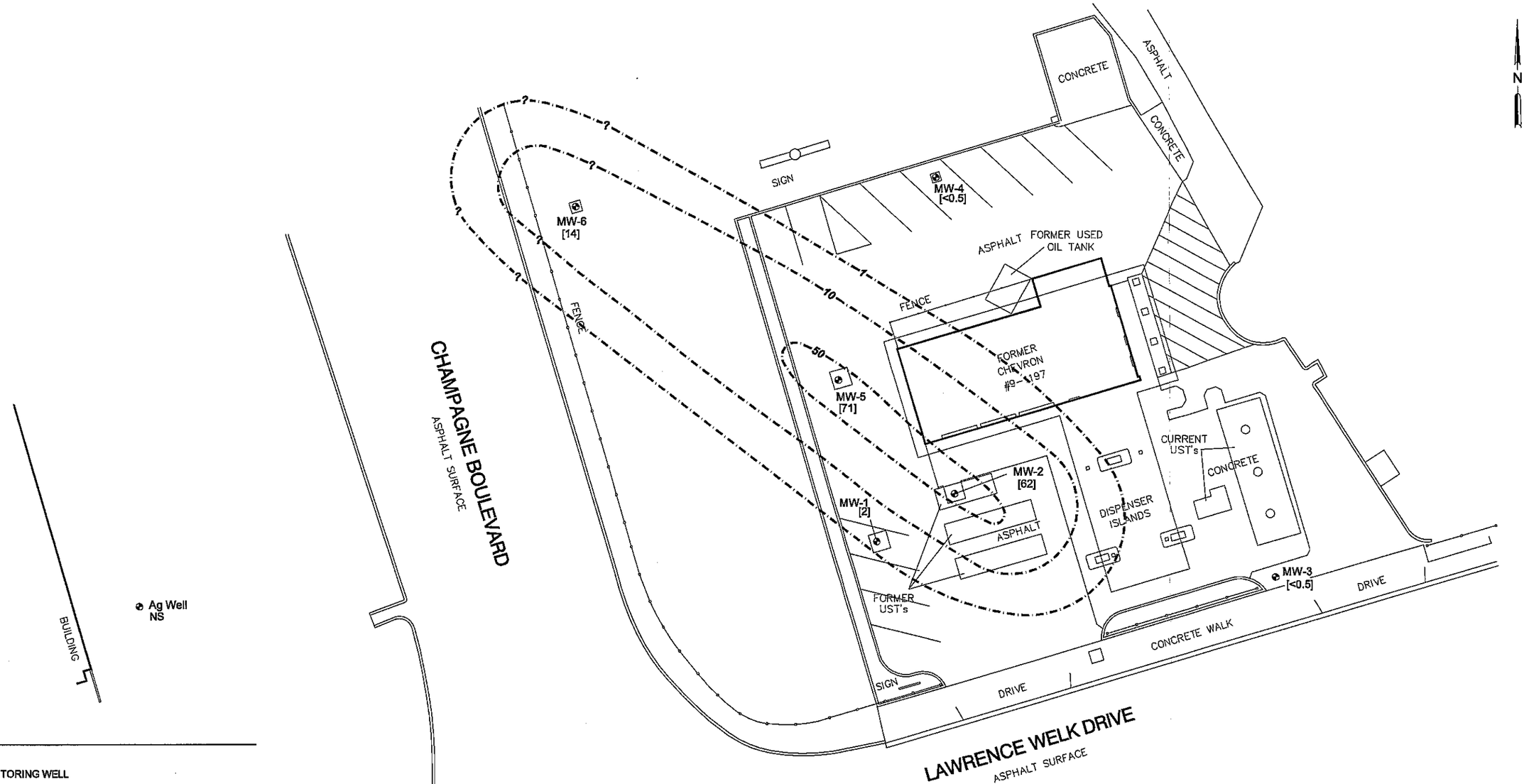
MTBE ISOCONCENTRATION MAP
NOVEMBER 5, 2004

FIGURE: 14

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
MTCH.91197.08	BDF	RT		05/04/05

FILEPATH:Q:\CADD-08\PROJECTS 2005\CHEVRONTEXACO\9-1197-2K5\9-1197MTBE11-04.DWG|PDODGE|JUL 11, 2005 AT 13:51|LAYOUT: LAYOUT1

9-1197MTBE11-04



LEGEND:

MW-12	MONITORING WELL
-10- -?-	ESTIMATED MTBE ISOCONCENTRATION CONTOUR IN $\mu g/L$, QUERIED WHERE UNKNOWN
[<0.5]	MTBE CONCENTRATION IN MICROGRAMS PER LITER ($\mu g/L$)
<	BELOW LABORATORY REPORTING LIMIT
MTBE	METHYL TERT-BUTYL ETHER
NS	NOT SAMPLED

0 30 60

APPROXIMATE SCALE (FEET)

MAP REFERENCE: SOUTHERN CALIFORNIA SURVEY, MAY 7, 2004.

SECOR
2655 CAMINO DEL RIO NORTH, SUITE 302
SAN DIEGO, CALIFORNIA
PHONE: (619) 296-6195/296-6199 (FAX)

PREPARED FOR:
FORMER
CHEVRON STATION # 9-1197
8808 LAWRENCE WELK DRIVE
ESCONDIDO, CALIFORNIA

MTBE ISOCONCENTRATION MAP
MAY 5, 2005

FIGURE: 15

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
MTCH.91197.08	PD			5/26/05

FILEPATH:Q:\CADD-08\Projects 2005\ChevronTexaco\9-1197-2k5\9-1197MTBE5-05.dwg|pdodge|Jul 19, 2005 at 11:18|Layout: Layout1

9-1197MTBE5-05

Figure 16
MTBE Concentration Trend Evaluation - Well MW-2
Former Chevron Station # 9-1197
8808 Lawrence Welk Drive, Escondido, California

