

6.0 INVESTIGATION FINDINGS

The results of the investigation are presented in the following subsections. Boring logs are included as Appendix E.

6.1 FIELD OBSERVATIONS

- Boring BA-1 was advanced vertically to a depth of 40 feet bgs near the northwestern corner of the existing gasoline UST pad in the northern portion of the property. Groundwater was expected to be encountered at a depth of approximately 15 feet bgs; therefore, a 20-foot deep boring was proposed. Since groundwater was not encountered the boring was extended to a depth of 40 feet, at which depth the auger encountered refusal. PID readings of samples collected in the boring ranged from 0.4 to 233 parts per million by volume (ppmv) in soil collected at a depth of 35 feet bgs. The VOC concentration in soil collected from 40 feet bgs was 108.1 ppmv. A strong hydrocarbon odor was noted in soil collected at 35 feet bgs. Soils encountered consisted of silts, silty clays and clayey silts.
- Boring BA-2 was advanced vertically to a depth of 35 feet bgs near the southeastern edge of the existing gasoline UST pad and north of the 90-degree bend in the product piping, near the northern portion of the property. PID readings of samples collected in the boring ranged from 2.1 to 44.4 ppmv. Hydrocarbon odors were not noted in this soil boring. Soils encountered included clayey silt, silty sand, and silty clay.
- Boring BA-3 was advanced vertically to a depth of 40 feet west of the northwestern dispenser island. PID readings of samples collected in the boring ranged from 0.4 to 320 ppmv in soil collected at a depth of 35 feet bgs. No hydrocarbon odors were noted in any of the samples collected from this boring. Soils encountered included clayey silt and silty sand.
- Boring BA-4 was advanced vertically to a depth of 34 feet bgs south of the northeastern dispenser island. The boring was terminated at 34 feet bgs due to auger refusal. PID detector readings of samples collected from the boring ranged from 0.2 ppmv to 60 ppmv in soil collected at a depth of 30 feet bgs, however the VOC concentration in the deepest soil sample was 0.4 ppmv. Hydrocarbon odors were not noted for soil collected from this boring. Soils encountered consisted of clays, silty clays, and clayey silts.
- Boring BA-5 was advanced vertically to a depth of 37 feet bgs south of the southwestern dispenser island, near the southern portion of the property. This boring also assessed the southernmost former dispenser island. The boring was terminated at 37 feet bgs due to auger refusal. PID readings of samples collected from the boring ranged from 2.1 ppmv to 145 ppmv in soil collected at depths ranging from a depth of 5 feet bgs. The deepest soil sample collected had a PID reading of 126.1 ppmv. Hydrocarbon odors were not noted in soil collected. Soils encountered consisted of silty clay, clayey silt, and silty sand.
- Boring BA-6 was advanced vertically to a depth of 33 feet bgs south of the southeastern dispenser island, near the southern portion of the property. The boring was terminated at a depth of 33 feet bgs due to auger refusal. PID readings of samples collected in the boring ranged from 1.9 ppmv to 56.1 ppmv in soil collected from a depth of 10 feet bgs. No hydrocarbon odors were noted in any of the samples collected from this boring. Soils encountered consisted of dark grayish, or yellow-brown fine grained silty sand with trace clay.

- Boring BA-7 was advanced vertically to a depth of 15 feet bgs near the former underground clarifier (oil/water separator), near the southwest portion of the property. It was necessary to move the boring to a location southeast of the former oil/water separator due to underground utilities discovered during a geophysical survey. PID readings of samples collected in the boring ranged from 6 ppmv to 9 ppmv. No hydrocarbon odors were noted in the samples collected from this boring. Soils encountered included silty clay, clayey silt, and clay
- Boring BA-8 was advanced vertically to a depth of 15 feet bgs near the former hydraulic lift on the southwest portion of the property. It was necessary to move the boring to a location north of the former hydraulic lift due to the presence of a sidewalk. PID readings of samples collected in the boring ranged from 0.2 to 0.4 ppmv. Hydrocarbon odors were not noted in this boring. Soils encountered consisted of clayey silt and silty clay.

6.2 ANALYTICAL RESULTS

The following subsections discuss the analytical results for soil and groundwater samples collected during SECOR's investigation.

6.2.1 Soil Samples

TPH-GRO were detected at a maximum concentration of 2.0 mg/kg in soil collected from boring BA-4, near the south end of the northeastern dispenser island at a depth of 30 feet bgs. The soil sample was subsequently analyzed for lead, which was detected at a concentration of 7.3 mg/kg. The following soil sample analyzed from BA-4 at 35 feet bgs did not contain TPH-GRO at concentrations above laboratory reporting limits. TPH-GRO were also detected in soil collected from borings BA-1-35 (near the USTs), BA-5-5 and BA-5-30 (near the former and existing southern dispenser islands) and BA-6-10 (near the southeastern dispenser island).

Benzene was detected at a maximum concentration of 10 µg/kg, toluene was detected at a concentration of 4.3 µg/kg, ethylbenzene was detected at a concentration of 110 µg/kg, and total xylenes were detected at a concentration of 13 µg/kg in soil collected from boring BA-4 at depth of 30 feet bgs (near the south end of the northeastern dispenser island). Benzene was also detected in soil collected from boring BA-1 at a depth of 40 feet bgs, near the USTs.

MTBE was detected at a concentration of 210 µg/kg in soil collected from boring BA-6 at a depth of 10 feet bgs, near the southeastern dispenser island. The subsequent sample collected at 33 feet bgs contained no detectable quantities of petroleum hydrocarbon constituents. No other soil samples contained MTBE above the laboratory reporting limit.

The gasoline oxygenates DIPE, ETBE, TBA and TAME were not detected above laboratory reporting limits in any soil sample collected.

Ethanol was not detected in any soil sample collected.

TPH-DRO and TPH-ORO were detected at maximum concentrations of 4.2 mg/kg and 19 mg/kg in soil collected from boring BA-7 at a depth of 15 feet bgs, near the former clarifier (oil/water separator). The sample was subsequently analyzed for VOCs and Title 22 Metals. Arsenic was detected above the Preliminary Remediation Goal (PRG) for industrial soil, at a concentration of 5.8 mg/kg. TPH-DRO were also detected in soil boring BA-7 at 5 feet bgs.

TPH-ORO was detected in soil collected beneath the former hydraulic lift at a maximum concentration of

17 mg/kg, in soil boring BA-8 at a depth of 5 feet bgs. The soil samples were subsequently analyzed for PCBs, which were not detected above laboratory reporting limits.

Tables 1 through 4 summarize the laboratory analytical results for soil samples collected from the borings located adjacent to the existing USTs, fuel dispenser islands, fuel delivery piping, former clarifier (oil/water separator) and former hydraulic lift. The laboratory data sheets and quality assurance/quality control (QA/QC) results are presented in Appendix F.

6.2.2 Groundwater Samples

Groundwater was not encountered to the maximum explored depth of 40 feet bgs.

7.0 SUMMARY AND CONCLUSIONS

Chevron Service Station No. 9-9693 is an active retail gasoline service station. The Site is located 5221 North Palo Comado Canyon Road in Agoura Hills, California. Properties in the vicinity of the Site are commercial and residential in nature. SECOR's review of available internal Chevron documentation for the Site shows that the service station has been in operation since at least 1965.

Internal Chevron documentation shows that two generations of station facilities may have existed at the Site. The most current Ground & Grade Plan provided by Chevron shows that existing facilities include three 10,000-gallon double-wall Joor fuel underground storage tanks (USTs) containing various grades of unleaded gasoline, double-wall fiberglass product and single-wall fiberglass vent and vapor recovery piping, and four fuel dispenser islands (each with two fuel dispensers). The fuel USTs are located near the center of the north end of the property and aligned roughly north to south (parallel to North Palo Comado Canyon Road). Two fuel dispenser islands are located on the north-central portion of the property, between the fuel USTs and the building; and two islands are located in the south-central portion of the property south of the building. Both sets of dispenser islands are aligned roughly east to west, perpendicular to Palo Comado Canyon Road. The building for the Site, a convenience store, is located near the center of the property, between the two sets of fuel dispenser islands, and aligned roughly east to west (Chevron, 1996).

Although station operation dates back to at least 1965, tank integrity reports for the Site date back to August of 1981. A December 1982 report stated that the 9,000-gallon unleaded and the 8,000-gallon regular steel tanks leaked through corrosion holes. The tanks were replaced with two 10,000-gallon fiberglass tanks. In January 1986, an underground product line leak was reported when used oil was discovered in a test well. In February 1987, a leak was reported to the LACDPW. In June 1988, new double-wall tanks were reportedly installed. In April 1996, most of the dispensers failed wet-pressure tests. Beginning in December 2000, the supreme tank and regular unleaded tank periodically failed initial test in pressure decay tests. However, the tanks passed when retested after faulty parts were replaced. In May 2002, dispensers 1 through 8 failed wet-tests. Defective parts were replaced, and the dispensers passed on June 3, 2003.

According to information provided by the ChevronTexaco Loss Prevention Division, three reports were on file for the Site. In 1981, water was reported in the unleaded tank. In 1987, a tank failure was reported for the supreme unleaded tank, which concurs with the tank integrity information listed above. In 1996, contaminated soil was discovered during a tank level monitoring project.

Information provided by Environmental Data Resources, Inc. (EDR) and the LACDPW, suggests that no groundwater wells are located within a 1-mile radius of the Site. Groundwater was not encountered beneath the Site during baseline site assessment activities to an explored depth of 40 feet bgs, however, data collected from a nearby Texaco station suggests that local groundwater flows to the southwest with depth to groundwater ranging from 4.6 to 17.5 feet bgs.

No facilities were identified within 1-mile of the Site as having a potential release to the environment that could potentially impact soil and/or groundwater quality beneath the Site.

Three sensitive receptors were identified within 1/4-mile (1,320 feet) down- or cross gradient of the Site. The closest sensitive receptor, Herschel Day School West, is located approximately 300 feet east and crossgradient from the Site.

SECOR's subsurface investigation at the Site consisted of the completion of eight exploratory soil borings (BA-1 through BA-8) in the locations of existing underground storage tanks (USTs), associated product delivery piping, dispenser islands, and former underground clarifier (oil/water separator) and former

hydraulic lift. Boring locations are illustrated on Figure 2 of the attached report.

Soil sediment types encountered during SECOR's field investigation consisted primarily of clays and silts with some sand to the maximum explored depth of approximately 40 feet below ground surface (bgs). Groundwater was not encountered during drilling.

Chemical analysis of collected soil samples showed the presence of total petroleum hydrocarbons as gasoline range organics (TPH-GRO) in five soil samples. The maximum concentration of TPH-GRO was detected in soil collected from boring BA-4 (near the northeastern dispenser island) at 2.2 milligrams per kilogram (mg/kg) at a depth of 30 feet bgs; however the soil sample collected at 34 feet bgs did not contain TPH-GRO above the laboratory reporting limit. Soil collected from a depth of 30 feet bgs in boring BA-4 also contained benzene, ethyl benzene, toluene, and xylenes (BTEX) at concentrations of 10 micrograms per kilogram ($\mu\text{g}/\text{kg}$), 4.3 $\mu\text{g}/\text{kg}$, 110 $\mu\text{g}/\text{kg}$ and 13 $\mu\text{g}/\text{kg}$, respectively.

The fuel oxygenate MTBE was detected in one soil sample from BA-6 at 10 feet (near the southeastern dispenser island) at a concentration of 210 $\mu\text{g}/\text{kg}$. However, the next soil sample collected at a depth of 33 feet bgs did not contain detectable concentrations of any petroleum hydrocarbon constituents. No other fuel oxygenates or ethanol were detected in soil.

Total petroleum hydrocarbons as diesel range organics (TPH-DRO) were detected in two soil samples at a maximum concentration of 4.2 mg/kg in soil collected from boring BA-7 (near the former clarifier [oil/water separator]) at a depth of 15 feet bgs. Total petroleum hydrocarbons as oil range organics (TPH-ORO) were detected in four soil samples at maximum concentration of 19 mg/kg in soil collected from boring BA-7 at a depth of 15 feet bgs. The soil sample was also analyzed for VOCs and Title 22 Metals. VOCs and Title 22 Metals were not detected above levels of regulatory concern. Title 22 Metals were not detected at or above levels of regulatory concern.

TPH-ORO were also detected in soil collected near the former hydraulic lift at a maximum concentration of 17 mg/kg in soil sample BA-8-5. The sample was subsequently analyzed for polychlorinated biphenyls, which were not detected above laboratory reporting limits.

8.0 LIMITATIONS

SECOR has prepared this report for the exclusive use of Chevron as it pertains to Service Station No. 9-9693 located at 5221 North Palo Comado Canyon Road in Agoura Hills, California. SECOR's investigation has been performed with the degree of skill generally exercised by practicing engineers and geologists in the environmental field. SECOR makes no other warranty, either expressed or implied, concerning the conclusions and professional advice, which is contained within the body of this report. *Any use of or reliance on this report by a third party shall be at such a party's sole risk.*

Inherent in most projects performed in a heterogeneous subsurface environment, excavation or continuing assessments may reveal findings that are different than those presented herein. This facet of the environmental profession should be considered when formulating professional opinions on the limited data collected on these projects.

The information presented in this report is valid as of the date our exploration was performed. Site conditions may alter with time; consequently, the findings presented herein are subject to change.

This report has been issued with the clear understanding that it is the responsibility of the owner, or their representative, to make appropriate notifications to regulatory agencies. It is specifically not the responsibility of SECOR to conduct appropriate notifications as specified by current county and state regulations.

SECOR can offer no assurances and assumes no responsibility for site conditions or activities that were outside the scope of the inquiry requested by Chevron as outlined in this document. It should be understood by Chevron that SECOR has relied on the accuracy of documents, oral information, and other material and information provided by Chevron and other associated parties. It is recognized that regulatory requirements may change, including the revision of accepted action levels, which could necessitate a review of the discussion, findings, recommendations or conclusions of this report. Any subsequent modification, revision or verification of this report must be provided in writing by SECOR.

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JAMES A. NOYES, Director

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
www.ladpw.org

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

February 10, 2004

IN REPLY PLEASE
REFER TO FILE **EP-1**
010053-009912

Mr. Mark Sigler
Chevron Environmental Management Company
145 South State College Boulevard, 4th Floor
Brea, CA 92821

Dear Mr. Sigler:

**HAZARDOUS MATERIAL UNDERGROUND STORAGE
CLOSURE REPORTS AND BASELINE SITE ASSESSMENT
CLOSURE PERMIT NUMBERS: 3342B, 156347
FACILITY LOCATION: 5221 NORTH PALO COMADO CANYON ROAD,
AGOURA HILLS**

This office has reviewed the closure reports dated June 24, 1988 and May 13, 1996, in addition to the Baseline Site Assessment report dated September 17, 2003, for the subject facility.

A letter issued by Los Angeles County Department of Public Works, Environmental Programs Division on May 29, 1996, indicated no further action was required with regards to closure application number 140960. However, this letter does not cover closure permit number 3342B, issued for the removal of four underground storage tanks in 1987, nor does it cover closure permit number 156347, issued for the removal and reinstallation of three underground storage tanks in 1996.

In order to better evaluate the facility, the following additional closure requirements must be submitted to this office by March 12, 2004:

- Submit a work plan to define the lateral and vertical extent of contamination.
- To define the vertical extent of soil contamination, complete borings which penetrate to a minimum depth of 25 feet below the deepest detectable contamination or complete borings to ground water. Soil samples shall be taken and analyzed at five-foot intervals. Contamination detected in borings may indicate that the lateral extent of contamination has not been defined which may require step-out borings to further assess contamination. All borings must be certified by a registered professional with sufficient experience in soils. EPA Method 5035 soil sampling collection/preservation guidelines must be utilized. A voluntary cleanup oversight base fee of \$443, must be submitted for the review of future submittals regarding this site.

Mr. Mark Sigler
February 10, 2004
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If you have any questions regarding this matter, please contact Mr. Eric Batman of this office, at (626) 458-3526, Monday through Thursday, 7 a.m. to 5:30 p.m.

Very truly yours,

JAMES A. NOYES
Director of Public Works



TIM SMTH
Civil Engineer
Environmental Programs Division

EB:cn

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Enc.

cc: California Regional Water Quality Control Board (Yue Rong)
Secor International, Inc. (Alexis Bahou)



September 1, 2004

Mr. Tim Smith
Los Angeles County Department of Public Works
Environmental Programs Division
900 South Fremont Avenue
Alhambra, California 91803

Subject: Site Assessment Report

**Site: Chevron Service Station No. 9-9693
5221 North Palo Comado Canyon Road, Agoura Hills, California
LACDPW File No. EP-1010053-009912
(RWQCB Case No. R-09912)**

Dear Mr. Smith:

On behalf of Chevron Environmental Management Company (CEMC), Science Applications International Corporation (SAIC), is pleased to submit this report documenting soil borings advanced in order to further delineate the lateral and vertical extent of the petroleum-hydrocarbon-affected subsurface soils found beneath the site. (Plate 1). This site assessment was proposed in the *Additional Site Assessment Workplan* submitted to the Los Angeles County Department of Public Works (LACDPW), Environmental Programs Division dated March 15, 2004. On May 20, 2004, SAIC submitted the 60-day letter, *Notification of Intent to Proceed with Site Assessment Fieldwork* to the LACDPW, Environmental Programs Division.

This report was developed in general accordance with the 1989 (current) version of the State of California Water Resources Control Board Leaking Underground Fuel Tank (LUFT) Field Manual; the 1994 State of California Code of Regulations Title 23, Division 3, Chapter 10, Underground Storage Tank Regulations; and the LACDPW "Guidance for Report Submittals - Revised June 1993."

SITE DESCRIPTION

The site is located at 5221 North Palo Comado Canyon Road, in Agoura Hills, California. The site is an operating Chevron service station located on the northwest corner of the intersection of Palo Comado Canyon Road and the northbound on-ramp of U.S. Highway 101 (Plate 2). Existing structures include the station building, four fuel-dispenser islands, and three 10,000-gallon underground storage tanks (USTs) containing gasoline. A Shell service station is located across Palo Comado Canyon Road to the east.

GEOLOGY

This section is cited from the Secor International Incorporated (SECOR) *Baseline Site Assessment* report dated September 18, 2003.

The subject site is located in the western Transverse Ranges geomorphic province of California (Norris and Webb, 1990). The site is on the north flank of the Santa Monica Mountains, about 2 miles south of the crest of the Simi Hills (U.S. Geological Survey, 1952). The site is at the east edge of a small valley located where Palo Comado and Cheseboro canyons join Lindero Canyon.

The site occupies the south limb of a small syncline, which is part of the roughly east-west-trending set of folds that make up the Simi Hills. The site is about 1 mile northwest of the northern projection of the

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north-striking Liberty Canyon Fault, and about 7 miles north of the east-west striking Malibu Coast Fault (Dibblee, 1992).

The site is underlain by Quaternary alluvium comprised of lean sandy clay, and is located west of and adjacent to a hillside comprised of north-dipping shale strata of the Upper Tertiary Topanga Formation (Dibblee, 1992).

Previous subsurface investigations indicate the site is underlain by primarily silty clay and clay to a depth of 30 feet, below which sandy silt and silt was encountered to the maximum explored depth of 65 feet below ground surface (bgs).

HYDROGEOLOGY

The State Department of Water Resources has divided California into 12 Hydrologic Areas. The Site is located in the South Coastal Hydrologic Study Area, in the Conejo-Tierra Rejada Volcanic Areas Groundwater Basin (California Department of Water Resources, 1975). The site is located about 0.1 mile east of Lindero Canyon Creek, approximately 7.5 miles north of the Pacific Ocean and approximately 6.8 miles east of Lake Sherwood reservoir.

Depth to groundwater in the vicinity of the site varies greatly. Groundwater data measured during August 1995 at depths from 4.6 to 17.5 feet bgs, at a Texaco station located at 5226 Palo Comado Canyon Road, approximately 300 feet north of the subject site. The direction of groundwater flow beneath the Texaco station was toward the west (TRAK Environmental Group, 1995). Groundwater data collected during January 2004 indicated that first water was encountered at depths from 12.99 to 15.15 feet bgs, at a Tosco - 76 station located at 28203 West Dorothy Drive, Agoura, approximately 600 feet southwest of the subject site. The 76 station is an open case with case number R-02634, assigned by California Regional Water Quality Control Board, Los Angeles Region (RWQCB; GeoTracker, March 5, 2004). Groundwater has not been encountered at this site in the maximum explored depth of 65 feet bgs.

WELL SURVEY

Information provided by Environmental Data Resources (EDR) shows that no active groundwater production wells are located within one mile of the site. Additionally, according to the LACDPW, no municipal water wells are present within one mile of the site (SECOR, 2003).

PREVIOUS WORK

In September 1981, Tait & Associates, Inc. (Tait) advanced six exploratory soil borings (#1 through #4, #6, and #7) adjacent to the fuel USTs and one exploratory soil boring (#5) to the southwest of the fuel storage islands in response to water being identified in the unleaded UST. In boring #2, sand saturated with petroleum hydrocarbons was identified from roughly 3 to 10 feet bgs. Clay was encountered at 12 feet bgs (Tait, 1981).

On July 30, 1987, the LACDPW requested that an investigation be conducted at the site following the unauthorized release of petroleum hydrocarbons from the 4,000-gallon supreme UST on February 6, 1987.

In April 1988, Groundwater Technology, Inc. (GTI) excavated and removed a 4,000-gallon steel gasoline UST, two 10,000-gallon fiberglass gasoline USTs, and a 1,000-gallon steel used-oil UST. Six soil samples (1 through 6) were collected from beneath the fuel USTs and one soil sample (7) was collected from beneath the used-oil UST for chemical analysis. Total petroleum hydrocarbons as gasoline (TPH_g) in samples 1 through 6 were detected at a maximum of 48.0 milligrams per kilogram (mg/kg). Benzene,

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toluene, ethylbenzene, and total xylenes (BTEX) were not detected in any samples. Total lead was not detected in sample 4. Total recoverable petroleum hydrocarbons (TRPH) in sample 7 were detected at a concentration of 74 mg/kg (GTI, 1988). Documentation regarding the removal of the first-generation dispensers and product lines was not available within CEMC.

On October 28, 1992, the LACDPW informed Chevron that additional closure requirements (installation of a groundwater discovery well) would need to be met before closure can be considered.

On October 29, 1992, the LACDPW issued a non-compliance notice to Chevron and requested submittal of certification of installation for the three USTs (Permit No. 156347).

In February 1996, Bechtel Environmental Inc. (BEI) performed environmental monitoring during the removal and replacement of the dispensers and associated product piping. Confirmation soil samples were collected at depths ranging from 3 to 10 feet bgs. Petroleum hydrocarbons were detected northwest, northeast, and southeast of the dispensers. TPHg and benzene were detected at a maximum concentration of 500 mg/kg and 0.73 mg/kg, respectively. The affected areas were over-excavated at maximum depths ranging from 3 to 7 feet bgs, and fourteen confirmation soil samples were collected. Benzene and toluene were detected in the confirmation samples at maximum concentrations of 0.011 mg/kg and 0.022 mg/kg, respectively. TPHg was not detected in any of the confirmation samples collected (BEI, 1996).

In March 1996, the existing fuel USTs were temporarily exposed during the installation of a tank level monitoring (TLM) system. Soil samples collected from the bottom of the UST basin showed TPHg at a maximum concentration of 80 mg/kg and benzene at 0.17 mg/kg, with the overall highest concentrations at the south end of the westernmost UST. Based on the results of the sampling, BEI requested site closure, or no further action (BEI, 1996).

The LACDPW issued a "No Further Action" letter (Permit No. 140960) for the site on May 29, 1996.

During August 2003, SECOR advanced eight exploratory soil borings onsite (Plate 3) to a maximum depth of 40 feet bgs. Groundwater was not encountered in any of the soil borings. Total petroleum hydrocarbons as gasoline range organics (GRO) were detected at a maximum concentration of 2.20 mg/kg from boring BA-4 at a depth of 30 feet bgs. Total petroleum hydrocarbons as diesel range organics (DRO) and total petroleum hydrocarbons as oil range organics (ORO) were detected at maximum concentrations of 4.2 mg/kg and 19 mg/kg respectively from boring BA-7 at a depth of 15 feet bgs. Methyl tertiary-butyl ether (MtBE) was detected at a concentration of 0.21 mg/kg from a soil sample collected from BA-6 at a depth of 10 feet bgs. BTEX were detected at maximum concentrations of 0.01 mg/kg, 0.0043 mg/kg, 0.11 mg/kg, and 0.015 mg/kg respectively from boring BA-4 at a depth of 30 feet bgs. Ethanol, di-isopropyl ether (DIPE), ethyl tertiary-butyl ether (ETBE), tertiary-butyl alcohol (TBA), and tertiary-amyl methyl ether (TAME) were not detected in any soil samples collected (SECOR, 2003). Analytical results of the baseline assessment are summarized in Tables 1 and 2.

The site is a current soil only case (R-09912) with the RWQCB.

PREFIELD ACTIVITIES

Prior to conducting the site assessment, SAIC obtained a soil boring to groundwater permit for the borings from the Los Angeles County Department of Environmental Health (LACDEH). A copy of the soil boring permit is included in Appendix A.

FIELD ACTIVITIES

SAIC and Subsurface Surveys (SSS) completed a geophysical survey of the proposed boring locations on June 17, 2004 to locate and identify piping, conduit, utilities, and other buried features in the immediate vicinity of the proposed borings. The geophysical survey report is included in Appendix B.

On June 29, 2004, the proposed boring locations were cleared to 7 feet bgs using an air-knife to ensure that the borings would not interfere with any subsurface utilities or former station features. Soil samples were collected at 5 feet bgs for laboratory analysis.

SAIC conducted site assessment activities on July 6 and 8, 2004. Fieldwork was conducted in general accordance with SAIC's field methods and procedures (Appendix C) and under the supervision of a California registered geologist. The scope of work included drilling five soil borings to define the lateral and vertical extent of petroleum hydrocarbon affected subsurface soils beneath the site. BC² Environmental Corporation of Fullerton, California (BC²) advanced the five soil borings (B-9 through B-13). The boring locations are shown on Plate 3. On July 6, a mobile laboratory was used onsite to analyze the soil samples.

Soil Borings and Sample Collection

Soil samples from borings B-9 through B-13 were collected at 5-foot intervals starting at 5 feet bgs until reaching a depth of 65 feet bgs. All soil samples collected were field screened for petroleum hydrocarbons using a photoionization detector (PID). Soil used for field screening was not used for laboratory analyses. Soil samples were described and classified at the time of collection in accordance with the Unified Soil Classification System (USCS). The boring logs are in Appendix D.

Soil Sample Analytical Results

Soil samples were submitted to Del Mar Analytical of Irvine, California, a Chevron-approved, state-certified laboratory. The samples were analyzed for TPHg using Gas Chromatography/Mass Spectrometer (GC/MS), BTEX, MtBE, DIPE, ETBE, TAME, TBA and ethanol by EPA Method 8260M. The soil samples from boring B-13 were also analyzed for DRO (C13-C22) and ORO (C23-C40) by EPA Method 8015 Modified, due to the boring's location adjacent to the former used-oil UST.

TPHg concentrations were detected in soil borings B-9, B-10, B-11 and B-13 at maximum concentrations of 3.2 E mg/kg, 170 mg/kg, 1,600 mg/kg, 0.39 J mg/kg and 0.44 J mg/kg, respectively. The E note indicates that the concentration of the sample exceeds the calibration range and therefore the result is semi-quantitative. The J note indicates that the analyte was detected at a level less than the reporting limit and greater than or equal to the method detection limit. Benzene concentrations were detected in soil borings B-9, B-10, B-11 and B-13 at maximum concentrations of 0.019 mg/kg, 0.0036 J mg/kg, 0.0007 mg/kg, and 0.0054 mg/kg, respectively. Ethylbenzene concentrations were detected in soil borings B-9, B-10, B-11 and B-12 at maximum concentrations of 0.2 mg/kg, 0.028 mg/kg, 36 mg/kg, and 0.017 mg/kg, respectively. Total xylenes concentrations were detected in soil borings B-10 and B-12 at maximum concentrations of 0.0087 mg/kg, and 0.008 mg/kg, respectively. MtBE concentrations were detected in soil borings B-9, B-11 and B-13 at maximum concentrations of 0.14 mg/kg, 0.0079 J mg/kg, and 0.9 mg/kg, respectively. TBA concentrations were detected in soil borings B-12 and B-13 at maximum concentrations of 0.021 J mg/kg, and 0.11 mg/kg, respectively. Toluene, ETBE, DIPE, TAME, and ethanol concentrations were not detected in any soil samples from the borings. DRO (C13-C22), were detected in soil samples from B-13 with a maximum concentration of 440 mg/kg at a depth of 20 feet bgs. ORO (C23-C40), were detected in soil samples from B-13 with a maximum concentration of

210 mg/kg at a depth of 20 feet bgs. Soil sample analytical results are summarized in Table 3. The laboratory reports and chain-of-custody records are provided in Appendix E.

Drill cuttings and decontamination water were temporarily stored onsite in properly labeled, Department of Transportation (DOT)-approved 55-gallon drums pending disposal. Philips Services Company (PSC), of Carson, California, transported the wastewater to the U.S. Filters permitted facility in Vernon, California, for recycling, and the drill cuttings were transported by PSC to TPS Technologies' permitted facility in Adelanto, California, for recycling. Copies of the non-hazardous waste manifests will be provided under separate cover.

DISCUSSION

Groundwater was not encountered during drilling activities with a maximum explored depth of 65 feet bgs. Groundwater has been encountered at a nearby 76 station at approximately 15 feet bgs. The 76 site is on the opposite side of the 101 freeway at a lower elevation than this site and resides in an area where alluvium has probably accumulated. The Chevron site is located on a bedrock slope that slopes to the south toward the 76 station. The presence of bedrock below this site and the elevation difference are probable explanations for the groundwater not being encountered below this site.

Maximum Soil Screening Levels (MSSLs) have been developed by the RWQCB (1996) to aid in determining action levels for TPH and BTEX concentrations in soil at various distances above drinking water aquifers. For purposes of this discussion, water is assumed to be encountered just below the depth of maximum exploration, or 65 feet bgs.

For distances above drinking water aquifers of less than 20 feet, the MSSLs for TPHg (C4-C12), DRO (C13-C22) and ORO (C23-C40) are 100 mg/kg, 100 mg/kg and 1,000 mg/kg, respectively. The maximum concentrations of TPHg, DRO and ORO encountered between 45 and 65 feet bgs were 0.4 mg/kg, 43 mg/kg and 96 mg/kg, respectively. These are all below the MSSLs for within 20 feet of a drinking water aquifer. The MSSLs for BTEX at 20 feet above a drinking water aquifer in silty soil are 0.011 mg/kg, 0.45 mg/kg, 2 mg/kg and 5.3 mg/kg, respectively. The maximum concentrations of BTEX encountered between 45 and 65 feet bgs were 0.0049 mg/kg, <0.0024 mg/kg, <0.0024 mg/kg, and <0.0024 mg/kg, respectively. These are all below the BTEX MSSLs for within 20 feet of a drinking water aquifer.

MSSLs for MtBE have not been established, but MtBE was not detected in any samples between 45 feet and 65 feet bgs. The deepest detection of MtBE was 0.14 mg/kg in the soil sample collected at 25 feet bgs in boring B-9. This is 40 feet above the termination of boring B-9 which did not encounter water.

Based on the low levels of TPHg, DRO, ORO, BTEX, MtBE and other oxygenates, and groundwater not being encountered at the site, CAC recommends no further action for the site.

September 1, 2004
Mr. Tim Smith
Los Angeles County Department of Public Works
Environmental Programs Division
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ELECTRONIC DATA FORMAT DELIVERABLES

In accordance with California State AB2886, laboratory analytical data have been uploaded to the Geotracker website. The Geotracker confirmation numbers are listed below.

<u>Lab Identification No.</u>	<u>Confirmation Number</u>
ING0010	1009211242
ING0371	2924182951
ING0175	7279996414
ING0153	Pending

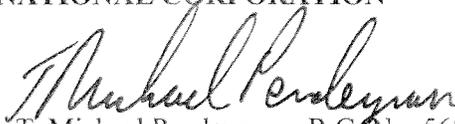
If you have any questions, please contact Mr. Mike Pendergrass, the SAIC Project Manager, at (714) 257-6403, or Mr. Y.M. Tuan, the CEMC Project Manager, at (714) 671-3373.

Yours very truly,

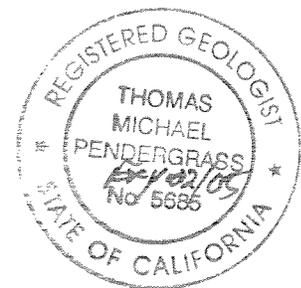
SCIENCE APPLICATIONS INTERNATIONAL CORPORATION



Ian Mueller
Junior Project Geologist



T. Michael Pendergrass, R.G. No. 5685
Senior Project Geologist



Attachments: Table 1 – Baseline Assessment Soil Analytical Data
Table 2 – Additional Baseline Assessment Soil Analytical Data
Table 3 – Soil Analytical Data – June and July 2004
Plate 1 – Site Location Map
Plate 2 – Site Vicinity Map
Plate 3 – Site Plan Showing Soil Boring Locations
Appendix A – LACDEH Soil Boring Permit
Appendix B – Geophysical Survey Report
Appendix C – SAIC's Field Methods and Procedures
Appendix D – Boring Logs
Appendix E – Laboratory Reports and Chain-of-Custody Records

cc: Y.M. Tuan, CEMC
Dr. Yi Lu, RWQCB
Wells Fargo Bank
SAIC Project File

SAIC's investigation was restricted to collection and analysis of a limited number of environmental samples and visual observations obtained during the physical site visit, and from records made available by CEMC or third parties during the investigation. Because the investigation consisted of collecting and evaluating a limited supply of information, SAIC may not have identified all potential items of concern and, therefore, SAIC warrants only that the project activities under this contract have been performed within the parameters and scope communicated by CEMC and reflected in the contract. SAIC has made no independent investigations concerning the accuracy or completeness of the information relied upon. This report is intended to be used in no other way. Taking or using in any way excerpts from this report are not permitted and any party doing so does so at its own risk.

REFERENCES

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- Groundwater Technology, Inc. (GTI) 1988. *Tank Pull Report for Chevron Service Station #9693, 5221 N. Palo Comado Cyn Rd., Agoura Hills, California*; dated June 24.
- Norris, R.M. and Webb, R.W. 1990. *Geology of California, second edition*; Wiley and Sons, Inc., New York.
- Secor International, Inc. (SECOR) 2003. *Baseline Site Assessment for Chevron Service Station No. 9-9693, 5221 Palo Comado Canyon Road, Agoura Hills, California*; dated September 18.
- Tait & Associates. (TAIT) 1981. *Synopsis of Drilling Activities, Service Station No. 9693, 5221 Palo Comado Road, Agoura Hills, California*; dated September 14.
- TRAK Environmental Group, Inc. (TRAK) 1995. *Third Quarter 1995 Groundwater Monitoring Report, Texaco Service Station, 5226 Palo Comado Road, Agoura Hills, California*; dated September 25.
- United States Geological Survey. 1952. *Calabasas, California 7.5-Minute (1:24,000 scale) Topographic Quadrangle Map*; photorevised 1967.