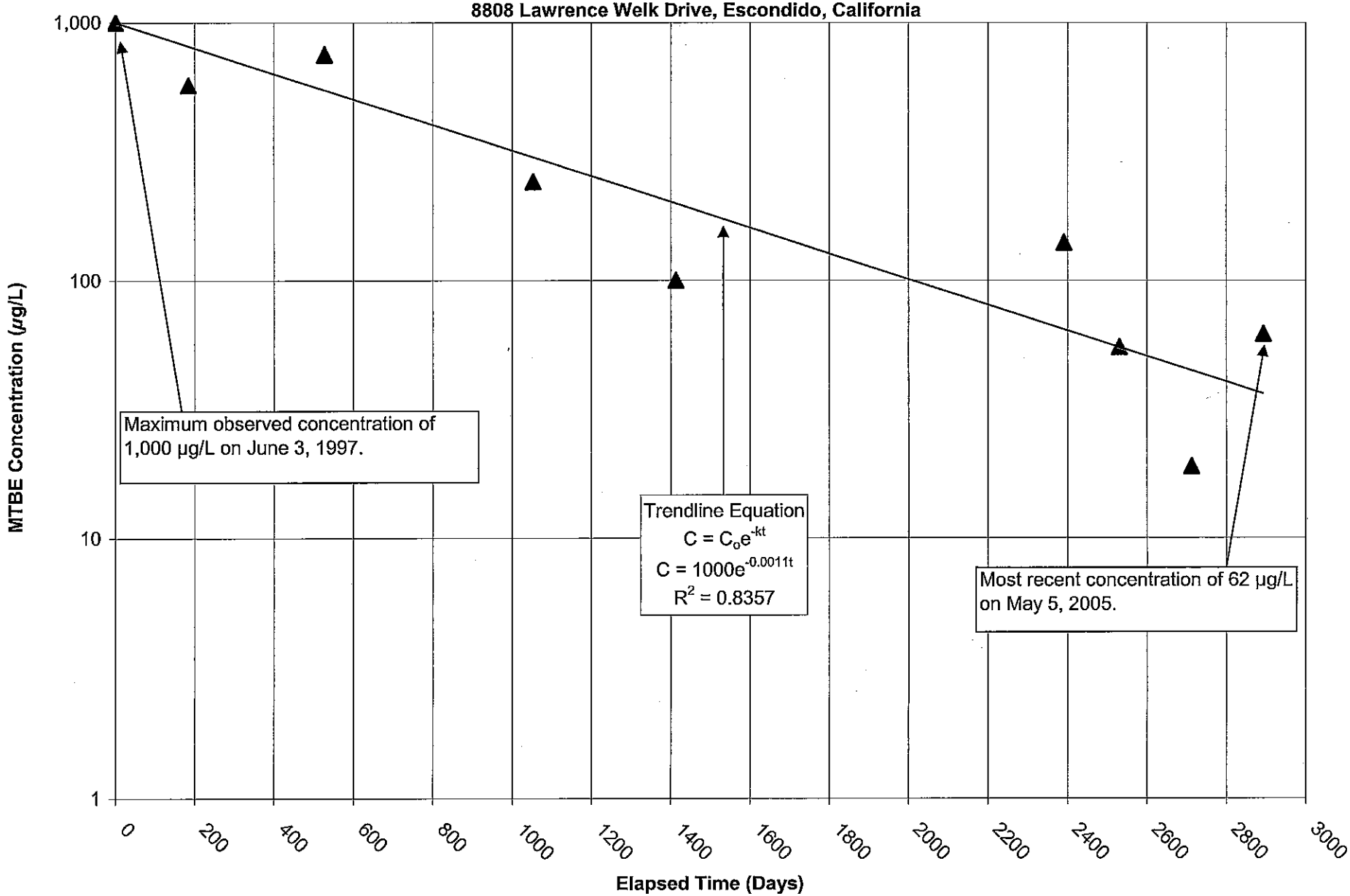
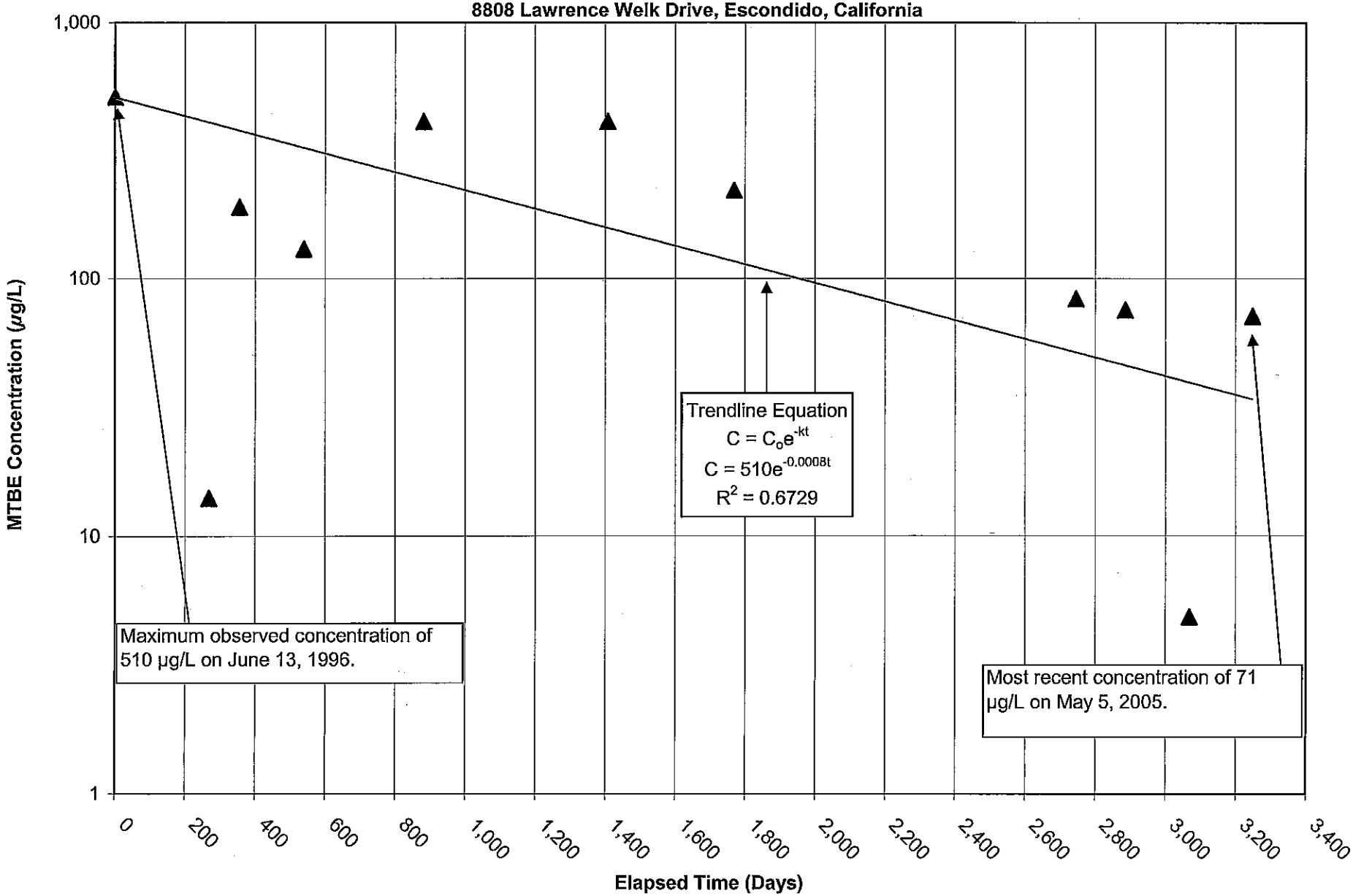


Figure 17
MTBE Concentration Trend Evaluation - Well MW-5
Former Chevron Station # 9-1197
8808 Lawrence Welk Drive, Escondido, California



TABLES

FORMER CHEVRON STATION # 9-1197

8808 LAWRENCE WELK DRIVE
ESCONDIDO, CALIFORNIA, 92026

MTCH.91197.08
August 1, 2005

TABLE 1

SUMMARY OF BENEFICIAL GROUNDWATER AND SURFACE WATER USES
Former Chevron Station # 9-1197
8808 Lawrence Welk Drive, Escondido, California
San Luis Rey Hydrologic Unit (903.00)*
Lower San Luis Hydrologic Area (903.10)
Moosa Hydrologic Subarea (903.13)

Beneficial Use	Groundwater	Surface Water
Municipal/Domestic Supply	X	+
Agricultrural Supply	X	X
Industrial Process Supply	X	X
Industrial Service Supply		
Groundwater Recharge		
Freshwater Replenishment		
Hydropower Generation		
Water Contact Recreation (REC 1)		X
Non-contact Water Recreation (REC 2)		X
Warm Freshwater Habitat		X
Cold Freshwater Habitat		
Wildlife Habitat		X
Biological Habitats of Special Significance		

Notes: *From California State Water Resources Board and Regional Water Quality Control Board, San Diego Region, "Water Quality Control Plan, San Diego Basin (9), 1994".

x = Existing beneficial use
o = Potential beneficial use
+ = Exempted from municipal use.

Table 2
Summary of Historic Groundwater Levels and Chemical Analysis Results
Former Chevron Station # 9-1197, 8808 Lawrence Welk Drive, Escondido, California

Well No. and Elevation (feet)*	Date	DTW (feet)	Groundwater Elevation (feet)*	Corrected Groundwater Elevation (feet)**	TPH-g [1] µg/l (ppb)	Benzene [2] µg/l (ppb)	Toluene [2] µg/l (ppb)	Ethyl-benzene [2] µg/l (ppb)	Total Xylenes [2] µg/l (ppb)	MTBE [3] µg/l (ppb)	MTBE [4] µg/l (ppb)	DIPE [4] µg/L (ppb)	ETBE [4] µg/L (ppb)	TAME [4] µg/L (ppb)	TBA [4] µg/L (ppb)
MW-1	12/20/93	14.92	495.22	497.15	ND	0.38	0.75	1.2	6.4	ND	--	--	--	--	--
510.14	3/14/94	14.65	495.49	497.42	ND	ND	ND	2.0	10.5	12.1	--	--	--	--	--
	6/13/94	16.70	493.44	495.37	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	9/20/94	21.63	488.51	490.44	700	9.2	2.5	10.5	33.6	15.6	--	--	--	--	--
	12/8/94	20.25	489.89	491.82	1830	13.6	3.0	28.8	7.0	77.5	--	--	--	--	--
	2/28/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/5/95	16.30	493.84	495.77	ND	0.60	ND	ND	ND	20	--	--	--	--	--
	8/23/95	17.72	492.42	494.35	ND	ND	8.0	ND	25	220	--	--	--	--	--
	12/5/95	17.09	493.05	494.98	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	3/18/96	16.56	493.58	495.51	ND	ND	ND	ND	ND	--	--	--	--	--	--
	6/13/96	19.32	490.82	492.75	--	--	--	--	--	--	--	--	--	--	--
	6/18/96	19.63	490.51	492.44	ND	0.50	5.0	ND	ND	ND	--	--	--	--	--
	8/26/96	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	11/12/96	23.83	486.31	488.24	--	--	--	--	--	--	--	--	--	--	--
	3/7/97	16.90	493.24	495.17	510	8.8	ND	ND	ND	36	--	--	--	--	--
	6/3/97	19.11	491.03	492.96	ND	0.83	ND	ND	ND	14	--	--	--	--	--
	12/4/97	21.83	488.31	490.24	1300	16	ND	2.1	1.6	45	--	--	--	--	--
	11/12/98	19.45	490.69	492.62	ND	3.8	ND	ND	ND	24	--	--	--	--	--
	11/12/99	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/20/00	20.93	489.21	491.14	500	2.5	<0.50	<0.50	<1.5	46	--	--	--	--	--
	10/18/00	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/16/01	17.94	492.20	494.13	<500	<0.50	<0.50	<0.50	<1.5	--	23	<5.0	<5.0	<5.0	120
	10/2/01	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/1/02	23.89	486.25	488.18	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<2.0	<2.0	<2.0	<25
	11/11/02	24.60	--	487.47	<500	0.93	0.56	3.5	<1.5	--	<1.0	<2.0	<2.0	<2.0	<25
	12/19/03	21.52	--	490.55	<500	<0.50	<0.50	<0.50	<1.5	--	41	<5.0	<5.0	<5.0	99
512.07	5/7/04	20.10	491.97	491.97	<500	<0.50	<0.50	<0.50	<1.5	--	26	<5.0	<5.0	<5.0	<25
	11/5/04	22.10	489.97	489.97	<500	<0.50	<0.50	<0.50	<1.5	--	1.2	<5.0	<5.0	<5.0	<25
	5/5/05	17.15	494.92	494.92	<22	<0.5	<0.5	<0.5	<0.5	--	2.0	<0.5	<0.5	<0.5	<5.0
MW-2	12/20/93	14.79	495.28	497.14	25000	340	770	1200	5400	36	--	--	--	--	--
510.07	3/14/94	14.52	495.55	497.41	9000	446	1110	992	2280	226	--	--	--	--	--
	6/13/94	16.46	493.61	495.47	18700	321	990	955	3100	534	--	--	--	--	--
	9/20/94	21.42	488.67	490.51	--	--	--	--	--	--	--	--	--	--	--
	12/8/94	20.26	489.81	491.67	34100	256	964	1040	5560	2990	--	--	--	--	--
	2/28/95	13.72	496.35	498.21	--	--	--	--	--	--	--	--	--	--	--
MW-2	6/5/95	16.14	493.93	495.79	69100	914	5490	4780	14000	6540	--	--	--	--	--
continued	8/23/95	17.40	492.67	494.53	34500	800	2800	3700	7800	2350	--	--	--	--	--
	12/5/95	16.90	493.17	495.03	7700	250	80	1600	940	1000	--	--	--	--	--
	3/18/96	16.43	493.64	495.50	7620	350	160	1300	800	--	--	--	--	--	--
	6/13/96	19.02	491.05	492.91	5170	360	60	1260	730	510	--	--	--	--	--
	8/26/96	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	11/12/96	23.89	486.18	488.04	--	--	--	--	--	--	--	--	--	--	--
	3/7/97	16.80	493.27	495.13	22000	360	890	2200	8300	780	--	--	--	--	--

Table 2
Summary of Historic Groundwater Levels and Chemical Analysis Results
Former Chevron Station # 9-1197, 8808 Lawrence Welk Drive, Escondido, California

Well No. and Elevation (feet)*	Date	DTW (feet)	Groundwater Elevation (feet)*	Corrected Groundwater Elevation (feet)**	TPH-g [1] µg/l (ppb)	Benzene [2] µg/l (ppb)	Toluene [2] µg/l (ppb)	Ethyl-benzene [2] µg/l (ppb)	Total Xylenes [2] µg/l (ppb)	MTBE [3] µg/l (ppb)	MTBE [4] µg/l (ppb)	DIPE [4] µg/L (ppb)	ETBE [4] µg/L (ppb)	TAME [4] µg/L (ppb)	TBA [4] µg/L (ppb)
	6/3/97	18.82	491.25	493.11	2700	63	18	400	310	1000	--	--	--	--	--
	12/4/97	21.65	488.42	490.28	7800	150	310	880	1300	570	--	--	--	--	--
	11/12/98	19.23	490.84	492.70	6700	46	190	520	1400	750	--	--	--	--	--
	11/12/99	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/20/00	20.52	489.55	491.41	2600	30	<5.0	350	29	240	--	--	--	--	--
	10/18/00	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/16/01	17.71	492.36	494.22	10000	49	26	1800	1700	--	100	<25	<25	<25	<250
	10/2/01	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/1/02	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
511.53	11/11/02	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	12/19/03	20.97	490.55	490.96	<2500	<25	<25	490	270	--	140	<250	<250	<250	<1200
511.93	5/7/04	19.64	492.29	492.29	910	0.66	<0.50	19	39	--	55	<5.0	<5.0	<5.0	90
	11/5/04	21.81	490.12	490.12	3200	110	240	100	810	--	19	<25	<25	<25	<120
	5/5/05	16.94	494.99	494.99	4100	2.0	0.6	240	250	--	62	<0.5	<0.5	<0.5	110
MW-3	12/20/93	11.42	496.57	499.05	ND	ND	ND	ND	ND	ND	--	--	--	--	--
507.99	3/14/94	11.16	496.83	499.31	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	6/13/94	12.62	495.37	497.85	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	9/20/94	17.35	490.64	493.12	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	12/8/94	16.73	491.26	493.74	--	--	--	--	--	--	--	--	--	--	--
	2/28/95	10.68	497.31	499.79	--	--	--	--	--	--	--	--	--	--	--
	6/5/95	13.83	494.16	496.64	--	--	--	--	--	--	--	--	--	--	--
	8/23/95	14.31	493.68	496.16	ND	9.0	40	ND	50	ND	--	--	--	--	--
	12/5/95	14.35	493.64	496.12	--	--	--	--	--	--	--	--	--	--	--
	3/18/96	14.11	493.88	496.36	--	--	--	--	--	--	--	--	--	--	--
	6/13/96	15.62	492.37	494.85	--	--	--	--	--	--	--	--	--	--	--
	8/26/96	21.40	486.59	489.07	ND	ND	ND	ND	ND	ND	--	--	--	--	--
MW-3	11/12/96	21.00	486.99	489.47	--	--	--	--	--	--	--	--	--	--	--
continued	3/7/97	14.55	493.44	495.92	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	6/3/97	15.51	492.48	494.96	--	--	--	--	--	--	--	--	--	--	--
	12/4/97	18.97	489.02	491.50	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	11/12/98	15.98	492.01	494.49	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	11/12/99	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/20/00	16.77	491.22	493.70	<500	<0.50	<0.50	<0.50	<1.5	2.4	--	--	--	--	--
	10/18/00	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/16/01	15.30	492.69	495.17	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<50
	10/2/01	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/1/02	19.93	488.06	490.54	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<2.0	<2.0	<2.0	<25
510.08	11/11/02	20.65	489.43	489.82	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<2.0	<2.0	<2.0	<25
	12/19/03	17.3	492.78	493.17	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<25
510.47	5/7/04	16.30	494.17	494.17	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<25
	11/5/04	18.63	491.84	491.84	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<25
	5/5/05	14.30	496.17	496.17	<22	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<5.0

Table 2
Summary of Historic Groundwater Levels and Chemical Analysis Results
Former Chevron Station # 9-1197, 8808 Lawrence Welk Drive, Escondido, California

Well No. and Elevation (feet)*	Date	DTW (feet)	Groundwater Elevation (feet)*	Corrected Groundwater Elevation (feet)**	TPH-g [1] µg/l (ppb)	Benzene [2] µg/l (ppb)	Toluene [2] µg/l (ppb)	Ethyl-benzene [2] µg/l (ppb)	Total Xylenes [2] µg/l (ppb)	MTBE [3] µg/l (ppb)	MTBE [4] µg/l (ppb)	DIPE [4] µg/L (ppb)	ETBE [4] µg/L (ppb)	TAME [4] µg/L (ppb)	TBA [4] µg/L (ppb)
MW-4	12/20/93	15.17	494.93	497.39	ND	ND	ND	ND	1.7	ND	--	--	--	--	--
510.10	3/14/94	14.97	495.13	497.59	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	6/13/94	16.76	493.34	495.80	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	9/20/94	21.71	488.39	490.85	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	12/8/94	20.40	489.70	492.16	--	--	--	--	--	--	--	--	--	--	--
	2/28/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/5/95	17.14	492.96	495.42	--	--	--	--	--	--	--	--	--	--	--
	8/23/95	18.17	491.93	494.39	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	12/5/95	17.79	492.31	494.77	--	--	--	--	--	--	--	--	--	--	--
	3/18/96	17.38	492.72	495.18	--	--	--	--	--	--	--	--	--	--	--
	6/13/96	19.83	490.27	492.73	--	--	--	--	--	--	--	--	--	--	--
	8/26/96	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	11/12/96	24.55	485.55	488.01	--	--	--	--	--	--	--	--	--	--	--
	3/7/97	17.80	492.30	494.76	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	6/3/97	19.58	490.52	492.98	--	--	--	--	--	--	--	--	--	--	--
	12/4/97	22.50	487.60	490.06	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	11/12/98	20.12	489.98	492.44	ND	ND	ND	ND	ND	ND	--	--	--	--	--
MW-4	11/12/99	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
continued	4/20/00	20.85	489.25	491.71	<500	<0.50	<0.50	<0.50	<1.5	<1.0	--	--	--	--	--
	10/18/00	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/16/01	18.62	491.48	493.94	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<50
	10/2/01	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/1/02	23.65	486.45	488.91	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<2.0	<2.0	<2.0	<25
512.16	11/11/02	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	12/19/03	22.11	490.05	490.45	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<25
512.56	5/7/04	20.72	491.84	491.84	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<25
	11/5/04	22.75	489.81	489.81	<500	<0.50	<0.50	<0.50	<1.5	--	<1.0	<5.0	<5.0	<5.0	<25
	5/5/05	18.10	494.46	494.46	<22	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<5.0
MW-5	3/14/94	15.47	495.16	497.21	ND	ND	5.8	ND	2.9	19.5	--	--	--	--	--
510.63	6/13/94	17.51	493.12	495.17	ND	14.8	0.86	117	2.7	16.3	--	--	--	--	--
	9/20/94	22.43	488.20	490.25	ND	16.1	1.2	24.3	23.7	ND	--	--	--	--	--
	12/8/94	21.02	489.61	491.66	1450	55	10.9	4.8	15.7	57.8	--	--	--	--	--
	2/28/95	15.00	495.63	497.68	ND	5.6	ND	1.9	ND	19.6	--	--	--	--	--
	6/5/95	17.14	493.49	495.54	525	25.3	0.90	3.8	5.2	327	--	--	--	--	--
	8/23/95	14.51	496.12	498.17	ND	11	24	ND	ND	430	--	--	--	--	--
	12/5/95	17.90	492.73	494.78	ND	ND	2.5	ND	ND	120	--	--	--	--	--
	3/18/96	17.40	493.23	495.28	625	ND	ND	ND	ND	--	--	--	--	--	--
	6/13/96	20.15	490.48	492.53	820	60	2.0	40	70	510	--	--	--	--	--
	8/26/96	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	11/12/96	23.55	487.08	489.13	--	--	--	--	--	--	--	--	--	--	--
	3/7/97	17.78	492.85	494.90	ND	2.2	ND	ND	ND	14	--	--	--	--	--
	6/3/97	19.91	490.72	492.77	ND	1.3	ND	ND	ND	190	--	--	--	--	--
	12/4/97	22.67	487.96	490.01	1100	14	ND	27	16	130	--	--	--	--	--