TABLES

Table 1. Data for Assessment Soil Analytical Data
 Chevron Environmental Management Company
 Chevron Service Station No. 9-9693
 5-21 N. Palo Verde Canyon Road, Agoura Hills, California

Date	Sample Depth (ft.)	Sample	GC/MS (mg/l)	EPA Method 8260B (mg/kg)										EPA Method 8015M (mg/kg)	
				Total Naphthalenes	MBP	E-TH	DHP	TAME	TBA	Ethanol	Lead	DRO (C13-C22)	ORO (C23-C40)		
08/27/03	0-10	0.55	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.3			
08/27/03	0-10	0.0065	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.3			
08/27/03	0-10	<0.10	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.2			
08/27/03	0-10	<0.10	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.2			
08/27/03	0-10	<0.10	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.2			
08/27/03	0-10	0.0043	0.11	0.013	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.2	7.3		
08/27/03	0-10	<0.10	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.2			
08/27/03	0-10	0.30	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.2			
08/27/03	0-10	0.25	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.2			
08/27/03	0-10	0.14	<0.002	<0.002	0.21	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.2			
08/27/03	0-10	<0.10	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.2			
08/27/03	0-10	<0.10	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.2			
08/27/03	0-10	5.00	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.2	2.5	14	
08/27/03	0-10	15.00	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.2	4.2	19	
08/27/03	0-10	5.00	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<2.5	17	
08/27/03	0-10	15.00	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<2.5	5.1	

GC/MS below ground surface
 EPA gas chromatography / mass spectrometer
 U.S. Environmental Protection Agency
 mg/kg milligrams per kilogram
 H11 total petroleum hydrocarbons quantified as gasoline
 MBP methyl tertiary-butyl ether
 TBA ethyl tertiary-butyl ether
 DHP di isopropyl ether
 TAME tertiary-amyyl methyl ether
 TBA tertiary butyl alcohol
 DRO diesel range organics (carbon range C13-C22)
 ORO oil range organics (carbon range C23-C40)
 < denotes a value below the method detection limit and the laboratory reporting limit

**Table 2. Additional Baseline Assessment Soil Analytical Data
Chevron Environmental Management Company
Chevron Service Station No. 9-9693
5221 N. Palo Comado Canyon Road, Agoura Hills, California**

Sample ID	BA-1	BA-3	BA-4	BA-5	BA-7	BA-8
Sample Depth (feet bgs)	40	35	30	35	15	5
Analyte	Sample Date	8/18/2003	8/18/2003	8/19/2003	8/19/2003	8/19/2003
Metals (mg/kg)						
Antimony	--	--	--	--	<10	--
Arsenic	--	--	--	--	5.8	--
Barium	--	--	--	--	68	--
Beryllium	--	--	--	--	0.74	--
Cadmium	--	--	--	--	4.4	--
Chromium	--	--	--	--	19	--
Cobalt	--	--	--	--	7.3	--
Copper	--	--	--	--	30	--
Lead	--	--	--	--	8.2	--
Mercury	--	--	--	--	<0.02	--
Molybdenum	--	--	--	--	8.4	--
Nickel	--	--	--	--	24	--
Selenium	--	--	--	--	<2.0	--
Silver	--	--	--	--	<1.0	--
Thallium	--	--	--	--	<10	--
Vanadium	--	--	--	--	51	--
Zinc	--	--	--	--	82	--
VOCs (mg/kg)						
1,2-Dichloroethane	0.0022	0.0047	0.0026	<0.002	<0.002	--
1,2,4-Trimethylbenzene	<0.002	<0.002	0.02	0.0044	<0.002	--
sec-Butylbenzene	<0.005	<0.005	0.01	<0.005	<0.005	--
Isopropylbenzene	<0.002	<0.002	0.024	<0.002	<0.002	--
n-propylbenzene	<0.002	<0.002	0.063	<0.002	<0.002	--
1,3,5-Trimethylbenzene	<0.002	<0.002	0.013	<0.002	<0.002	--
o-Xylene	<0.002	<0.002	0.0032	<0.002	<0.002	--
m,p-Xylene	<0.002	<0.002	0.0094	<0.002	<0.002	--
PCBs (mg/kg)						
Aroclor 1016	--	--	--	--	--	<0.05
Aroclor 1221	--	--	--	--	--	<0.05
Aroclor 1232	--	--	--	--	--	<0.05
Aroclor 1242	--	--	--	--	--	<0.05
Aroclor 1248	--	--	--	--	--	<0.05
Aroclor 1254	--	--	--	--	--	<0.05
Aroclor 1260	--	--	--	--	--	<0.05

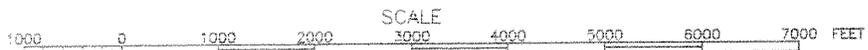
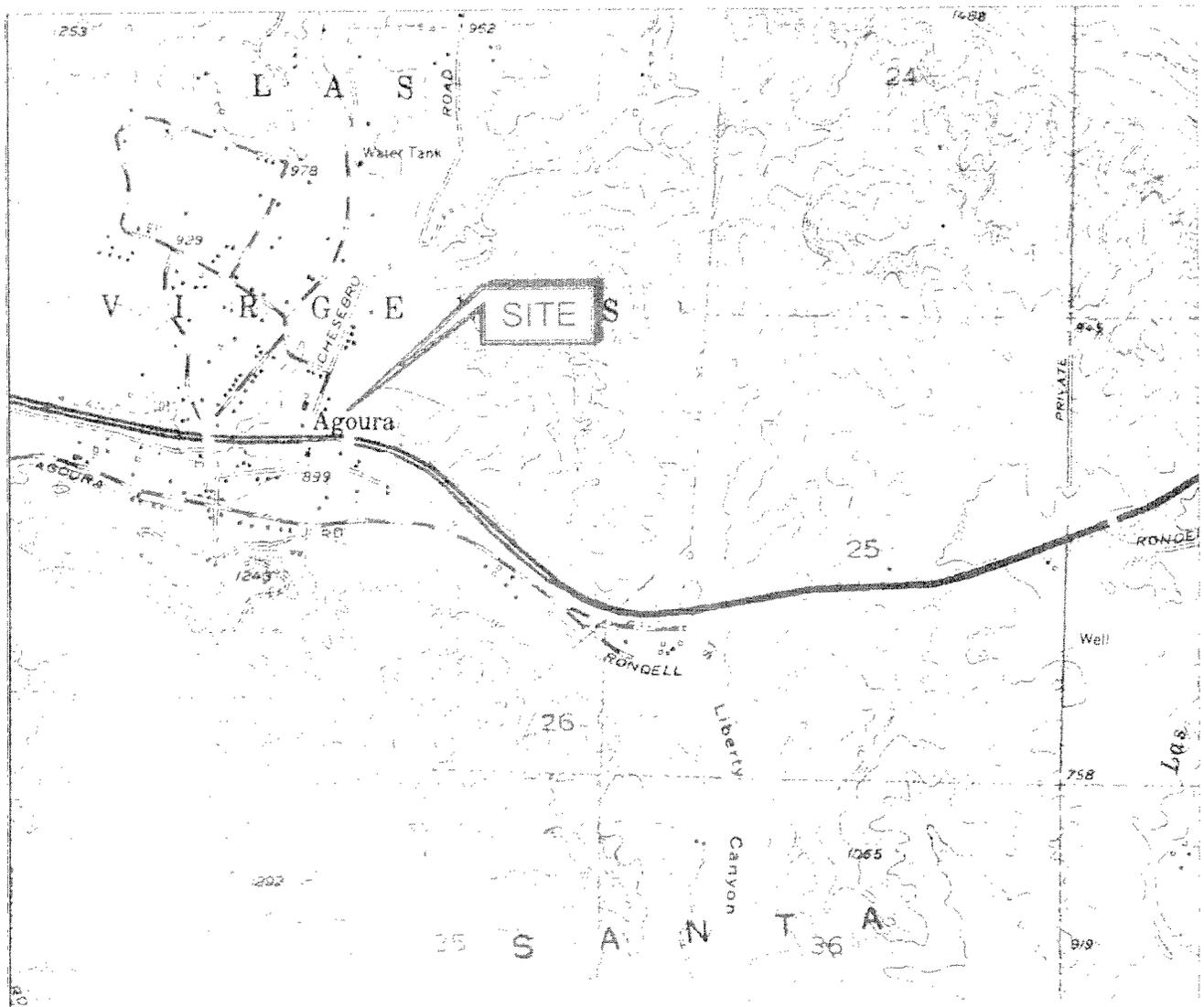
NOTES: bgs - below ground surface
 EPA - U.S. Environmental Protection Agency
 mg/kg - milligrams per kilogram
 PCB - polychlorinated biphenyls analyzed by EPA Method 8082
 VOC - volatile organic compound analyzed by EPA Method 8260B
 < - not detected above the MFL (as shown in the MFL)
 I - denotes a value between the method detection limit and the laboratory reporting limit
 MFL - method detection limit (EPA Method 8082) or reporting limit (EPA Method 7471A)

Table 3. Soil Analytical Data - June and July 2004
 Chevron Environmental Management Company
 Chevron Service Station No. 9-9093
 52136146 Coronado Canyon Road, Sycara Hills, California

Sample ID	Sample Date	Sample Depth (ft)	GC/MS (mg/kg)	EPA Method 8260B (mg/kg)										EPA Method 8015M (mg/kg)	
				FBPig	Benzene	Toluene	Ethylbenzene	Total Xylenes	MIBK	ETBE	DIPE	TAME	TBA	Ethanol	DRO (C13-C22)
B-9	7/2/04	5	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.02	<1.0	--	--
B-9	7/6/04	10	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.02	<1.0	--	--
B-9	7/6/04	15	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.02	<1.0	--	--
B-9	7/6/04	20	<0.22	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0043	<0.0043	<0.0043	<0.017	<0.87	--	--
B-9	7/6/04	25	0.59	<0.002	<0.002	<0.002	0.2	<0.002	<0.005	<0.005	<0.005	<0.02	<1.0	--	--
B-9	7/6/04	30	3.2 E	<0.002	<0.002	<0.002	0.2	<0.002	<0.005	<0.005	<0.005	<0.02	<1.0	--	--
B-9	7/6/04	35	<0.25	0.019	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.02	<1.0	--	--
B-9	7/6/04	40	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.02	<1.0	--	--
B-9	7/6/04	45	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.02	<1.0	--	--
B-9	7/6/04	50	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.02	<1.0	--	--
B-9	7/6/04	55	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.02	<1.0	--	--
B-9	7/6/04	60	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.02	<1.0	--	--
B-9	7/6/04	65	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.02	<1.0	--	--
B-10	7/9/04	5	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.02	<0.1	--	--
B-10	7/9/04	10	110	0.0019 J	<0.0018	<0.0018	<0.0018	<0.0018	<0.0044	<0.0044	<0.0044	<0.018	<0.89	--	--
B-10	7/6/04	15	170	<0.0018	<0.0018	0.028	0.0087	<0.0045	<0.0045	<0.0045	<0.0045	<0.018	<0.91	--	--
B-10	7/6/04	20	0.85	0.0036 J	<0.0016	<0.0016	0.006	<0.0016	<0.004	<0.004	<0.004	<0.016	<0.8	--	--
B-10	7/6/04	25	0.27 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.02	<1.0	--	--
B-10	7/6/04	30	<0.2	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0039	<0.0039	<0.0039	<0.016	<0.79	--	--
B-10	7/6/04	35	<0.23	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0045	<0.0045	<0.0045	<0.018	<0.9	--	--
B-10	7/6/04	40	<0.2	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.004	<0.004	<0.004	<0.016	<0.81	--	--
B-10	7/6/04	45	<0.21	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0042	<0.0042	<0.0042	<0.017	<0.85	--	--
B-10	7/6/04	50	<0.22	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0045	<0.0045	<0.0045	<0.018	<0.9	--	--
B-10	7/6/04	55	<0.22	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0044	<0.0044	<0.0044	<0.018	<0.88	--	--
B-10	7/6/04	60	<0.22	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0044	<0.0044	<0.0044	<0.017	<0.87	--	--
B-10	7/6/04	65	<0.22	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0044	<0.0044	<0.0044	<0.018	<0.88	--	--
B-11	7/9/04	5	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.02	<1.0	--	--
B-11	7/9/04	10	1.600	<2.0	<2.0	36	<2.0	<5.0	<5.0	<5.0	<5.0	<20	<1000	--	--
B-11	7/9/04	15	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	0.0079 J	<0.005	<0.005	<0.02	<1.0	--	--
B-11	7/9/04	20	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.02	<1.0	--	--
B-11	7/9/04	25	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.004	<0.004	<0.004	<0.017	<0.83	--	--
B-11	7/9/04	30	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.004	<0.004	<0.004	<0.017	<0.83	--	--
B-11	7/9/04	35	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.004	<0.004	<0.004	<0.017	<0.83	--	--
B-11	7/9/04	40	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.004	<0.004	<0.004	<0.017	<0.83	--	--
B-11	7/9/04	45	0.4 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.004	<0.004	<0.004	<0.017	<0.83	--	--
B-11	7/9/04	50	<0.25	0.0026 J	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.02	<1.0	--	--
B-11	7/9/04	55	<0.22	0.0049	<0.0018	<0.0018	<0.0018	<0.0018	<0.0044	<0.0044	<0.0044	<0.018	<0.88	--	--
B-11	7/9/04	60	<0.23	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0045	<0.0045	<0.0045	<0.018	<0.9	--	--
B-11	7/9/04	65	<0.22	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0044	<0.0044	<0.0044	<0.018	<0.88	--	--

PLATES

FILE: X:\Draftering\9--9.883\BASE\SITE LOCATION MAP.dwg [Layout1]



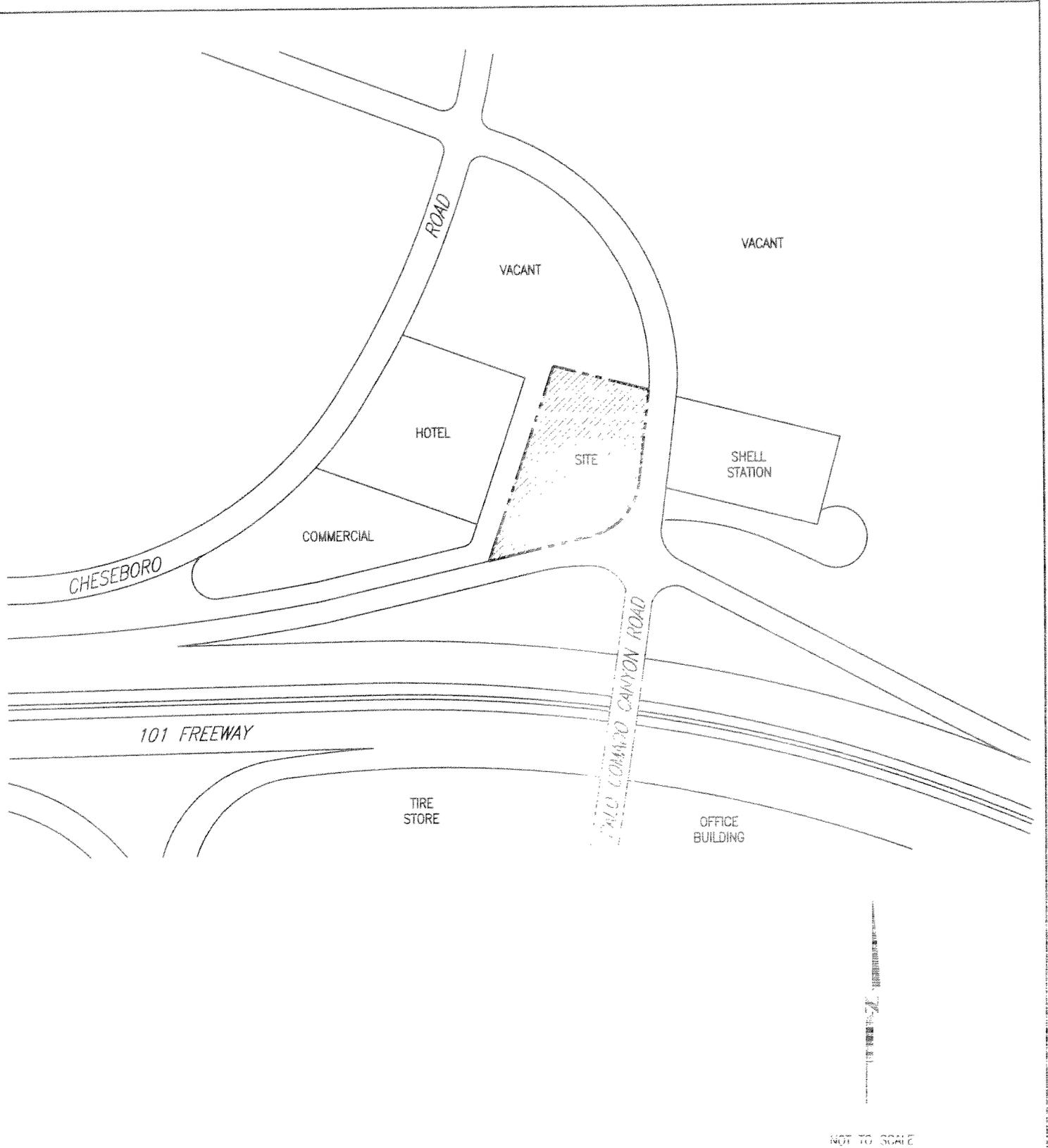
SCALE

Chevron Environmental Management Company
 SERVICE STATION NO. 44993
 5221 N. PALO CAMADO CANYON RD & HWY 101
 AGOURA HILLS, CALIFORNIA

SITE LOCATION MAP

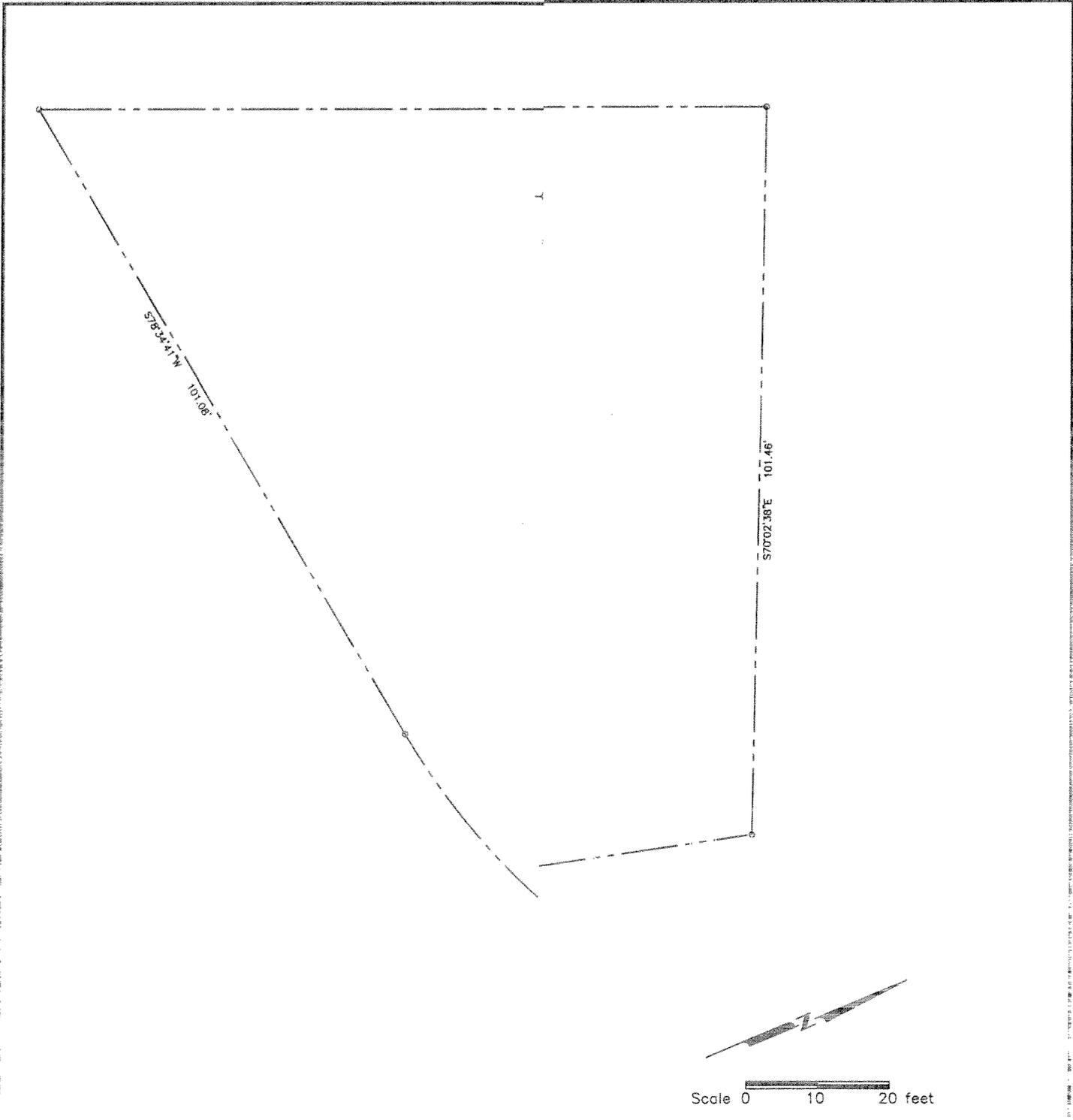
Drawn	BDP	Checked	Approved	DATE	PAGE NO.
				06/16/88	1
06-6102-00-0000-000				DATE	BY
				06/16/88	BDP

REFERENCE: USCS 7.5-MINUTE QUADRANGLE, CALABASAS, CALIFORNIA (DATED 1952, PHOTOREVISED 1967)



NOT TO SCALE

Chevron Environmental Management Company				
6721 N. PALO COMADO CANYON ROAD				
MOUNTAIN VIEW, CALIFORNIA				
SITE VICINITY MAP				
DRAWN	DATE	PREPARED	APPROVED	SCALE NO.
DATE	DATE	DATE	DATE	
JOB NO. 06-6102-00-6005-000			FILE NO.	



EXPLANATION

- SOIL BORING (SLOCR, 2003)
- SOIL BORING (SAIC, 2004)
- TANK MONITORING WELL

Chevron Environmental Management Company SERVICE STATION NO. 9-9693 5221 N. PALO COMADO CANYON & HWY 101 AGOURA HILLS, CALIFORNIA				
SITE PLAN SHOWING SOIL BORING LOCATIONS				
DRAWN	BDP	CHECKED	APPROVED	PLATE NO.
DATE	03/04	DATE	DATE	
JOB NO.	06-6102-00-6005-284	FILE NO.	B6005-001	

APPENDIX A

LACDEH SOIL BORING PERMIT

10053 - 9912



November 2, 2005

Ms. Elizabeth Ralston
Los Angeles County Department of Public Works
Environmental Programs Division
900 South Fremont Avenue
Alhambra, California 91803

Subject: Historical Data Submittal and Response to Agency Letter

**Site: Chevron Service Station No. 9-9693
5221 North Palo Comado Canyon Road, Agoura Hills, California
LACDPW File No. EP-1010053-009912
(RWQCB Case No. R-09912)**

Dear Ms. Ralston:

On behalf of Chevron Environmental Management Company (CEMC), Science Applications International Corporation (SAIC) is submitting supplemental historical soil analytical data to further assist in the evaluation of the site for regulatory case closure. In a letter dated May 23, 2005 the Los Angeles Department of Public Works (DPW) requested additional site assessment at the site based on reported concentrations of heavy-end petroleum hydrocarbons in soil samples collected during soil boring activities in 2004 and 2005 (Appendix A).

A review of historical assessment data and a comparison of the reported concentrations with the Regional Water Quality Control Board's (RWQCB) Maximum Soil Screening Levels (MSSLs) indicates that conditions at the site have been adequately assessed and that observed concentrations of hydrocarbons in soil do not pose a threat to human health and the environment. A copy of the RWQCB MSSL Table 4-1 is included as Appendix B.

Based on the evaluation of supplemental site data provided in this report, and the comparison of reported concentrations with RWQCB MSSLs, SAIC requests that this site be reviewed for regulatory case closure.

SITE DESCRIPTION

The site is located at 5221 North Palo Comado Canyon Road, in Agoura Hills, California. The site is an operating Chevron service station located on the northwest corner of the intersection of Palo Comado Canyon Road and the northbound on-ramp of U.S. Highway 101 (Plate 2). Existing structures include the station building, four fuel-dispenser islands, and three 10,000-gallon underground storage tanks (USTs) containing gasoline. The current USTs are located in the northern portion of the site. A prior configuration of the site had USTs located in the southern portion of the site. These tanks were removed in 1988, and soil sampling was conducted in the former UST area. Plate 3 shows the current and former locations of the USTs, as well as the locations of soil samples soil borings.

An Alliance Oil service station with an open RWQCB case (I-05924A) is located across Palo Comado Canyon Road to the east.

GEOLOGY

The station is constructed upon a graded flat lot on the western edge of a northwestern-trending ridge in the Las Virgenes Hills. Analysis of topographical maps and aerial photographs suggests that the land surface at the site has been altered to accommodate the development and construction of the adjacent onramp to the northbound lanes of the Highway 101, and the structural support for the Palo Comado Canyon Road overpass. Considerable compaction, and grading were apparently necessary to stabilize the area for bridge construction.

The elevation of the site is approximately 930 feet mean sea level (msl). The eastern boundary of Russell Valley is approximately 75 feet below the site to the west. This portion of the valley is an alluvial floodplain containing deposits derived from the nearby confluence of Palo Comado, Cheeseboro, and Lindero Canyons. The site is about 1 mile northwest of the northern projection of the north-striking Liberty Canyon Fault, and about 7 miles north of the east-west striking Malibu Coast Fault (Dibblee, 1992).

Soils in low-lying portions of the valley are reported to be comprised of unconsolidated Quaternary alluvium. Hills surrounding the site are composed of deformed strata of the Upper Tertiary Topanga Formation (Dibblee, 1992). Boring logs reviewed from previous assessments indicate that shallow soil is predominantly clay and silt, with varying amounts of sand to the total explored depth of 65 feet below ground surface (bgs). Bedrock was not reported in any of the historical boring logs.

HYDROGEOLOGY

The site is located in the South Coastal Hydrologic Region, within the Russell Valley Groundwater Basin. The Russell Valley Groundwater Basin is a relatively small alluvial basin bounded by semi-permeable rocks of the Santa Monica Mountains to the south and the Las Virgenes Hills to the north and east. The principal water-bearing formation within the basin is Holocene age alluvium, which is generally more prevalent in topographic lows in the valley. The reported thicknesses of these alluvial deposits average approximately 35 to 55 feet and consist of unconsolidated, poorly bedded, poorly-sorted to sorted sand, gravel, silt, and clay (California Department of Water Resources (DWR, 2005). Soil samples collected from beneath the site did not contain coarse-grained gravels and sands, effectively limiting the porosity. This suggests that the effect of road and bridge construction earth-moving activities has created a zone of low permeability. Such a zone would impede water flow into soils beneath the site.

Groundwater has not been encountered at the site during any of the previous site assessment activities. Soil moisture reported in historical boring logs ranges from dry to moist to the maximum explored depth of 65 feet bgs. Permeability coefficient values for clay and silt, as was primarily observed during soil assessments, are generally on the order of $10E-6$ to $10E-17$ (Verrjuit, 1982). However, groundwater data reported in the second quarter 2005 monitoring event at the former Shell station located at 5226 Palo Comado Canyon Road indicates that depth to water ranged from 3.45 to 12.57 feet bgs. The monitoring well network for this open case (I-05924A) includes wells located within Palo Comado Canyon Road, approximately 20 feet east of the subject site. The direction of groundwater beneath the former Shell station has been reported to flow toward the west at a relatively steep gradient of 0.12 ft/ft (Delta Environmental Consultants, 2005).

The variance in groundwater depth and the anomalous lack of groundwater at the site are likely the result of permeability gradients related to the compaction of soils during construction of the overpass and the grading and compaction of the pad upon which the subject site is constructed. This soil disturbance likely

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altered the hydrogeologic properties that may have existed in the subsurface prior to development of the area.

WELL SURVEY

Information provided by Environmental Data Resources (EDR) shows that no active groundwater production wells are located within one mile of the site. Additionally, according to the LACDPW, no municipal water wells are present within one mile of the site (SECOR, 2003).

PREVIOUS WORK

In September 1981, Tait & Associates, Inc. (Tait) advanced six exploratory soil borings (#1 through #4, #6, and #7) adjacent to the fuel USTs and one exploratory soil boring (#5) to the southwest of the fuel dispenser islands in response to water being identified in the unleaded UST. In boring #2, sand saturated with petroleum hydrocarbons was identified from roughly 3 to 10 feet bgs. Clay was encountered at 12 feet bgs (Tait, 1981). No record of soil sampling conducted at this time was available for review.

In April 1988, Groundwater Technology, Inc. (GTI) conducted the removal of three gasoline USTs from the southern portion of the site and one used-oil UST from the eastern portion of the site. Tanks removed included a 4,000-gallon steel gasoline UST, two 10,000-gallon fiberglass gasoline USTs, and a 1,000-gallon steel used-oil UST. Soil samples 1 through 6 were collected from beneath the fuel USTs. Analytical data are presented in Table 1. Sample locations are presented on Plate 3. Concentrations of total petroleum hydrocarbons as gasoline (TPHg) were detected in samples 3, 4, and 5 at a maximum of 48.0 milligrams per kilogram (mg/kg). Benzene and toluene were detected in sample 6 at concentrations of 0.036 mg/kg and 0.008 mg/kg, respectively. Sample JW-1A was collected from soil excavated from the gasoline UST area. TPH was detected in sample JW-1A at a concentration of 74 mg/kg.

Sample 8 was collected from stockpiled soil removed from the used-oil UST excavation. TPH was detected in sample 8 at a concentration of 9,200 mg/kg. Sample 7 was collected from undisturbed soil below the bottom of the used-oil UST. TPH in sample 7 was detected at a concentration of 74 mg/kg (GTI, 1988). Stockpiled soils were removed from the site and properly disposed.

In February 1996, Bechtel Environmental Inc. (BEI) performed environmental monitoring during the removal and replacement of the dispensers and associated product piping. Analytical data are presented in Table 1. Sample locations are presented on Plate 3. Soil samples D1 through D8 were collected beneath the dispensers at a depth of 3 feet bgs. TPHg and benzene were detected at maximum concentrations of 230 mg/kg and 0.73 mg/kg, respectively. Samples P1 through P9 were collected beneath the product piping lines at depths of 4 to 5 feet bgs. TPHg was detected at a maximum concentration of 500 mg/kg. Benzene was detected at a maximum concentration of 0.21 mg/kg. Three samples were collected from a hand auger soil boring near the southeastern dispenser island at depths of 5, 7, and 10 feet bgs. No detections of any of the target analytes were reported in these samples. Soil in the affected areas were over-excavated at maximum depths ranging from 5 to 7 feet bgs, and fourteen confirmation soil samples were collected (samples D1X-D4X and P1X-P10X). Benzene and toluene were detected in the confirmation samples at maximum concentrations of 0.011 mg/kg and 0.022 mg/kg, respectively. TPHg was not detected in any of the confirmation samples collected (BEI, 1996).

In March 1996, the fuel USTs in the northern portion of the site were temporarily exposed during the installation of a tank level monitoring (TLM) system. Soil samples collected from the bottom of the UST

basin showed TPHg at a maximum concentration of 80 mg/kg and benzene at 0.17 mg/kg, with the overall highest concentrations at the south end of the westernmost UST.

During August 2003, SECOR advanced eight exploratory soil borings onsite to a maximum depth of 40 feet bgs. Groundwater was not encountered in any of the soil borings. Total petroleum hydrocarbons as gasoline range organics (GRO) were detected at a maximum concentration of 2.20 mg/kg from boring BA-4 at a depth of 30 feet bgs. Total petroleum hydrocarbons as diesel range organics (DRO) and total petroleum hydrocarbons as oil range organics (ORO) were detected at maximum concentrations of 4.2 mg/kg and 19 mg/kg respectively from boring BA-7 at a depth of 15 feet bgs. Methyl tertiary-butyl ether (MtBE) was detected at a concentration of 0.21 mg/kg from a soil sample collected from BA-6 at a depth of 10 feet bgs. BTEX were detected at maximum concentrations of 0.01 mg/kg, 0.0043 mg/kg, 0.11 mg/kg, and 0.013 mg/kg respectively from boring BA-4 at a depth of 30 feet bgs. Ethanol, di-isopropyl ether (DIPE), ethyl tertiary-butyl ether (ETBE), tertiary-butyl alcohol (TBA), and tertiary-amyl methyl ether (TAME) were not detected in any soil samples collected (SECOR, 2003). Analytical data are presented in Table 1. Sample locations are presented on Plate 3.

SAIC conducted site assessment activities on July 6 and 8, 2004. Analytical data are presented in Table 1. Sample locations are presented on Plate 3. TPHg was detected in soil borings B-9, B-10, B-11 and B-13 at maximum concentrations of 3.2 E mg/kg, 170 mg/kg, 1,600 mg/kg, 0.39 J mg/kg and 0.44 J mg/kg, respectively. The E note indicates that the concentration of the sample exceeds the calibration range and therefore the result is semi-quantitative. The J note indicates that the analyte was detected at a level less than the reporting limit and greater than or equal to the method detection limit. Benzene was detected in soil borings B-9, B-10, B-11 and B-13 at maximum concentrations of 0.019 mg/kg, 0.0036 J mg/kg, 0.0049 mg/kg, and 0.0054 mg/kg, respectively. Ethylbenzene was detected in soil borings B-9, B-10, B-11 and B-12 at maximum concentrations of 0.2 mg/kg, 0.028 mg/kg, 36 mg/kg, and 0.013 mg/kg, respectively. Total xylenes were detected in soil borings B-10 and B-12 at maximum concentrations of 0.0087 mg/kg, and 0.008 mg/kg, respectively. MtBE was detected in soil borings B-9, B-11 and B-13 at maximum concentrations of 0.14 mg/kg, 0.0079 J mg/kg and 0.9 mg/kg, respectively. TBA was detected in soil borings B-12 and B-13 at maximum concentrations of 0.021 J mg/kg, and 0.11 mg/kg, respectively. Toluene, ETBE, DIPE, TAME and ethanol concentrations were not detected in any soil samples from the borings. DRO was detected in soil samples from B-13 with a maximum concentration of 440 mg/kg at a depth of 20 feet bgs. ORO was detected in soil samples from B-13 with a maximum concentration of 210 mg/kg at a depth of 20 feet bgs.

DISCUSSION

Environmental assessment at the subject site has resulted in the collection and analysis of 131 soil samples beginning in April 1988. Current and former UST locations have been assessed. Additionally, soil samples were collected during the 2003 baseline site assessment and 2004 additional assessment activities.

During the UST and dispenser upgrade activities, the soil samples that contained slightly elevated concentrations for petroleum hydrocarbons, such as D1 and P8, were excavated. The petroleum hydrocarbon containing soils were removed and the areas were followed up with subsequent sampling to confirm the removal of the petroleum hydrocarbon containing soil laterally and vertically. The subsequent samples are denoted by the samples containing an X in the description.

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The Baseline Assessment conducted by Secor in August of 2003 confirmed the historical data presented in the UST and dispensing upgrade projects sampling. Additionally, the Baseline assessment provided data to show that there have been no new releases from the current USTs and dispensing facilities.

SAIC conducted an additional assessment at the request of the LACDPW by drilling and sampling four soil borings to 65 feet. Samples collected during these activities exhibited isolated low-level detectable concentrations for the constituents analyzed. TPHg was detected at a concentration of 1,600 mg/kg at 10 feet bgs in B-11. The subsequent 30 feet of samples below it exhibited no detectable concentrations. Additionally, boring B-13 contained detectable concentrations of the longer chain hydrocarbons, DRO and ORO, with maximum concentrations reported at 20 feet bgs at 440 mg/kg and 210 mg/kg, respectively. The subsequent 15 feet of soils beneath these did not exhibit detectable concentrations for any analytes. Subsequent to the 15 feet of non-detectable concentrations, low-level concentrations of DRO and ORO were observed from 40 feet to 65 feet bgs. The concentrations observed in these samples were below Maximum Soil Screening Levels and may be the result of historical construction activities in the area.

The areas that have received the majority of the assessment sampling include the current and former UST, product-piping, and dispenser locations. Soils in these areas have been adequately assessed and/or excavated.

Hydrocarbon compounds observed in deeper soils are longer chain hydrocarbons (DRO and ORO), which are considered relatively immobile and are assigned higher action levels in the MSSSLs. Relatively low permeability in the clays and silts that have been observed in the subsurface may impede the leaching of hydrocarbons. Groundwater has not been observed in any of the borings advanced on this site. The existence of shallow groundwater in nearby monitoring wells suggests that the soils beneath this site have been altered and compacted to a degree that prohibits groundwater from penetrating beneath the site.