Table 2
Summary of Historic Groundwater Levels and Chemical Analysis Results
Former Chevron Station # 9-1197, 8808 Lawrence Welk Drive, Escondido, California

Well No. and Elevation (feet)*	Date	DTW (feet)	Groundwater Elevation (feet)*	Corrected Groundwater Elevation (feet)**	TPH-g [1] µg/l (ppb)	Benzene [2] µg/l (ppb)	Toluene [2] µg/l (ppb)	Ethyl-benzene [2] µg/l (ppb)	Total Xylenes [2] µg/l (ppb)	MTBE [3] µg/l (ppb)	MTBE [4] µg/l (ppb)	DIPE [4] µg/L (ppb)	ETBE [4] µg/L (ppb)	TAME [4] µg/L (ppb)	TBA [4] µg/L (ppb)
	11/12/98	20.34	490.29	492.34	ND	1.1	0.61	ND	ND	410	--	--	--	--	--
	11/12/99	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/20/00	21.78	488.85	490.90	<500	1.7	<1.0	<1.0	<3.0	410	--	--	--	--	--
	10/18/00	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/16/01	18.76	491.87	493.92	<500	<0.50	0.57	<0.50	<1.5	--	220	<10	<10	<10	190
	10/2/01	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/1/02	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
512.27	11/11/02	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	12/19/03	22.5	489.77	490.18	<500	<0.50	<0.50	<0.50	<1.5	--	83	<5.0	<5.0	<5.0	<25
512.68	5/7/04	21.05	491.63	491.63	<500	<0.50	<0.50	<0.50	<1.5	--	75	<5.0	<5.0	<5.0	<25
	11/5/04	22.95	489.73	489.73	<500	<0.50	<0.50	<0.50	<1.5	--	4.8	<5.0	<5.0	<5.0	<25
	5/5/05	18.13	494.55	494.55	25	<0.5	<0.5	<0.5	<0.5	--	71	<0.5	<0.5	<0.5	13
MW-6	3/18/96	16.19	492.43	494.86	ND	1.4	ND	1.4	3.5	--	--	--	--	--	--
508.62	6/13/96	19.32	489.30	491.73	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	8/26/96	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	11/12/96	25.54	483.08	485.51	--	--	--	--	--	--	--	--	--	--	--
	3/7/97	15.52	493.10	495.53	ND	ND	ND	ND	ND	24	--	--	--	--	--
	6/3/97	19.04	489.58	492.01	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	12/4/97	21.50	487.12	489.55	ND	ND	ND	ND	ND	ND	--	--	--	--	--
	11/12/98	19.40	489.22	491.65	ND	ND	ND	ND	ND	17	--	--	--	--	--
	11/12/99	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/20/00	21.16	487.46	489.89	<500	<0.50	<0.50	<0.50	<1.5	33	--	--	--	--	--
	10/18/00	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/16/01	17.58	491.04	493.47	<500	<0.50	<0.50	<0.50	<1.5	--	9.0	<5.0	<5.0	<5.0	<50
	10/2/01	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	4/1/02	22.80	485.82	488.25	<500	<0.50	<0.50	<0.50	<1.5	--	6.2	<2.0	<2.0	<2.0	<25
510.65	11/11/02	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
	12/19/03	DRY	DRY	DRY	--	--	--	--	--	--	--	--	--	--	--
511.05	5/7/04	20.43	490.62	490.62	<500	<0.50	<0.50	<0.50	<1.5	--	2.4	<5.0	<5.0	<5.0	<25
	11/5/04	22.50	488.55	488.55	<500	<0.50	<0.50	<0.50	<1.5	--	3.1	<5.0	<5.0	<5.0	<25
	5/5/05	17.23	493.82	493.82	<22	<0.5	<0.5	<0.5	<0.5	--	14	<0.5	<0.5	<0.5	<5.0

Notes: [1] Historically analyzed by modified EPA method 8015B. Currently analyzed by EPA method 8260B. [2] Historically analyzed by EPA method 8021B. Currently analyzed by EPA method 8260B.
[3] Analyzed by EPA Method 8021B. [4] Analyzed bt EPA method 8260B.

Definitions: DTW = Depth to Water, feet* = Feet above mean sea level, ** = Groundwater elevation calculated to most recent survey data, TPHg = Total Petroleum Hydrocarbons as Gasoline, MTBE = Methyl tert-Butyl Ether, DIPE = Di-isopropyl Ether, ETBE = Ethyl tert-Butyl Ether, TAME = tert-Amyl Methyl Ether, TBA = tert-Butyl Alcohol, µg/l = micrograms per liter, ppb = parts per billion, -- = Not Measured, ND = Not Detected,
Monitoring and sampling activities conducted by SECOR after 2/1/03. Monitoring and sampling activities conducted by Blaine Tech Services 5/5/05. GEIMS Global ID # T0607301337.
Prior to 4th Quarter 1999 sampling event, laboratory results below reporting limits were presented as ND.

TABLE 3
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
Former Chevron Station # 9-1197, 8808 Lawrence Welk Drive, Escondido, California
All Results Reported in milligrams per kilogram (mg/kg)

Sample ID	Sample Location	Sample Depth (ft bgs)	Date Sampled	TRPH	TPHg	TPH - Carbon Chain Breakdown	TFH	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	PCBs	HVOC	Organic Lead
T-1-W	Former UST Pit	16	10/21/93	--	<0.1	--	--	--	--	--	--	--	--	--	--
T-1-E	Former UST Pit	15	10/21/93	--	**0.25**	--	--	--	--	--	--	--	--	--	--
T-2-W	Former UST Pit	16.8	10/21/93	--	**9.2**	--	--	--	--	--	--	--	--	--	--
T-2-E	Former UST Pit	17	10/21/93	--	**2.4**	--	--	--	--	--	--	--	--	--	--
T-3-W	Former UST Pit	16	10/21/93	--	**4300**	--	--	--	--	--	--	--	--	--	--
T-3-E	Former UST Pit	16	10/21/93	--	**5400**	--	--	<2	<2	**140**	**460**	--	--	--	--
WO-1	Former Waste Oil UST	9.2	10/21/93	<10	--	--	--	--	--	--	--	--	--	--	--
WO-2	Former Waste Oil UST	8.8	10/21/93	<10	--	--	--	--	--	--	--	--	--	--	--
WO-3	Former Waste Oil UST	7	10/21/93	**23000**	--	--	--	<2	**27**	**11**	**73**	--	--	--	--
P-1	Former Product Piping	2.5	11/2/93	--	**61**	--	--	--	--	--	--	--	--	--	--
P-2	Former Product Piping	3	11/2/93	--	**0.44**	--	--	--	--	--	--	--	--	--	--
P-3	Former Product Piping	3	11/2/93	--	**0.11**	--	--	--	--	--	--	--	--	--	--
P-4	Former Product Piping	4	11/2/93	--	<0.1	--	--	--	--	--	--	--	--	--	--
P-5	Former Product Piping	3.5	11/2/93	--	**0.15**	--	--	--	--	--	--	--	--	--	--
P-6	Former Product Piping	3.5	11/2/93	--	**8.5**	--	--	--	--	--	--	--	--	--	--
P-7	Former Product Piping	3.5	11/2/93	--	**28**	--	--	--	--	--	--	--	--	--	--
P-8	Former Product Piping	5	11/2/93	--	**490**	--	--	--	--	--	--	--	--	--	--
P-1-D5	Former Product Piping	5	11/2/93	--	**3300**	--	**3000**	<1	**80**	**65**	**520**	--	--	--	<2
P-2-D6	Former Product Piping	6	11/2/93	--	<0.1	--	<5	<0.005	<0.005	<0.005	<0.005	--	--	--	--
P-3-D3.5	Former Product Piping	3.5	11/2/93	--	<0.1	--	<5	<0.005	<0.005	<0.005	<0.005	--	--	--	--
P-5A-D6.5	Former Product Piping	6.5	11/2/93	--	**0.26**	--	<5	<0.005	**0.008**	<0.005	**0.027**	--	--	--	--
P-6-D6	Former Product Piping	6	11/2/93	--	**110**	--	**130**	<0.1	**0.42**	**1.0**	**7.1**	--	--	--	--
P-7-D6	Former Product Piping	6	11/2/93	--	**980**	--	**3200**	**1.8**	**34**	**21**	**120**	--	--	--	--
P-8-D6	Former Product Piping	6	11/2/93	--	**120**	--	**26**	<0.1	**0.76**	**0.86**	**5.0**	--	--	--	--
B1D5	B1	5	12/13/93	**11**	<0.1	--	--	<0.005	<0.005	<0.005	<0.005	--	--	<0.03	--
B1D10	B1	10	12/13/93	<10	<0.1	--	--	<0.005	<0.005	<0.005	<0.005	--	<0.03	<0.03	<2
B2D10	B2	10	12/13/93	--	**4.1**	--	--	<0.03	<0.03	**0.13**	**1.3**	<0.3	--	--	--
B2D14	B2	14	12/13/93	--	**13**	--	**210**	**0.040**	**0.26**	**0.36**	**1.1**	<0.3	--	--	--
B3D5	B3	5	12/13/93	--	<0.1	--	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--	--
B3D10	B3	10	12/13/93	--	**13**	--	<5.0	<0.03	<0.03	**0.27**	**1.6**	<0.3	--	--	--
B3D14	B3	14	12/13/93	--	**3.8**	--	--	**0.028**	**0.008**	**0.055**	**0.30**	<0.05	--	--	--
B4D5	B4	5	12/13/93	--	<0.1	--	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--	--
B4D10	B4	10	12/13/93	--	**0.13**	--	<5.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--	--
B4D14	B4	14	12/13/93	--	<0.1	--	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--	--
B5D5	B5	5	12/14/93	--	<0.1	--	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--	--
B5D10	B5	10	12/14/93	--	**0.14**	--	<5.0	<0.005	<0.005	<0.005	**0.047**	<0.05	--	--	--
B6D5	B6	5	12/14/93	--	**0.59**	--	--	**0.079**	**0.067**	**0.015**	**0.059**	<0.05	--	--	--
B6D10	B6	10	12/14/93	--	**2.0**	--	**6.9**	**0.072**	**0.045**	**0.027**	**0.79**	<0.05	--	--	--
B7D5	B7	5	12/16/93	**11**	<0.1	--	--	<0.005	<0.005	<0.005	<0.005	--	--	--	--
B7D10	B7	10	12/17/93	<10	**0.46**	--	--	<0.005	<0.005	<0.005	**0.12**	--	--	--	--
B7D13.5	B7	13.5	12/17/93	<10	**0.16**	--	--	<0.005	<0.005	<0.005	**0.016**	--	--	--	--
B8D10	B8	10	12/16/93	<10	<0.1	--	--	<0.005	<0.005	<0.005	<0.005	--	--	--	--
B8D14	B8	14	12/16/93	<10	<0.1	--	--	<0.005	<0.005	<0.005	<0.005	--	--	--	--
B9D10	B9	10	12/16/93	<10	**0.38**	--	--	<0.005	<0.005	<0.005	<0.005	--	--	--	--
B9D14	B9	14	12/16/93	<10	<0.1	--	--	<0.005	<0.005	<0.005	<0.005	--	--	--	--
B10D5	B10	5	12/17/93	--	**0.14**	--	<5.0	<0.005	<0.005	<0.005	<0.005	<0.05	--	--	--
B10D10	B10	10	12/17/93	--	<0.1	--	--	<0.005	<0.005	<0.005	**0.021**	<0.05	--	--	--
B10D13	B10	13	12/17/93	--	<0.1	--	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--	--
B11D5	B11	5	12/17/93	--	**190**	--	**54**	<0.03	**0.91**	**1.30**	**8.5**	<1.0	--	--	--
B11D10	B11	10	12/17/93	--	**2.4**	--	--	**0.014**	**0.066**	**0.043**	**0.55**	<0.05	--	--	--
B11D13	B11	13	12/17/93	--	**0.12**	--	--	<0.005	<0.005	<0.005	**0.013**	<0.05	--	--	--
B12D5.5	B12	5.5	12/17/93	--	**2400**	--	**1100**	**3.7**	**110**	**25**	**270**	**2.4**	--	--	--
B12D10	B12	10	12/17/93	--	**0.58**	--	--	**0.012**	**0.037**	**0.012**	**0.18**	<0.05	--	--	--
B13D5	B13	5	12/17/93	--	**0.10**	--	<5.0	<0.005	**0.0091**	<0.005	**0.022**	**0.96**	--	--	--

TABLE 3
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
Former Chevron Station # 9-1197, 8808 Lawrence Welk Drive, Escondido, California
All Results Reported in milligrams per kilogram (mg/kg)