In the May 1996 *Interim Site Assessment and Cleanup Guidebook*, the RWQCB refers to its Maximum Soil Screening Levels (MSSSLs) to support the determination of action levels for TPH and BTEX concentrations in soil at various distances above groundwater aquifers (RWQCB Table 4-1 included as Appendix B). For distances above drinking water aquifers of less than 20 feet, the MSSSLs for TPHg (C4-C12), DRO (C13-C22) and ORO (C23-C40) are 100 mg/kg, 100 mg/kg and 1,000 mg/kg, respectively. The maximum concentrations of TPHg, DRO and ORO encountered between 45 and 65 feet bgs were 0.4 J mg/kg, 43 mg/kg and 96 mg/kg, respectively. These are all below the MSSSLs for within 20 feet of a drinking water aquifer. The MSSSLs for BTEX at 20 feet above a drinking water aquifer in silty soil are 0.011 mg/kg, 0.45 mg/kg, 2 mg/kg and 5.3 mg/kg, respectively. The maximum concentrations of BTEX encountered between 45 and 65 feet bgs were 0.0049 mg/kg, <0.0024 mg/kg, <0.0024 mg/kg, and <0.0024 mg/kg, respectively. These are all below the BTEX MSSSLs for within 20 feet of a drinking water aquifer.

Reported concentrations of hydrocarbons in soil are generally low and isolated, with the highest concentrations observed within the upper ten feet of soil.

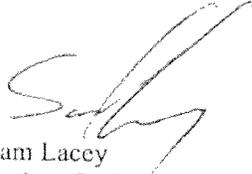
Based on the low levels of TPHg, DRO, ORO, BTEX, MtBE and other oxygenates, and groundwater not being encountered at the site, SAIC recommends no further action for the site.

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If you have any questions, please contact Mr. Daryl Pessler, the SAIC Project Manager, at (714) 257-6404, or Mr. Mike Bauer, the CEMC Project Manager, at (714) 671-3207.

Yours very truly,

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION



Sam Lacey
Project Geologist



Daryl Pessler
Senior project Manager

Attachments: Table 1 – Historical Soil Analytical Data
Plate 1 – Site Location Map
Plate 2 – Site Vicinity Map
Plate 3 – Site Plan Showing Soil Boring Locations
Appendix A – LACDEH Letter, May 23, 2005
Appendix B – RWQCB MSSSL Table 4-1

cc: M. Bauer, CEMC
SAIC Project File

SAIC's investigation was restricted to collection and analysis of a limited number of environmental samples and visual observations obtained during the physical site visit, and from records made available by CEMC or third parties during the investigation. Because the investigation consisted of collecting and evaluating a limited supply of information, SAIC may not have identified all potential items of concern and, therefore, SAIC warrants only that the project activities under this contract have been performed within the parameters and scope communicated by CEMC and reflected in the contract. SAIC has made no independent investigations concerning the accuracy or completeness of the information relied upon. This report is intended to be used in its entirety. Taking or using in any way excerpts from this report are not permitted and any party doing so does so at its own risk.

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TABLES

Table 1. Historical Soil Analytical Data
 Chevron Environmental Management Company
 Chevron Service Station No. 9-9693
 5221 N. Palo Camado Canyon Road, Agoura Hills, California

Sample ID	Sample Date	Sample Depth (ft bags)	GC/MS (mg/kg)	EPA Method 8260B (mg/kg)										EPA Method 6010B (mg/kg)		EPA Method 8015M (mg/kg)	
				TPH/g	Benzene	Toluene	Ethylbenzene	Total Xylenes	MtBE	ETBE	DiPE	TAME	TBA	Ethanol	Lead	DKO (C13-C22)	ORO (C23-C40)
1	4/13/88	14	ND														
2	4/13/88	14	ND														
3	4/13/88	14	7.7														
4	4/13/88	14	48														
5	4/13/88	14	6.9														ND
6	4/13/88	14	ND	0.036	0.008	ND	ND	ND									
7	4/13/88	8	74														
8	4/13/88	Stockpile	9,200														ND
JW-1A	4/15/88	Stockpile	0.86	0.007	0.059	0.02	0.1										13
D1	2/9/96	3	83	0.73	0.28	1.4	6.2										
D2	2/9/96	3	59	0.056	0.15	0.4	3.4										
D3	2/9/96	3	ND	ND	ND	ND	ND										
D4	2/9/96	3	ND	ND	ND	ND	ND										
D5	2/9/96	3	230	0.45	4.9	3	26										
D6	2/9/96	3	ND	ND	ND	ND	ND										
D7	2/9/96	3	1.6	ND	ND	ND	0.11										
D8	2/9/96	3	ND	ND	ND	ND	0.042										
P1	2/9/96	4	ND	0.025	0.13	0.036											
P2	2/9/96	4	ND	0.021	ND	ND	ND										
P3	2/9/96	4	ND	0.015	ND	ND	ND										
P4	2/9/96	4	ND	0.0053	0.037	0.0064	0.039										
P5	2/9/96	4	ND	ND	0.03	0.0053	0.03										
P6	2/9/96	4	ND	ND	ND	ND	ND										
P7	2/9/96	4	ND	ND	ND	ND	ND										
P8	2/9/96	5	500	ND	0.19	0.35	7.2										
P9	2/9/96	4	5	0.21	ND	ND	ND										
H1A1D	2/9/96	5	ND	ND	ND	ND	ND										
H1A1D	2/9/96	7	ND	ND	ND	ND	ND										
H1A1D	2/9/96	10	ND	ND	ND	ND	ND										
D1X	2/14/96	5	ND	ND	ND	ND	ND										
D2X	2/14/96	5	ND	ND	ND	ND	ND										
D3X	2/14/96	7	ND	ND	ND	ND	ND										
D4X	2/14/96	6	ND	0.011	0.022	ND	ND										
P1X	2/14/96	5	ND	ND	ND	ND	ND										
P2X	2/14/96	5	ND	ND	ND	ND	ND										
P3X	2/14/96	5	ND	ND	ND	ND	ND										
P4X	2/14/96	6	ND	ND	ND	ND	ND										
P5X	2/14/96	5	ND	ND	ND	ND	ND										

Table 1. Historical Soil Analytical Data
 Chevron Environmental Management Company
 Chevron Service Station No. 9-9693
 5221 N. Palo Comado Canyon Road, Agoura Hills, California

Sample ID	Sample Date	Sample Depth (ft bgs)	GC/MS (mg/kg)	EPA Method 8260B (mg/kg)										EPA Method 6010B (mg/kg)		EPA Method 8015M (mg/kg)		
				TfHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	MtBE	EtBE	DiPE	TAME	TBA	Ethanol	Lead	DR0 (C13-C22)	ORO (C23-C40)	
P6X	2/14/96	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
P7X	2/14/96	5	ND	ND	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
P8X	2/14/96	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
P9X	2/14/96	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
P10X	2/14/96	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T1S	3/5/96	15	80	0.17	1.9	0.67	4.4											
T1N	3/5/96	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T2S	3/5/96	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T2N	3/5/96	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T3S	3/5/96	15	ND	0.015	0.0065	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T3N	3/5/96	15	1.8	0.016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BA-1	08/18/2003	35.00	0.56	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.3	5.1	ND
BA-1	08/18/2003	40.00	<0.10	0.0065	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.3	ND	ND
BA-2	08/18/2003	5.00	<0.10	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.1	<0.2	ND	ND	ND
BA-2	08/18/2003	35.00	<0.10	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.1	<0.2	ND	ND	ND
BA-3	08/18/2003	35.00	<0.10	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.1	<0.2	ND	ND	ND
BA-3	08/18/2003	40.00	<0.10	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.1	<0.2	ND	ND	ND
BA-4	08/19/2003	30.00	2.20	0.01	0.0043	0.11	0.013	0.013	0.013	<0.005	<0.005	<0.005	<0.005	<0.1	<0.2	7.3	ND	ND
BA-4	08/19/2003	34.00	<0.10	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.1	<0.2	ND	ND	ND
BA-5	08/19/2003	5.00	0.30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.1	<0.2	ND	ND	ND
BA-5	08/19/2003	35.00	0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.1	<0.2	ND	ND	ND
BA-6	08/19/2003	10.00	0.14	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.1	<0.2	ND	ND	ND
BA-6	08/19/2003	33.00	<0.10	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.1	<0.2	ND	ND	ND
BA-7	08/19/2003	5.00	<1.0														2.5	14
BA-7	08/19/2003	15.00	<1.0	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.1	<0.2	ND	4.2	19
BA-8	08/19/2003	5.00	<1.0														<2.5	17
BA-8	08/19/2003	15.00	<1.0														<2.5	5.4
B-9	6/29/04	5	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.1	<0.2	ND	ND	ND
B-9	7/6/04	10	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.036	<0.005	<0.005	<0.005	<0.1	<0.2	ND	ND	ND
B-9	7/6/04	15	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0065 J	<0.005	<0.005	<0.005	<0.1	<0.2	ND	ND	ND

Table 1. Historical Soil Analytical Data
 Chevron Environmental Management Company
 Chevron Service Station No. 9-9693
 5221 N. Palo Comado Canyon Road, Agoura Hills, California

Sample ID	Sample Date	Sample Depth (ft bgs)	GC/MS (mg/kg)	EPA Method 8260B (mg/kg)										EPA Method 6010B (µg/g)		EPA Method 8015M (mg/kg)	
				TPH _g	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MRBE	E1BE	D1PE	FAME	TBA	Ethanol	Lead	DRO (C1-C22)	ORO (C23-C40)
B-9	7/6/04	20	<0.22	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0043	<0.0043	<0.0043	<0.0043	<0.017	<0.87		
B-9	7/6/04	25	0.59	<0.002	<0.002	<0.002	<0.002	<0.002	0.14	<0.0043	<0.0043	<0.0043	<0.0043	<0.005	<1.0		
B-9	7/6/04	30	3.2 E	<0.002	<0.002	<0.002	0.2	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0		
B-9	7/6/04	35	<0.25	0.019	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0		
B-9	7/6/04	40	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0		
B-9	7/6/04	45	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0		
B-9	7/6/04	50	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0		
B-9	7/6/04	55	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0		
B-9	7/6/04	60	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0		
B-9	7/6/04	65	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0		
B-10	6/29/04	5	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0044	<0.0044	<0.0044	<0.0044	<0.018	<0.89		
B-10	7/8/04	10	110	0.0019 J	<0.0018	<0.0018	<0.0018	0.028	0.0087	<0.0045	<0.0045	<0.0045	<0.0045	<0.018	<0.91		
B-10	7/8/04	15	170	<0.0018	<0.0018	<0.0018	0.028	0.0087	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.018	<0.91		
B-10	7/8/04	20	0.85	0.0036 J	<0.0016	<0.0016	0.006	<0.0016	<0.0044	<0.0044	<0.0044	<0.0044	<0.0044	<0.016	<0.8		
B-10	7/8/04	25	0.27 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.02	<1.0		
B-10	7/8/04	30	<0.2	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.016	<0.79		
B-10	7/8/04	35	<0.23	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0045	<0.0045	<0.0045	<0.0045	<0.018	<0.9			
B-10	7/8/04	40	<0.2	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0042	<0.0042	<0.0042	<0.0042	<0.017	<0.85			
B-10	7/8/04	45	<0.21	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0042	<0.0042	<0.0042	<0.0042	<0.017	<0.85			
B-10	7/8/04	50	<0.22	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0045	<0.0045	<0.0045	<0.0045	<0.018	<0.9			
B-10	7/8/04	55	<0.22	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0044	<0.0044	<0.0044	<0.0044	<0.018	<0.88			
B-10	7/8/04	60	<0.22	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0044	<0.0044	<0.0044	<0.0044	<0.017	<0.87			
B-10	7/8/04	65	<0.22	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0044	<0.0044	<0.0044	<0.0044	<0.018	<0.88			
B-11	6/29/04	5	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.02	<1.0			
B-11	7/8/04	10	1.600	<2.0	<2.0	<2.0	36	<2.0	<5.0	<5.0	<5.0	<5.0	<20	<1000			
B-11	7/8/04	15	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	0.0079 J	<0.005	<0.005	<0.005	<0.005	<1.0			
B-11	7/8/04	20	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.02	<1.0			
B-11	7/8/04	25	<0.21	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0041	<0.0041	<0.0041	<0.0041	<0.017	<0.83			
B-11	7/8/04	30	<0.21	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0042	<0.0042	<0.0042	<0.0042	<0.017	<0.83			
B-11	7/8/04	35	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.02	<1.0			
B-11	7/8/04	40	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0061	<0.0061	<0.0061	<0.0061	<0.024	<1.2			
B-11	7/8/04	45	0.4 J	<0.0024	<0.0024	<0.0024	<0.0024	<0.0024	<0.005	<0.005	<0.005	<0.005	<0.02	<1.0			
B-11	7/8/04	50	<0.25	0.0026 J	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.02	<1.0			
B-11	7/8/04	55	<0.22	0.0049	<0.0018	<0.0018	<0.0018	<0.0018	<0.0044	<0.0044	<0.0044	<0.0044	<0.018	<0.88			
B-11	7/8/04	60	<0.23	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0045	<0.0045	<0.0045	<0.0045	<0.018	<0.9			
B-11	7/8/04	65	<0.22	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0044	<0.0044	<0.0044	<0.0044	<0.018	<0.88			

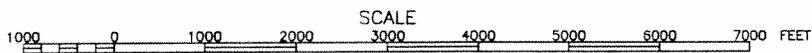
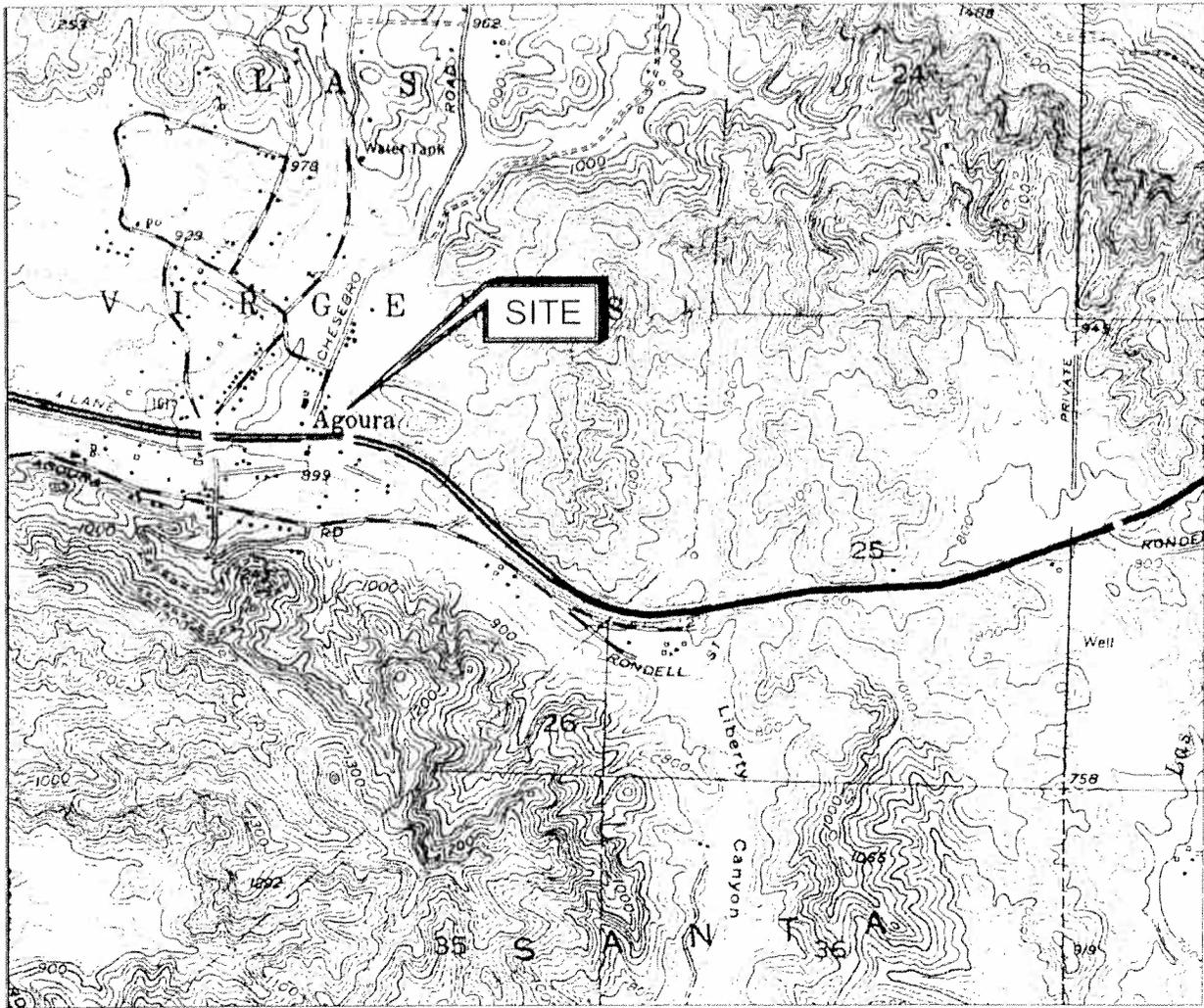
Table 1. Historical Soil Analytical Data
 Chevron Environmental Management Company
 Chevron Service Station No. 9-9693
 5221 N. Palo Colorado Canyon Road, Agoura Hills, California

Sample ID	Sample Date	Sample Depth (ft bgs)	GC/MS (mg/kg)	EPA Method 8260B (mg/kg)										EPA Method 6010B (mg/kg)		EPA Method 8015M (mg/kg)	
				TPH _g	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MIBE	ETBE	DIPE	TAME	TBA	Ethanol	Lead	DRO (C13-C22)	ORO (C23-C40)
B-12	6/29/04	5	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.02	<1.0		
B-12	7/6/04	10	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	0.021 J	<1.0		
B-12	7/6/04	15	<0.25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.02	<1.0		
B-12	7/6/04	20	0.26 J	<0.0018	<0.0018	<0.0018	<0.0018	<0.0044	<0.0044	<0.0044	<0.0044	<0.0044	<0.018	<0.88			
B-12	7/6/04	25	0.39 J	<0.0018	<0.0018	0.013	0.008	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.018	<0.9			
B-12	7/6/04	30	<0.25	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.02	<1.0			
B-12	7/6/04	35	<0.23	<0.0018	<0.0018	<0.0018	<0.0018	<0.0045	<0.0045	<0.0045	<0.0045	<0.018	<0.91				
B-12	7/6/04	40	<0.25	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.02	<1.0				
B-12	7/6/04	45	<0.25	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.02	<1.0				
B-12	7/6/04	50	<0.25	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.02	<1.0				
B-12	7/6/04	55	<0.25	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.02	<1.0				
B-12	7/6/04	60	<0.25	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.02	<1.0				
B-12	7/6/04	65	<0.25	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.02	<1.0				
B-13	6/29/04	5	<0.25	0.0054	<0.002	<0.002	<0.002	<0.002	<0.002	0.9	<0.005	<0.005	0.041 J	<1.0	<2.5	6	
B-13	7/6/04	10	0.44 J	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.02	<1.0	<1.0	4.5	5.9	
B-13	7/6/04	15	<0.23	<0.0018	<0.0018	<0.0018	<0.0018	0.0073 J	<0.0045	<0.0045	<0.0045	<0.018	<0.9	<1.0	13	26	
B-13	7/6/04	20	<0.25	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	0.11	<1.0	<1.0	440	210	
B-13	7/6/04	25	<0.22	<0.0017	<0.0017	<0.0017	<0.0017	<0.0043	<0.0043	<0.0043	<0.0043	<0.017	<0.87	<1.0	<2.5	<2.5	
B-13	7/6/04	30	<0.25	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.02	<1.0	<1.0	<2.5	<2.5	
B-13	7/6/04	35	<0.25	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.02	<1.0	<1.0	<2.5	<2.5	
B-13	7/6/04	40	<0.25	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.02	<1.0	<1.0	<2.5	<2.5	
B-13	7/6/04	45	<0.25	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.02	<1.0	<1.0	29	41	
B-13	7/6/04	50	<0.25	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.02	<1.0	<1.0	<2.5	4	
B-13	7/6/04	55	<0.25	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.02	<1.0	<1.0	23	41	
B-13	7/6/04	60	<0.25	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.02	<1.0	<1.0	13	20	
B-13	7/6/04	65	<0.25	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.02	<1.0	<1.0	28	37	
B-13	7/6/04		<0.25	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.02	<1.0	<1.0	43	96	

NOTES:
 bgs - below ground surface
 GC/MS - gas chromatography / mass spectrometer
 EPA - U.S. Environmental Protection Agency
 mg/kg - milligrams per kilogram
 TPH_g - total petroleum hydrocarbons quantified as gasoline
 MIBE - methyl tertiary-butyl ether
 ETBE - ethyl tertiary-butyl ether
 DIPE - di-isopropyl ether
 TAME - tertiary-amyyl methyl ether
 TBA - tertiary-butyl alcohol
 DRO - diesel range organics (carbon range C13-C22)
 ORO - oil range organics (carbon range C23-C40)
 < - not detected above the MDL; value given is the MDL
 J - denotes a value between the method detection limit and the laboratory reporting limit

PLATES

FILE: X:\Drafting\9-9693\BASE\SITE LOCATION MAP.dwg [Layout1]



Chevron Environmental Management Company
 SERVICE STATION NO. 9-9693
 5221 N. PALO CAMADO CYN. RD & HWY 101
 AGOURA HILLS, CALIFORNIA

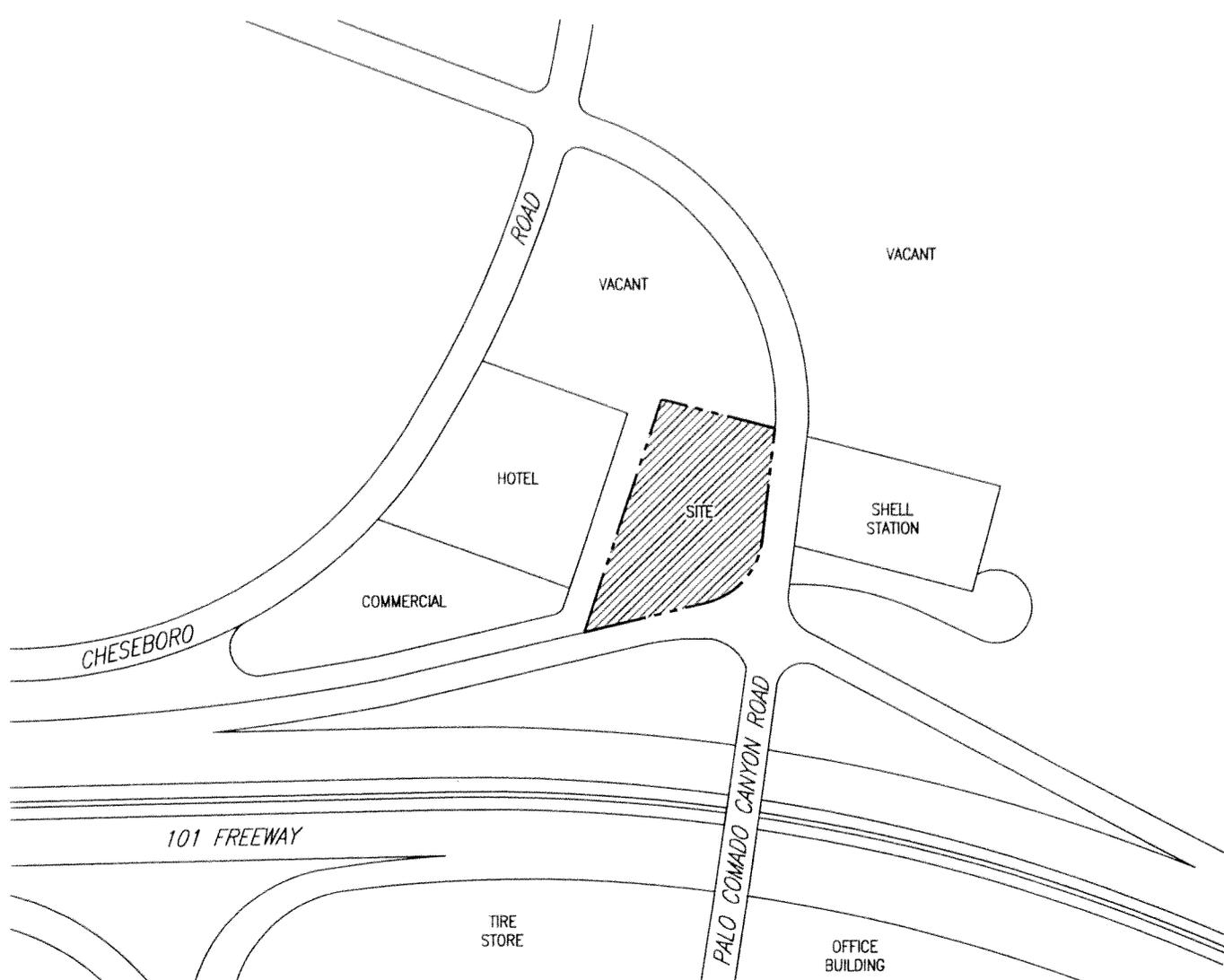
SITE LOCATION MAP

drawn	BDP	checked	approved	PLATE NO. 1
date	03/04	date	date	
job no.	06-6102-00-0000-000	file no.	_____DWG	



REFERENCE: USGS 7.5-MINUTE QUADRANGLE, CALABASAS, CALIFORNIA (DATED 1952, PHOTOREVISED 1967)

FILE: X:\Drafting\9-9693\BASE\SITE VICINITY.dwg [Model]



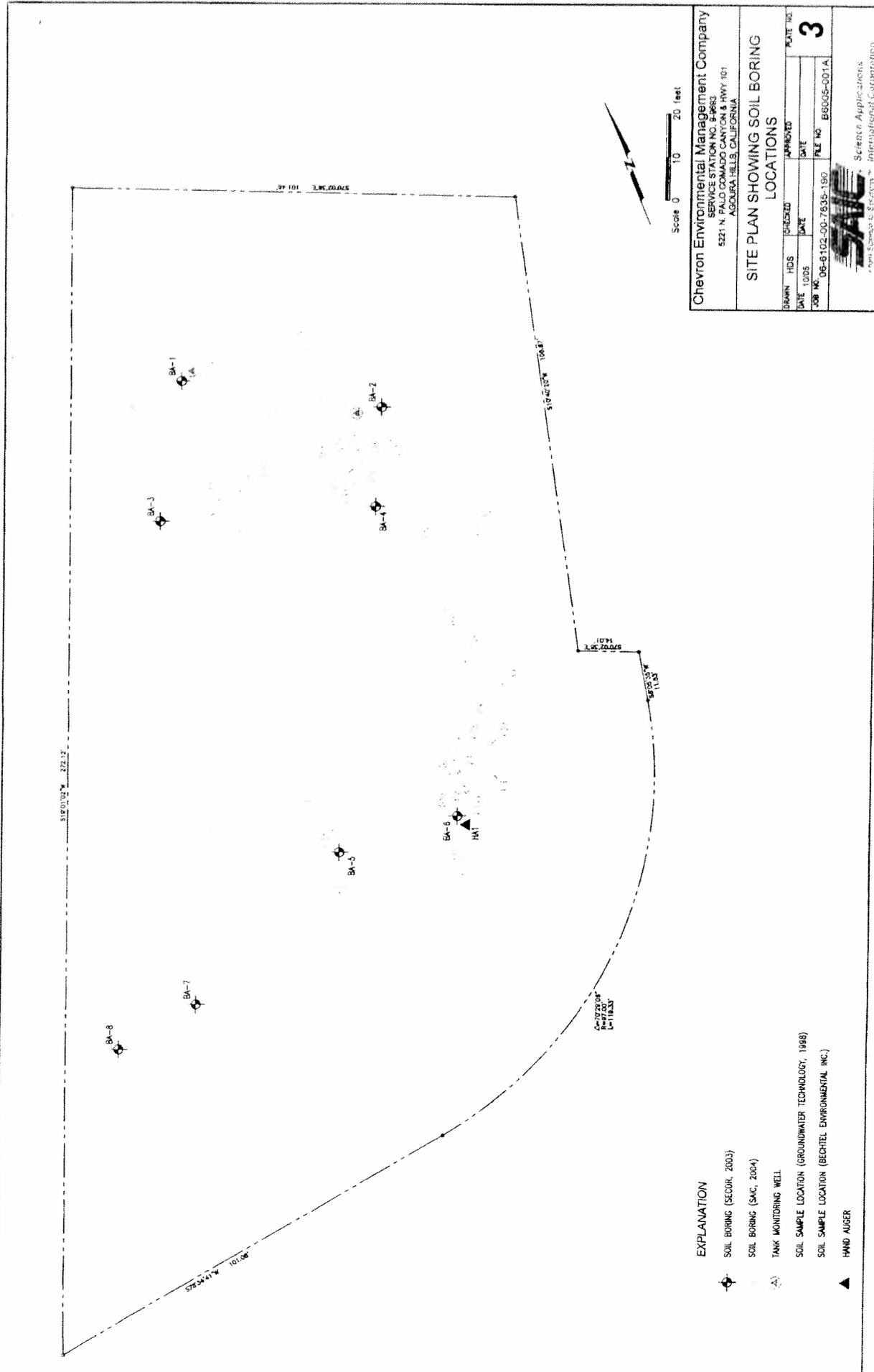
NOT TO SCALE

Chevron Environmental Management Company
 SERVICE STATION NO. 9-9693
 5221 N. PALO COMADO CANYON ROAD
 AGOURA HILLS, CALIFORNIA

SITE VICINITY MAP

DRAWN	BDP	CHECKED	APPROVED	PLATE NO.
DATE	98/04	DATE	DATE	2
JOB NO.	06-6102-00-6005-000		FILE NO.	





Scale 0 10 20 feet

Chevron Environmental Management Company
 SERVICE STATION NO. E-9693
 5321 N. RAYBURN AVENUE & HWY 101
 AGOURA HILLS, CALIFORNIA

SITE PLAN SHOWING SOIL BORING LOCATIONS

DATE	TIME	APPROVED	PLATE NO.
06-10-06	10:00		3

SAIC
 Science Applications
 1000 S. Bascom Avenue, Suite 100
 San Jose, CA 95128

EXPLANATION

- SOIL BORING (SECUR, 2003)
- SOIL BORING (SAC, 2004)
- TANK MONITORING WELL
- SOIL SAMPLE LOCATION (GROUNDWATER TECHNOLOGY, 1998)
- SOIL SAMPLE LOCATION (BECHTEL ENVIRONMENTAL INC.)
- HAND AUGER

APPENDIX A
LADPW LETTER



COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
www.ladpw.org

ADDRESS ALL CORRESPONDENCE TO
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

May 23, 2005

IN REPLY PLEASE
REFER TO FILE: **EP-1**
010053-009912

Chevron Products Company
Attn: Permits Desk
P.O. Box 6004
San Ramon, CA 94583-0904

**HAZARDOUS MATERIAL UNDERGROUND STORAGE
CLOSURE/SITE ASSESSMENT REPORT
CLOSURE PERMIT NUMBER: 156347 and 3342B
FACILITY LOCATION: 5221 PALO COMANDO CANYON ROAD, AGOURA HILLS**

This office has reviewed the closure report dated September 1, 2004, for the subject facility.

In order to better evaluate the report, the information indicated on the enclosed Additional Closure Requirements sheet must be submitted to this office by August 18, 2005.

If you have any questions regarding this matter, please contact Ms. Elizabeth Ralston, of this office, at (626) 458-3526, Monday through Thursday, 7 a.m. to 5:30 p.m.

Very truly yours,

DONALD L. WOLFE
Acting Director of Public Works

TIM SMITH
Senior Civil Engineer
Environmental Programs Division

ER:wm
C:\05Ltrs\C\Chevron\CA16.m2

Enc.

cc: California Regional Water Quality Control Board (Yue Rong)
SAIC (Jan Mueller)

ADDITIONAL CLOSURE REQUIREMENTS

The additional information or requirements checked below must be submitted to the County of Los Angeles Department of Public Works, Environmental Programs Division, P.O. Box 1460, Alhambra, CA 91802-1460, in order to complete evaluation of Closure Permit No. 156347 and 3342B.

- Plot plan to scale showing locations of tanks, sampling points, buildings, adjacent streets, and north arrow.
- Insufficient number of samples were obtained. Additional samples required in accordance with attached Closure Permit Requirements.
- Describe method of obtaining, handling, and/or transporting samples.
- Indicate time and date samples were obtained.
- Submit logs certified by a CA registered geologist, CA certified engineering geologist, or CA registered civil engineer with sufficient experience in soils for all borings.
- Submit chain-of-custody documentation initiated by person obtaining sample through person at Department of Health Services certified laboratory.
- Disposal destination of tanks and evidence of legal disposal.
- Analysis results by a State certified laboratory shall be submitted on laboratory letterhead showing analysis date, methods of extraction and methods of analysis.
- Documentation as to depth of groundwater at facility.
- Evidence of legal disposal of soils designated as non-hazardous.
- Signature on the report is required of CA registered geologist, CA certified engineering geologist, or CA registered civil engineer with sufficient experience in soils. The report must clearly indicate that all soil sampling was done under the supervision of the registered professional.
- Submit a work plan to define the lateral and vertical extent of contamination by completing borings to ground water or completing borings which penetrate to minimum depth of 25 feet below the deepest detectable contamination. Borings shall be sampled and analyzed at five-foot intervals. EPA 5035 soil sampling collection/preservation guidelines must be utilized. Laboratory analysis must include EPA method 8015(M) for TPH Gasoline and/or Diesel, and EPA Method 8260B for BTEX, MTBE, DIPE, ETBE, TAME, TBA, Methanol and Ethanol and must conform with Regional Water Quality Control Board established method detection limits. A voluntary cleanup oversight fee of \$453 must be submitted for the review of future submittals regarding this sight.

APPENDIX B

RWQCB MSSL TABLE 4-1

Table 4-1: Maximum Soil Screening Levels (mg/kg) for TPH, BTEX and MTBE above Drinking Water Aquifers

T P H	Distance Above Groundwater	Carbon Range		
		C4-C12	C13-C22	C23-C32
	>150 feet	1,000	10,000	50,000
	20-150 feet	500	1,000	10,000
<20 feet	100	100	1,000	

B T E X & M T B E	Distance Above Groundwater	Lithology			
		Gravel	Sand	Silt	Clay
150 feet	B=0.044 T=2 E=8 X=23 MTBE = 0.039	B=0.077 T=4 E=17 X=48 MTBE = 0.078	B=0.165 T=9 E=34 X=93 MTBE = 0.156	B=0.8 T=43 E=170 X=465 MTBE = 0.78	
120 feet	B=0.035 T=1.57 E=6.3 X=17.9 MTBE = 0.028	B=0.058 T=3.1 E=12.7 X=36 MTBE = 0.061	B=0.123 T=7 E=25.9 X=70.3 MTBE = 0.117	B=0.603 T=32 E=128 X=351 MTBE = 0.591	
100 feet	B=0.028 T=1.3 E=5.1 X=14.4 MTBE = 0.020	B=0.046 T=2.57 E=9.86 X=28 MTBE = 0.05	B=0.094 T=5.4 E=20.4 X=55.1 MTBE = 0.091	B=0.471 T=25 E=101 X=276 MTBE = 0.464	
80 feet	B=0.022 T=1 E=4 X=11 MTBE = 0.013	B=0.033 T=2 E=7 X=20 MTBE = 0.039	B=0.066 T=4 E=15 X=40 MTBE = 0.065	B=0.34 T=18 E=73 X=200 MTBE = 0.338	
60 feet	B=0.018 T=0.72 E=2.9 X=7.9 MTBE = 0.013	B=0.026 T=1.4 E=4.9 X=13.9 MTBE = 0.03	B=0.048 T=2.8 E=10.7 X=28.4 MTBE = 0.048	B=0.241 T=13 E=52 X=141.5 MTBE = 0.247	
40 feet	B=0.015 T=0.43 E=1.8 X=4.8 MTBE = 0.013	B=0.018 T=0.87 E=2.8 X=7.8 MTBE = 0.022	B=0.029 T=1.6 E=6.3 X=16.9 MTBE = 0.03	B=0.143 T=7.5 E=30 X=83 MTBE = 0.156	
20 feet	B=0.011 T=0.15 E=0.7 X=1.75 MTBE = 0.013	B=0.011 T=0.3 E=0.7 X=1.75 MTBE = 0.013	B=0.011 T=0.45 E=2 X=5.3 MTBE = 0.013	B=0.044 T=2.3 E=9 X=24.5 MTBE = 0.065	

- TPH = Total petroleum hydrocarbons.
- BTEX = benzene, toluene, ethylbenzene, and xylenes, respectively. MTBE = methyl tertiary butyl ether.
- Respective MCLs (ppm): B=0.001, T=0.15, E=0.7, X=1.75, MTBE=0.013.
- BTEX screening concentrations determined per the attenuation factor method as described in RWQCB Guidance for VOC Impacted Sites (March 1996), with a natural degradation factor of 11 for BTEX and of 3 for MTBE. Table



COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

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DONALD L. WOLFE, Director

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

August 9, 2006

IN REPLY PLEASE
REFER TO FILE: EP-1
010053-009912

Mr. Y.M. Tuan
Chevron USA Products Company
145 South State College Boulevard, Suite 400
Brea, CA 92821-5818

Dear Mr. Tuan:

**HAZARDOUS MATERIALS UNDERGROUND STORAGE
SITE INVESTIGATION REPORT
MODIFICATION APPLICATION NO. 457099
FACILITY LOCATED AT 5221 NORTH PALO COMADO CANYON ROAD,
AGOURA HILLS (5H)**

This office has reviewed the Site Investigation Report dated November 2, 2005, for the subject facility. Based on the information provided:

- The exact extent of contamination has not been defined.
- The proposed remedial action is inadequate.