Sample ID	Sample Location	Sample Depth (ft bgs)	Date Sampled	TRPH	TPHg	TPH - Carbon Chain Breakdown	TFH	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	PCBs	HVOC	Organic Lead
B13D10	B13	10	12/17/93	--	<0.1	--	--	<0.005	**0.051**	<0.005	**0.012**	<0.05	--	--	--
B13D12	B13	12	12/17/93	--	<0.1	--	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--	--
MW1D10	MW1	10	12/13/93	--	**0.48**	--	<5.0	<0.005	<0.005	**0.028**	<0.005	**0.053**	--	--	--
MW1D14	MW1	14	12/13/93	--	**0.31**	--	--	<0.005	<0.005	**0.015**	<0.005	**0.058**	--	--	--
MW2D10	MW2	10	12/13/93	--	**0.24**	--	--	**0.0061**	<0.005	<0.005	**0.033**	<0.05	--	--	--
MW2D14	MW2	14	12/13/93	--	**9.2**	--	**32**	**0.13**	**0.20**	**0.21**	**1.6**	**0.16**	--	--	--
MW3D5	MW3	5	12/13/93	--	**1.6**	--	<5.0	**0.014**	**0.074**	**0.018**	**0.11**	<0.05	--	--	--
MW3D12	MW3	12	12/13/93	--	<0.1	--	--	<0.005	<0.005	<0.005	<0.005	<0.05	--	--	--
MW4D10	MW4	10	12/13/93	<10	<0.1	--	--	<0.005	<0.005	<0.005	<0.005	--	--	--	--
MW4D14	MW4	14	12/13/93	<10	<0.1	--	--	<0.005	<0.005	<0.005	<0.005	--	--	--	--
B14D10	B14	10	3/8/94	--	<10	--	--	<0.005	<0.005	<0.005	<0.015	<0.005	--	--	--
B14D13	B14	13	3/8/94	--	<10	--	--	<0.005	<0.005	<0.005	<0.015	<0.005	--	--	--
B15D5	B15	5	3/8/94	--	<10	--	--	<0.005	<0.005	<0.005	<0.015	<0.005	--	--	--
B15D10	B15	10	3/8/94	--	<10	--	--	<0.005	<0.005	<0.005	<0.015	<0.005	--	--	--
B15D13	B15	13	3/8/94	--	<10	--	--	<0.005	<0.005	<0.005	<0.015	<0.005	--	--	--
B16D5	B16	5	3/8/94	--	<10	--	--	<0.005	<0.005	<0.005	<0.015	<0.005	--	--	--
B16D10	B16	10	3/8/94	--	<10	--	--	**0.046**	**0.63**	**0.16**	**0.855**	**0.019**	--	--	--
B16D12	B16	12	3/8/94	--	<10	--	--	**0.011**	**0.225**	**0.065**	**0.41**	**0.024**	--	--	--
B17D5	B17	5	3/8/94	--	<10	--	--	<0.005	<0.005	<0.005	<0.015	<0.005	--	--	--
B17D10	B17	10	3/8/94	--	<10	--	--	<0.005	<0.005	<0.005	<0.015	<0.005	--	--	
B17D12	B17	12	3/8/94	--	<10	--	--	<0.005	<0.005	<0.005	**0.024**	<0.005	--	--	--
VW1D5	VW1	5	3/8/94	--	<10	--	--	<0.005	<0.005	<0.005	<0.015	<0.005	--	--	--
VW1D10	VW1	10	3/8/94	--	**30**	--	--	<0.005	<0.005	<0.005	<0.015	**0.022**	--	--	--
VW1D14	VW1	14	3/8/94	--	<10	--	--	<0.005	<0.005	**0.115**	**0.155**	**0.024**	--	--	--
MW5D5	MW5	5	3/8/94	--	<10	--	--	<0.005	<0.005	<0.005	<0.015	<0.005	--	--	--
MW5D10	MW5	10	3/8/94	--	<10	**1.5 (C9-C10) / 4.8 (C11-C12)**	--	**0.018**	<0.005	**0.160**	**0.049**	**0.024**	--	--	--
MW5D14	MW5	14	3/8/94	--	<10	--	--	<0.005	<0.005	**0.019**	<0.015	<0.005	--	--	--
VW2D5	VW2	5	3/11/94	--	**70**	--	--	**0.073**	**4.04**	**1.65**	**7.59**	**0.207**	--	--	--
VW2D9	VW2	9	3/11/94	--	<10	--	--	**0.072**	**0.101**	**0.03**	**0.338**	**0.014**	--	--	--
VW2D13	VW2	13	3/11/94	--	**60**	--	--	**0.074**	**1.51**	**0.627**	**2.77**	**0.686**	--	--	--
VW3D5	VW3	5	3/11/94	--	<10	--	--	<0.005	<0.005	<0.005	<0.015	<0.005	--	--	--
VW3D9	VW3	9	3/11/94	--	**17**	--	--	**0.010**	**0.127**	**0.583**	**3.31**	<0.005	--	--	--
VW3D9.5	VW3	9.5	3/11/94	--	**19**	--	--	**0.034**	**0.203**	**0.839**	**4.22**	<0.005	--	--	--
VW3D12	VW3	12	3/11/94	--	<10	--	--	**0.008**	<0.005	**0.216**	**1.37**	<0.005	--	--	--
B18D5	B18	5	3/11/94	--	<10	--	--	<0.005	<0.005	<0.005	<0.015	<0.005	--	--	--
B18D10	B18	10	3/11/94	--	<10	<1 (all reported ranges)	--	<0.005	<0.005	**0.065**	**0.173**	<0.005	--	--	--
B18D14	B18	14	3/11/94	--	<10	--	--	<0.005	<0.005	<0.005	**0.019**	<0.005	--	--	--
B19D5	B19	5	3/11/94	--	<10	--	--	<0.005	<0.005	<0.005	<0.015	<0.005	--	--	--
B19D9.5	B19	9.5	3/11/94	--	<10	--	--	<0.005	<0.005	<0.005	<0.015	<0.005	--	--	--
B19D10	B19	10	3/11/94	--	<10	--	--	**0.019**	<0.005	**0.264**	<0.015	**0.058**	--	--	--
B19D13	B19	13	3/11/94	--	<10	--	--	<0.005	<0.005	<0.005	<0.015	<0.005	--	--	--
VW4D6	VW4	6	4/12/94	--	<10	--	--	<0.005	**0.04**	<0.005	**0.103**	<0.005	--	--	--
VW4D9	VW4	9	4/12/94	--	<10	--	--	**0.049**	**0.269**	**0.145**	**1.82**	<0.005	--	--	--
VW4D12	VW4	12	4/12/94	--	<10	--	--	**0.030**	**0.042**	<0.005	**0.063**	<0.005	--	--	--
B20D6	B20	6	4/12/94	--	<10	--	--	<0.005	<0.005	<0.005	<0.015	<0.005	--	--	--
B20D9	B20	9	4/12/94	--	<10	--	--	<0.005	<0.005	<0.005	<0.015	<0.005	--	--	--
B20D12.5	B20	12.5	4/12/94	--	<10	--	--	<0.005	<0.005	<0.005	<0.015	<0.005	--	--	--
B21D6	B21	6	4/12/94	--	<10	--	--	<0.005	<0.005	<0.005	<0.015	<0.005	--	--	--
B21D9	B21	9	4/12/94	--	<10	--	--	<0.005	<0.005	<0.005	<0.015	<0.005	--	--	--
B21D11	B21	11	4/12/94	--	<10	--	--	<0.005	<0.005	<0.005	<0.015	<0.005	--	--	--
B22D6	B22	6	4/12/94	--	<10	--	--	<0.005	<0.005	<0.005	<0.015	<0.005	--	--	--
B22D8.5	B22	8.5	4/12/94	--	<10	--	--	<0.005	<0.005	<0.005	<0.015	<0.005	--	--	--
B22D11	B22	11	4/12/94	--	<10	--	--	<0.005	<0.005	<0.005	<0.015	<0.005	--	--	--
ESW-North	Current USTs	Unknown	3/1/95	--	--	**61 (DIESEL) / 258 (C5-C11)**	--	<0.005	**0.139**	**2.537**	**27.597**	--	--	--	--

TABLE 3
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
Former Chevron Station # 9-1197, 8808 Lawrence Welk Drive, Escondido, California
All Results Reported in milligrams per kilogram (mg/kg)

Sample ID	Sample Location	Sample Depth (ft bgs)	Date Sampled	TRPH	TPHg	TPH - Carbon Chain Breakdown	TFH	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	PCBs	HVOC	Organic Lead
ESW-North Duplicate	Current USTs	Unknown	3/1/95	--	--	**222 (C5-C11)**	--	<0.005	**0.122**	**2.476**	**27.125**	--	--	--	--
ESW-West1	Current USTs	Unknown	3/1/95	--	--	**891 (C5-C11)**	--	**0.125**	**0.605**	**5.504**	**58.131**	--	--	--	--
ESW-West2	Current USTs	Unknown	3/1/95	--	--	<10	--	<0.005	<0.005	<0.005	<0.015	--	--	--	--
ESW-East1	Current USTs	Unknown	3/1/95	--	--	<10	--	<0.005	<0.005	<0.005	**0.101**	--	--	--	--
ESW-East2	Current USTs	Unknown	3/1/95	--	--	<10	--	<0.005	<0.005	<0.005	<0.015	--	--	--	--
ESW-South	Current USTs	Unknown	3/1/95	--	--	<10	--	<0.005	<0.005	<0.005	<0.015	--	--	--	--
DTE SW East 8'	Current USTs	8	3/15/94	--	--	**10 (C5-C11)**	--	<0.005	<0.050	<0.050	**1.233**	--	--	--	--
DTE SW West 8'	Current USTs	8	3/15/94	--	--	<10	--	<0.005	<0.050	<0.050	<0.050	--	--	--	--
DTE SW North 10'	Current USTs	10	3/15/94	--	--	<10	--	<0.005	<0.005	**0.019**	**0.019**	--	--	--	--
DTE SW South 6'	Current USTs	6	3/15/94	--	--	<10	--	<0.005	<0.050	<0.050	<0.050	--	--	--	--
Sump North 2'	Current Dispenser Islands	2	3/15/94	--	--	<10	--	**1.422**	**4.413**	**2.152**	**2.152**	--	--	--	--
Sump Southeast 3'	Current Dispenser Islands	3	3/15/94	--	--	**244 (C5-C11)**	--	<0.005	<0.050	<0.050	<0.050	--	--	--	--
Sump Southwest 2'	Current Dispenser Islands	2	3/15/94	--	--	<10	--	<0.005	<0.050	<0.050	<0.050	--	--	--	--
VW5D5	VW5	5	3/17/95	--	--	<10	--	<0.005	<0.005	<0.005	<0.015	--	--	--	--
VW5D10	VW5	10	3/17/95	--	--	<10	--	<0.005	<0.005	<0.005	<0.015	--	--	--	--
B23D3	B23	3	3/17/95	--	--	<10	--	<0.005	<0.005	<0.005	**0.047**	--	--	--	--
B23D6	B23	6	3/17/95	--	--	**6090 (GAS)**	--	**5.94**	**87**	**119**	**717**	--	--	--	--
B23D10	B23	10	3/17/95	--	--	<10	--	<0.005	<0.005	<0.005	<0.015	--	--	--	--
B24D3	B24	3	3/17/95	--	--	<10	--	<0.005	<0.005	<0.005	<0.015	--	--	--	--
B24D6	B24	6	3/17/95	--	--	**53.7**	--	**0.034**	**0.127**	**0.269**	**2.13**	--	--	--	--
B24D10	B24	10	3/17/95	--	--	--	--	<0.005	**0.491**	**0.953**	**9.53**	--	--	--	--
TP1-2.5'	Current Product Piping	2.5	3/17/95	--	--	<10	--	<0.005	<0.005	<0.005	<0.015	--	--	--	--
TP2-2.5'	Current Product Piping	2.5	3/17/95	--	--	<10	--	<0.005	<0.005	<0.005	<0.015	--	--	--	--
TP3-2.5'	Current Product Piping	2.5	3/17/95	--	--	<10	--	<0.005	<0.005	<0.005	<0.015	--	--	--	--
TP4-2.5'	Current Product Piping	2.5	3/17/95	--	--	<10	--	<0.005	<0.005	<0.005	<0.015	--	--	--	--
MW6D5	MW6	5	1/11/96	--	<10	--	--	<0.05	<0.05	<0.05	<0.05	--	--	--	--
MW6D10	MW6	10	1/11/96	--	<10	--	--	<0.05	<0.05	<0.05	<0.05	--	--	--	--
MW6D14	MW6	14	1/11/96	--	<10	--	--	<0.05	<0.05	<0.05	<0.05	--	--	--	--