Make the required corrections as indicated above and submit a revised report to this office by September 25, 2006.

If you have any questions, please contact Mr. Iheanacho Ofo of this office at (626) 458-3512, Monday through Thursday, 7 a.m. to 5:30 p.m.

Very truly yours,

DONALD L. WOLFE
Director of Public Works

TIM SMITH
Senior Civil Engineer
Environmental Programs Division

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cc: California Regional Water Quality Control Board, Los Angeles Region (Yue Rong)
SAIC (Daryl Pessler)



September 28, 2007

Mr. Iheanacho Ofo
Los Angeles County Department of Public Works
Environmental Programs Division
900 South Fremont Avenue
Alhambra, California 91803

Subject: Site Assessment Report

**Site: Chevron Service Station No. 9-9693
5221 North Palo Comado Canyon Road, Agoura Hills, California
LACDPW File No. EP-1010053-009912
(RWQCB Case No. R-09912)**

Dear Mr. Ofo:

On behalf of Chevron Environmental Management Company (CEMC), Science Applications International Corporation (SAIC), is pleased to submit a CD-ROM of this report documenting soil borings advanced in order to further delineate the lateral and vertical extents of the petroleum-hydrocarbon-affected subsurface soils found beneath the site. This site assessment was proposed in the *Additional Soil Sampling Workplan* submitted to the Los Angeles County Department of Public Works (LACDPW), Environmental Programs Division dated November 15, 2006. In an e-mail correspondence dated January 31, 2007, SAIC requested that the workplan be modified and that laboratory analysis begin in the borings at 60 feet. Concurrence was received the same day in an e-mail reply.

This report was developed in general accordance with the 1989 (current) version of the State of California Water Resources Control Board Leaking Underground Fuel Tank (LUFT) Field Manual; the 1994 State of California Code of Regulations Title 23, Division 3, Chapter 16, Underground Storage Tank Regulations; and the LACDPW "Guidance for Report Submittals - Revised June 1993."

SITE DESCRIPTION

The site is located at 5221 North Palo Comado Canyon Road, in Agoura Hills, California (Plate 1). The site is an operating Chevron service station located on the northwestern corner of the intersection of Palo Comado Canyon Road and the northbound on-ramp of U.S. Highway 101 (Plate 2). Existing structures include the station building, four fuel dispenser islands, and three 10,000-gallon underground storage tanks (USTs) containing gasoline. An unbranded (former Shell) service station is located across Palo Comado Canyon Road to the east.

GEOLOGY AND HYDROGEOLOGY

The geology and hydrogeology underlying the site are described in detail in the *Site Assessment Report* submitted by SAIC on September 1, 2004.

PREVIOUS SITE ACTIVITIES

The previous site activities are discussed in detail in the *Site Assessment Report* submitted by SAIC on September 1, 2004.

UTILITY CLEARANCE

Prior to initiating field activities associated with the advancement of the soil borings, SAIC conducted the following pre-field activities:

- Performed site visit to mark the proposed boring locations;
- Notified Underground Service Alert, and the LACDPW a minimum of 48 hours prior to the onset of field activities;
- Notified the CEMC Project Manager and the Chevron Sales Area Representative prior to the start of field activities;
- Contracted the services of Subsurface Surveys to provide a geophysical survey to mark all utilities in the area of the proposed boring locations (Appendix C); and
- Used air-knife with air-vacuum to clear each boring location to a depth of at least 8 feet below ground surface (bgs) prior to conducting intrusive fieldwork.

On January 31, 2007, SAIC contacted Mr. Iheanacho Ofo of the LACDPW via e-mail to request a modification to the workplan. The workplan proposed to advance two borings to 100 feet bgs in the vicinity of B-13, which was terminated at 65 feet bgs. The proposed modification was to begin sampling in the proposed borings at 60 feet bgs. This would allow for two overlapping samples at 60 and 65 feet bgs, allowing SAIC to obtain the data for non-detectable concentrations. Mr. Ofo granted his approval of the modification via e-mail.

FIELD ACTIVITIES

On March 22, 2007, SAIC supervised the air-knifing and advancement of borings CB-1 and CB-2 drilled by BC² Environmental (BC²) of Fullerton, California. Boring CB-1 was drilled using an 8-inch-diameter hollow-stem auger (HSA) drill rig, equipped with a California modified split-spoon sampler for the collection of soil samples. Sampling point CB-1 was advanced to an approximate depth of 100 feet bgs. Groundwater was not encountered in the boring during the drilling activity.

During air-knifing on boring CB-2, water was observed at approximately 5 feet bgs. Groundwater had never been encountered in any of the prior borings advanced onsite. Work on CB-2 was temporarily discontinued until plans could be made for the installation of a monitoring well.

A well construction permit was obtained from the LACDPW to install CB-2/MW-1 (Appendix A). On July 12, 2007, SAIC supervised the installation of groundwater well CB-2/MW-1 drilled by BC² Environmental (BC²) of Fullerton, California. Boring CB-2 was drilled using an 8-inch-diameter hollow-stem auger (HSA) mounted on a limited access drill rig, equipped with a California modified split-spoon sampler for the collection of soil samples. Sampling point CB-2 was advanced to an approximate depth of 18.5 feet bgs. Groundwater was encountered in the boring at 8 feet bgs. The approximate location of the sampling point is shown on Plate 2.

Soils were logged by SAIC personnel, working under the supervision of an SAIC California professional geologist, in accordance with the American Society for Testing and Materials Test Method D 2488-00 and the Unified Soil Classification System. Soil samples were collected for chemical analysis by Environmental Protection Agency (EPA) Method 5035 protocol in Encore™ sampling devices at 5-foot intervals from approximately 60 feet bgs to total depth from CB-1, and at 11 and 15 feet bgs in CB-2.

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Los Angeles County Department of Public Works
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Samples were then labeled and placed in an iced storage container for transport to a CEMC-approved, state-certified laboratory, for analysis. SAIC personnel evaluated the soil samples for the presence of volatile organic compounds (VOCs) using a photo-ionization detector (PID). Soil samples used for field screening were not used for laboratory analysis. Field instruments such as the PID are useful for evaluating relative concentrations of VOCs, but do not measure contaminant concentrations with the same precision as laboratory analysis. PID measurements were recorded on the exploratory boring logs (Appendix C).

Well Installation Activities

Soil boring CB-2 was subsequently converted into groundwater monitoring well CB-2/MW-1. Groundwater was encountered during drilling activities at approximately 8 feet bgs. New casing and well screen materials were used to construct the well. The well was constructed with 4-inch-diameter Schedule 40 polyvinyl chloride (PVC) casing with 0.010-inch slots and filter sand comprised of No. 2/12 sand. The well was secured with a well cap and traffic-rated, 12-inch-diameter vault box installed flush to grade. Well construction details are shown on the exploratory boring log (Appendix C).

Well Development and Groundwater Sampling

On July 30, 2007, SAIC developed well CB-2/MW-1 using a well development rig provided by BC². Prior to development, SAIC's field personnel measured the depth to groundwater in well CB-2/MW-1 with an electronic water-level indicator. Approximately 3 inches of water were measured in the well. A sample was collected without surging or bailing.

A groundwater sample was collected from the well using a disposable bailer and containerized in 40-milliliter volatile organic analysis vials (VOAs) with a hydrochloric acid preservative. Each VOA was checked for the absence of headspace prior to being sealed with a Teflon™-lined cap and placed on ice for transport to the laboratory for analysis. On August 23, 2007, a grab groundwater sample was collected into a 1,000 ml amber bottle for Diesel Range Organics (DRO; C13-C22) and Oil Range Organics (ORO; C23-C40), and placed on ice for transport to the laboratory for analysis.

Investigation-Derived Wastes

Soil wastes generated during drilling activities (i.e., auger cuttings), and water wastes generated during well development and equipment decontamination were containerized in Department of Transportation (DOT)-approved 55-gallon drums. The drums were removed from the site and transported by Belshire Environmental Services, Inc. for proper disposal at TPS Technologies in Adelanto, California, for soils, and Siemens in Vernon, California, for purge and decontamination water. Copies of the manifests will be provided upon request.

RESULTS OF FIELD ACTIVITIES

Soil boring CB-1 was advanced at the site on March 22, 2007. Groundwater well CB-2/MW-1 was advanced at the site on July 12, 2007. Groundwater was encountered in CB-2/MW-1 at approximately 8 feet bgs. A total of 11 soil samples were collected during field activities. Soil boring CB-2 was subsequently converted into groundwater monitoring well CB-2/MW-1. An attempt to develop well CB-2/MW-1 was made on July 30, 2007, and one groundwater sample was collected. An additional groundwater sample was collected on August 23, 2007, for DRO and ORO analysis.

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Soil

DRO and ORO were detected in all samples collected from CB-1 with maximum concentrations of 46 milligrams per kilogram (mg/kg) at 70 feet bgs and 160 mg/kg at 90 feet bgs, respectively. Acetone was detected in the two samples from CB-2 at 0.008 J mg/kg at 11 feet bgs and 0.042 mg/kg at 15 feet bgs. Total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, total xylenes (BTEX), methyl tertiary-butyl ether (MtBE), di-isopropyl ether (DIPE), ethyl tertiary-butyl ether (EtBE), tertiary-amyl methyl ether (TAME), tertiary-butyl alcohol (TBA), and ethanol were not detected in any of the soil samples collected during this investigative effort. Laboratory results for soil samples are shown on Table 1.

All samples were analyzed for Volatile Organics. p-Isopropyltoluene and 1,2,4-Trimethylbenzene were detected in CB1-S-60 at 0.0018J mg/kg and 0.00093J mg/kg, respectively. Methylene chloride was detected in CB-1-S-90 and CB1-S-95 at 0.0084J mg/kg and 0.0063J mg/kg, respectively. All other analytes were non-detect at laboratory detection limits. Laboratory results for volatile organics soil samples are shown on Table 2.

Water

Groundwater samples were collected from CB-2/MW-1 on July 30 and August 23, 2007. MtBE was detected at a concentration of 0.8J micrograms per liter (ug/l). DRO and ORO were detected at 5,800 ug/l and 12,000 ug/l, respectively. All other motor vehicle fuel (MVF) constituents were below laboratory detection limits, with the exception of TPHg at a concentration of 56 ug/l. Laboratory results for groundwater samples are shown on Table 3.

CONCLUSIONS AND RECOMMENDATIONS

Soil boring CB-1 was advanced to 100 feet bgs. Soil samples were collected from approximately 60 to 100 feet bgs. Soil boring CB-2 was advanced to approximately 18.5 feet bgs and subsequently converted to a groundwater monitoring well, CB-2/MW-1.

Based on the fact that groundwater has never been encountered in any of the prior borings at the site, the presence of water in CB-2/MW-1 appears anomalous. Furthermore, the location of CB-2/MW-1 is adjacent to the former used-oil UST excavation area. The backfill of the former excavation area is most likely more porous than the surrounding clayey soil, and may be acting as a collection area for irrigation water from the nearby landscaped portions of the site.

DRO and ORO were detected in all samples collected from CB-1 with maximum concentrations of 46 mg/kg at 70 feet bgs and 160 mg/kg at 90 feet bgs, respectively. None of the soil sample results exceeded the Regional Water Quality Control Board (CRWQCB) UST closure criteria listed on Table 4-1 (http://www.waterboards.ca.gov/losangeles/html/programs/ust/new_approach.html).

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Mr. Iheanacho Ofo
Los Angeles County Department of Public Works
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If you have any questions, please contact Mr. Samuel Lacey, the SAIC Project Manager, at (714) 257-6418, or Mr. Mike Bauer, the CEMC Project Manager, at (714) 671-3207.

Yours very truly,

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION



Walid Makhoul
Project Engineer



Sam Lacey
Professional Geologist No. 8263



Attachments: Table 1 –Analytical Laboratory Results for Soil Samples
Table 2 –Analytical Laboratory Results for Volatile Organics
Table 3 – Analytical Laboratory Results for Groundwater Samples
Plate 1 – Site Location Map
Plate 2 – Site Vicinity Map
Plate 3 – Site Plan Showing Soil Boring Locations
Appendix A – Well Construction Permit
Appendix B – Geophysical Survey Report
Appendix C – Soil Boring Logs
Appendix D – Laboratory Reports and Chain of Custody Records
Appendix E – Survey Data for MW-1

cc: Mr. Mike Bauer, CEMC
Yue Rong, RWQCB
SAIC Project File

SAIC's investigation was restricted to the collection and analysis of a limited number of environmental samples and visual observations obtained during the physical site visit, and from records made available by CEMC or third parties during the investigation. Because the investigation consisted of collecting and evaluating a limited supply of information, SAIC may not have identified all potential items of concern and, therefore, SAIC warrants only that the project activities under this contract have been performed within the parameters and scope communicated by CEMC and reflected in the contract. SAIC has made no independent investigations concerning the accuracy or completeness of the information provided. This report is intended to be used in its entirety. Taking or using in any way excerpts from this report is not permitted and any party doing so does so at its own risk.

TABLES

Table 1. Analytical Laboratory Results for Soil Samples
Chevron Environmental Management Company
Chevron Service Station No. 9-9693
5221 N. Palo Comado Canyon Road, Agoura Hills, California

Sample ID	Sample Date	Sample Depth (ft bgs)	EPA Method 8015M (mg/kg)		EPA Method 8260B (mg/kg)										
			GC/MS (mg/kg)	TPHg	DRO (C13-C22)	ORO (C23-C40)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MtBE	ETBE	DIPE	TAME	TBA
CB-1	3/22/07	60	<0.093		26	32	<0.00046	<0.00046	<0.00046	<0.00046	<0.00093	<0.00054	<0.00046	<0.00059	<0.00046
CB-1	3/22/07	65	<0.093		31	41	<0.00047	<0.00047	<0.00046	<0.00092	<0.00054	<0.00046	<0.00059	<0.00046	
CB-1	3/22/07	70	<0.092		46	50	<0.00046	<0.00046	<0.00041	<0.00083	<0.00048	<0.00041	<0.00053	<0.00041	
CB-1	3/22/07	75	<0.083		5.2	5.9	<0.00048	<0.00048	<0.00096	<0.00056	<0.00048	<0.00062	<0.00048		
CB-1	3/22/07	80	<0.096		41	64	<0.00046	<0.00046	<0.00093	<0.00054	<0.00046	<0.00059	<0.00046		
CB-1	3/22/07	85	<0.093		4.7 J	12	<0.00052	<0.00052	<0.0010	<0.00060	<0.00052	<0.00066	<0.00052		
CB-1	3/22/07	90	<0.1		36	160	<0.00045	<0.00045	<0.00091	<0.00053	<0.00045	<0.00058	<0.00045		
CB-1	3/22/07	95	<0.091		7.3	18	<0.00050	<0.00050	<0.0010	<0.00058	<0.00050	<0.00065	<0.00050		
CB-1	3/22/07	100	<0.1		8.1	15	<0.0004	<0.0004	<0.0008	<0.0008	<0.0008	<0.0008	<0.017		
CB-2: MW-1*	7/12/07	11	<0.037	<4.0	<4.0	<4.0	<0.0004	<0.0004	<0.0009	<0.0009	<0.0009	<0.0009	<0.018		
CB-2: MW-1*	7/12/07	15	<0.039	<4.0	<4.0	<4.0	<0.0004	<0.0004	<0.0009	<0.0009	<0.0009	<0.0009	<0.018		

NOTES: Laboratory analysis for CB-1 was performed by Test America Analytical, Irvine, California
Laboratory analysis for CB-2 was performed by Lancaster Laboratory, Lancaster, Pennsylvania

bgs - below ground surface
GC/MS - gas chromatography / mass spectrometer
EPA - U.S. Environmental Protection Agency
mg/kg - milligrams per kilogram
< - not detected above the MDL; value given is the MDL
J - denotes a value between the method detection limit and the laboratory reporting limit

TPHg - total petroleum hydrocarbons quantified as gasoline
MtBE - methyl tertiary-butyl ether
ETBE - ethyl tertiary-butyl ether
DIPE - di-isopropyl ether
TAME - tertiary-amy methyl ether
TBA - tertiary-butyl alcohol
DRO - diesel range organics (carbon range C13- C22)
ORO - oil range organics (carbon range C23-C40)

*The 11- and 15-foot samples from CB-2 were analyzed and non-detect for full suite EPA Method 8260B, except for acetone (0.0081 mg/kg and 0.042 mg/kg, respectively)

Table 2. Analytical Laboratory Results For Volatile Organics
 Chevron Environmental Management Company
 Chevron Service Station No. 9-9693
 5221 N. Palo Comado Canyon Road, Agoura Hills, California

Analyte (GC/MS 8260B)	Collected 3/22/07														7/12/2007	
	CBI-S-60	CBI-S-65	CBI-S-70	CBI-S-75	CBI-S-80	CBI-S-85	CBI-S-90	CBI-S-95	CBI-S-100	CBI-S-11	CB-2-S-11	CB-2-S-15				
Bromobenzene	<0.00078	<0.00078	<0.00077	<0.00069	<0.00081	<0.00078	<0.00087	<0.00087	<0.00085	<0.00087	<0.00088	<0.0009				
Bromochloromethane	<0.00083	<0.00084	<0.00083	<0.00074	<0.00087	<0.00084	<0.00093	<0.00082	<0.00091	<0.00093	<0.0008	<0.0009				
Bromodichloromethane	<0.00039	<0.00039	<0.00039	<0.00035	<0.00040	<0.00039	<0.00044	<0.00038	<0.00042	<0.00044	<0.0008	<0.0009				
Bromoforn	<0.00074	<0.00074	<0.00074	<0.00066	<0.00077	<0.00074	<0.00083	<0.00073	<0.00081	<0.00083	<0.0008	<0.0009				
Bromomethane	<0.00085	<0.00086	<0.00085	<0.00076	<0.00089	<0.00086	<0.00095	<0.00084	<0.00093	<0.00095	<0.002	<0.002				
n-Butylbenzene	<0.00067	<0.00067	<0.00066	<0.00060	<0.00069	<0.00067	<0.00075	<0.00065	<0.00073	<0.00073	<0.0008	<0.0009				
sec-Butylbenzene	<0.00062	<0.00062	<0.00062	<0.00055	<0.00065	<0.00062	<0.00070	<0.00061	<0.00068	<0.00068	<0.0008	<0.0009				
tert-Butylbenzene	<0.00057	<0.00058	<0.00057	<0.00051	<0.00060	<0.00058	<0.00064	<0.00056	<0.00062	<0.00062	<0.0008	<0.0009				
Carbon tetrachloride	<0.00046	<0.00047	<0.00046	<0.00041	<0.00048	<0.00046	<0.00052	<0.00045	<0.00050	<0.00050	<0.0008	<0.0009				
Chlorobenzene	<0.00048	<0.00048	<0.00048	<0.00043	<0.00050	<0.00048	<0.00054	<0.00047	<0.00052	<0.00052	<0.0008	<0.0009				
Chloroethane	<0.0014	<0.0014	<0.0014	<0.0012	<0.0014	<0.0014	<0.0016	<0.0014	<0.0015	<0.0015	<0.002	<0.002				
Chloroform	<0.00046	<0.00047	<0.00046	<0.00041	<0.00048	<0.00046	<0.00052	<0.00045	<0.00050	<0.00050	<0.0008	<0.0009				
Chloromethane	<0.00093	<0.00093	<0.00092	<0.00083	<0.00096	<0.00093	<0.0010	<0.00091	<0.0010	<0.0010	<0.002	<0.002				
2-Chlorotoluene	<0.00081	<0.00081	<0.00080	<0.00072	<0.00084	<0.00081	<0.00090	<0.00079	<0.00088	<0.00088	<0.0008	<0.0009				
4-Chlorotoluene	<0.00069	<0.00069	<0.00068	<0.00061	<0.00071	<0.00069	<0.00077	<0.00067	<0.00075	<0.00075	<0.0008	<0.0009				
Dibromochloromethane	<0.00052	<0.00052	<0.00052	<0.00046	<0.00054	<0.00052	<0.00058	<0.00051	<0.00056	<0.00056	<0.0008	<0.0009				
1,2-Dibromo-3-chloropropane	<0.0014	<0.0014	<0.0014	<0.0012	<0.0014	<0.0014	<0.0016	<0.0014	<0.0015	<0.0015	<0.002	<0.002				
1,2-Dibromoethane (EDB)	<0.00074	<0.00074	<0.00074	<0.00066	<0.00077	<0.00074	<0.00083	<0.00073	<0.00081	<0.00081	<0.0008	<0.0009				
Dibromomethane	<0.00083	<0.00084	<0.00083	<0.00074	<0.00087	<0.00084	<0.00093	<0.00082	<0.00091	<0.00091	<0.0008	<0.0009				
1,2-Dichlorobenzene	<0.00088	<0.00088	<0.00088	<0.00079	<0.00092	<0.00088	<0.00099	<0.00086	<0.00096	<0.00096	<0.0008	<0.0009				
1,3-Dichlorobenzene	<0.00078	<0.00078	<0.00077	<0.00069	<0.00081	<0.00078	<0.00087	<0.00076	<0.00085	<0.00085	<0.0008	<0.0009				
1,4-Dichlorobenzene	<0.00087	<0.00088	<0.00087	<0.00078	<0.00091	<0.00087	<0.00098	<0.00085	<0.00095	<0.00095	<0.0008	<0.0009				
Dichlorofluoromethane	<0.0014	<0.0014	<0.0014	<0.0012	<0.0014	<0.0014	<0.0016	<0.0014	<0.0015	<0.0015	<0.002	<0.002				
1,1-Dichloroethane	<0.00046	<0.00047	<0.00046	<0.00041	<0.00048	<0.00046	<0.00052	<0.00045	<0.00050	<0.00050	<0.0008	<0.0009				
1,2-Dichloroethane	<0.00074	<0.00074	<0.00074	<0.00066	<0.00077	<0.00074	<0.00083	<0.00073	<0.00081	<0.00081	<0.0008	<0.0009				
1,1-Dichloroethene	<0.00056	<0.00056	<0.00055	<0.00050	<0.00058	<0.00056	<0.00062	<0.00055	<0.00060	<0.00060	<0.0008	<0.0009				
cis-1,2-Dichloroethene	<0.00077	<0.00077	<0.00077	<0.00069	<0.00080	<0.00077	<0.00086	<0.00075	<0.00084	<0.00084	<0.0008	<0.0009				
trans-1,2-Dichloroethene	<0.00065	<0.00065	<0.00065	<0.00058	<0.00067	<0.00065	<0.00073	<0.00064	<0.00071	<0.00071	<0.0008	<0.0009				
1,2-Dichloropropane	<0.00032	<0.00033	<0.00032	<0.00029	<0.00034	<0.00033	<0.00036	<0.00032	<0.00035	<0.00035	<0.0008	<0.0009				
1,3-Dichloropropane	<0.00058	<0.00059	<0.00058	<0.00052	<0.00061	<0.00059	<0.00065	<0.00057	<0.00064	<0.00064	<0.0008	<0.0009				
2,2-Dichloropropane	<0.00042	<0.00042	<0.00042	<0.00037	<0.00043	<0.00042	<0.00047	<0.00041	<0.00045	<0.00045	<0.0008	<0.0009				
1,1-Dichloropropene	<0.00037	<0.00037	<0.00037	<0.00033	<0.00039	<0.00037	<0.00041	<0.00036	<0.00040	<0.00040	<0.0008	<0.0009				

Table 2. Analytical Laboratory Results For Volatile Organics
 Chevron Environmental Management Company
 Chevron Service Station No. 9-9693
 5221 N. Palo Comado Canyon Road, Agoura Hills, California

Analyte (GC/MS 8260B)	Collected 3/22/07														7/12/2007	
	CB1-S-60	CB1-S-65	CB1-S-70	CB1-S-75	CB1-S-80	CB1-S-85	CB1-S-90	CB1-S-95	CB1-S-100	CB1-S-11	CB1-S-15	CB1-S-15	CB1-S-15	CB1-S-15	CB1-S-15	CB1-S-15
cis-1,3-Dichloropropene	<0.00041	<0.00041	<0.00041	<0.00036	<0.00042	<0.00041	<0.00046	<0.00040	<0.00044	<0.00048	<0.00048	<0.00048	<0.00048	<0.00048	<0.00048	<0.00048
trans-1,3-Dichloropropene	<0.00056	<0.00057	<0.00056	<0.00050	<0.00059	<0.00057	<0.00063	<0.00055	<0.00061	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068
Hexachlorobutadiene	<0.00068	<0.00068	<0.00067	<0.00060	<0.00070	<0.00068	<0.00076	<0.00066	<0.00074	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088
Isopropylbenzene	<0.00050	<0.00050	<0.00050	<0.00045	<0.00052	<0.00050	<0.00056	<0.00049	<0.00054	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068
p-Isopropyltoluene	0.0018J	<0.00067	<0.00066	<0.00060	<0.00069	<0.00067	<0.00076	<0.00065	<0.00073	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088
Methylene chloride	<0.00060	<0.00061	<0.00060	<0.00054	<0.00063	<0.00060	0.0084J	0.0063J	<0.00066	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088
Naphthalene	<0.0010	<0.0010	<0.0010	<0.00091	<0.0011	<0.0010	<0.0011	<0.0010	<0.0011	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088
n-Propylbenzene	<0.00056	<0.00057	<0.00056	<0.00050	<0.00059	<0.00057	<0.00063	<0.00055	<0.00061	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068
Styrene	<0.00054	<0.00054	<0.00054	<0.00048	<0.00056	<0.00054	<0.00060	<0.00053	<0.00058	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068
1,1,1,2-Tetrachloroethane	<0.00053	<0.00053	<0.00053	<0.00047	<0.00055	<0.00053	<0.00059	<0.00052	<0.00057	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068
1,1,2,2-Tetrachloroethane	<0.00080	<0.00080	<0.00079	<0.00071	<0.00083	<0.00080	<0.00089	<0.00078	<0.00087	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098
Tetrachloroethene	<0.00045	<0.00046	<0.00045	<0.00040	<0.00047	<0.00046	<0.00051	<0.00045	<0.00049	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068
1,2,3-Trichlorobenzene	<0.00093	<0.00093	<0.00092	<0.00083	<0.00096	<0.00093	<0.0010	<0.00091	<0.0010	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011
1,2,4-Trichlorobenzene	<0.00093	<0.00093	<0.00092	<0.00083	<0.00096	<0.00093	<0.0010	<0.00091	<0.0010	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011
1,1,1-Trichloroethane	<0.00065	<0.00065	<0.00065	<0.00058	<0.00067	<0.00065	<0.00073	<0.00064	<0.00071	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088
1,1,2-Trichloroethane	<0.00081	<0.00081	<0.00080	<0.00072	<0.00084	<0.00081	<0.00090	<0.00079	<0.00088	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011
Trichloroethene	<0.00046	<0.00047	<0.00046	<0.00041	<0.00048	<0.00046	<0.00052	<0.00045	<0.00050	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068
Trichlorofluoromethane	<0.00050	<0.00050	<0.00050	<0.00045	<0.00052	<0.00050	<0.00056	<0.00049	<0.00054	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068	<0.00068
1,2,3-Trichloropropane	<0.00093	<0.00093	<0.00092	<0.00083	<0.00096	<0.00093	<0.0010	<0.00091	<0.0010	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011
1,2,4-Trimethylbenzene	0.00093J	<0.00073	<0.00072	<0.00064	<0.00075	<0.00072	<0.00081	<0.00071	<0.00079	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098
1,3,5-Trimethylbenzene	<0.00058	<0.00059	<0.00058	<0.00052	<0.00061	<0.00059	<0.00065	<0.00057	<0.00064	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088	<0.00088
Vinyl Chloride	<0.00084	<0.00085	<0.00084	<0.00075	<0.00088	<0.00085	<0.00094	<0.00083	<0.00092	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011

NOTES: GC/MS - gas chromatography / mass spectrometer
 EPA - U.S. Environmental Protection Agency
 mg/kg - milligrams per kilogram
 < - not detected above the MDL; value given is the MDL
 J - denotes a value between the method detection limit and the laboratory reporting limit

Table 3. Analytical Laboratory Results for Groundwater Samples
Chevron Environmental Management Company
Chevron Service Station No. 9-9693
5221 N. Palo Comado Canyon Road, Agoura Hills, California

Sample ID	Sample Date	GC/MS (ug/kg)		EPA Method 8015M (ug/l)		EPA Method 8260B (ug/l)											
		TPHg	ORO (C13-C22)	DRO (C13-C22)	ORO (C23-C40)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MtBE	ETBE	DIPE	TAME	TBA			
CB-2/ MW-1	7/30/07	56	NA	NA	NA	<0.5	<0.5	<0.5	<0.1	0.8 J	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
CB-2/ MW-1	8/23/07	NA	NA	5,800	12,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

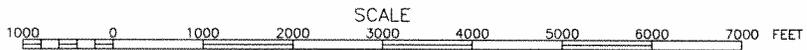
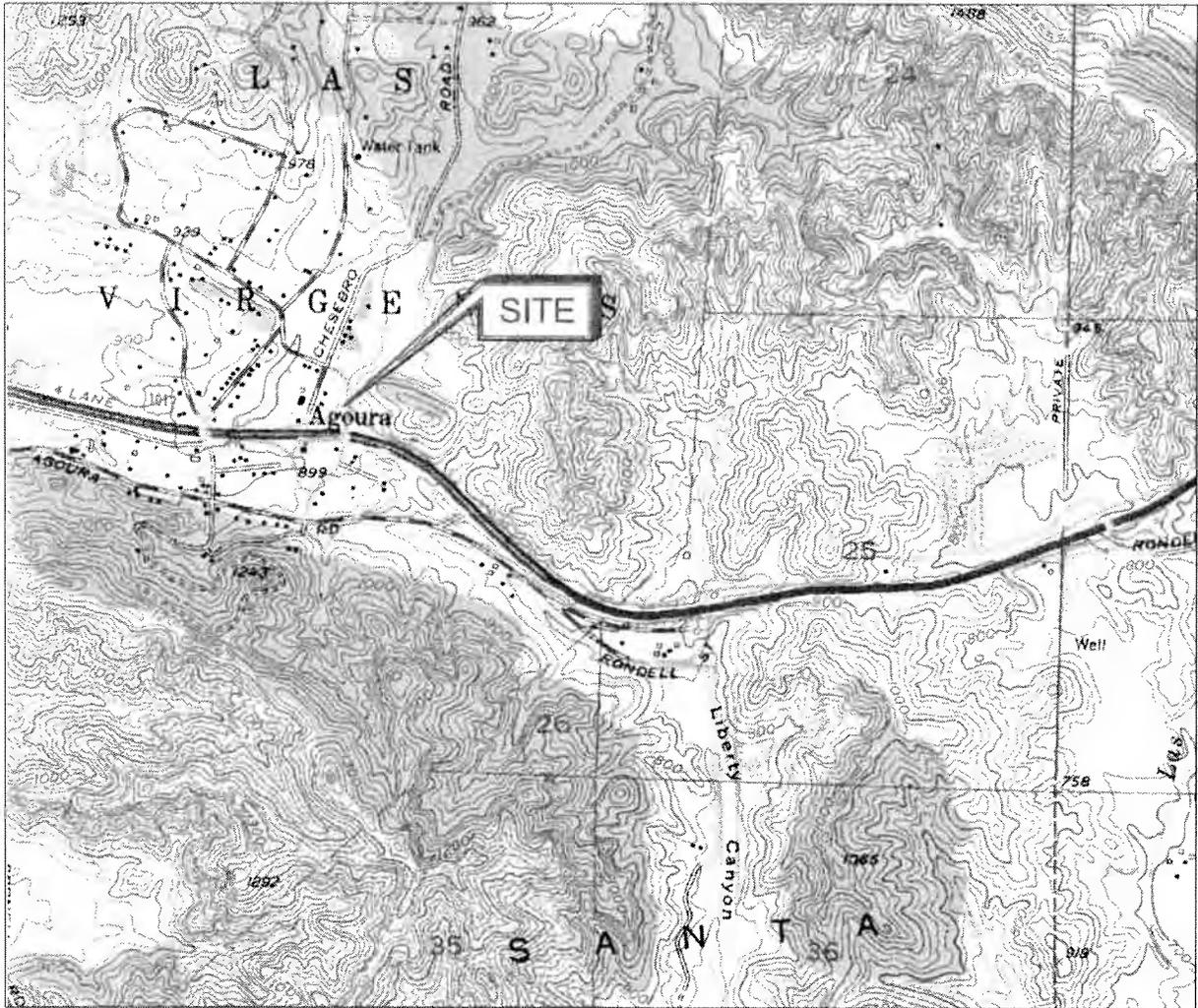
NOTES: Laboratory analysis performed by Lancaster Laboratory, Lancaster, Pennsylvania

- GC/MS - gas chromatography / mass spectrometer
- EPA - U.S. Environmental Protection Agency
- ug/l - micrograms per liter
- < - not detected above the MDL, value given is the MDL
- TPHg - total petroleum hydrocarbons quantified as gasoline
- MtBE - methyl tertiary-butyl ether
- ETBE - ethyl tertiary-butyl ether
- NA - not analyzed

- DIPE - di-isopropyl ether
- TAME - tertiary-amyyl methyl ether
- TBA - tertiary-butyl alcohol
- DRO - diesel range organics (carbon range C13- C22)
- ORO - oil range organics (carbon range C23-C40)
- J - denotes a value between the method detection limit and the laboratory reporting limit

PLATES

FILE: X:\Drafting\9-9693\BASE\SITE LOCATION MAP.dwg [Layout1]



Chevron Environmental Management Company
 CHEVRON SERVICE STATION NO. 9-9693
 5221 N. PALO CAMADO CYN. ROAD
 AGOURA HILLS, CALIFORNIA

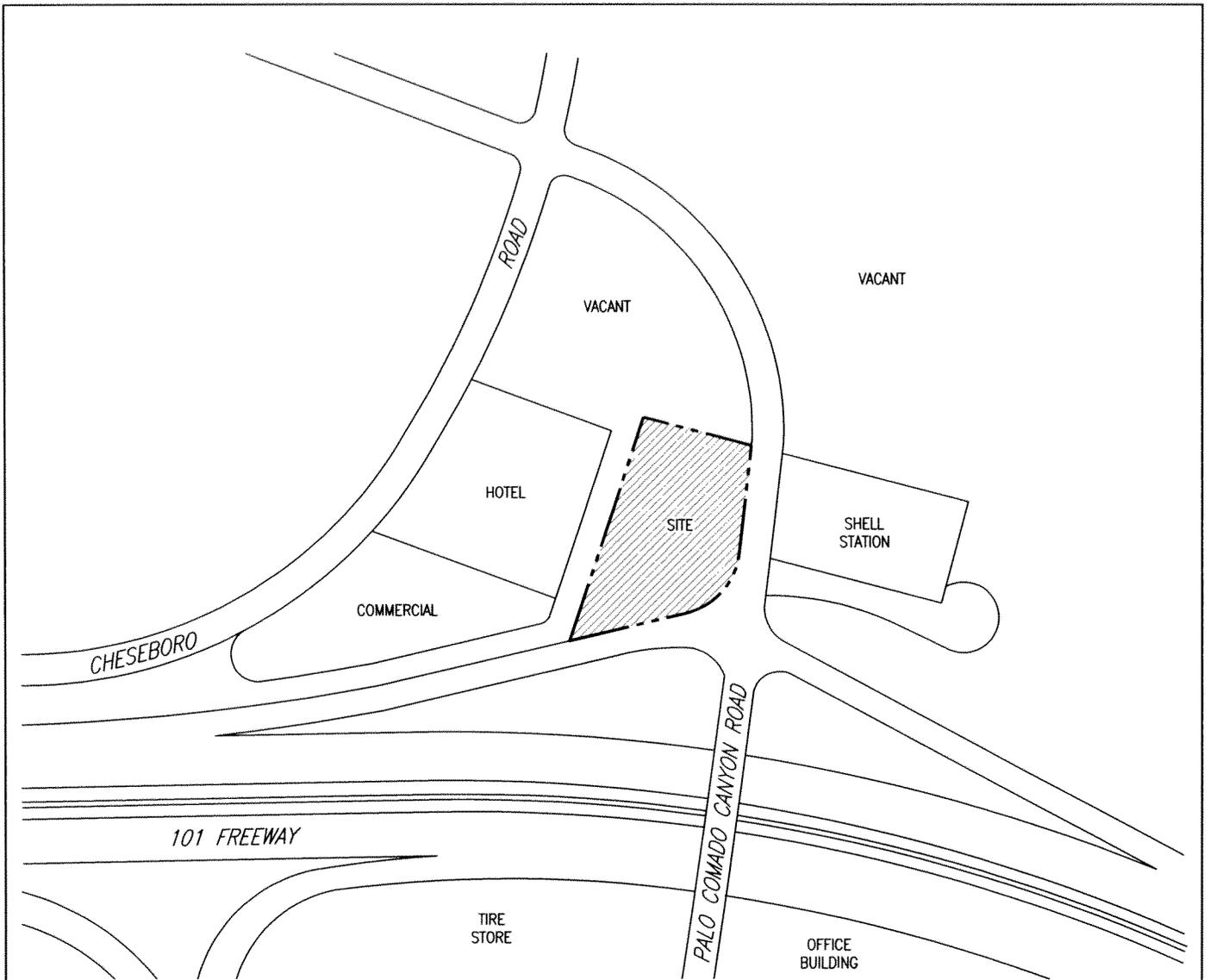
SITE LOCATION MAP

drawn	HDS	checked	approved	PLATE NO. 1
date	11/06	date	date	
job no.	06-6102-00-9143-000	file no.	____ DWG	



REFERENCE: USGS 7.5-MINUTE QUADRANGLE, CALABASAS, CALIFORNIA (DATED 1952, PHOTOREVISED 1967)

FILE: X:\Drafting\9-9693\BASE\SITE VICINITY.dwg [Model]



NOT TO SCALE

Chevron Environmental Management Company
SERVICE STATION NO. 9-9693
5221 N. PALO COMADO CANYON ROAD
AGOURA HILLS, CALIFORNIA

SITE VICINITY MAP

DRAWN	BDP	CHECKED	APPROVED	PLATE NO.
DATE	08/04	DATE	DATE	2
JOB NO.	06-6102-00-6005-000		FILE NO.	



APPENDIX A
WELL CONSTRUCTION PERMIT

WELL PERMIT APPLICATION - **NON-PRODUCTION WELLS**
 WATER & SEWAGE / MOUNTAIN & RURAL PROGRAMS - ENVIRONMENTAL HEALTH DIVISION
 5050 COMMERCE DRIVE BALDWIN PARK, CA 91706 (626) 430-5380 FAX (626) 813-3016

DATE 5/16/07

<input checked="" type="checkbox"/> NEW WELL CONSTRUCTION	<input checked="" type="checkbox"/> MONITORING	<input type="checkbox"/> HEAT EXCHANGE
<input type="checkbox"/> RECONSTRUCTION OR RENOVATION	<input type="checkbox"/> CATHODIC	<input type="checkbox"/> Hydropunch
<input type="checkbox"/> DECOMMISSIONING	<input type="checkbox"/> INJECTION	<input type="checkbox"/> C.P.T. For Ground Water Sampling
<input type="checkbox"/> OTHER: _____	<input type="checkbox"/> EXTRACTION	Other: (Specify) : _____

WELL LOCATION	SITE ADDRESS <u>5221 Palo Camado</u> CITY <u>Agoura Hills</u> ZIP CODE _____
	Nearest Intersection <u>Palo Camado + 101 Frey</u> Thomas Bros. Page / Grid _____
	NO. OF WELLS IN EACH PARCEL: <u>1</u> Attach site map with well locations

WELL STRUCTURE	Total Depth, Size and Depth of Well Casing <u>2" PVC 0.10 screen T.D. 24</u>
	Sanitary / Annular Sealing Material <u>Bentomite Chips</u>
	Depth of Sanitary / Annular Seal <u>4-6'</u>
	Conductor Casing Seal <u>N/A</u>

CONSULTANT	Company <u>SAIC</u>
	Contact Person <u>WALID MAKHLOUF</u>
	Address <u>590 W. Central Ave</u>
	City, State Zip Code <u>Brea, Ca 92821</u>
Telephone <u>(714) 257-6417</u>	

OWNER / DRILLER INFORMATION	Well Owner <u>Chevron Emv. Mgt. Co.</u>
	Address <u>145 S. State College</u>
	City / Zip Code <u>Brea, Ca 92821</u>
	Telephone <u>(714) 671-3207</u>
	Well Driller <u>BC² Environmental</u>
	Address <u>1212 E. Ash Ave</u>
	City / Zip Code <u>Fullerton</u>
	C-57 License No. <u>686255</u>
Telephone <u>(714) 449-2990</u>	

IF WELL AND GEOLOGIC CONDITIONS ENCOUNTERED IN THE FIELD ARE FOUND TO DIFFER FROM THE SCOPE OF WORK PRESENTED TO THIS OFFICE, WORK PLAN MODIFICATIONS MAY BE REQUIRED

DISPOSITION OF PERMIT (Department Use Only)
 THIS PERMIT IS CONSIDERED COMPLETE WHEN THE WORK PLAN IS APPROVED AND WHEN THE WELL COMPLETION LOG IS RECEIVED. NO WELL CONSTRUCTION OR DECOMMISSIONING CAN BE INITIATED WITHOUT THE WORK PLAN APPROVAL FROM THIS DEPARTMENT

WORK PLAN APPROVAL This Approval is Valid for 180 Days	
Date <u>5-31-07</u>	By <u>[Signature]</u>
Conditions _____	



WELL DECOMMISSIONING	Well Depth Log / Records
	Method of Well Assessment
	Depth and Number of Perforations
	Type of Perforator Size of Perforations
	Type and Amount of Sealant
	Method of Upper Seal Pressure Application

I hereby agree to comply in every respect with all the regulations of the County Environmental Health Division and with all ordinances and laws of the County of Los Angeles and the State of California pertaining to well construction, reconstruction and decommissioning. Upon completion of the well and with in thirty days thereafter, I will furnish the Environmental Health office with a completion log of the well giving date drilled, depth of the well, perforations in the casing, and any other data deemed necessary by County Environmental Health Division.

[Signature]
 Applicant's Signature

Applicant Name: (Print) WALID MAKHLOUF
 Fax Number: (714) 257-9886

NOTICE

This well permit approval is limited to compliance with the California well standards and the Los Angeles County Health and Safety Code and does not grant any rights to construct, reconstruct, or decommission any well. Applicant is responsible for securing all other permits necessary to perform the work.

APPENDIX B
GEOPHYSICAL SURVEY REPORT



March 26, 2007

SAIC
590 W. Central Avenue
Suite I
Brea, California 92821

Project No. 07-130

Attn: **Walid Makhoulf**

Re: Geophysical Investigation, 2 Boreholes, Chevron #9-9693, 5221 Palo Comado Canyon Rd, Agoura Hills, California.

This report is to present the results of our geophysical survey carried out over portions of Chevron Service Station #9-9693 located at 5221 Palo Comado Canyon Road in Agoura Hills, California (Figure 1) on March 23, 2007. Purpose of the survey was to locate and identify, insofar as possible, piping, conduit, and other buried features that may exist in the vicinity of two (2) locations designated for future drilling activities.

Ground penetrating radar (GPR) was applied to the search. A utility locator with line tracing capabilities was also brought to the field and used where risers exist onto which a signal could be impressed and traced.

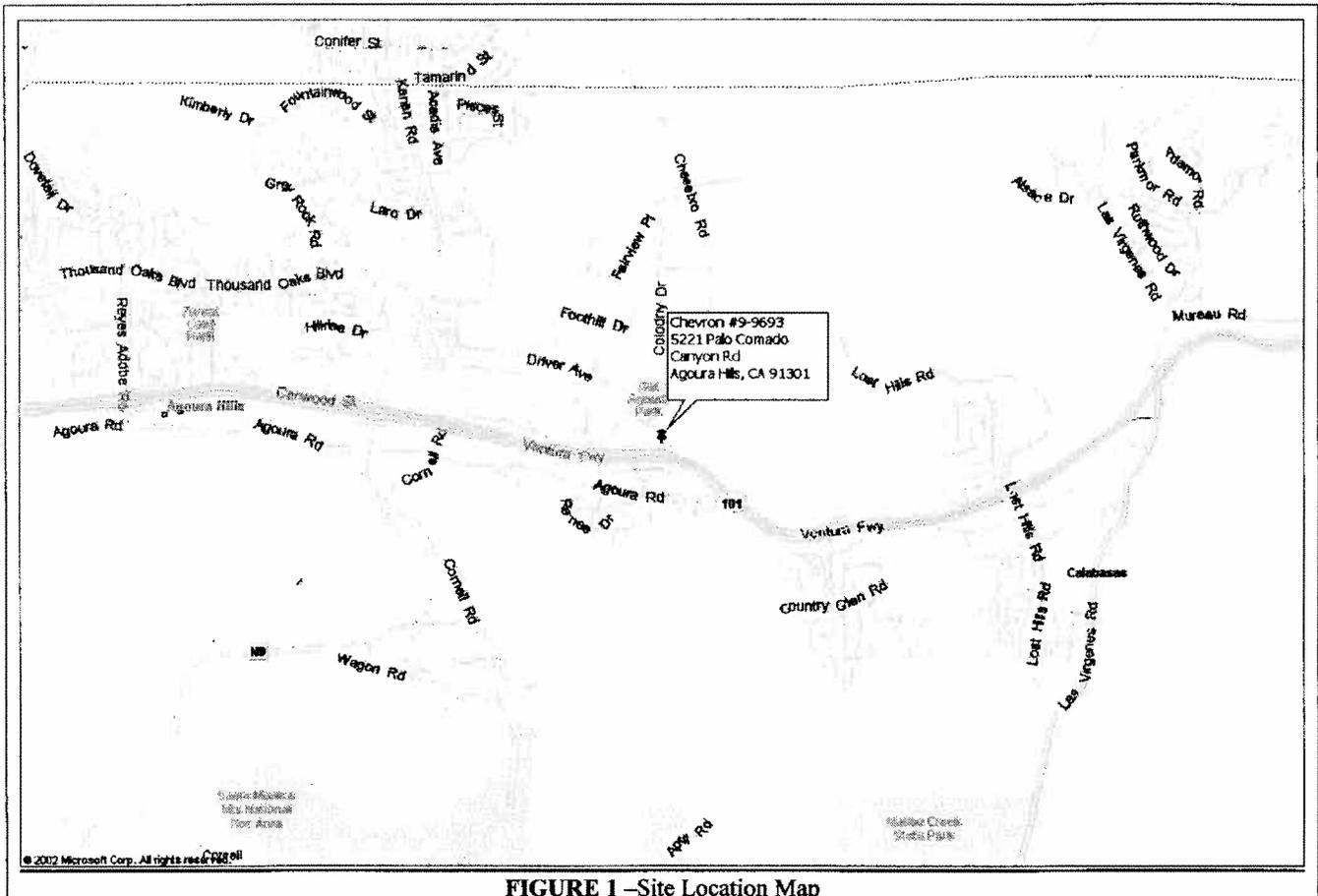


FIGURE 1 – Site Location Map

Multiple methods were utilized because each instrument senses different material properties of the ground and buried objects. At any given site the situation, geologic and cultural, may be such that one or more of the instruments may record excessive "noise", the ground may not provide sufficient contrasts, or there may be overlapping anomalies, for a given instrument to be effective. Summarily stated, there are generally instrumental limits and interpretational impediments.

Survey Design – The locations of the individual boreholes, indicated in the field by the client, were in the southwest corner of the service station property near the restrooms. Both boreholes were positioned over reinforced concrete; which as a result, causes too much interference with the EM and magnetic instruments. Due to this circumstance the line tracer and GPR were the main tools applied to this survey. These instruments were traversed systematically over each location along the eight lines of the standard search pattern (Figure 2), wherein, there are two sets of three parallel lines, mutually orthogonal, and two diagonals, all centered on the marked drill location. Adjacent parallel lines are approximately 5 feet apart, and each line is approximately 20 feet long, access permitting. Other traverses were taken, access permitting, for detailing and confirmation where anomalous conditions were found.

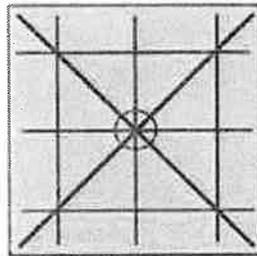


Figure 2: Standard search pattern around borehole

A Sensors & Software Noggin Ground Penetrating Radar unit produced the radar images and a Metrotech 9890 utility locator rounded out the tools applied.

Brief Description of the Geophysical Methods Applied – The line locator is used to passively detect energized high voltage electric lines and electrical conduit (50-60 Hz), VLF signals (14-22 kHz), as well as to actively trace other utilities. Where risers are present, the utility locator transmitter can be connected directly to the object, and a signal (9.8-82 kHz) is sent traveling along the conductor, pipe, conduit, etc. In the absence of a riser, the transmitter can be used to impress an input signal on the utility by induction. In either case, the receiver unit is tuned to the input signal, and is used to actively trace the signal along the pipe's surface projection.

The GPR instrument beams energy into the ground from its transducer/antenna, in the form of electromagnetic waves. A portion of this energy is reflected back to the antenna at a boundary in the subsurface across which there is an electrical contrast. The instrument produces a continuous record of the reflected energy as the antenna is traversed across the ground surface. The greater the electrical contrast, the higher the amplitude of the returned energy. The radar wave travels at a velocity unique to the material properties of the ground being investigated, and when these velocities are known, the two-way travel times can be converted to depth. The depth of penetration and image resolution produced are a function of ground electrical conductivity and dielectric constant.

Interpretation and Conclusions - The interpretation took place in real time as the survey progressed, and accordingly, the findings of our investigation were marked on the ground cover at the site, and further documented with site photographs of each borehole (Figures 3 and 4).

GPR was useful at detecting both metallic and non-metallic lines and utilities. According to principles of physics, radar penetration is a function of soil conductivity and dielectric constant. At this site, local conditions were favorable for radar penetration due to the nature of the soil and materials covering the survey area. This resulted in radar penetration down to approximately 3.0 feet bgs.

Piping and utilities detected during the survey were marked with spray chalk paint on the ground cover, using blue for water and red for electric.

The borehole shown in figure 3 is over five feet from any detected anomaly. An east-west trending electric line was detected in the immediate vicinity of the second borehole location (Figure 4). As per the client's request, this boring was repositioned two feet north from its original location. The new borehole is approximately three feet north from the detected electric line.

Once all detectable buried cultural objects were accounted for, the proposed boreholes were cleared by Subsurface Surveys and Associates and marked in paint with a white circle and yellow "SSS".

Where obstructions from adjacent cultural objects limited passes in at least one direction, or a resolute image of the subsurface was partially drowned out by localized non-target anomalies, certainty was compromised. All detected utilities in the immediate vicinity of the proposed borehole locations were marked out and it was left up to the client to determine if drilling activities should proceed there in the future.

Subsurface Survey's and Associates professional personnel are trained and experienced and have completed thousands of projects since the company's inception in 1988. It is our policy to work diligently to bring this training and experience to bear to acquire quality data sets, which in turn, can provide clues useful in formulating our interpretations. Still, non-uniqueness of interpretations, methodological limitations, and non-target interferences are prevailing problems. Subsurface Surveys and Associates makes no guarantee either expressed or implied regarding the accuracy of the interpretations presented. And, in no event will Subsurface Surveys and Associates be liable for any direct, indirect, special, incidental, or consequential damages resulting from interpretations and opinions presented herewith.

All data acquired in these surveys are in confidential file in this office, and are available for review by your staff, or by us at your request, at any time. We appreciate the opportunity to participate in this project. Please call, if there are questions.



Bret Herman
Staff Geophysicist



Travis Crosby, GP# 1044
Senior Geophysicist



BOREHOLE PHOTOGRAPHS

*Chevon Service Station #9-9693
5221 Palo Comado Canyon Road
Agoura Hills, California*



FIGURE 3

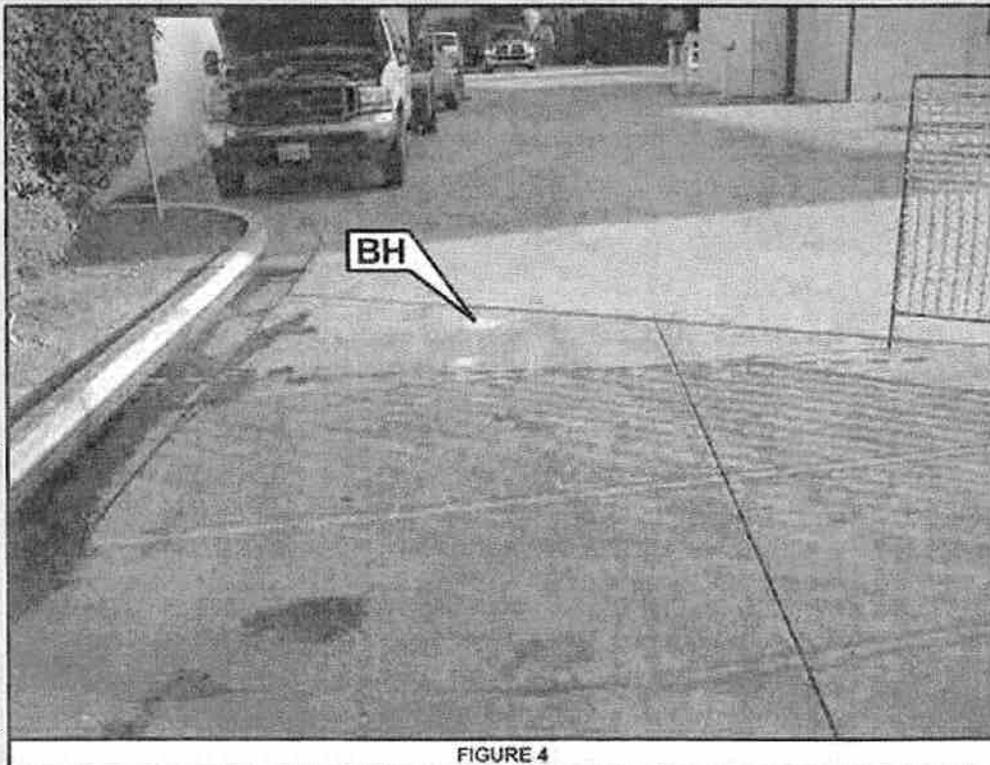


FIGURE 4

DATE 5/16/07

<input checked="" type="checkbox"/> NEW WELL CONSTRUCTION	<input checked="" type="checkbox"/> MONITORING	<input type="checkbox"/> HEAT EXCHANGE
<input type="checkbox"/> RECONSTRUCTION OR RENOVATION	<input type="checkbox"/> CATHODIC	<input type="checkbox"/> Hydropunch
<input type="checkbox"/> DECOMMISSIONING	<input type="checkbox"/> INJECTION	<input type="checkbox"/> C.P.T. For Ground Water Sampling
<input type="checkbox"/> OTHER: _____	<input type="checkbox"/> EXTRACTION	Other: (Specify): _____

WELL LOCATION	SITE ADDRESS <u>5221 Palo Camado</u> CITY <u>Agoura Hills</u> ZIP CODE _____
	Nearest Intersection <u>Palo Camado + 101 Freeway</u> Thomas Bros. Page / Grid _____
	NO. OF WELLS IN EACH PARCEL: <u>1</u> Attach site map with well locations

WELL STRUCTURE	Total Depth, Size and Depth of Well Casing <u>2" PVC 0.10 screen T.D. 24</u>
	Sanitary / Annular Sealing Material <u>Bentonite Chips</u>
	Depth of Sanitary / Annular Seal <u>4-6'</u>
	Conductor Casing Seal <u>N/A</u>

CONSULTANT	Company <u>SAIC</u>
	Contact Person <u>WALID MAKHLOUF</u>
	Address <u>590 W. Central Ave</u>
	City, State Zip Code <u>Brea, Ca 92821</u>
	Telephone <u>(714) 257-6417</u>

OWNER/DRILLER INFORMATION	Well Owner <u>Chevron Emor. Mgt. Co.</u>
	Address <u>145 S. State College</u>
	City / Zip Code <u>Brea, Ca 92821</u>
	Telephone <u>(714) 671-3207</u>
	Well Driller <u>BC² Environmental</u>
	Address <u>1212 E. Ash Ave</u>
	City / Zip Code <u>Fullerton</u>
	C-57 License No. <u>686255</u>
Telephone <u>(714) 449-2990</u>	

IF WELL AND GEOLOGIC CONDITIONS ENCOUNTERED IN THE FIELD ARE FOUND TO DIFFER FROM THE SCOPE OF WORK PRESENTED TO THIS OFFICE, WORK PLAN MODIFICATIONS MAY BE REQUIRED

DISPOSITION OF PERMIT (Department Use Only)
 THIS PERMIT IS CONSIDERED COMPLETE WHEN THE WORK PLAN IS APPROVED AND WHEN THE WELL COMPLETION LOG IS RECEIVED. NO WELL CONSTRUCTION OR DECOMMISSIONING CAN BE INITIATED WITHOUT THE WORK PLAN APPROVAL FROM THIS DEPARTMENT

WORK PLAN APPROVAL This Approval is Valid for 180 Days	
Date <u>5-31-07</u>	Signature <u>[Signature]</u>
Conditions _____	



WELL DECOMMISSIONING	Well Depth Log / Records
	Method of Well Assessment
	Depth and Number of Perforations
	Type of Perforator Size of Perforations
	Type and Amount of Sealant
	Method of Upper Seal Pressure Application

I hereby agree to comply in every respect with all the regulations of the County Environmental Health Division and with all ordinances and laws of the County of Los Angeles and the State of California pertaining to well construction, reconstruction and decommissioning. Upon completion of the well and with in thirty days thereafter, I will furnish the Environmental Health office with a completion log of the well giving date drilled, depth of the well, perforations in the casing, and any other data deemed necessary by County Environmental Health Division.

[Signature]
Applicant's Signature

Applicant Name: (Print) WALID MAKHLOUF
 Fax Number: (714) 257-9886

NOTICE

This well permit approval is limited to compliance with the California well standards and the Los Angeles County Health and Safety Code and does not grant any rights to construct, reconstruct, or decommission any well. Applicant is responsible for securing all other permits necessary to perform the work.

APPENDIX C
SOIL BORING LOGS



BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
Chevron	06-6102-00-9143	1 of 4	CB-1
DRILLING COMPANY	DRILLING RIG	BEGUN	FINISHED
BC ² Environmental Corp.	CME-85	03-22-07	03-22-07
DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	
Hollow-Stem Auger	140 lbs./ 30 in.	5221 N. Palo Comado Canyon, Agoura Hills, CA.	
DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY
n.a.	n.a.	Walid Makhlouf	S. Lacey
		ANGLE (from Horizontal)	HOLE DIAMETER
		Vertical	8 inches

SAMPLE ID	SAMPLER ADVANCE BLOW COUNTS 6" OF CORE RECOVERY (%)	PID READING (PPM)	WELL CONSTRUCTION	ELEVATION IN FEET	DEPTH IN FEET	GRAPHIC SYMBOL	DESCRIPTION AND CLASSIFICATION	NOTES
							Fill material.	Hole cleared to 8 feet by air-knife.
CB-1-10	5 10 11	0			5			
CB-1-15	4 7 10	0			15		SILTY CLAY (CL): Brown [7.5YR 4/2], very stiff, moist, low plasticity, trace gravel.	
							at 15.0 ft.: No gravel, trace organic material (Black) and crystalin salt.	
CB-1-20	4 4 8	0			20		CLAY (CL): at 20.0 ft.: Brown [7.5YR 4/2], soft, moist, medium plasticity, interbedded Dark gray.	



BORING LOCATION

Service Station No. 9-9693, Agoura Hills, California

HOLE NUMBER

CB-1



BORING LOG

PROJECT

Chevron

JOB NUMBER

06-6102-00-9143

SHEET NUMBER

2 of 4

HOLE NUMBER

CB-1

SAMPLE ID	SAMPLER ADVANCE BLOW COUNTS 6" OF CORE RECOVERY (%)	PID READING (PPM)	WELL CONSTRUCTION	ELEVATION IN FEET	DEPTH IN FEET	GRAPHIC SYMBOL	DESCRIPTION AND CLASSIFICATION	NOTES
CB-1-25	6 10 13	0					at 25.0 ft.: No gravel, trace organic material (Black) and crystalline salt.	
CB-1-30	10 12 14	0			30		at 30.0 ft.: trace fine sand.	
CB-1-35	6 6 17	0			35		at 35.0 ft.: Dark gray [2.5Y 4/1], trace of mica and crystalline.	
CB-1-40	10 11 7	0			40		at 40.0 ft.: very stiff, dry.	
CB-1-45	5 16 20	0			45		at 45.0 ft.: hard.	
CB-1-50	12 20 30	0			50		at 50.0 ft.: same as above.	
				BORING LOCATION		Service Station No. 9-9693, Agoura Hills, California		
						HOLE NUMBER		CB-1



Service Station No. 9-9693, Agoura Hills, California

CB-1



BORING LOG

PROJECT

JOB NUMBER

SHEET NUMBER

HOLE NUMBER

ChevronTexaco Project

06-6102-00-6005

3 of 4

CB-1

SAMPLE ID	SAMPLER ADVANCE BLOW COUNTS 6" OF CORE RECOVERY (%)	PID READING (PPM)	WELL CONSTRUCTION	ELEVATION IN FEET	DEPTH IN FEET	GRAPHIC SYMBOL	DESCRIPTION AND CLASSIFICATION	NOTES
CB-1-55	16 27 33	0			55		at 55.0 ft.: trace fine sand.	
CB-1-60	19 20 35	0			60		at 60.0 ft.: same as above.	
CB-1-65	15 20 36	0			65		at 65.0 ft.: same as above.	
CB-1-70	16 30 34	0			70		at 70.0 ft.: same as above.	
CB-1-75	18 25 40	0			75		at 75.0 ft.: same as above.	
CB-1-80	25 33 34	0			80		at 80.0 ft.: same as above.	
				BORING LOCATION		9-9693, Agoura Hills, CA.		HOLE NUMBER CB-1



9-9693, Agoura Hills, CA.

CB-1



BORING LOG

PROJECT

ChevronTexaco Project

JOB NUMBER

06-6102-00-6005

SHEET NUMBER

4 of 4

HOLE NUMBER

CB-1

SAMPLE ID	SAMPLER ADVANCE BLOW COUNTS 6" or CORE RECOVERY (%)	PID READING (PPM)	WELL CONSTRUCTION	ELEVATION IN FEET	DEPTH IN FEET	GRAPHIC SYMBOL	DESCRIPTION AND CLASSIFICATION	NOTES	
CB-1-85	30 39 44	0			85		at 85.0 ft.: same as above.		
CB-1-90	19 36 44	0			90		at 90.0 ft.: becomes consolidated.		
CB-1-95	19 27 50/2	0			95				
CB-1-100	49 50/6	0			100				
TOTAL DEPTH = 100.0 FEET									
			BORING LOCATION				9-9693, Agoura Hills, CA.		
							HOLE NUMBER		
							CB-1		



BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
Chevron	06-6102-00-9143	1 of 1	CB-2/MW-1
DRILLING COMPANY	DRILLING RIG	BEGUN	FINISHED
BC ² Environmental Corp.	LAR	03-22-07	07-12-07
DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	
Hollow-Stem Auger	140 lbs./ 30 in.	5221 N. Palo Comado Canyon, Agoura Hills, CA.	
TOC ELEVATION	DEPTH TO WATER	LOGGED BY	REVIEWED BY
not surveyed	7.5 ft. bgs	Walid Makhlof	Sam Lacey
		ANGLE (from Horiz)	HOLE DIAMETER
		Vertical	10 in

SAMPLE ID	SAMPLER ADVANCE BLOW COUNTS (# BLOWS/6")	P/D READING (PPM)	WELL CONSTRUCTION	ELEVATION IN FEET	DEPTH IN FEET	GRAPHIC SYMBOL	DESCRIPTION AND CLASSIFICATION	NOTES
							CONCRETE	
							CLAYEY SILT (ML): Brown [10YR 4/3], trace fine gravel, moist, medium plasticity.	Borehole cleared to ~7.5 feet using airknife
					5			Well Construction - Materials: 0-1.0 ft.: 12" Emco-Wheaton Well Box 0.5-5.0 ft.: 4-in diam Schedule 40 PVC Blank Casing 5.0-15.0 ft.: 4-in diam. Machine Slotted 0.010 PVC Screen
							GRAVEL (GW): trace clay and silt, saturated.	Well Construction - Backfill: 0.0-2.0 ft.: Concrete
							CLAYEY SILT (ML): Brown [10YR 4/3], trace fine gravel, moist, medium plasticity.	2.0-4.0 ft.: Bentonite Seal
					10		at 11.0 ft.: decreasing gravel. at 12.0 ft.: slight grayish discoloration, trace angular shale fragments.	4.0-15.0 ft.: #2/12 Silica Sand Filter Pack 15.0-18.5 ft.: Bentonite Pellet Backfill
							CLAY (CL): Brown [10YR 4/3], and grayish brown [10YR, 5/2], trace silt, moist, medium plasticity, slight odor. at 16.5 ft.: Brown [10YR 4/3].	
					15			
							TOTAL DEPTH = 18.5 FEET	
CB-2-11	8 10 11	0						
	7 9 12	0						
	5 7 10 14	0						
	6 7 11	0						
CB-2-15	7 9 13	0						
	6 7 9 11	0						



WELL BORING LOCATION
Service Station No. 9-9693, Agoura Hills, California

HOLE NUMBER
CB-2/MW-1

NEWLY POSITIONED MONITORING WELLS:

WELL	LATITUDE	LONGITUDE	NORTH	EAST	ELEV. AT NOTCH	ELEV. TOP OF TID
MW-1	34.1439842	-118.7384955	1875601.63	6338214.68	933.79	934.26

COORDINATES ARE CALIFORNIA STATE PLANE, ZONE V, BASED ON THE NATIONAL GEODETIC SURVEY'S (NGS) PUBLISHED POSITIONS FOR THE CONTINUOUSLY OPERATING REFERENCE STATION (CORS) SITES CBHS, MPWD, SPK1, AND TOST, NORTH AMERICAN DATUM OF 1983 (NAD83) (2000.35 EPOCH).

THE VERTICAL DATA SHOWN HEREON IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AS DERIVED FROM THE NGS PUBLISHED ELLIPSOID HEIGHTS OF CORS STATIONS CBHS, MPWD, SPK1, AND TOST.

UNITS ARE U.S. SURVEY FEET

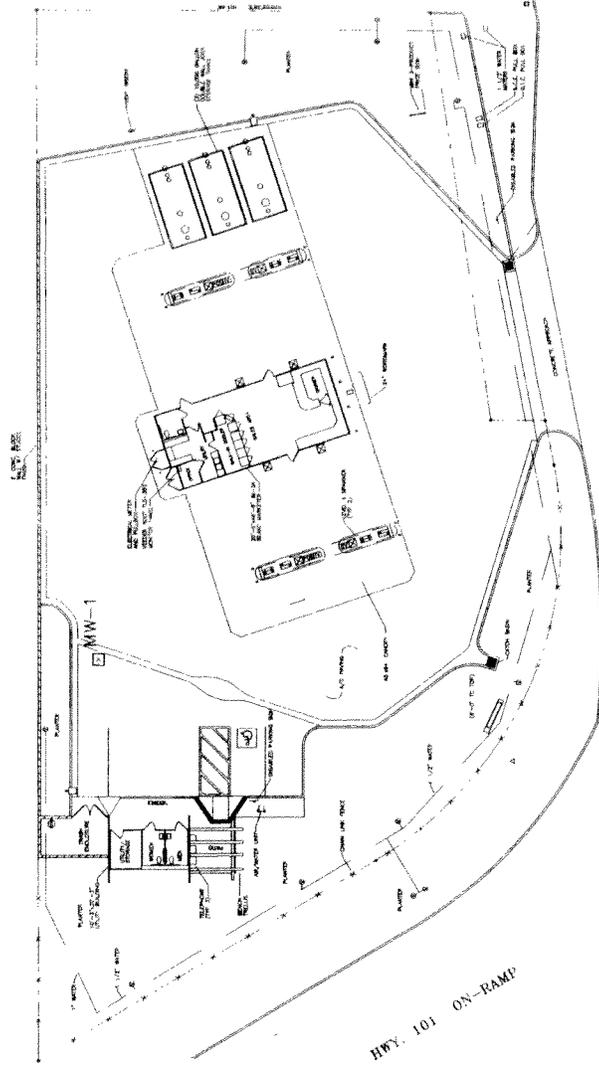
RELEVANT GEOTRACKER CODES:

XY_SURVEY_DATE= 8/16/2007
 XY_METHOD= CGPS
 XY_DATUM= NAD83
 Z_SURVEY_DATE= 8/16/2007
 ELEV_METHOD= CGPS
 ELEV_DATUM= 88



EXPLANATION

MW-1 NEWLY POSITIONED MONITORING WELL



Scale 0 15 30 Feet

Chevron Environmental Management Company
 SERVICE STATION NO. 8-9893
 5221 N. PALO COMADO CANYON ROAD
 ASCOURA HILLS, CALIFORNIA

J F JOHNSON-FRANK & ASSOC., INC.
 LAND SURVEYING & MAPPING
 1400 WEST 10TH AVENUE
 ANAHEIM, CALIFORNIA 92807-2049
 (714) 777-8877 FAX (714) 777-1841

DATE AUG. 2007 SHEET 1 OF 1

200708 8-485

MONITORING WELLS

DRAWN	CHECKED	APPROVED	DATE	DATE	DATE

PLATE NO. 3



COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

DEAN D. EFSTATHIOU, Acting Director

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-3100
<http://www.pwcounty.gov>

ADDRESS ALL CORRESPONDENCE TO
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

June 10, 2008

IN REPLY PLEASE REFER TO FILE **EP-1**
010053-009912

Mr. Yue Rong
State of California Regional Water
Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, CA 90013-2343

Dear Mr. Rong:

**HAZARDOUS MATERIALS UNDERGROUND STORAGE
CLOSURE REPORT
CLOSURE PERMIT NO. 3342B
FACILITY LOCATED AT 5221 NORTH PALO COMADO CANYON ROAD
AGOURA HILLS (5H)**

This office reviewed the Additional Closure Requirements report dated September 15, 2007, for the subject facility. Based on the report, there is significant soil and groundwater contamination at the site.

Pursuant to Section 25297(b) of the California Health and Safety Code, we are referring this matter to your agency for further action. We request that all future correspondence regarding this matter be sent to your office with a copy sent to this office.

If you have any questions, please contact Mr. Iheanacho Ofo of this office at (626) 458-3512, Monday through Thursday, 7 a.m. to 5:30 p.m.

Very truly yours,

DEAN D. EFSTATHIOU
Acting Director of Public Works

TIM SMITH
Senior Civil Engineer
Environmental Programs Division

IO:ca
P:\seclRong C570746

74C

9912-5H



Chevron U.S.A. Products Company
1300 South Beach Boulevard, Building 4516, La Habra, California • Phone (310) 694-7300
Mail Address: P.O. Box 2833, La Habra, CA 90632-2833

VK
OTHR

August 25, 1993

Marketing Department

Case No. WM-1 (9912-5H)
Chevron Station 9-9693
5221 Palo Comado Cyn. Rd.
Agoura Hills, California

CG7901

Ms. Vache Keledjian
County of Los Angeles
Department of Public Works
900 S. Fremont Avenue
Alhambra, CA 91803-1331

RECEIVED

SEP 1 1993
DEPARTMENT OF PUBLIC WORKS
WASTE MANAGEMENT DIVISION

Dear Ms. Keledjian:

Chevron requests that the County of Los Angeles close their active file on the above referenced case.