Notes:

TRPH = Total Recoverable Petroleum Hydrocarbons
TPHg = Total Petroleum Hydrocarbons as gasoline
TFH = Total Fuel Hydrocarbons
MTBE = Methyl-tert-butyl Ether
PCB = Polychlorinated Biphenyls
HVOC = Halogenated Volatile Organic Compounds

ft bgs = Feet below ground surface
-- = Not analyzed
< = Less than the analytical detection limits

TABLE 4
SUMMARY OF NATURAL ATTENUATION DATA
Former Chevron Station # 9-1197
8808 Lawrence Welk Drive, Escondido, California
All Results Reported in Micrograms per Liter (µg/L), unless otherwise noted

Well Identification	Sampling Date	Petroleum Hydrocarbon Concentrations						Indicators of Natural Attenuation		
		TPHg	B	T	E	X	MTBE	DO (mg/L)	ORP (mV)	Ferrous Iron (mg/L)
MW-1	11/05/04	<500	<0.50	<0.50	<0.50	<1.5	1.2	0.49	39	0.0
MW-2	11/05/04	3,200	110	240	100	810	19	0.18	-90	0.0
MW-3	11/05/04	<500	<0.50	<0.50	<0.50	<1.5	<1.0	1.01	-10	0.0
MW-4	11/05/04	<500	<0.50	<0.50	<0.50	<1.5	<1.0	0.76	-11	0.0
MW-5	11/05/04	<500	<0.50	<0.50	<0.50	<1.5	4.8	0.14	-10	1.0
MW-6	11/05/04	<500	<0.50	<0.50	<0.50	<1.5	3.1	1.38	-10	0.0
Ag. Well	11/05/04	<500	<0.50	<0.50	<0.50	<1.5	<1.0	4.40	36	0.0

Notes:

TPHg = Total petroleum hydrocarbons as gasoline (EPA Method 8260)
BTEX = Benzene, toluene, ethylbenzene, and total xylenes (EPA Method 8260B)
MTBE = Methyl tert-butyl ether (EPA Method 8260B)
DO = Dissolved Oxygen (field measurement)
ORP = Oxidation-reduction potential (field measurement)
mg/L = Milligrams per Liter
mV = Millivolts
< = Analytical results less than laboratory reporting limit shown

TABLE 5
CONTAMINANT CHARACTERISTICS
Former Chervon Station # 9-1197
8808 Lawrence Welk Drive, Escondido, California

Compound/ Chemical	CAS #	Molecular Weight	Pure Phase Solubility [1,2] (mg/L)	log Koc [1,2] (log l/kg)	Vapor Pressure[1,2] (mm Hg)	Henry's Law Constant [1,2] (dimensionless)	Flash Point [1,2] (C)	Boiling Point [1,2] (C)	State of California Drinking Water MCL [3] (µg/L)	EPA Region 9 Preliminary Remediation Goals [4]			
										Residential Soil (mg/kg)	Industrial Soil (mg/kg)	Ambient Air (µg/m^3)	Tap Water (µg/L)
Gasoline	8006-61-9	~ 95	NA	NA	NA	NA	-45.6	32-225	NA	NA	NA	NA	NA
Benzene	71-43-2	78.11	1780	1.79	76 - 95.2	0.23	-11	80.1	0.001	0.64	1.4	0.25	0.35
methyl tert-butyl ether (MTBE)	1634-04-4	88.15	43,000-54,300	1.0-1.1	245-256	0.024	-28	55.2	0.013	32	70	7.4	11
tert-butyl alcohol (TBA)	75-65-0	74.12	Miscible	1.57	40-42	0.00048-0.00059	4	82.2	NA	NA	NA	NA	NA
tert-amyl methyl ether (TAME)	994-05-8	102.18	20,000	1.3-2.2	68.3	0.052	-11	85-86	NA	NA	NA	NA	NA

Notes:

mg/L	milligram per liter
µg/L	micrograms per liter
mg/kg	milligrams per kilogram
µg/m^3	micrograms per cubic meter
C	temperature in degrees Celsius
mm Hg	pressure in millimeters of mercury
log l/kg	a measure of the propensity of a compound to adsorb onto carbon in the soil matrix
Koc	soil sorption coefficient
MCL	California Maximum Contaminant Level in groundwater promulgated by California Environmental Protection Agency (CalEPA)

Pure Phase Solubility – The tendency of a chemical to dissolve in water, expressed as milligrams of a chemical that will dissolve in one liter of water.
Soil sorption coefficient (log Koc) - The tendency of a chemical to adsorb to soil, expressed as the ratio of a chemical that will adsorb onto organic carbon to the concentration of the chemical that dissolves in water;
Vapor pressure – The tendency of a chemical to migrate from a pure liquid phase to a gas phase, expressed as the pressure exerted by a chemical in the gas phase when it is in equilibrium with the liquid phase.
Henry's law constant – The tendency of a chemical to partition between the dissolved phase and the gas phase, expressed as the ratio of the equilibrium concentration of the chemical in the gas phase to the equilibrium concentration of the chemical in water.

(1) Guidelines for Investigation and Cleanup of MTBE and Other Ether-Based Oxygenates, 2000, California State Water Resources Control Board, Final Draft, 3/27/00
(2) San Diego County, Department of Environmental Health, Site Assessment and Mitigation Program, Vapor Risk Model, http://www.co.san-diego.ca.us/deh/lwq/sam/docs/vapor_risk-2000_rev-08-25-2003.xls
(3) A Compilation of Water Quality Goals, California Environmental Protection Agency, Regional Water Quality Control Board, Central Valley Region, August 2000
(4) U.S. Environmental Protection Agency, Region 9 Preliminary Remediation Goals, http://www.epa.gov/region09/waste/sfund/prg/files/04prgtable.pdf dated October 2004. These goals assume direct exposure to the contaminants.

TABLE 6
REMEDIAL TECHNOLOGY SCREENING MATRIX
Former Chevron Station # 9-1197
8808 Lawrence Welk Drive, Escondido, California

Option Number	Technology Name	Description of Technology	Retained?	Comments
1	Groundwater Extraction	Conventional groundwater extraction (GWE) methods involve pumping impacted groundwater to either a treatment system or an above ground storage tank on-site. Groundwater treated on-site is discharged or re-injected to the aquifer. Groundwater stored on-site is transported to a waste disposal facility for treatment and disposal. GWE systems are used primarily to accomplish hydraulic containment and/or to reduce the dissolved contaminant concentrations in the aquifer to meet cleanup objectives.	No	Considered to be a viable remediation alternative.
2	Excavation and Off-Site Disposal	Excavation removes contaminated material from a hazardous waste site using heavy construction equipment, such as backhoes, bulldozers, and front loaders. At certain sites, specially designed equipment may be used to prevent the spread of contaminants. The excavated material is commonly landfilled at an approved off-site disposal facility, but can also be remediated on site and reused.	No	Excavation would not remediate MTBE in groundwater. Excavation would also interfere with the operation of the station.
3	Soil Vapor Extraction (1)	Soil vapor extraction (SVE), also known as "soil venting" or "vacuum extraction", is an *in situ* remedial technology that reduces concentrations of volatile constituents in petroleum products adsorbed to soils in the unsaturated (vadose) zone. In this technology, a vacuum is applied through wells near the source of contamination in the soil. Volatile constituents of the contaminant mass "evaporate" and the vapors are drawn toward the extraction wells. Extracted vapor is then treated as necessary before being released to the atmosphere. The increased airflow through the subsurface can also stimulate biodegradation of some of the contaminants, especially those that are less volatile. Wells may be either vertical or horizontal. In areas of high groundwater levels, water table depression pumps may be required to offset the effect of upwelling induced by the vacuum.	No	Limited areas of hydrocarbon impacted soil (TPHg ≥ 100 mg/kg) are present beneath the site.
4	Dual-Phase Extraction (1)	Dual-phase extraction (DPE), also known as multi-phase extraction, vacuum-enhanced extraction, or sometimes bioslurping, is an in-situ technology that uses pumps to remove various combinations of contaminated groundwater, separate-phase petroleum product, and hydrocarbon vapor from the subsurface. Extracted liquids and vapor are treated and collected for disposal, or re-injected to the subsurface (where permissible under applicable state laws).	Yes	Considered to be a viable remediation alternative.
5	Air Sparging w/ Soil Vapor Extraction (1)	Air sparging is an *in situ* remedial technology that reduces concentrations of volatile constituents in petroleum products that are adsorbed to soils and dissolved in groundwater. This technology, which is also known as "*in situ* air stripping" and "*in situ* volatilization," involves the injection of contaminant-free air into the subsurface saturated zone, enabling a phase transfer of hydrocarbons from a dissolved state to a vapor phase. The air is then vented through the unsaturated zone. Air sparging is most often used together with soil vapor extraction (SVE), but it can also be used with other remedial technologies. When air sparging (AS) is combined with SVE, the SVE system creates a negative pressure in the unsaturated zone through a series of extraction wells to control the vapor plume migration. This combined system is called AS/SVE.	No	Limited areas of hydrocarbon impacted soil (TPHg ≥ 100 mg/kg) are present beneath the site.
6	In-Situ Enhanced Bioremediation (1)	In-situ groundwater bioremediation is a technology that encourages growth and reproduction of indigenous microorganisms to enhance biodegradation of organic constituents in the saturated zone. In-situ groundwater bioremediation can effectively degrade organic constituents which are dissolved in groundwater and adsorbed onto the aquifer matrix.	Yes	Would likely require the addition of specialized microbes to the saturated zone to address MTBE.
7	Low-Temperature Thermal Desorption (1)	Low-Temperature Thermal Desorption (LTTD), also known as low-temperature thermal volatilization, thermal stripping, and soil roasting, is an ex-situ remedial technology that uses heat to physically separate petroleum hydrocarbons from excavated soils. Thermal desorbers are designed to heat soils to temperatures sufficient to cause constituents to volatilize and desorb (physically separate) from the soil. Although they are not designed to decompose organic constituents, thermal desorbers can, depending upon the specific organics present and the temperature of the desorber system, cause some of the constituents to completely or partially decompose. The vaporized hydrocarbons are generally treated in a secondary treatment unit (e.g., an afterburner, catalytic oxidation chamber, condenser, or carbon adsorption unit) prior to discharge to the atmosphere. Afterburners and oxidizers destroy the organic constituents. Condensers and carbon adsorption units trap organic compounds for subsequent treatment or disposal. Some pre- and post-processing of soil is necessary when using LTTD. Excavated soils are first screened to remove large (greater than 2 inches in diameter) objects. These may be sized (e.g., crushed or shredded) and then introduced back into the feed material. After leaving the desorber, soils are cooled, re-moistened to control dust, and stabilized (if necessary) to prepare them for disposal/reuse. Treated soil may be redeposited onsite, used as cover in landfills, or incorporated into asphalt.	No	Ex-situ soil treatment performed on site would not be practical due to ongoing operation of the gas station.

TABLE 7
HIGH-VACUUM DUAL-PHASE EXTRACTION COST BREAKDOWN
Former Chevron Station # 9-1197
8808 Lawrence Welk Drive, Escondido, California

Capital Equipment and Construction	
Total Capital/Construction	**$0**
Periodic HVDPE Costs	
Number of 96-hour MRS events (events per month)	2
Mobile DPE Unit Costs ($/96-hr event)	$15,000.00
Transportation and Disposal Fees ($/event)	$7,500.00
Total DPE Event Costs (incl Utilities)	**$45,000**
Total Cost	**$45,000**

Notes:
HVDPE = High-Vacuum Dual-Phase Extraction
MRS = Mobile Remediation System
DPE = Dual-Phase Extraction

TABLE 8
BIOREMEDIATION OXYGEN-RELEASING COMPOUND COST BREAKDOWN
Former Chevron Station # 9-1197
8808 Lawrence Welk Drive, Escondido, California

ORC Installation Costs	
Pounds of ORC needed	100
Cost per Pound of ORC	$10
Misc Parts	$1,000
System Construction	$0
Total Capital Cost	**$2,000**
Drilling Costs	
Number Borings needed for ORC	12
Depth per Boring	20
Drillers Cost ($/ft)*	$40
Permits	$660
Supervision/Permits/Etc	$4,000
Total Drilling Costs	**$14,260**
O&M Costs	
Total O&M Costs (incl Utilities)	**$0**
Total Cost	**$16,260**

*Drillers per foot cost includes mobilization/demobilization, boring advancement, and materials.

Notes:
ORC = Oxygen-Releasing Compound
O&M = Operation and Maitenance

TABLE 9
REMEDIATION BY NATURAL ATTENUATION COST BREAKDOWN
Former Chevron Station # 9-1197
8808 Lawrence Welk Drive, Escondido, California

Capital Equipment and Construction	
Total Capital/Construction	**$0**
Utility Costs	
Monthly Utilities	**$0**
O&M Costs	
Total O&M Costs (incl Utilities)	**$0**
Total Cost	**$0**

TABLE 10
EVALUATION MATRIX FOR REMEDIAL ALTERNATIVES
Former Chevron Station # 9-1197
8808 Lawrence Welk Drive, Escondido, California

Evaluation Criteria	Alternative 1 – High-Vacuum Dual Phase Extraction (two 96 hour events)	Alternative 2 – Enhanced Bioremediation with Oxygen-Releasing Compound	Alternative 3 – Remediation by Natural Attenuation
1. Description of Alternative	SECOR's Mobile Remediation System will be used to remediate the impacted soil and groundwater with two 96-hour events on monitoring well MW-2	Oxygen Releasing Compound (ORC) is injected as a slurry into the impacted groundwater zone using a direct-push rig. The ORC releases oxygen, increasing the rate of biodegradation.	Dissolved hydrocarbon plume is allowed to reach State Maximum Contaminant Levels by natural attenuation.
2. Level of Protection of Human Health, the Environment, and Beneficial Uses of Ground and Surface Waters	This alternative provides an adequate level of protection of human health, the environment, and beneficial uses of ground and surface waters. Implementation will slightly increase the potential exposure of humans and the environment through the extraction, treatment, and discharge of impacted soil vapor. This potential exposure would be limited to the event time span.	This alternative provides an adequate level of protection of human health, the environment, and beneficial uses of ground and surface waters. Implementation would not significantly increase the potential exposure of humans to hydrocarbon impacted soil and groundwater.	This alternative provides an adequate level of protection of human health, the environment, and beneficial uses of ground and surface waters. Implementation would not significantly increase the potential exposure of humans to hydrocarbon impacted soil and groundwater.
3. Reduction of Hydrocarbons	This alternative will reduce the concentration of contaminants below the site in the vadose and saturated zones.	This alternative will reduce the concentration of contaminants dissolved in groundwater and adsorbed to soil in the saturated zone.	This alternative will reduce the concentration of contaminants dissolved in groundwater and adsorbed to soil in the saturated zone.
4. Implementation and Operation	Moderately easy to implement. Requires power/gas, and 24-hour operator and security. Minor disruption to local traffic, business operations for the site and neighboring sites during the events.	Easy to implement. Minor disruptions to business operations during installation of ORC.	Easy to implement. No disruptions to business operations during implementation.

TABLE 10 (CONT.)
EVALUATION MATRIX FOR REMEDIAL ALTERNATIVES
Former Chevron Station # 9-1197
8808 Lawrence Welk Drive, Escondido, California

Evaluation Criteria	Alternative 1 – High-Vacuum Dual Phase Extraction (two 96 hour events)	Alternative 2 – Enhanced Bioremediation with Oxygen-Releasing Compound	Alternative 3 – Remediation by Natural Attenuation
5. Cost Effectiveness	Cost Estimate = $45,000	Cost Estimate = $16,260	Cost Estimate = $0
6. Compliance with Regulatory Guidelines	This alternative can be implemented within regulatory guidelines.	This alternative can be implemented within regulatory guidelines.	This alternative can be implemented within regulatory guidelines.
7. Short Term Effectiveness	This alternative is effective in the short term.	Same as Alternative 1.	This alternative is effective in the short term because natural attenuation processes appear to be occurring.
8. Long Term Effectiveness	Effective in the long term.	Same as Alternative 1.	Same as Alternative 1.
9. Community Exceptance	No community acceptance problems anticipated for this alternative.	The impact to the nearby community and population would be negligible.	The impact to the nearby community and population would be negligible.
10. Impacts on Water Conservation	This alternative would have a slight negative impact on water conservation	This alternative would not impact water conservation either negatively or positively.	This alternative would not impact water conservation either negatively or positively.

TABLE 11
Summary of Trend Analysis for MW-2 and MW-5
Former Chevron Station # 9-1197
8808 Lawrence Welk Drive, Escondido, California

Monitoring Well	Compound Evaluated	Max Contaminant Level - C_{MCL} (ug/L) (1)	Initial Max. Concentration - C_0 (ug/L) (2)	Sampling Date for C_0	Current Reference Date Used	Estimated Degradation Rate Constant - k (day-1)	Time to Reach MCL from C_0 - t (days)	Current Elapsed Time from Date C_0 Reported (days)	Estimated Time to Reach C_{MCL} from Current Reference Date (yrs)
MW-2	MTBE	13	1,000	6/3/1997	7/31/2005	0.0011	3,948	2,980	2.65
MW-5	MTBE	13	510	6/13/1996	7/31/2005	0.0008	4,587	3,335	3.43

Notes: Equation used to estimate time to reach MCL is $C = C_0e^{-kt}$, where:

C = Concentration at time t
C_0 = Initial Concentration
k = Degradation rate constant ($time^{-1}$)
t = time

(1) State of California Primary Maximum Contaminant Level (MCL) for Drinking Water
(2) Maximum concentration from groundwater monitoring data

MTBE = Methyl tert-Butyl Ether
µg/l = micrograms per liter
yrs = years