In response to your letter of July 22, 1993, Chevron's position is that the site warrants no groundwater assessment. The following reasons are provided:

- 1) **Excavation of the Impacted Soil.** The hydrocarbon impacted soil in the area of the used oil tank was removed by excavation. The tank pit was sampled to verify remediation and analytical results yielded a value of 74 ppm TRPH.
- 2) **LUFT Manual Cleanup Guidelines.** The LUFT Manual dictates that the site needs no additional work. Utilizing Table 2-1 for the leaching potential of hydrocarbon, the site "scores" 39 points. The table states that under this scenario, a maximum allowable level of 10 ppm and 100 ppm for gasoline and diesel, respectively, should be established for the site. However, the constituent of concern, used oil, is not integrated into the table. However, used oil is much less mobile in the environment than diesel and, accordingly, the appropriate maximum allowable level for used oil should be 100 ppm or higher, and presently, the concentrations at our facility are below this value.

Please contact me at (310) 694-7903 if you have any questions.

Very truly yours,

Dan Gallagher
Environmental Engineer

DJG/djg





COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (818) 458-5100

THOMAS A. TIDEMANSON, Director

ADDRESS ALL CORRESPONDENCE TO
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

July 22, 1993

Mr. Dan Gallagher
Environmental Engineer
Chevron USA Products Company
P.O.Box 2833
La Habra, CA 90632-2833

IN REPLY PLEASE
REFER TO FILE: WM-1
9912-5H

NOTICE OF NON-COMPLIANCE
HAZARDOUS MATERIALS UNDERGROUND STORAGE PERMIT (HMUSP)
FACILITY AT: 5221 Palo Comado Canyon Road, Augora Hills

You were notified on April 20, 1993 to submit to this office
on or before May 27, 1993 the item(s) checked below:

- HMUSP application and/or accompanying fees.
 - Tank integrity test results for the underground containers at the above location.
 - Leak Detection Program (LDP). Tank Monitoring Program (TMP).
 - LDP/TMP corrections. LDP/TMP final report.
 - Assessment report following closure of the following containers:
-
- Site investigation proposal. Remedial action plan.
 - Progress report for the month of _____.
 - Other Establish a groundwater monitoring well to determine the impact of released contaminants on the ground water.

As of this date, our records show that you have not responded. Please be advised that the required information must be submitted to this office by August 27, 1993. Failure to comply with this notice will result in the initiation of enforcement measures.

If you have any questions regarding this matter, please contact Vache Keledjian of this office, at (818) 458-3516, Monday through Thursday, 7:00 a.m. to 5:30 p.m.

Very truly yours,

T. A. TIDEMANSON
Director of Public Works

By *Vache Keledjian*
Waste Management Division

WP7



COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (818) 458-5100

THOMAS A. TIDEMANSON, Director

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

April 20, 1993

*Mailed with
3 Form C's*

IN REPLY PLEASE
REFER TO FILE

WM-1
09912-5H

Mr. Dan Gallagher
Environmental Engineer
Chevron USA Products Company
P.O. Box 2833
La Habra, CA 90632-2833

Dear Mr. Gallagher:

**HAZARDOUS MATERIALS UNDERGROUND STORAGE
SITE ASSESSMENT/REMEDIAL ACTION PLAN
5221 PALO CAMADO CANYON ROAD, AGOURA HILLS**

This office has reviewed the additional closure information submitted on April 6, 1993, for the subject site.

As previously related to you in our letter dated October 28, 1992, this office maintains the position that groundwater monitoring wells are necessary for the subject site to determine the impact of released contaminants on the groundwater.

This determination is based on the depth of groundwater, the levels of TPH found under the waste oil tank and in the stock pile and the waste oil samples were not analyzed for BTEX compounds.

Please be advised this closure will not be considered final until all the applicable closure requirements of this office are met. A written report containing the required information must be submitted to this office by May 27, 1993. Additionally, provide certification by a manufacturer authorized technician that the monitoring system for the new tanks is properly installed and operational. Complete and return one of the enclosed forms for each new tank installed.

If you have any questions regarding this matter, please contact Mr. Patrick Longtin of this office at (818) 458-3516, Monday through Thursday, 7:00 a.m. to 5:30 p.m.

Your cooperation with this matter will be highly appreciated.

Very truly yours,

T. A. TIDEMANSON
Director of Public Works

114
Carl W. Sjoberg
Carl W. Sjoberg
Chief, Industrial Waste Planning & Control
Waste Management Division

PJL:li
UST1/GALL
C58800

Enc.

PREPARED FOR: JAMES COALSON
CHEVRON USA, INC.
1300 S. BEACH BLVD.
LA HABRA, CALIFORNIA 90631

TANK PULL REPORT
FOR
CHEVRON SERVICE STATION #9693
5221 N. PALO COMADO CYN RD.
AGOURA HILLS, CALIFORNIA

JUNE 24, 1988

PREPARED BY: GROUNDWATER TECHNOLOGY, INC.
2646 PALMA DRIVE
SUITE 440
VENTURA, CA 93003

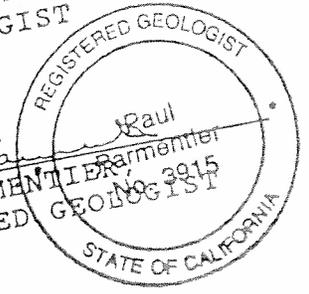
WRITTEN BY:


ROY E. THUN,
GEOLOGIST

REVIEWED BY:


JAMES KO WADA,
HYDROGEOLOGIST


PAUL PARMENTIER,
REGISTERED GEOLOGIST
#3915



INTRODUCTION

On April 7, 1988, Groundwater Technology, Inc., was retained by James Coalson of Chevron USA, Inc., to collect soil samples for analysis, following the removal of four hydrocarbon storage tanks at Chevron Service Station #9693. The location of this site is on the northwest corner of Palo Comado Canyon Road and the 101 Freeway on-ramp, Agoura Hills, California (Figure 1). On April 13, 1988, a 4000 gallon, steel gasoline storage tank; two 10,000 gallon, fiberglass gasoline storage tanks; and a 1,000 gallon steel waste-oil tank were removed from the site.

The purpose of the soil sample analysis was to determine if any significant hydrocarbon concentrations exist around any of the storage tanks. Soil samples were obtained directly under the storage tanks, with one sample taken three feet in from each tank end. The soil samples were sent to Chemical Research Laboratories for final analysis.

GEOLOGY/HYDROLOGY

Agoura Hills is located in the central portion of the Santa Monica Mountains.

Regionally, the area consists of Miocene marine sandstones, Miocene volcanics, Miocene undifferentiated, and Quaternary

alluvium.

Structurally, the area is within the transverse ranges. Local minor faulting is prevalent throughout the area.

On site, the geology consists of rust colored, well compacted clays of low permeability containing gray-brown, lenses of clay of moderate permeability.

Hydrologically, this area may be underlain by only a minor perched aquifer or aquitard with limited lateral extent, based on previous work in this area. An aquitard is a lithologic zone which has sufficient porosity to store water, but extremely low permeability which limits or prevents water movement. Depth to groundwater in this area is approximately 19 feet, based on local well data.

TANK PULL

On April 13, 1988, three underground gasoline storage tanks and one waste-oil tank were removed. The first tank removed was an abandoned, twenty-year-old, 4000 gallon, single-walled steel gasoline storage tank. This tank was in fair condition, with no observable holes. The second and third tanks removed were five-year old, 10,000 gallon, fiberglass gasoline storage tanks. These tanks were in good condition and actively used before the

tank pull. The fourth tank removed was an actively used, twenty-year old, 1000 gallon, waste-oil tank. After extraction of each tank, samples were collected from the base of both ends of each excavated tank pit. Soils surrounding the three gasoline storage tanks were clean with no hydrocarbon smell. Minor discoloration of soil surrounding the waste-oil tank pit had a moderate hydrocarbon smell. This soil was excavated and sampled.

After collection, each sample was packed into a brass sampling tube, sealed with teflon-lined plastic caps, and placed on ice. The soil samples were sent to Chemical Research Laboratories in Ventura, California, for analysis.

LABORATORY INVESTIGATION

Eight soil samples were acquired during the tank pull (Figure 2). Samples 1 thru 6 were tested for gasoline Total Petroleum Hydrocarbons - TPH, (EPA method 8015), sample 6 was also tested for Benzene, Toluene, Ethylbenzene, and Total Xylenes - BTEX, (EPA method 8020). Samples 7 and 8 were tested for Total Petroleum Hydrocarbons - TPH, (EPA method 418.1). Sample JW1-A was obtained from the gasoline soil pile. Table 1 contains a partial tabulation of laboratory analysis in parts per million.

TABLE 1

<u>Sample I.D.</u>	<u>TPH</u>	<u>BTEX</u>	<u>Total Lead</u>	<u>Flashpoint</u>
1	ND	--	--	--
2	ND	--	--	--
3	7.7	--	--	--
4	48.0	--	ND	--
5	6.9	--	--	--
6	ND	--	--	--
7	74.0	--	--	--
STOCKPILE 8	9200.0	--	ND	--
JW1-A	0.86	0.19	<0.1	<185F

* ND - Non Detectable

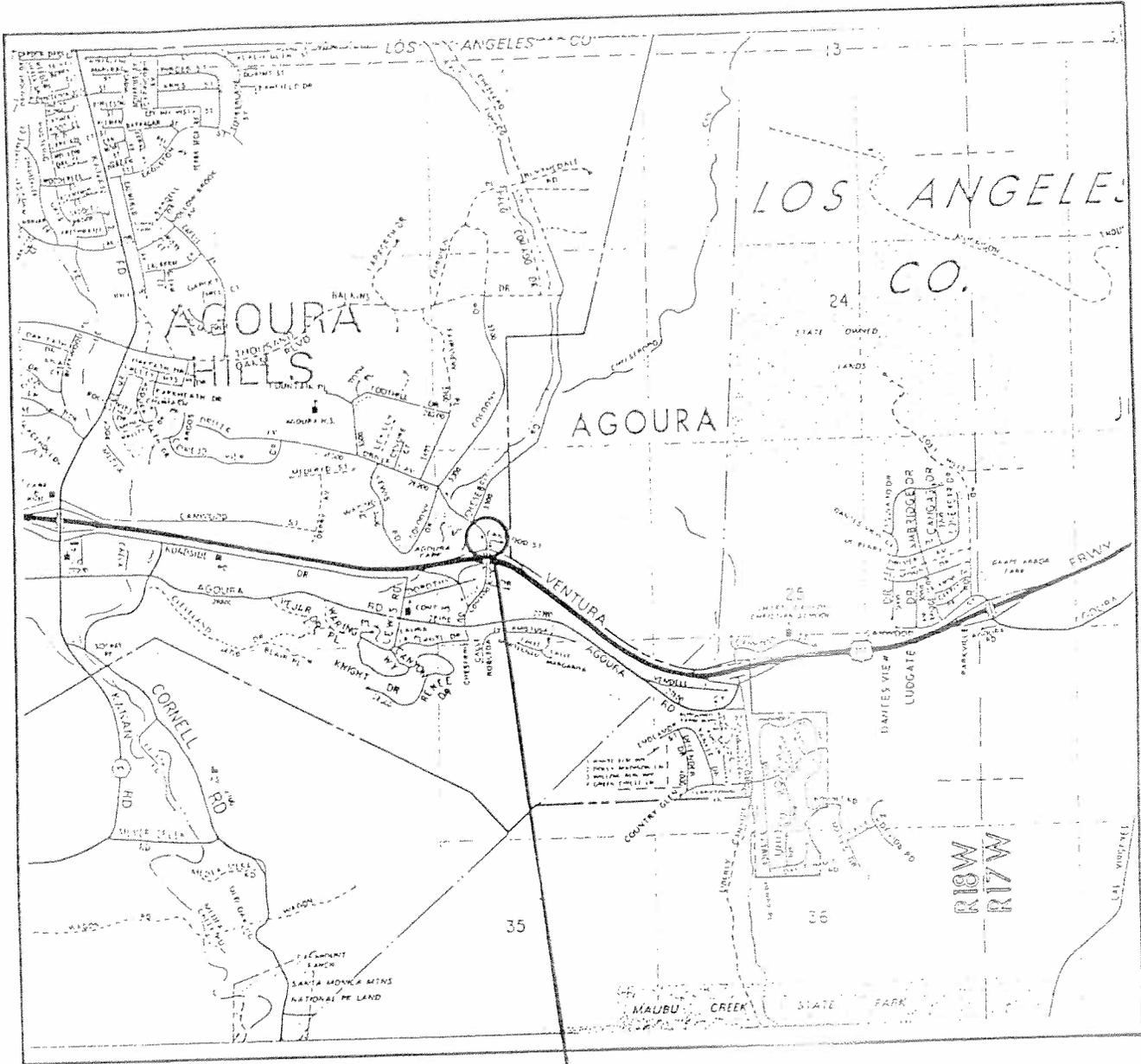
Samples 1, 2, 3, 5, and 6 contained less than 8 ppm TPH as gasoline. Sample 4 contained 48 ppm TPH as gasoline. Sample 6 also indicated non-detectable BTEX levels (5.0 ppm). Sample 7 had a TPH level less than 75 ppm. Sample 8 contained 9200 ppm TPH. The gasoline soil pile was sampled on April 15, 1988. This sample was sent to GT Environmental Laboratories in Concord, California. Total Benzene, Toluene, Ethylbenzene, and Xylenes-BTEX (modified EPA method 8020) indicated less than 0.2 ppm. Miscellaneous Hydrocarbons (modified EPA method 5030) was 0.67 ppm. Total Petroleum Hydrocarbons as gasoline - TPH, (modified EPA method 8015) was 0.86 ppm. Organo Lead content was less than

0.1 ppm. Flash Point testing on this sample indicated no ignitability below 186 degrees F. Priority pollutant metals (EPA method 6010) are all below Total Threshold Limits for hazardous wastes in California (Appendix A).

CONCLUSION

The soil around and below the gasoline tank pit area contained TPH concentrations below 48 ppm. Excavated soil which had surrounded the 1000 gallon, waste-oil tank indicated hydrocarbon concentrations at 9200 ppm, above county action levels. This soil was disposed of at a class I hazardous waste facility (Casmalia). Native soil below the waste oil tank contained 76 ppm TPH. All other samples were below county action levels.

3554RE



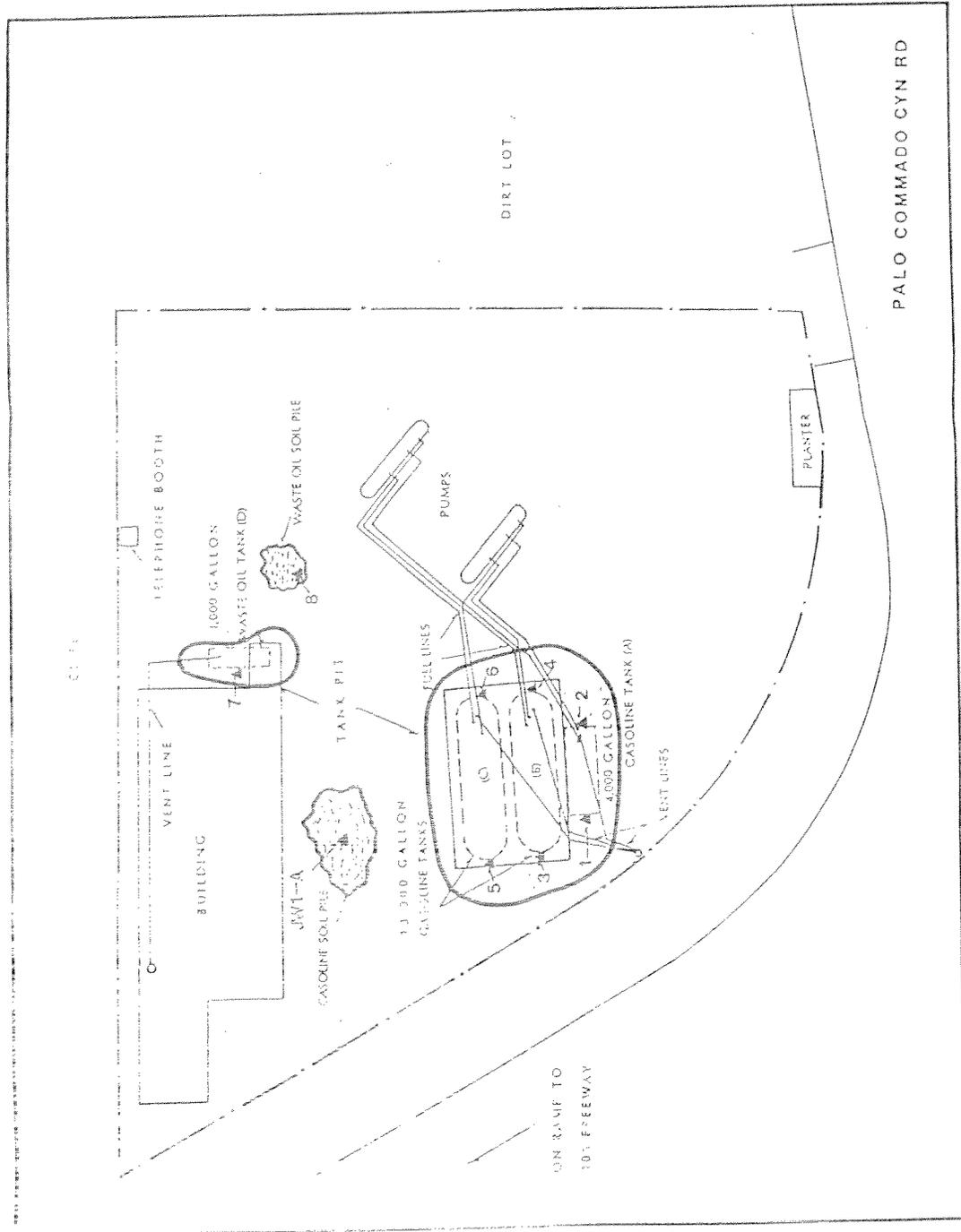
SITE

0 .5

MILES



SITE:	CHEVRON #9693	JOB NO. 213-	175-3554
SITE LOC.:	5227 N. PALO COMMADO CYN RD, AGOURA HILLS, CA		
MAP TYPE:	SITE LOCATION		
DRAWN BY:	<i>RT</i>	DATE:	6/6/88
FIGURE 1			



LEGEND

(B) TANK DESIGNATION

▲-4 SAMPLE LOCATION AND NUMBER

— PROPERTY LINE

○ VENT POLE

0 20 40 FT

SITE: CHEVRON #9593 JOB # 213-175-3554

SITE LOC: 5221N PALO COMMADO CYN RD, AGOURA PRIS, CALIF

MAP TYPE: SITE MAP

DESIGNED BY	DATE	APPROVED BY	DATE
REI	6/16/88	Alan Blanks	6/16/88
REVISION	DATE	BY	

FIGURE 1

APPROXIMATE TELELOCATION

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

EMERGENCY <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	STATE TANK ID # UNKNOWN
--	---	-----------------------------------

REPORT DATE 02/25/87	LOCAL CASE # UNKNOWN	REGIONAL BOARD CASE # UNKNOWN	US EPA ID # UNKNOWN
--------------------------------	--------------------------------	---	-------------------------------

REPORTED BY	NAME OF INDIVIDUAL FILING REPORT JANE D FRUIN	PHONE (213) 694 9157	SIGNATURE 	
	REPRESENTING <input type="checkbox"/> LOCAL AGENCY <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> OWNER/OPERATOR <input type="checkbox"/> REGIONAL BOARD	COMPANY OR AGENCY NAME CHEVRON USA Inc.		
	ADDRESS 1201 S BEACH, P.O. BOX 2833 LA HABRA CA 90631			

RESPONSIBLE PARTY	NAME CHEVRON USA <input type="checkbox"/> UNKNOWN	CONTACT PERSON JANE FRUIN	PHONE (213) 694 9157
	ADDRESS 1201 BEACH, P.O. BOX 2833, LA HABRA CA 9063		

SITE LOCATION	FACILITY NAME (IF APPLICABLE) CHEVRON STATION # 9-9693	OPERATOR DEXTER OZAWA	PHONE (818) 889-888	
	ADDRESS 5221 N. PALO COMADO CYN AGOURA LOS ANGELES 9130			
	CROSS STREET VENTURA FWY	TYPE OF AREA <input checked="" type="checkbox"/> COMMERCIAL <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> RESIDENTIAL <input type="checkbox"/> RURAL <input type="checkbox"/> OTHER	TYPE OF BUSINESS <input checked="" type="checkbox"/> RETAIL FUEL STATION <input type="checkbox"/> UNKNOWN <input type="checkbox"/> OTHER	

IMPLEMENTING AGENCIES	LOCAL AGENCY AGENCY NAME LOS ANGELES COUNTY PUBLIC WORKS	CONTACT PERSON UNKNOWN	PHONE ()	
	REGIONAL BOARD LOS ANGELES REGIONS			
	TSCD UNKNOWN			

SUBSTANCES INVOLVED	CAS # (ATTACH EXTRA SHEET IF NEEDED) NAME (1) GASOLINE (SUPREME)	QUANTITY LOST (GALLONS) <input checked="" type="checkbox"/> UNKN
	(2)	

DISCOVERY/ABATEMENT	DATE DISCOVERED 02/20/87	HOW DISCOVERED <input type="checkbox"/> INVENTORY CONTROL <input type="checkbox"/> SUBSURFACE MONITORING <input type="checkbox"/> ROUTINE MONITORING <input type="checkbox"/> TANK REMOVAL <input type="checkbox"/> UNDESIRABLE CONDITIONS <input type="checkbox"/> OTHER:
	DATE DISCHARGE BEGAN M M D D Y Y <input type="checkbox"/> UNKNOWN	
	HAS DISCHARGE BEEN STOPPED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, DATE 02/20/87	

SOURCE/CAUSE	SOURCE(S) OF DISCHARGE <input checked="" type="checkbox"/> TANK LEAK <input type="checkbox"/> UNKNOWN	TANKS ONLY/CAPACITY 4000 GAL	CAUSE(S) <input type="checkbox"/> OVERFILL <input type="checkbox"/> CORROSION
	<input type="checkbox"/> PIPING LEAK	AGE 21 YRS. <input type="checkbox"/> UNKNOWN	<input type="checkbox"/> RUPTURE/FAILURE <input type="checkbox"/> SPILL
	<input type="checkbox"/> OTHER (SPECIFY)	MATERIAL <input checked="" type="checkbox"/> STEEL <input type="checkbox"/> FIBERGLASS	<input checked="" type="checkbox"/> UNKNOWN <input type="checkbox"/> OTHER

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COMMENTS:	A LEAK WAS DISCOVERED IN THE SUPREME TANK AND ALL CONTENTS HAVE BEEN REMOVED.
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COMPLETE AND ATTACH A CLEANUP TRACKING REPORT IF ANY CLEANUP WORK OR PLANNING HAS STARTED HSC 05 (10/85)



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February 8, 2006
DELTA Project No. PA5226P-1

Dr. Yue Rong
California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street
Los Angeles, CA 91103-1104

Re: Notification of Groundwater Detections
Former Shell Service Station
5226 Palo Camado Canyon Road
Agoura Hills, California

Dear Dr. Rong:

Delta Environmental Consultants, Inc. (DELTA), on behalf of Equilon Enterprises LLC dba Shell Oil Products US (SHELL), would like to inform you of the fuel oxygenate concentration detected in a groundwater sample collected during the first quarter 2006 groundwater monitoring event. Diisopropyl ether (DIPE) was detected in the groundwater sample collected from Well W-17 at a concentration of 1.5 micrograms per liter (ug/L). This is the first time that DIPE has been detected in groundwater samples collected during quarterly groundwater monitoring activities since sampling began in January 2004. The complete results of the monitoring activities will be presented in DELTA's *First Quarter 2006 Groundwater Monitoring Report*, submitted under separate cover to the California Regional Water Quality Control Board- Los Angeles Region (LARWQCB).

In a telephone conversation between Ms. Monica Cash-Ortega of DELTA and Dr. Yue Rong of the LARWQCB on January 30, 2006, Dr. Rong was informed of the DIPE detection in the groundwater. During the discussion, Dr. Rong indicated that continued groundwater monitoring at the site would be the preferred approach, and the submittal of a new unauthorized release report (URR) was not required based on the following information:

- The underground storage tanks (USTs) onsite are no longer the property of SHELL,
- DIPE was previously detected in two soil samples collected during the UST removal activities in February 2004,
- Based on information obtained from the State Water Resource Control Board (SWRCB)'s GeoTracker database, the Chevron station located at 5221 Palo Comado, Agoura Hills is list on GeoTracker as an open

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case with the LARWQCB and Well W-17 is located just off-site of the Chevron station where DIPE has been detected in groundwater.

Should you have any questions or comments, please contact either Ms. Jillian Ly (DELTA) or Ms. Monica Cash-Ortega (DELTA Project Manager) at (626) 256-6662. The SHELL Project Manager is Ms. Deborah Pryor. Ms. Pryor can be reached at (323) 291-9595.

Sincerely,

Delta Environmental Consultants, Inc.



Jillian Ly
Project Engineer

cc: Mr. Ben Hazany, Property Owner
Ms. Deborah Pryor, Shell Oil Products US
Mr. Manny Regalado, LACDPW



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March 2, 2006
DELTA Project No. PA5226P-1
SAP: 121366

Dr. Yue Rong
State of California, Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street
Los Angeles, CA 91103-1104

**Re: Vacuum Enhanced Groundwater Extraction (VEGE) Pilot Test Report
Former Shell Service Station
5226 Palo Comado Canyon Road
Agoura Hills, California**

Dear Dr. Rong:

Delta Environmental Consultants, Inc. (DELTA), on behalf of Equilon Enterprises LLC dba Shell Oil Products US (SHELL), submits this *Vacuum Enhanced Groundwater Extraction (VEGE) Pilot Test Report* for the above-referenced site (Figure 1). The primary objective of the pilot test was to conduct VEGE to determine groundwater extraction rates from the existing wells and to determine the radius-of-influence (ROI) to evaluate the effectiveness of soil vapor extraction (SVE) to remediate hydrocarbon-impacted soil at the site.

This document has been prepared in accordance with the scope of work submitted to the Los Angeles Regional Water Quality Control Board (LARWQCB) in DELTA's *Feasibility Study, Work Plan for Pilot Test, Work Plan for Slug Test, and Contingency Work Plan for Groundwater Monitoring Well Installation*, dated August 15, 2004. A *Notice of Intent*, dated April 22, 2005, was submitted to the LARWQCB informing the agency of DELTA's plans to proceed with the scope of work detailed in the August 15, 2004 document (Appendix A). The subject site is currently being managed under the RWQCB, Expedited Agency Oversight Program (EAOP) as detailed in their *Underground Storage Tank-Notification of Expedited Agency Oversight Program for Lower Priority Cases (Priority D-1)* letter dated February 15, 2005 (Appendix A). Additionally, to fulfill the requirements of the EAOP

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BACKGROUND

SITE DESCRIPTION

The site is a former SHELL service station located on the northeast corner of the intersection of Palo Comado Canyon Road and Canwood Road, approximately 250 feet north of the Ventura (101) Freeway in Agoura Hills, California. The site is approximately 120 feet by 180 feet in dimension. Site improvements consisted of three 10,000-gallon underground storage tanks (USTs), one 8,000-gallon UST, four fuel dispensers, one 550-gallon waste oil tank, one clarifier, one hydraulic hoist and a service building/food mart. The underground fueling system was removed by SHELL in February 2004 and replaced by the new property owner with one 20,000-gallon UST, one 22,000-gallon UST, and associated dispensers and piping. Figure 2 illustrates the approximate layout of the service station. The site is at an elevation of approximately 933 feet above mean sea level at the southwest end of a relatively small knoll. The site topography is relatively flat, but in the immediate vicinity of the site it slopes moderately to the south and southwest away from the knoll.

PREVIOUS ENVIRONMENTAL ACTIVITIES

Previous environmental activities performed at this site are summarized in the table below. A summary of well and boring data are presented in Table 1. Historical soil and groundwater analytical tables are presented as Table 2 and Table 3.

Summary					
Date	Activity/ Method	No. of Borings/ Samples	Report Date	Consultant	Comments
4/1991 to 6/1991	Site Assessment	10 soil borings (C-1 through C-10)	8/1991	Texaco Environmental Services (TES)	Weathered TPH-g maximum of 280 mg/kg; and TPH-d maximum of 2,900 mg/kg.
7/1992	Environmental Site Assessment	One Groundwater (GW) Monitoring Well (W2) abandoned; three GW Monitoring Wells (W-12, W-13, W-14) installed	7/1992	TES	TPH-g maximum of 230 mg/kg; TPH-d maximum of 230 mg/kg; and benzene maximum of 0.19 mg/kg.

Summary (continued)					
Date	Activity/ Method	No. of Borings/ Samples	Report Date	Consultant	Comments
5/1993	Additional Site Assessment	One on-site GW Monitoring Well (W-15) installed; two off-site GW Monitoring Wells (W-16, W-17) installed	6/25/1993	ENV America Inc. (ENV)	TPH-g and BTEX compounds not detected in soil samples. TPH-d maximum of 300 mg/kg.
1992 to 1996	Quarterly Groundwater Monitoring	W-11, W-12, W-13, W-14, W-15, W-16, W-17, W-18, and W-19	9/28/1992 to 11/25/1996	Various	TPH-g, TPH-d, TRPH, and BTEX compounds detected.
3/1994	Additional Off-Site Assessment	Two off-site GW Monitoring Wells (W-18, W-19) installed	8/10/1994	ENV	TPH-g and BTEX compounds not detected in soil samples. TPH-d maximum of 110 mg/kg; TRPH maximum of 24 mg/kg.
12/3/96	No Further Action Letter issued by LARWQCB	---	12/3/96	LARWQCB	No further action is required related to the release from the USTs.
2/2004	UST Removal and Over-Excavation	20 soil samples; 100 cubic yards over-excavated; 13 confirmation soil samples	3/10/2004	DELTA	Over-excavated to TPH-g maximum of 38 mg/kg; TPH-d maximum of 78 mg/kg; benzene maximum of 0.013 mg/kg; and MTBE maximum of 9.2 mg/kg.

Summary (continued)					
Date	Activity/ Method	No. of Borings/ Samples	Report Date	Consultant	Comments
2004	Quarterly Groundwater Monitoring	W-11, W-12, W-13, W-14, W-15, W-16, W-17, W-18, and W-19	2004	DELTA	TPH-g, BTEX compounds, and fuel oxygenates detected.
6/2004	Slug Tests		7/30/04	DELTA	Results inconclusive due to the fact that water levels never returned to static.
2004	Work Plan for Pilot Test, Slug Test, and Contingency Plan		8/15/2004	DELTA	
2005	Quarterly Groundwater Monitoring	W-11, W-12, W-13, W-14, W-15, W-16, W-17, W-18, and W-19	3/31/05 to 10/15/2005	DELTA	TPH-g, TPH-d, BTEX compounds, and fuel oxygenates detected

GEOLOGY AND HYDROGEOLOGY

The site area is located on the northerly flank of the Santa Monica Mountains, within the Transverse Ranges geomorphic province. It is situated in the east-west trending canyon pass that connects the San Fernando Valley and the Ventura Basin through the Conejo Valley.

Structurally, the Santa Monica Mountains are a highly-faulted, east-west trending anticline with a core of older Jurassic or Triassic rocks intruded by granitics and flanked by younger Cretaceous and Tertiary sedimentary rocks (Oakshot, 1978). The basement core consists of a highly foliated slate and schist formation, referred to as the Santa Monica slate. The site is underlain by middle Miocene marine sediments assigned to the Topanga formation (Jennings, 1991). The Topanga formation generally consists of shale and sandstone with minor conglomerate. Alluvial sediments fill the bottom of the canyon pass.

The principal fault of the area is the Malibu Coast fault, the westerly extension of the Malibu-Santa Monica-Raymond fault zone.

The site is positioned at the western end of a relatively small knoll. Based on surface topography and borehole data, the subject site rests primarily in a cut portion of a cut-fill transition. The cuts and fills were made in order to develop a relatively flat building pad. The deepest cut is at the northeast corner of the site, and the fill is estimated to occur at the southwest corner, however, only bedrock has been observed in the southwest corner during the UST removal activities.

According to the Geologic Map of the Calabasas Quadrangle (Dibblee, Jr., 1992), the site is underlain by the Upper Topanga formation. The Upper Topanga formation consists of a well bedded, gray claystone that is crumbly with ellipsoidal fracture. The bedrock observed at the site by DELTA personnel during the previous UST removal activities consisted primarily of thin to medium and fair to well bedded, jointed siltstone with sandstone. As observed in borehole samples and nearby roadcuts, bedding dips moderately to the northeast and orthogonal joint fractures generally dip steeply.

The bedrock can be divided into an upper weathered zone and deeper unweathered rock. The deeper bedrock is generally described as having poorly developed bedding planes and very tight joint fractures. The upper bedrock is generally described as having well developed bedding planes and joint fractures. Joint fractures and bedding planes within the upper weathered bedrock are commonly filled with granular calcite, which is generally less than 0.1-inch wide (ENV, 1994).

Groundwater beneath the site appears to occur in joints and fractures, along the bedding planes and in coarser sand units of bedrock.

The depth to groundwater at the site during the October 2005 gauging and sampling event ranged from 4.37 to 23.85 feet below ground surface (bgs). The groundwater gradient beneath the site during this gauging and monitoring event was toward the west at approximately 0.20 ft/ft. Historical groundwater gauging data is presented on Table 3. A groundwater elevation contour map is presented as Figure 2.

HYDROCARBON DISTRIBUTION IN SOIL

Former Gasoline and Diesel Fuel UST Area. Eight confirmation samples were collected from the bottom of the over-excavated area of UST pit, at approximately 19 feet bgs. Total Petroleum Hydrocarbons as gasoline (TPH-g) was detected in one sample with a concentration of 0.63 milligrams per kilogram (mg/kg) [T-2Bd19]. Benzene was detected in one sample with a concentration of 0.0028 mg/kg (T-3Ad19). Methyl tert-butyl ether (MTBE) was detected in all eight soil samples with a maximum concentration at 9.2 mg/kg (T-3Bd19). Tert-butyl alcohol (TBA) was detected in five soil samples with a maximum concentration of 14 mg/kg (T-1Bd19). Di-isopropyl ether (DIPE), tert-amyl methyl ether (TAME), ethyl-tert butyl ether (ETBE) and ethanol were not detected in any of the confirmation soil samples.

Former Dispenser Areas. Three confirmation samples were collected from the bottom of the over-excavated area of former dispensers, at approximately eight feet bgs. TPH-g and benzene were detected in two soil samples collected beneath the former dispensers with a maximum concentration of 38 mg/kg and 0.013 mg/kg, respectively

(D4-d8). MTBE was detected in two soil samples collected beneath the dispensers with a maximum concentration of 0.36 mg/kg (D-4d8). TBA was detected in one soil sample at a concentration of 0.22 mg/kg (D-4d8). DIPE, TAME, ETBE and ethanol were not detected in the former dispenser soil samples.

Former Product Piping Areas. TPH-g was not detected above the laboratory reporting limit in the one soil sample collected beneath the former product piping. Benzene was detected with a concentration of 0.0018 mg/kg (P1-d4). MTBE and TBA were not detected above the laboratory reporting limit in the soil sample collected. DIPE was detected at a concentration of 0.0015 mg/kg. Total Recoverable Petroleum Hydrocarbons (TRPH) was detected in the one soil sample at a concentration of 0.0026 mg/kg. ETBE, TAME and ethanol were not detected in the former product piping soil sample.

Former Waste Oil Tank. TPH-g and benzene were not detected above the laboratory reporting limit in the one soil sample collected beneath the former waste oil tank during the over-excavation activities. MTBE was detected in the one soil sample at a concentration of 0.029 mg/kg. TBA, DIPE, TBE, TAME and ethanol were not detected in the former product piping over-excavation confirmation soil sample.

Former Hydraulic Hoist. TPH-g and benzene were not detected above the laboratory reporting limit in the one soil sample collected beneath the former waste oil tank. TRPH was detected in the one soil sample at a concentration of 25 mg/kg. MTBE, TBA, DIPE, ETBE, TAME and ethanol were not detected in the former product piping soil sample.

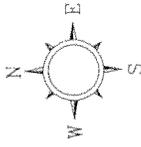
Former Clarifier. TPH-g, benzene, MTBE, TBA, DIPE, TBE, TAME and ethanol were not detected in the one soil sample beneath the former clarifier during over-excavation activities.

Historical soil data collected during UST removal activities is included as Table 2 and displayed on Figure 3.

HYDROCARBON DISTRIBUTION IN GROUNDWATER

The results of the fourth quarter 2005 groundwater monitoring event indicate the presence of dissolved-phase hydrocarbons in groundwater collected from on-site monitoring wells. The highest concentration of total petroleum as diesel (TPH-d) [1,600 micrograms per liter ($\mu\text{g/L}$)] in groundwater was detected in Well W-11 and was not detected above the laboratory detection limit in all other wells sampled. The highest concentration of TPH-g (840 $\mu\text{g/L}$) in groundwater samples was detected in Well W-14, with lesser concentrations reported in the groundwater samples collected from wells W-12, W-13, W-17 and W-19. The highest concentration of MTBE (1,400 $\mu\text{g/L}$) was detected in Well W-14 and detected to a lesser extent in wells W-12, W-13, W-15, W-17, and W-19. The highest concentration of TBA (1,700 $\mu\text{g/L}$) was detected in Well W-12 with lesser concentrations reported in the groundwater samples collected from wells W-13, W-14, and W-17. DIPE, ETBE and TAME were not detected in groundwater samples.

A hydrocarbon distribution in groundwater map is presented as Figure 4. Isoconcentration and concentration maps for TPH-d, TPH-g, benzene, MTBE and TBA during the fourth quarter 2005 monitoring event are provided as Figures 5 through 9. Historical groundwater analytical results are provided in Table 3.



LEGEND

MW-1 GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION

D-1 SAMPLING LOCATION AND DESIGNATION

TPH-9 TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

TPH-d TOTAL PETROLEUM HYDROCARBONS AS DIESEL

MTBE METHYL TERT-BUTYL ETHER

TBA TERT-BUTYL ALCOHOL

mg/Kg MILLIGRAMS PER KILOGRAM

ND< LIMIT DETECTED ABOVE

ND< NOT DETECTED ABOVE

• THE SAMPLE CHROMATOGRAPHIC PATTERN FOR TPH DOES NOT MATCH THE PATTERN OF THE SPECIFIED STANDARD QUANTIFICATION OF THE UNKNOWN HYDROCARBON(S) WAS BASED UPON THE SPECIFIED STANDARD.

•• INSTALLED 11/05, SURVEY PENDING.



Delta ENVIRONMENTAL CONSULTANTS INC.
SHELL OIL PRODUCTS US
SHELL SERVICE STATION
AGOURA HILLS, CALIFORNIA

FIGURE 3
HYDROCARBON CONCENTRATIONS
IN SOIL MAP (JUST REMOVAL)
5226 PALO COMADO CANYON ROAD
AGOURA HILLS, CALIFORNIA

D-4 02/10/04 & 03/03/04

DEPTH (FT.)	TPH-9 (mg/Kg)	TPH-d (mg/Kg)	BENZENE (mg/Kg)	MTBE (mg/Kg)	TBA (mg/Kg)
2	270	260	0.12	ND<0.21	ND<2.1
4	90	86	ND<0.081	ND<0.16	ND<1.6
8	38	38	ND<0.013	0.36	0.22

T-1B 02/10/04 & 03/03/04

DEPTH (FT.)	TPH-9 (mg/Kg)	TPH-d (mg/Kg)	BENZENE (mg/Kg)	MTBE (mg/Kg)	TBA (mg/Kg)
14	2.6	ND<5.0	0.095	7.8	7.3
19	ND<0.22	78*	ND<0.094	3.1	1.4

T-2B 02/10/04 & 03/03/04

DEPTH (FT.)	TPH-9 (mg/Kg)	TPH-d (mg/Kg)	BENZENE (mg/Kg)	MTBE (mg/Kg)	TBA (mg/Kg)
14	2.6	ND<5.0	ND<0.096	2.6	2.1
19	0.63	ND<5.0	ND<0.095	1.1	ND<1.9

H-1 02/10/04

DEPTH (FT.)	TPH-9 (mg/Kg)	TPH-d (mg/Kg)	BENZENE (mg/Kg)	MTBE (mg/Kg)	TBA (mg/Kg)
9	ND<0.30	ND<5.0	ND<0.0011	ND<0.0022	ND<0.022

C-1 02/10/04 & 03/03/04

DEPTH (FT.)	TPH-9 (mg/Kg)	TPH-d (mg/Kg)	BENZENE (mg/Kg)	MTBE (mg/Kg)	TBA (mg/Kg)
8	ND<0.24	ND<5.0	ND<0.0090	0.0039	0.044
10	ND<0.22	390*	ND<0.0093	ND<0.0019	ND<0.019

WOT 02/10/04 & 03/03/04

DEPTH (FT.)	TPH-9 (mg/Kg)	TPH-d (mg/Kg)	BENZENE (mg/Kg)	MTBE (mg/Kg)	TBA (mg/Kg)
10	ND<0.24	ND<5.0	ND<0.0011	0.059	1.9
11	ND<0.23	ND<5.0	ND<0.0096	0.029	ND<0.019

T-3B 02/10/04 & 03/03/04

DEPTH (FT.)	TPH-9 (mg/Kg)	TPH-d (mg/Kg)	BENZENE (mg/Kg)	MTBE (mg/Kg)	TBA (mg/Kg)
14	0.91	ND<5.0	0.33	0.81	ND<1.9
19	ND<0.24	ND<5.0	ND<0.097	9.2	3.5

D-2 02/10/04 & 03/03/04

DEPTH (FT.)	TPH-9 (mg/Kg)	TPH-d (mg/Kg)	BENZENE (mg/Kg)	MTBE (mg/Kg)	TBA (mg/Kg)
2	430	1,200	ND<0.10	ND<0.20	ND<2.0
4	ND<0.27	ND<5.0	ND<0.0011	ND<0.0022	0.31
8	ND<0.22	ND<5.0	ND<0.0083	ND<0.0017	ND<0.017

D-1 02/10/04

DEPTH (FT.)	TPH-9 (mg/Kg)	TPH-d (mg/Kg)	BENZENE (mg/Kg)	MTBE (mg/Kg)	TBA (mg/Kg)
2	ND<0.26	ND<5.0	ND<0.0010	ND<0.0021	ND<0.021
4	ND<0.27	ND<5.0	ND<0.0011	ND<0.0022	ND<0.022

T-4B 02/10/04 & 03/03/04

DEPTH (FT.)	TPH-9 (mg/Kg)	TPH-d (mg/Kg)	BENZENE (mg/Kg)	MTBE (mg/Kg)	TBA (mg/Kg)
14	180	29	0.091	2.6	1.9
19	ND<0.30	ND<5.0	ND<0.0017	0.38	0.10

T-3A 02/10/04 & 03/03/04

DEPTH (FT.)	TPH-9 (mg/Kg)	TPH-d (mg/Kg)	BENZENE (mg/Kg)	MTBE (mg/Kg)	TBA (mg/Kg)
14	4.4	ND<5.0	0.0076	0.64	0.61
19	ND<0.26	ND<5.0	0.0028	0.055	0.083

T-4A 02/10/04 & 03/03/04

DEPTH (FT.)	TPH-9 (mg/Kg)	TPH-d (mg/Kg)	BENZENE (mg/Kg)	MTBE (mg/Kg)	TBA (mg/Kg)
14	0.30	ND<5.0	0.0021	1.7	0.20
19	ND<0.22	ND<5.0	ND<0.0087	0.016	ND<0.017

D-3 02/10/04 & 03/03/04

DEPTH (FT.)	TPH-9 (mg/Kg)	TPH-d (mg/Kg)	BENZENE (mg/Kg)	MTBE (mg/Kg)	TBA (mg/Kg)
2	11,000	4,300	60	ND<19	ND<19
4	4,700	3,900	15	ND<0.20	ND<2.0
8	2.3	9.5	0.0035	0.063	ND<1.5

T-1A 02/10/04 & 03/03/04

DEPTH (FT.)	TPH-9 (mg/Kg)	TPH-d (mg/Kg)	BENZENE (mg/Kg)	MTBE (mg/Kg)	TBA (mg/Kg)
14	3.1	ND<5.0	ND<0.10	6.9	6.5
19	ND<0.28	ND<5.0	ND<0.0012	0.052	0.037

T-2A 02/10/04 & 03/03/04

DEPTH (FT.)	TPH-9 (mg/Kg)	TPH-d (mg/Kg)	BENZENE (mg/Kg)	MTBE (mg/Kg)	TBA (mg/Kg)
14	4.0	ND<5.0	0.11	12	2.4
19	ND<0.23	ND<5.0	ND<0.00989	0.0078	ND<0.018

P-1 02/10/04

DEPTH (FT.)	TPH-9 (mg/Kg)	TPH-d (mg/Kg)	BENZENE (mg/Kg)	MTBE (mg/Kg)	TBA (mg/Kg)
4	ND<0.23	ND<5.0	0.0018	ND<0.0020	ND<0.020



PROJECT NUMBER: _____
DRAWN BY: _____
CHECKED BY: _____
APPROVED BY: _____

SUSTAINABLE STRATEGIES FOR GLOBAL LEADERS

July 13, 2009
DELTA Project No. SCA5226P1A
SAP No. 121366
Dr. Yue Rong
State of California, Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street
Los Angeles, CA 90013

Delta, 2009 6



**Re: SECOND QUARTER 2009
GROUNDWATER MONITORING REPORT
Former Shell Service Station/Active Alliance Station
5226 Palo Comado Canyon Road
Agoura Hills, California 91301
EAOP Site No. I-05924A**

Dear Dr. Rong:

On behalf of Equilon Enterprises LLC dba Shell Oil Products (SHELL), Delta Consultants (DELTA) has prepared this *Second Quarter 2009 Groundwater Monitoring Report* for the above referenced site. The sampling activities at the site were conducted by Blaine Tech Services, Inc. (BTS) under contract to SHELL, and included the collection and analyses of groundwater samples and the collection of static water level measurements. DELTA did not provide any oversight of Blaine Tech Services, Inc. work or protocol. A DELTA staff member, under the supervision of a California Registered Civil Engineer or a California Professional Geologist, performed evaluation of the data provided to us. This report is also being distributed to the current property owner, Mr. Ben Hazany.

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



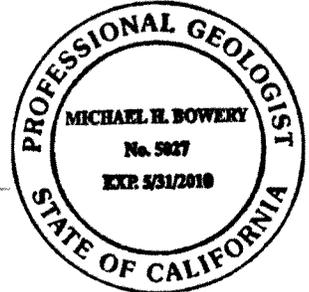
Dr. Yue Rong
State of California Regional Water Quality Control Board Los Angeles Region
July 13, 2009
Page 2

If you have any questions regarding this site, please contact Ms. Katherine Winsor (DELTA Project Manager) at (626) 873-2719 or Ms. Monica Ortega (DELTA) at (626) 873-2728. The SHELL Project Manager is Ms. Deborah Pryor; Ms. Pryor may be reached at (323) 291-9595.

Sincerely,
Delta Consultants

for Monica Ortega
Katherine Winsor
Senior Scientist

Michael H. Bowery
Michael H. Bowery, P.G. 5027
Senior Specialist/Geology



Attachment: Second Quarter 2009 Groundwater Monitoring Report

cc: Ms. Deborah Pryor, Shell Oil Products US
Mr. Manny Regalado, Los Angeles County Department of Public Works
Mr. Ben Hazany, Property Owner
Ms. Monica Ortega, DELTA.

July 13, 2009

SHELL QUARTERLY GROUNDWATER MONITORING REPORT

Station Address: 5226 Palo Comado Canyon Road,
Agoura Hills, California

DELTA Project No.: SCA5226P1A

SHELL Project Manager/Phone No.: Deborah Pryor / (323) 291-9595

DELTA Project Manager/Phone No.: Katherine Winsor / (626) 873-2719

Primary Agency/Regulatory ID No.: LARWQCB / Dr. Yue Rong EAOP Site No.
I-05924A

Other Agencies to Receive Copies: LACDPW / Manny Regalado

WORK PERFORMED THIS QUARTER:

1. Conducted quarterly groundwater monitoring and sampling.
2. Submitted quarterly groundwater monitoring report.
3. Conducted additional off-site groundwater and soil assessment in March 2009..

WORK PROPOSED FOR NEXT QUARTER:

1. Conduct quarterly groundwater monitoring and sampling; continue to monitor for natural attenuation parameters.
2. Submit quarterly groundwater monitoring report.
3. Submit off-site confirmation boring report (CB-27-CB-30).
4. Propose groundwater monitoring report frequency reduction from quarterly to semi-annual.

Current Phase of Project: Groundwater Monitoring / Passive Remediation

Site Use: Active Alliance Service Station

Site and Surrounding Description: Commercial / Residential

Frequency of Sampling: Quarterly

Frequency of Monitoring: Quarterly

Is Separate Phase Hydrocarbon Yes No

Present On-site (Well #'s):

Cumulative SPH Recovered to Date: NA

SPH Recovered this Quarter: None

Groundwater Removed This Quarter: 312.5 gallons were recovered via purging during the sampling event conducted on April 14, 2009.

Groundwater Removed to Date: NA

Receptors in Site Vicinity: Nearest office-verified well is State Well No. 01N19W14K004S approximately 6.5 miles west of the site.

SHELL QUARTERLY GROUNDWATER MONITORING REPORT (CONT.)

General Site Lithology:	Bedrock observed at the site during the previous UST removal activities consisting primarily of thin to medium and fair to well bedded, jointed siltstone with sandstone. As observed in borehole samples and nearby road cuts, bedding dips moderately to the northeast and orthogonal joint fractures generally dip steeply.
Current Remediation Techniques:	None
Permits for Discharge:	None
Approximate Depth to Groundwater:	9.27 to 27.55 feet below top of casing.
Groundwater Gradient:	Southwest @ approximately 0.12 ft/ft.
Current Agency Correspondence:	LARWQCB letters dated February 15, 2005 and January 18, 2006.
Date of Most Recent Work Plan:	NA – Expedited Agency Oversight Program (EAOP) – self directed.
Site History:	
Case Opening	Site file was reopened in 2004 following UST removal.
On-Site Assessment	2004
Off-Site Assessment	2005
Passive Remediation	2006, 2007
Active Remediation	None
Closure	NA
Summary of Unusual Activity:	All wells were dewatered during purging activities except wells W-11 and W-14.

Discussion:

Groundwater conditions observed during the second quarter 2009 remained generally consistent with the previous quarters. Total Purgeable Petroleum Hydrocarbons (TPPH) analyzed using 8260B were reported in three groundwater sample concentrations ranging from 56 micrograms per liter ($\mu\text{g/L}$) of 88 micrograms per liter ($\mu\text{g/L}$). MTBE was reported in six samples with concentrations ranging from 1.7 $\mu\text{g/L}$ (W-13) to 10 $\mu\text{g/L}$ (W-19). TBA was reported in four samples with concentrations ranging from 17 $\mu\text{g/L}$ (W-19) to 780 $\mu\text{g/L}$ (W-17). Concentrations continue to decline in wells W-12 through W-14, and W-19, and have remained essentially stable in wells W-15 and W-17. Concentrations of TPH-d (diesel fuel), BTEX compounds, DIPE, ETBE, TAME, and ethanol were not reported above their respective laboratory reporting limits in any of the samples analyzed.

Monitored natural attenuation (MNA) parameters, including sulfate, nitrate, ferrous iron, dissolved oxygen (DO), and oxygen reduction potential (ORP) were evaluated to determine the effectiveness of on-going bio-attenuation. During the past twelve quarters (since July 2006), sulfate concentrations have ranged between 2,100 and 2,900 milligrams per liter (mg/L) in upgradient well W-15, between 1,200 and 3,100 mg/L in wells within the plume (wells W-13 and W-14), and between 520 and 4,200 mg/L in downgradient wells (wells W-17, W-18, and W-20). Based on the results of the MNA analysis, it appears that bio-attenuation is occurring at the site and will continue.

ATTACHMENTS:

Tables:

Table 1 – Well and Boring Data

Table 2 – Current Groundwater Gauging and Analytical Results

Table 3 – Historical Groundwater Gauging and Analytical Results

Figures:

Figure 1 – Site Location Map

Figure 2 – Groundwater Elevation Contour Map 4/14/2009

Figure 3 – Groundwater Hydrocarbon Distribution Map 4/14/2009

Figure 4 – MTBE Isoconcentration Map 4/14/2009

Figure 5 – TBA Isoconcentration Map 4/14/2009

Graphs:

Graph 1 – Groundwater Elevations & TPH-g/Benzene/MTBE/TBA Concentrations vs. Time (Well W-12)

Graph 2 – Groundwater Elevations & TPH-g/Benzene/MTBE/TBA Concentrations vs. Time (Well W-13)

Graph 3 – Groundwater Elevations & TPH-g/Benzene/MTBE/TBA Concentrations vs. Time (Well W-17)

Graph 4 – Groundwater Elevations & TPH-g/Benzene/MTBE/TBA Concentrations vs. Time (Well W-19)

Appendices:

Appendix A – Agency Communications

Appendix B – Blaine Tech Services, Inc. Field Data Sheets

Appendix C – Blaine Tech Services, Inc Field Procedures

Appendix D – Waste Disposal Documentation

Appendix E – Certified Analytical Report and Chain-of-Custody Documentation

TABLES

Table 1

Well and Boring Data
5226 Palo Comado Canyon Road, Agoura Hills, California

Name	Type	Date Drilled/ Installed	Approx. Surf. Elev. (ft. AMSL)	Total Depth (ft)	Soil Sample Iner. (ft)	Depth (ft)	First GW Depth (ft)	Elev. (ft. AMSL)	Screen Diameter (in.)	Screen Depth (ft)		Comments
										Top	Bottom	
C-1	boring (auger)	05/01/91	unknown	21.5	5	5-20	-	-	-	-	-	Drilled by TES
C-2	boring (auger)	05/01/91	unknown	21.5	5	5-20	-	-	-	-	-	Drilled by TES
C-3	boring (auger)	05/01/91	unknown	21.5	5	5-20	-	-	-	-	-	Drilled by TES
C-4	boring (auger)	05/01/91	unknown	21.5	5	5-20	-	-	-	-	-	Drilled by TES
C-5	boring (auger)	06/05/91	unknown	21	5	5-20	-	-	-	-	-	Drilled by TES
C-6	boring (auger)	06/05/91	unknown	21	5	5-20	-	-	-	-	-	Drilled by TES
C-7	boring (auger)	06/05/91	unknown	21	5	5-20	-	-	-	-	-	Drilled by TES
C-8	boring (auger)	04/30/91	unknown	21.5	5	5-20	-	-	-	-	-	Drilled by TES
C-9	boring (auger)	04/30/91	unknown	21.5	5	5-20	-	-	-	-	-	Drilled by TES
C-10	boring (auger)	04/30/91	unknown	30.5	5	5-30	-	-	-	-	-	Drilled by TES
W-11	GW Monitor Well	unknown	936.26	unknown	unknown	16.1	920.21	unknown	unknown	unknown	unknown	Drilled by TES
W-12	GW Monitor Well	07/24/92	933.26	35	5	5-35	14.4	918.87	4	5	35	unknown
W-13	GW Monitor Well	07/23/92	933.76	35	5	5-35	10.5	923.24	4	5	35	Installed by TES
W-14	GW Monitor Well	07/23/92	935.12	45	5	5-45	12.2	922.94	4	10	45	Installed by TES
W-15	GW Monitor Well	05/19/93	934.4	31	-	5, 8, 30	15.4	919.02	4	5	30	Installed by TES
W-16	GW Monitor Well	05/19/93	unknown	34	-	5	23.93	unknown	4	5	30	Installed by ENV
W-17	GW Monitor Well	05/19/93	931.87	31	-	5, 8, 30	19.48	912.39	4	5	30	Installed by ENV
W-18	GW Monitor Well	03/17/94	932.84	30.5	5	5-30	27.70	905.14	4	5	30	Installed by ENV
W-19	GW Monitor Well	03/17/94	930.43	30.5	5	5-30	16.87	913.56	4	5	30	Installed by ENV
W-20	GW Monitor Well	11/16/05	933.69	31	continuous	10-30	23.50	TBD	4	6	31	Installed by DEC
CB-21	boring (auger)	12/11/07	unknown	15	8, 12, 15	-	-	-	-	-	-	Drilled by DELTA
CB-22	boring (auger)	12/11/07	unknown	15	8, 12, 15	-	-	-	-	-	-	Drilled by DELTA
CB-25	boring (auger)	12/11/07	unknown	15	8, 12, 15	-	-	-	-	-	-	Drilled by DELTA
CB-26	boring (auger)	12/11/07	unknown	15	8, 12, 15	-	-	-	-	-	-	Drilled by DELTA
CB-27	boring (auger)	03/13/09	unknown	25	5	5-25	-	-	-	-	-	Drilled by DELTA
CB-28	boring (auger)	03/13/09	unknown	25	5	8, 10-25	-20	-	-	-	-	Drilled by DELTA
CB-29	boring (auger)	03/12/09	unknown	20	5	5-20	-	-	-	-	-	Drilled by DELTA
CB-30	boring (auger)	03/12/09	unknown	20	5	5-20	-20	-	-	-	-	Drilled by DELTA

Notes:

- AMSL = Above mean sea level
- = Not applicable
- N/A = Data not available
- DEC = Delta Environmental Consultants, Inc.
- TES = Texaco Environmental Services
- ENV = ENV America, Inc.

TABLE 2 CURRENT GROUNDWATER GAUGING AND ANALYTICAL RESULTS 5226 Palo Comado Canyon Road, Agoura Hills, California																					
DATE	DEPTH (feet)	SPH (feet)	GW ELEV. (ft relative to MSL)	TPH-D (ug/L)	TPHC (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL- BENZENE (ug/L)	TOTAL XYLENES (ug/L)	MTBE (ug/L)	TBA (ug/L)	DIPE 8260 (ug/L)	ETBE 8260 (ug/L)	TAME 8260 (ug/L)	ETHANOL METHANE 8260 (ug/L)	Fe 2+ (mg/L)	Nitrate-N (mg/L)	Sulfate (mg/L)	DO (mg/L)	ORP (mV)	COMMENTS
W-11	10.46	0.00	925.80	ND<500	ND<50 a	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<0.00100	ND<0.10	1.3 b	2100	0.6100.61	132.57	
W-12	10.24	0.00	923.02	ND<500	67 a	ND<1.0	ND<1.0	ND<1.0	ND<1.0	4.0	360	ND<2.0	ND<2.0	ND<2.0	0.00109	ND<0.20 b	ND<0.20 b	2100	0.530.62	112.31	
W-13	10.34	0.00	923.42	ND<500	56 a	ND<1.0	ND<1.0	ND<1.0	ND<1.0	1.7	ND<1.0	ND<2.0	ND<2.0	ND<2.0	0.00737	0.61	ND<0.20 b	2200	0.450.64	47.68	
W-14	11.70	0.00	923.42	ND<500	ND<50 a	ND<1.0	ND<1.0	ND<1.0	ND<1.0	3.1	72	ND<2.0	ND<2.0	ND<2.0	ND<0.00100	ND<0.10	0.20	1200	0.620.53	16.44	
W-15	10.15	0.00	924.25	ND<500	ND<50 a	ND<1.0	ND<1.0	ND<1.0	ND<1.0	2.9	ND<1.0	ND<2.0	ND<2.0	ND<2.0	0.00101	ND<0.10	ND<0.20 b	2400	0.500.79	92.50	
W-16	9.27	0.00	921.73	ND<500	ND<50 a	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<0.00100	ND<0.10	0.40	2800	0.7900.77	23.23	
W-17	16.45	0.00	915.44	ND<500	88 a	ND<1.0	ND<1.0	ND<1.0	ND<1.0	8.1	780	ND<2.0	ND<2.0	ND<2.0	0.00326	12	ND<0.20 b	2900	0.800.76	-26--8	
W-18	27.35	0.00	905.29	ND<500	ND<50 a	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<2.0	ND<2.0	ND<2.0	0.00243	0.28	ND<0.20 b	1600	0.780.23	-30.4	
W-19	11.45	0.00	918.58	ND<500	ND<50 a	ND<1.0	ND<1.0	ND<1.0	ND<1.0	10	17	ND<2.0	ND<2.0	ND<2.0	0.00126	ND<0.10	ND<0.20 b	2400	0.950.84	85.73	
W-20	24.13	0.00	909.36	ND<500	ND<50 a	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<2.0	ND<2.0	ND<2.0	0.00139	0.58	0.75	1300	0.720.63	85.36	

Notes:
 GW = groundwater
 SPH = separate-phase hydrocarbons
 MSL = mean sea level
 ND = not detected
 ug/L = parts per billion
 TPH-D = total petroleum hydrocarbons as diesel analyzed using the California DHS LUFT Method
 TPH-G = total petroleum hydrocarbons as gasoline analyzed using the California DHS LUFT Method
 Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8260B
 MTBE = methyl tertiary butyl ether analyzed using EPA Method 8260B
 TBA = tertiary butyl alcohol analyzed using EPA Method 8260B
 DIPE = diisopropyl ether analyzed using EPA Method 8260B
 ETBE = ethyl tertiary butyl ether analyzed using EPA Method 8260B
 TAME = tertiary amyl methyl ether analyzed using EPA Method 8260B
 Fe 2+ = iron
 DO = dissolved oxygen
 ORP = Oxidation-Reduction Potential
 * - hydrocarbon does not match pattern of laboratory's standard
 RL-1 = reporting limit raised due to sample matrix effect
 a - total purgeable hydrocarbons using 8260B
 b - The reporting limit is elevated resulting from matrix interference.
 Ethanol analyzed using EPA Method 801.5B prior to 3/04
 Wells W-11 through W-15 and W-17 through W-19 surveyed on February 23, 2004 by Azamult Group of Ventura, CA
 Wells W-16 and W-20 surveyed on July 24, 2006 by DULIN and BOYNTON, CA

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL RESULTS
 5226 Palo Comado Canyon Road, Agoura Hills, California

DATE	DEPTH TO GW THICKN. (ft)	SPH GW ELEV. (ft)	TPH-D TO MSL (ft)	TPH-G (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL-BENZENE (ug/L)	TOTAL XYLENES (ug/L)	MTBE (ug/L)	TBA (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	ETHANOL METHANE 8260 (ug/L)	Fe 2+ (mg/L)	Nitrate-N (mg/L)	Sulfate (mg/L)	DO (mg/L)	ORP (mV)	COMMENTS
W-11																				
1/26/2004	10.59	0.00	Top of casing elevation (ft): unknown																	
1/30/2004	16.05	0.00	ND<10000	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
4/23/2004	10.30	0.00	Top of casing elevation (ft): 936.26	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
7/21/2004	10.67	0.00	925.96	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
10/14/2004	10.10	0.00	926.16	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
4/19/2005	9.71	0.00	934.95	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
7/26/2005	9.84	0.00	926.55	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
10/24/2005		0.00	1600	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
1/10/2006		0.00		ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
4/5/2006		0.00		ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						Unable to access well
7/24/2006		0.00		ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						Unable to access well
10/11/2006		0.00		ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						Unable to access well
1/31/2007		0.00		ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						Unable to access well
4/4/2007		0.00		ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						Unable to access well
7/12/2007	10.23	0.00	926.03	ND<470	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<10	ND<1.0	ND<1.0	ND<1.0	ND<150	ND<0.0010	0.28	2200	0.16<0.09	109/98	Unable to access well
10/11/2007	10.20	0.00	926.06	ND<470	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<10	ND<1.0	ND<1.0	ND<1.0	ND<150	ND<0.10	0.29	2300	0.34<0.17	107/86	Unable to access well
1/16/2008	10.17	0.00	926.09	ND<480	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<10	ND<1.0	ND<1.0	ND<1.0	ND<150	ND<0.10	0.44	2200	0.27<0.16	174.8	Unable to access well
4/3/2008	9.85	0.00	926.41	ND<500	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<0.0010	0.57	3100	0.35<0.32	79/60	Unable to access well
7/18/2008	9.97	0.00	926.29	ND<500	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<0.0010	0.22	2700	0.26<0.35	155/183	Unable to access well
10/8/2008	10.30	0.00	925.96	ND<500	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<0.0010	0.22	2300	0.73<0.36	38/116	Unable to access well
1/14/2009	10.33	0.00	925.93	ND<500	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<0.0010	ND<0.10	2800	0.51<0.21	159.3	Unable to access well
4/14/2009	10.46	0.00	925.80	ND<500	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<0.0010	1.3 b	2100	0.60<0.61	132/37	Unable to access well
W-12																				
1/26/2004	11.40	0.00	Top of casing elevation (ft): unknown																	
1/30/2004	14.39	0.00	ND<10000	4200	5.7	ND<1.0	ND<1.0	ND<1.0	45000	15000	ND<2.0	ND<2.0	17	ND<100						
4/23/2004																				
7/21/2004	15.11	0.00	680	180	ND<200	ND<200	ND<200	ND<200	ND<200	29000	ND<400	ND<400	ND<400	ND<20000	ND<0.050	ND<0.10	2000	0.67<1.15	-71/-26	Unable to locate
10/14/2004	14.52	0.00	918.74	ND<500	ND<50	ND<50	ND<50	ND<50	ND<50	24000	ND<100	ND<100	ND<100	ND<5000	ND<0.050	ND<0.10	2300	1.76<0.47	18.3	Unable to locate
1/11/2005	5.16	0.00	928.10	ND<50	ND<25	ND<50	ND<50	ND<50	ND<50	170	ND<100	ND<100	ND<100	ND<5000	ND<0.050	ND<0.10	2300	0.60<0.28	84/-89	Unable to locate
4/19/2005	4.80	0.00	928.46	ND<50	ND<25	ND<50	ND<50	ND<50	ND<50	4100	ND<10	ND<10	ND<10	ND<500	ND<0.050	ND<0.10	2000	0.31<0.23	157/90	Unable to locate
7/26/2005	4.75	0.00	928.51	ND<50	ND<25	ND<50	ND<50	ND<50	ND<50	4800	ND<20	ND<20	ND<20	ND<500	ND<0.050	ND<0.10	2000	0.25<0.10	-22/108	Unable to locate
10/24/2005	5.10	0.00	928.16	ND<50	ND<10	ND<10	ND<10	ND<10	ND<10	1700	ND<40	ND<40	ND<40	ND<200	ND<0.050	ND<0.10	2100	0.47<0.26	10/56	Unable to locate
1/10/2006	5.29	0.00	927.97	ND<500	ND<10	ND<20	ND<20	ND<20	ND<20	30	ND<40	ND<40	ND<40	ND<200	ND<0.050	ND<0.10	2100	0.15<0.13	8/-15	Unable to locate
4/5/2006	5.45	0.00	927.81	ND<470	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	28	ND<10	ND<10	ND<10	ND<150	ND<0.050	ND<0.10	2100	0.15<0.13	8/-15	Unable to locate
7/24/2006	6.74	0.00	926.52	ND<470	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	30	ND<10	ND<10	ND<10	ND<150	ND<0.050	ND<0.10	2100	0.15<0.13	8/-15	Unable to locate
10/11/2006	7.10	0.00	926.16	ND<470	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	43	ND<40	ND<40	ND<40	ND<150	ND<0.050	ND<0.10	2100	0.15<0.13	8/-15	Unable to locate
1/31/2007	9.22	0.00	924.04	ND<470	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	15	ND<10	ND<10	ND<10	ND<150	ND<0.050	ND<0.10	2100	0.15<0.13	8/-15	Unable to locate
4/4/2007	9.63	0.00	923.67	ND<500	ND<10	ND<10	ND<10	ND<10	ND<10	5.9	ND<20	ND<20	ND<20	ND<100	ND<0.050	ND<0.10	2100	0.15<0.13	8/-15	Unable to locate
7/12/2007	10.59	0.00	922.67	ND<480	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	8.3	ND<10	ND<10	ND<10	ND<100	ND<0.050	ND<0.10	2100	0.15<0.13	8/-15	Unable to locate
10/11/2007	10.55	0.00	922.71	ND<480	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	7.6	ND<10	ND<10	ND<10	ND<100	ND<0.050	ND<0.10	2100	0.15<0.13	8/-15	Unable to locate
1/16/2008	10.53	0.00	922.73	ND<480	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	8.0	ND<10	ND<10	ND<10	ND<100	ND<0.050	ND<0.10	2100	0.15<0.13	8/-15	Unable to locate
4/3/2008	7.55	0.00	925.93	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	390	ND<10	ND<10	ND<10	ND<150	ND<0.050	ND<0.10	2100	0.15<0.13	8/-15	Unable to locate
7/18/2008	8.22	0.00	925.04	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	360	ND<20	ND<20	ND<20	ND<100	ND<0.050	ND<0.10	2100	0.15<0.13	8/-15	Unable to locate
10/8/2008	10.05	0.00	923.21	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4.8	ND<20	ND<20	ND<20	ND<100	ND<0.050	ND<0.10	2100	0.15<0.13	8/-15	Unable to locate
1/14/2009	10.71	0.00	923.55	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	370	ND<20	ND<20	ND<20	ND<100	ND<0.050	ND<0.10	2100	0.15<0.13	8/-15	Unable to locate
4/14/2009	10.24	0.00	923.02	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.3	ND<20	ND<20	ND<20	ND<100	ND<0.050	ND<0.10	2100	0.15<0.13	8/-15	Unable to locate

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL RESULTS
5226 Palo Comado Canyon Road, Agoura Hills, California

DATE	DEPTH TO GW THICKN. (feet)	SPH (feet)	GW ELEV. (ft relative to MSL)	TPH-D (ug/L)	TPH-G (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL-BENZENE (ug/L)	TOTAL XYLENES (ug/L)	MTBE (ug/L)	TBA (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	ETHANOL (ug/L)	METHANE (ug/L)	Fe ²⁺ (mg/L)	Nitrate-N (mg/L)	Sulfate (mg/L)	DO (mg/L)	ORP (mV)	COMMENTS
W-13																						
1/26/2004	10.90	0.00																				
1/30/2004	10.52	0.00																				
	Top of casing elevation (ft): unknown																					
	10.52	0.00																				
	Top of casing elevation (ft): 933.76																					
4/23/2004	13.58	0.00	920.18	1200	980 *	ND<500	ND<500	ND<500	ND<500	820	25000	ND<200	ND<1000	ND<1000	ND<100							
7/21/2004	13.45	0.00	920.31	ND<500	190	ND<100	ND<200	ND<200	ND<200	230	35000	ND<400	ND<400	ND<20000	ND<100							
10/14/2004	12.45	0.00	921.31	380 *	ND<10	ND<20	ND<20	ND<20	ND<20	50	17000	ND<40	ND<40	ND<2000	ND<2000							
1/11/2005	1.95	0.00	931.81	ND<500	ND<50	ND<10	ND<20	ND<20	ND<20	100	960	ND<40	ND<40	ND<40	ND<200							
4/19/2005	3.45	0.00	930.31	ND<500	210 *	ND<10	ND<20	ND<20	ND<20	170	1400	ND<40	ND<40	ND<200	ND<200							
7/26/2005	9.08	0.00	924.68	ND<500	50	ND<10	ND<20	ND<20	ND<20	49	1800	ND<40	ND<40	ND<200	ND<200							
10/24/2005	4.37	0.00	929.39	ND<500	110	ND<10	ND<20	ND<20	ND<20	19	880	ND<40	ND<40	ND<200	ND<200							
1/10/2006	3.91	0.00	929.85	ND<470	94	ND<0.50	ND<0.50	ND<0.50	ND<0.50	16	710	ND<10	ND<10	ND<40	ND<200							
4/5/2006	6.67	0.00	928.98	ND<470	110	ND<0.50	ND<0.50	ND<0.50	ND<0.50	16	710	ND<10	ND<10	ND<40	ND<200							
7/24/2006	6.67	0.00	927.09	ND<470	58	ND<0.50	ND<0.50	ND<0.50	ND<0.50	9.0	440	ND<10	ND<10	ND<150	ND<150							
10/11/2006	7.30	0.00	926.46	ND<470	58	ND<0.50	ND<0.50	ND<0.50	ND<0.50	9.0	230	ND<10	ND<10	ND<150	ND<150							
1/31/2007	9.34	0.00	924.42	ND<470	58	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4.5	310	ND<10	ND<10	ND<150	ND<150							
4/4/2007	9.99	0.00	923.77	ND<500	ND<50	ND<10	ND<20	ND<20	ND<20	3.6	410	ND<10	ND<10	ND<20	ND<200							
7/12/2007	10.87	0.00	922.89	ND<470	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.4	240	ND<10	ND<10	ND<150	ND<150							
10/11/2007	10.80	0.00	922.89	ND<470	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.4	240	ND<10	ND<10	ND<150	ND<150							
1/16/2008	10.69	0.00	923.07	ND<480	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.5	77	ND<10	ND<10	ND<150	ND<150							
4/5/2008	6.87	0.00	926.89	ND<500	65 a	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.5	15	ND<20	ND<20	ND<200	ND<200							
7/18/2008	8.56	0.00	925.20	ND<500	83 a	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.5	15	ND<20	ND<20	ND<200	ND<200							
10/8/2008	10.06	0.00	923.70	ND<500	ND<50 a	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.2	16	ND<20	ND<20	ND<200	ND<200							
1/14/2009	10.87	0.00	922.89	ND<500	ND<50 a	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.0	11	ND<20	ND<20	ND<200	ND<200							
4/14/2009	10.34	0.00	923.42	ND<500	56 a	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.7	ND<10	ND<20	ND<20	ND<200	ND<200							
W-14																						
1/26/2004	11.85	0.00																				
1/30/2004	12.18	0.00																				
	Top of casing elevation (ft): 935.12																					
	12.18	0.00																				
4/23/2004																						
7/21/2004																						
10/14/2004	14.19	0.00	920.93	ND<500	2100 *	ND<13	ND<25	ND<25	ND<25	2500	360	ND<50	ND<50	ND<2500	ND<2500							
1/11/2005	3.35	0.00	931.77	ND<500	ND<50	ND<0.50	ND<10	ND<10	ND<10	16	ND<10	ND<20	ND<20	ND<200	ND<200							
4/11/2005	4.51	0.00	930.61	ND<500	390 *	1.4	ND<10	ND<10	ND<10	560	280	ND<20	ND<20	ND<100	ND<100							
7/26/2005	5.29	0.00	929.83	3400	320 *	ND<0.50	ND<10	ND<10	ND<10	4600	460	ND<20	ND<20	3.5	ND<1000							
10/24/2005	5.89	0.00	929.23	ND<500	840 *	ND<50	ND<10	ND<10	ND<10	1400	620	ND<20	ND<20	ND<1000	ND<1000							
1/10/2006	5.73	0.00	929.39	ND<470	130	ND<0.50	ND<0.50	ND<0.50	ND<0.50	130	570	ND<10	ND<10	ND<150	ND<150							
4/5/2006	6.10	0.00	929.02	ND<470	78	ND<0.50	ND<0.50	ND<0.50	ND<0.50	49	220	ND<10	ND<10	ND<150	ND<150							
7/24/2006	7.99	0.00	927.13	ND<470	59	ND<0.50	ND<0.50	ND<0.50	ND<0.50	49	520	ND<10	ND<10	ND<150	ND<150							
10/11/2006	8.63	0.00	926.49	ND<470	52	ND<0.50	ND<0.50	ND<0.50	ND<0.50	36	580	ND<10	ND<10	ND<150	ND<150							
1/31/2007	10.62	0.00	924.50	ND<470	52	ND<0.50	ND<0.50	ND<0.50	ND<0.50	60	520	ND<10	ND<10	ND<150	ND<150							
4/4/2007	11.31	0.00	923.81	ND<500	50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	18	300	ND<10	ND<10	ND<150	ND<150							
7/12/2007	12.19	0.00	922.93	ND<470	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	8.1	800	ND<10	ND<10	ND<150	ND<150							
1/10/2008	12.10	0.00	923.02	ND<470	54	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4.4	120	ND<10	ND<10	ND<150	ND<150							
1/16/2008	12.00	0.00	923.12	ND<480	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.4	42	ND<20	ND<20	ND<100	ND<100							
4/3/2008	8.24	0.00	926.88	ND<500	61 a	ND<0.50	ND<10	ND<10	ND<10	10	85	ND<20	ND<20	ND<100	ND<100							
7/18/2008	9.71	0.00	925.41	ND<500	57 a	ND<0.50	ND<10	ND<10	ND<10	12	160	ND<20	ND<20	ND<100	ND<100							
10/8/2008	11.55	0.00	923.57	ND<500	57 a	ND<0.50	ND<10	ND<10	ND<10	5.4	320	ND<20	ND<20	ND<100	ND<100							
1/14/2009	12.11	0.00	923.01	ND<500	ND<50 a	ND<0.50	ND<10	ND<10	ND<10	3.1	72	ND<20	ND<20	ND<100	ND<100							
4/14/2009	11.70	0.00	923.42	ND<500	ND<50 a	ND<0.50	ND<10	ND<10	ND<10	3.1	72	ND<20	ND<20	ND<100	ND<100							

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL RESULTS
5226 Palo Comado Canyon Road, Agoura Hills, California

DATE	DEPTH TO GW (feet)	SPH THICKN. (feet)	GW ELEV. (ft relative to MSL)	TPH-D (ug/L)	TPH-G (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL-BENZENE (ug/L)	TOTAL XYLENES (ug/L)	MTBE (ug/L)	TBA (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	ETHANOL METHANE (ug/L)	Fe ²⁺ (mg/L)	Nitrate-N (mg/L)	Sulfate (mg/L)	DO (mg/L)	ORP (mV)	COMMENTS
W-15																					
1/26/2004	11.33	0.00				ND<1.0	ND<1.0	ND<1.0	ND<1.0	3.6	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
1/30/2004	15.38	0.00				ND<1.0	ND<1.0	ND<1.0	ND<1.0	1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
	7.80	0.00	926.60			ND<1.0	ND<1.0	ND<1.0	ND<1.0		ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
4/23/2004						ND<1.0	ND<1.0	ND<1.0	ND<1.0		ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
7/21/2004						ND<1.0	ND<1.0	ND<1.0	ND<1.0		ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
10/14/2004	10.65	0.00	923.75			ND<1.0	ND<1.0	ND<1.0	ND<1.0	2.1	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
1/11/2005	3.42	0.00	930.98			ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
4/19/2005	7.89	0.00	926.51			ND<1.0	ND<1.0	ND<1.0	ND<1.0	1.2	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
7/26/2005	7.56	0.00	926.84			ND<1.0	ND<1.0	ND<1.0	ND<1.0	3.2	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
10/24/2005	8.20	0.00	926.20			ND<1.0	ND<1.0	ND<1.0	ND<1.0	2.9	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
1/10/2006	8.20	0.00	926.20			ND<1.0	ND<1.0	ND<1.0	ND<1.0	3.5	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
4/5/2006	6.85	0.00	927.55			ND<1.0	ND<1.0	ND<1.0	ND<1.0	3.4	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
7/24/2006	9.71	0.00	924.69			ND<1.0	ND<1.0	ND<1.0	ND<1.0	4.3	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
10/11/2006	9.95	0.00	924.45			ND<1.0	ND<1.0	ND<1.0	ND<1.0	4.7	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
1/31/2007	11.73	0.00	922.67			ND<1.0	ND<1.0	ND<1.0	ND<1.0	4.3	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
4/4/2007	10.34	0.00	924.06			ND<1.0	ND<1.0	ND<1.0	ND<1.0	4.1	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
7/12/2007	10.42	0.00	923.98			ND<1.0	ND<1.0	ND<1.0	ND<1.0	3.2	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
10/11/2007	10.38	0.00	924.02			ND<1.0	ND<1.0	ND<1.0	ND<1.0	2.2	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
1/16/2008	9.07	0.00	925.33			ND<1.0	ND<1.0	ND<1.0	ND<1.0	2.3	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
4/5/2008	9.62	0.00	924.78			ND<1.0	ND<1.0	ND<1.0	ND<1.0	2.7	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
7/18/2008	9.84	0.00	924.56			ND<1.0	ND<1.0	ND<1.0	ND<1.0	3.9	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
10/8/2008	10.88	0.00	923.52			ND<1.0	ND<1.0	ND<1.0	ND<1.0	2.2	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
1/14/2009	10.30	0.00	924.10			ND<1.0	ND<1.0	ND<1.0	ND<1.0	2.8	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
4/14/2009	10.15	0.00	924.25			ND<1.0	ND<1.0	ND<1.0	ND<1.0	2.9	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
W-16																					
1/26/2004	7.45	0.00				ND<1.0	ND<1.0	ND<1.0	ND<1.0		ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
1/30/2004	23.93	0.00				ND<1.0	ND<1.0	ND<1.0	ND<1.0	3.5	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
4/23/2004	9.14	0.00				ND<1.0	ND<1.0	ND<1.0	ND<1.0		ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
7/21/2004	8.85	0.00				ND<1.0	ND<1.0	ND<1.0	ND<1.0		ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
10/14/2004	7.77	0.00				ND<1.0	ND<1.0	ND<1.0	ND<1.0		ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
1/11/2005	5.89	0.00				ND<1.0	ND<1.0	ND<1.0	ND<1.0		ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
4/19/2005	5.43	0.00				ND<1.0	ND<1.0	ND<1.0	ND<1.0		ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
7/26/2005	6.57	0.00				ND<1.0	ND<1.0	ND<1.0	ND<1.0		ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
10/24/2005	6.65	0.00				ND<1.0	ND<1.0	ND<1.0	ND<1.0		ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
1/10/2006	8.22	0.00				ND<1.0	ND<1.0	ND<1.0	ND<1.0		ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
4/5/2006	8.15	0.00				ND<1.0	ND<1.0	ND<1.0	ND<1.0		ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
7/24/2006	7.61	0.00				ND<1.0	ND<1.0	ND<1.0	ND<1.0		ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
10/11/2006	9.03	0.00	921.97			ND<1.0	ND<1.0	ND<1.0	ND<1.0		ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
1/31/2007	10.62	0.00	920.38			ND<1.0	ND<1.0	ND<1.0	ND<1.0		ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
4/4/2007	10.40	0.00	920.60			ND<1.0	ND<1.0	ND<1.0	ND<1.0		ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
7/12/2007	12.14	0.00	918.86			ND<1.0	ND<1.0	ND<1.0	ND<1.0		ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
10/11/2007	12.05	0.00	918.95			ND<1.0	ND<1.0	ND<1.0	ND<1.0		ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
1/16/2008	8.88	0.00	922.12			ND<1.0	ND<1.0	ND<1.0	ND<1.0		ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
4/3/2008	6.76	0.00	924.24			ND<1.0	ND<1.0	ND<1.0	ND<1.0		ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
7/18/2008	9.24	0.00	921.76			ND<1.0	ND<1.0	ND<1.0	ND<1.0		ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
10/8/2008	10.23	0.00	920.77			ND<1.0	ND<1.0	ND<1.0	ND<1.0		ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
1/14/2009	11.31	0.00	919.69			ND<1.0	ND<1.0	ND<1.0	ND<1.0		ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
4/14/2009	9.27	0.00	921.73			ND<1.0	ND<1.0	ND<1.0	ND<1.0		ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL RESULTS
5226 Palo Comado Canyon Road, Agoura Hills, California

DATE	DEPTH TO GW THICKN. (feet)	SPH	GW ELEV. (ft) relative to MSL	TPH-D (ug/L)	TPH-G (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL-BENZENE (ug/L)	TOTAL XYLENES (ug/L)	MTBE (ug/L)	TBA (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	ETHANOL METHANE (ug/L)	Fe 2+ (mg/L)	Nitrate-N (mg/L)	Sulfate (mg/L)	DO (mg/L)	ORP (mV)	COMMENTS
W-17 1/26/2004	18.21	0.00																			
	19.48	0.00																			
4/23/2004	18.60	0.00	913.27	ND<1000	160	ND<0.50	ND<1.0	ND<1.0	ND<1.0	210	220	ND<2.0	ND<2.0	ND<2.0	ND<100						
	7/21/2004	18.92	0.00	912.95	ND<500	160*	ND<1.0	ND<2.0	ND<2.0	210	97	ND<4.0	ND<4.0	ND<4.0	ND<100						
10/14/2004	18.95	0.00	912.92	ND<500	190	ND<0.50	ND<1.0	ND<1.0	ND<1.0	170	38	ND<2.0	ND<2.0	ND<2.0	ND<100						
4/19/2005	11.79	0.00	920.08	ND<500	84	ND<0.50	ND<1.0	ND<1.0	ND<1.0	150	430	ND<2.0	ND<2.0	ND<2.0	ND<100						
7/26/2005	14.55	0.00	917.32	990	73	ND<0.50	ND<1.0	ND<1.0	ND<1.0	110	520	ND<2.0	ND<2.0	ND<2.0	ND<100						
10/24/2005	14.89	0.00	916.98	ND<500	200	ND<0.50	ND<1.0	ND<1.0	ND<1.0	85	400	ND<2.0	ND<2.0	ND<2.0	ND<100						
1/10/2006	15.40	0.00	916.47	ND<470	130	ND<0.50	ND<1.0	ND<1.0	ND<1.0	45	900	1.5	ND<1.0	ND<1.0	ND<150						
4/5/2006	15.32	0.00	916.55	ND<470	130	ND<0.50	ND<1.0	ND<1.0	ND<1.0	40	1300	ND<2.0	ND<2.0	ND<2.0	ND<3000						
7/24/2006	15.68	0.00	916.19	ND<470	130	ND<1.0	ND<1.0	ND<1.0	ND<1.0	33	1200	ND<2.0	ND<2.0	ND<2.0	ND<3000						
10/11/2006	15.53	0.00	916.34	ND<470	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	18	130	ND<1.0	ND<1.0	ND<1.0	ND<150						
1/31/2007	16.55	0.00	915.32	ND<470	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	14	500	ND<1.0	ND<1.0	ND<1.0	ND<150						
4/4/2007	16.84	0.00	915.03	ND<500	68	ND<2.0	ND<2.0	ND<2.0	ND<2.0	11	1300	ND<4.0	ND<4.0	ND<4.0	ND<600						
7/12/2007	17.08	0.00	914.79	ND<470	63	ND<0.50	ND<0.50	ND<0.50	ND<0.50	14	1500	ND<1.0	ND<1.0	ND<1.0	ND<150						
10/11/2007	16.98	0.00	914.89	ND<470	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<0.50	12	6200	ND<1.0	ND<1.0	ND<1.0	ND<1500						
1/16/2008	17.48	0.00	914.39	ND<480	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<0.50	14	620	ND<1.0	ND<1.0	ND<1.0	ND<1500						
4/3/2008	16.16	0.00	915.71	ND<500	120 a	ND<0.50	ND<1.0	ND<1.0	ND<1.0	16	1400	ND<2.0	ND<2.0	ND<2.0	ND<150						
7/18/2008	16.16	0.00	915.71	ND<500	190 a	ND<0.50	ND<1.0	ND<1.0	ND<1.0	16	1400	ND<2.0	ND<2.0	ND<2.0	ND<150						
10/8/2008	16.43	0.00	915.44	ND<500	150 a	ND<0.50	ND<1.0	ND<1.0	ND<1.0	11	1600	ND<4.0	ND<4.0	ND<4.0	ND<200						
1/14/2009	16.83	0.00	915.04	ND<500	58 a	ND<0.50	ND<1.0	ND<1.0	ND<1.0	9.4	730	ND<2.0	ND<2.0	ND<2.0	ND<100						
4/14/2009	16.43	0.00	915.44	ND<500	88 a	ND<0.50	ND<1.0	ND<1.0	ND<1.0	8.1	780	ND<2.0	ND<2.0	ND<2.0	ND<100						
W-18 1/26/2004	25.65	0.00																			
	27.70	0.00																			
1/30/2004	27.70	0.00																			
4/23/2004	28.44	0.00	904.40	ND<1000	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
	28.77	0.00	904.07	ND<500	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
10/14/2004	28.70	0.00	904.14	ND<500	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
1/11/2005	9.03	0.00	923.81	ND<500	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
4/19/2005	12.57	0.00	920.27	ND<500	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
7/26/2005	22.55	0.00	910.29	3000	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
10/24/2005	23.85	0.00	908.99	ND<500	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
1/10/2006	25.30	0.00	907.54	ND<470	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
4/5/2006	26.20	0.00	906.64	ND<470	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
7/24/2006	25.21	0.00	907.63	ND<470	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
10/11/2006	26.74	0.00	906.10	ND<470	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
1/31/2007	27.63	0.00	905.21	ND<470	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
4/4/2007	27.94	0.00	904.90	ND<500	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
7/12/2007	27.94	0.00	904.90	ND<470	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
10/11/2007	27.90	0.00	904.94	ND<480	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
1/16/2008	28.17	0.00	904.67	ND<470	ND<50	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
4/3/2008	17.58	0.00	915.26	ND<50	ND<50 a	ND<0.50	ND<1.0	ND<1.0	ND<1.0	51	51	ND<1.0	ND<1.0	ND<1.0	ND<150						
7/18/2008	25.21	0.00	907.63	ND<500	ND<50 a	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
10/8/2008	26.25	0.00	906.59	ND<500	ND<50 a	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
1/14/2009	26.73	0.00	906.11	ND<500	ND<50 a	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						
4/14/2009	27.55	0.00	905.29	ND<500	ND<50 a	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	ND<2.0	ND<2.0	ND<2.0	ND<100						

TABLE 3 HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL RESULTS 5226 Palo Comado Canyon Road, Agoura Hills, California																					
DATE	DEPTH (feet)	SPH (feet)	GW ELEV. (ft relative to MSL)	TPH-D (ug/L)	TPH-G (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL- BENZENE (ug/L)	TOTAL XYLENES (ug/L)	MTBE 8260 (ug/L)	TBA 8260 (ug/L)	DIPE 8260 (ug/L)	ETBE 8260 (ug/L)	TAME 8260 (ug/L)	ETHANOL METHANE 8260 (ug/L)	Fe 2+ (mg/L)	Nitrate-N (mg/L)	Sulfate (mg/L)	DO (mg/L)	ORP (mV)	COMMENTS
Notes:																					
GW = groundwater																					
SPH = separate-phase hydrocarbons																					
MSL = mean sea level																					
ND = not detected																					
ug/L = parts per billion																					
TPH-D = total petroleum hydrocarbons as diesel analyzed using the California DHS LUFT Method																					
TPH-G = total petroleum hydrocarbons as gasoline analyzed using the California DHS LUFT Method																					
Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8260B																					
MTBE = methyl tertiary butyl ether analyzed using EPA Method 8260B																					
TBA = tertiary butyl alcohol analyzed using EPA Method 8260B																					
DIPE = diisopropyl ether analyzed using EPA Method 8260B																					
ETBE = ethyl tertiary butyl ether analyzed using EPA Method 8260B																					
TAME = tertiary amyl methyl ether analyzed using EPA Method 8260B																					
Fe 2+ = Iron																					
DO = dissolved oxygen																					
ORP = Oxidation-Reduction Potential																					
* - hydrocarbon does not match pattern of laboratory's standard																					
RL-1 = reporting limit raised due to sample matrix effect																					
a - total purgeable petroleum hydrocarbons using 8260B																					
b - The reporting limit is elevated resulting from matrix interference																					
Ethanol analyzed using EPA Method 8015B prior to 3/04																					
Wells W-11 through W-15 and W-17 through W-19 surveyed on February 23, 2004 by Azimuth Group of Ventura, CA.																					
Wells W-16 and W-20 surveyed on July 24, 2006 by DULIN and BOYNTON, CA																					

FIGURES

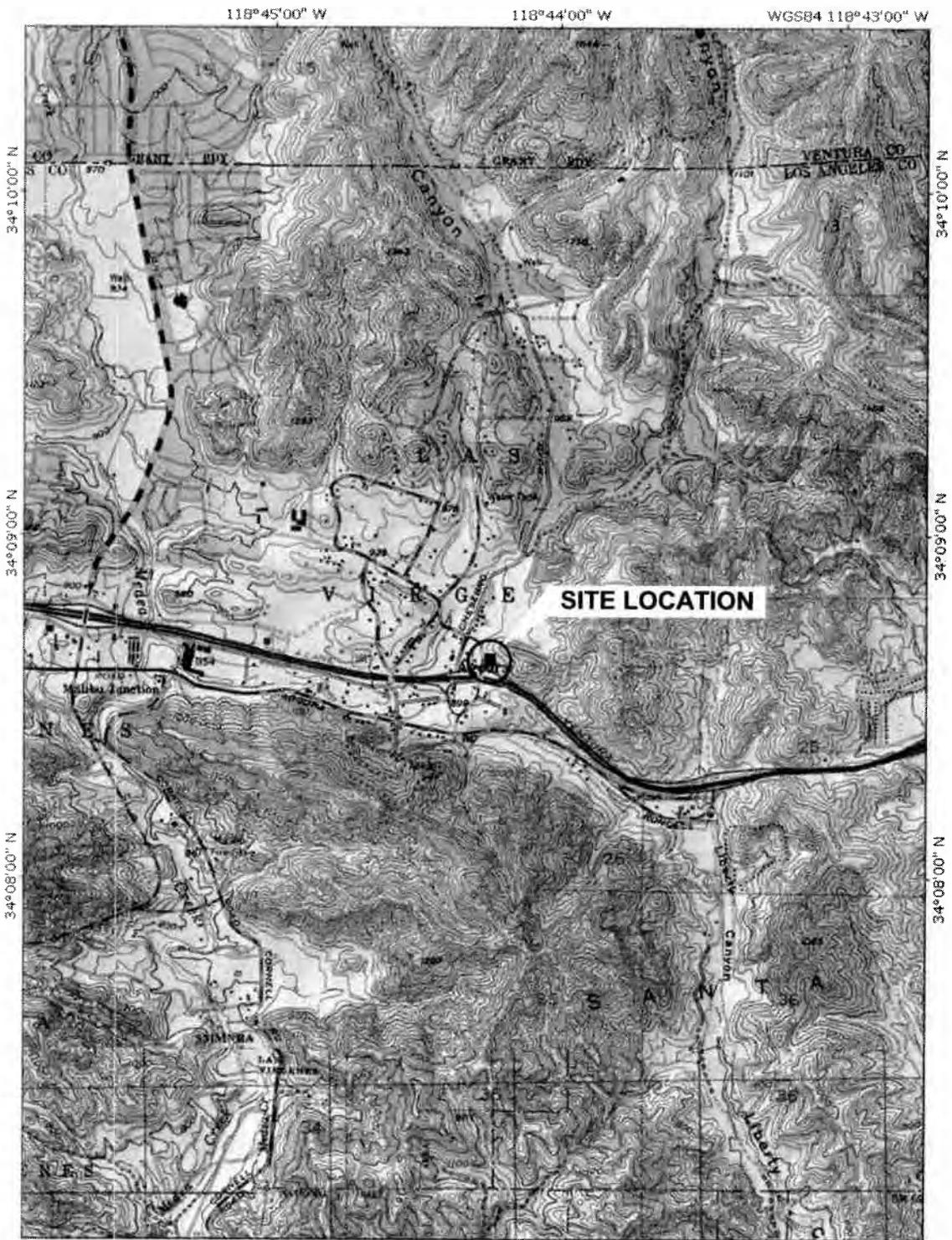
SCA5226 P1

DRAWING NUMBER

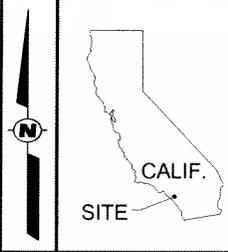
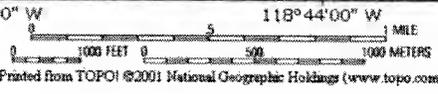
APPROVED BY

CHECKED BY

DRAWN BY
LUIS CH 08/30/06



TN MN
134°



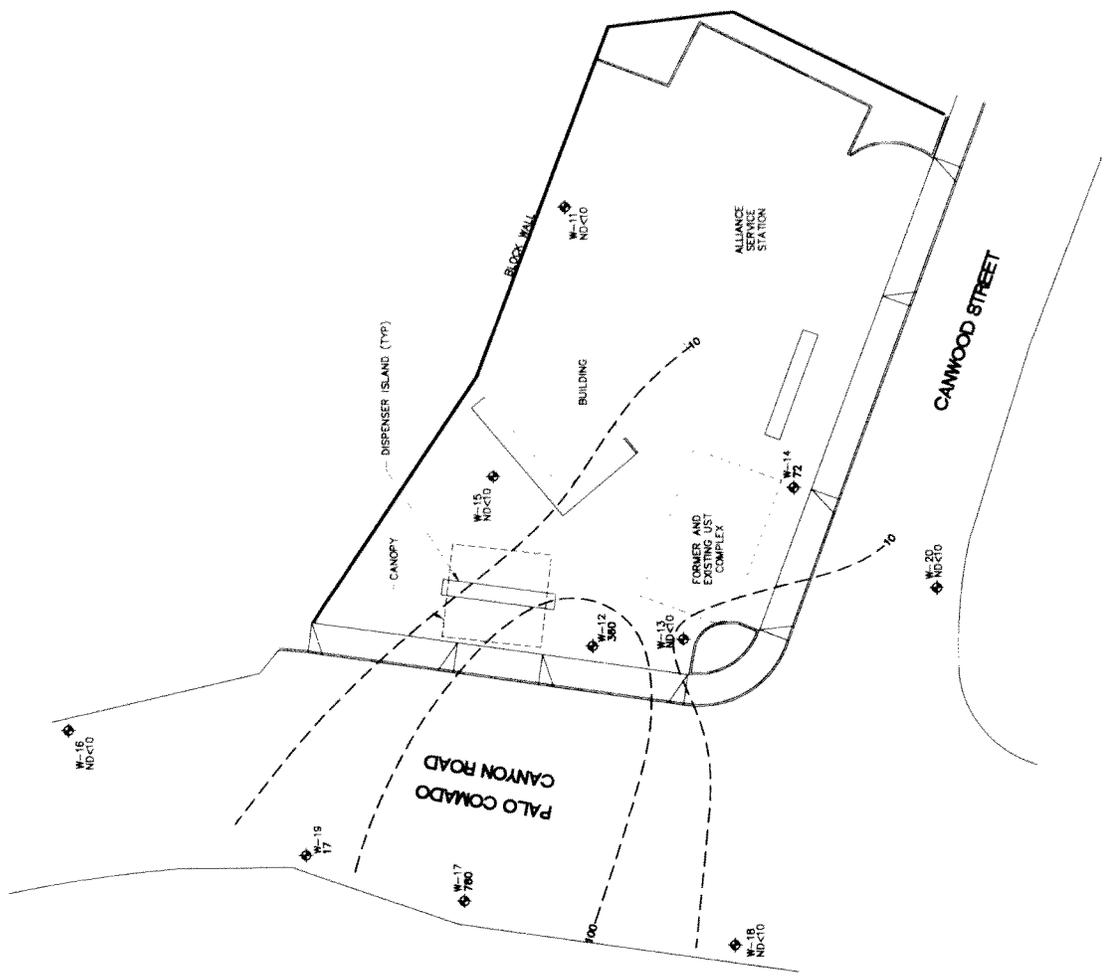
SHELL OIL PRODUCTS US
FORMER SHELL SERVICE STATION
AGOURA HILLS, CALIFORNIA

FIGURE 1
SITE LOCATION MAP
5226 PALO COMADO CANYON ROAD
AGOURA HILLS, CALIFORNIA



LEGEND

- W-1 ◆ GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- 300 TBA CONCENTRATION IN GROUNDWATER IN MICROGRAMS PER LITER (UG/L)
- 100 --- LINE OF EQUAL TBA CONCENTRATION
- TBA TERTIARY BUTYL ALCOHOL MICROGRAMS PER LITER
- ND<C NOT DETECTED ABOVE LIMIT NOTES



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 AGOURA HILLS, CALIFORNIA

FIGURE 5

TBA ISOCONCENTRATION MAP
 04/14/2008
 5226 PALO COMADO CANYON ROAD
 AGOURA HILLS, CALIFORNIA

FILENAME: SCA5226P1A_0902.DWGFIG5_TBA

DRAWN BY	CHECKED BY	APPROVED BY	PROJECT NUMBER
ICD	05/20/2008		SCA5226P1A

SCALE IN FEET
 0 15 30

NEWLY POSITIONED MONITORING WELLS:

WELL	LATITUDE	LONGITUDE	NORTH	EAST	ELEV. AT WELL NOTCH	ELEV. TOP OF L.I.D.
MW-1	34.1439842	-118.7384955	1875601.63	63388214.68	933.79	934.26

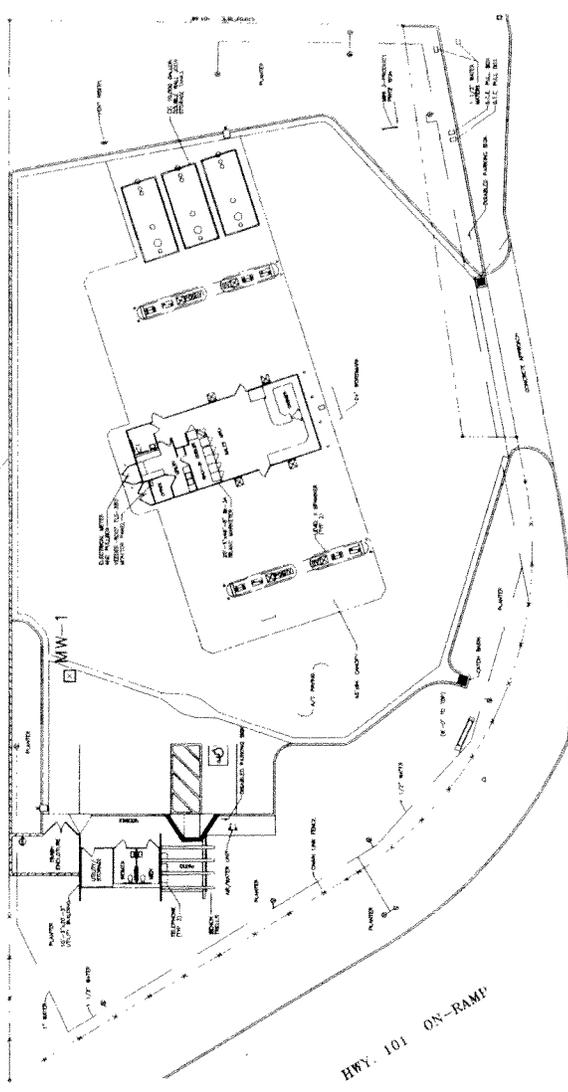
COORDINATES ARE CALIFORNIA STATE PLANE, ZONE V, BASED ON THE NATIONAL GEODETIC SURVEY'S (NGS) PUBLISHED POSITIONS FOR THE CONTINUOUSLY OPERATING REFERENCE STATION (CORS) SITES CBHS, MPWD, SPK1, AND TOST, NORTH AMERICAN DATUM OF 1983 (NAD83) (2000 35 EPOCH).

THE VERTICAL DATA SHOWN HEREON IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AS DERIVED FROM THE NGS PUBLISHED ELLIPSOID HEIGHTS OF CORS STATIONS CBHS, MPWD, SPK1, AND TOST.

UNITS ARE U. S. SURVEY FEET

RELEVANT GEOTRACKER CODES:

XY_SURVEY_DATE= 8/16/2007
 XY_METHOD= CGPS
 XY_DATUM= NAD83
 Z_SURVEY_DATE= 8/16/2007
 ELEV_METHOD= CGPS
 ELEV_DATUM= 88



Scale 0 15 30 feet

Chevron Environmental Management Company
 SERVICE STATION NO. 9-9883
 5221 N. PALO COMADO CANYON ROAD
 AGOURA HILLS, CALIFORNIA

J F JOHNSON-FRANK & ASSOC., INC.
 LAND SURVEYING - MAPPING
 5150 E. HUNTERS AVENUE
 ANAHEIM, CALIFORNIA 92807-2049
 (714) 777-8577 FAX (714) 777-1641

MONITORING WELLS	
DRAWN	CHECKED
DATE	DATE
JOB NO.	FILE NO.
	3

DATE AUG. 2007 SHEET 1 OF 1

2007106 9-480



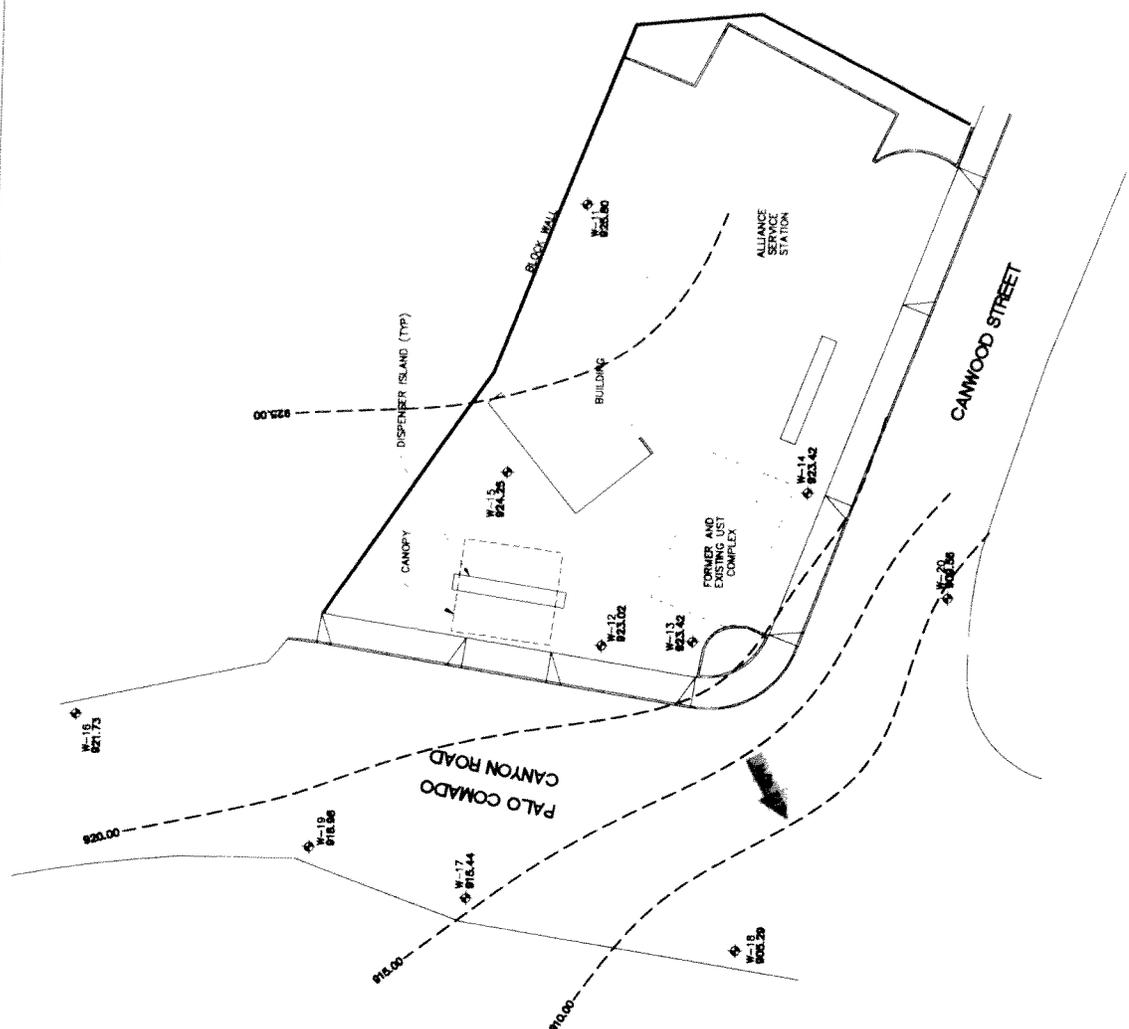
LEGEND

- MW-1-6 GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- 925.00 GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (F/MSL)
- 925.00 - - - GROUNDWATER CONTOUR IN FEET ABOVE MEAN SEA LEVEL (F/MSL)
CONTOUR INTERVAL=5.00 FEET
- APPROXIMATE GROUNDWATER GRADIENT DIRECTION (N/A)

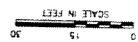
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 AGOURA HILLS, CALIFORNIA

FIGURE 3

GROUNDWATER ELEVATION CONTOUR MAP
 04/14/2009
 5226 PALO COMADO CANYON ROAD
 AGOURA HILLS, CALIFORNIA



PROJECT NUMBER	SCA5226P1A
DRAWN BY	CHECKED BY
APPROVED BY	
DATE	05/20/2009

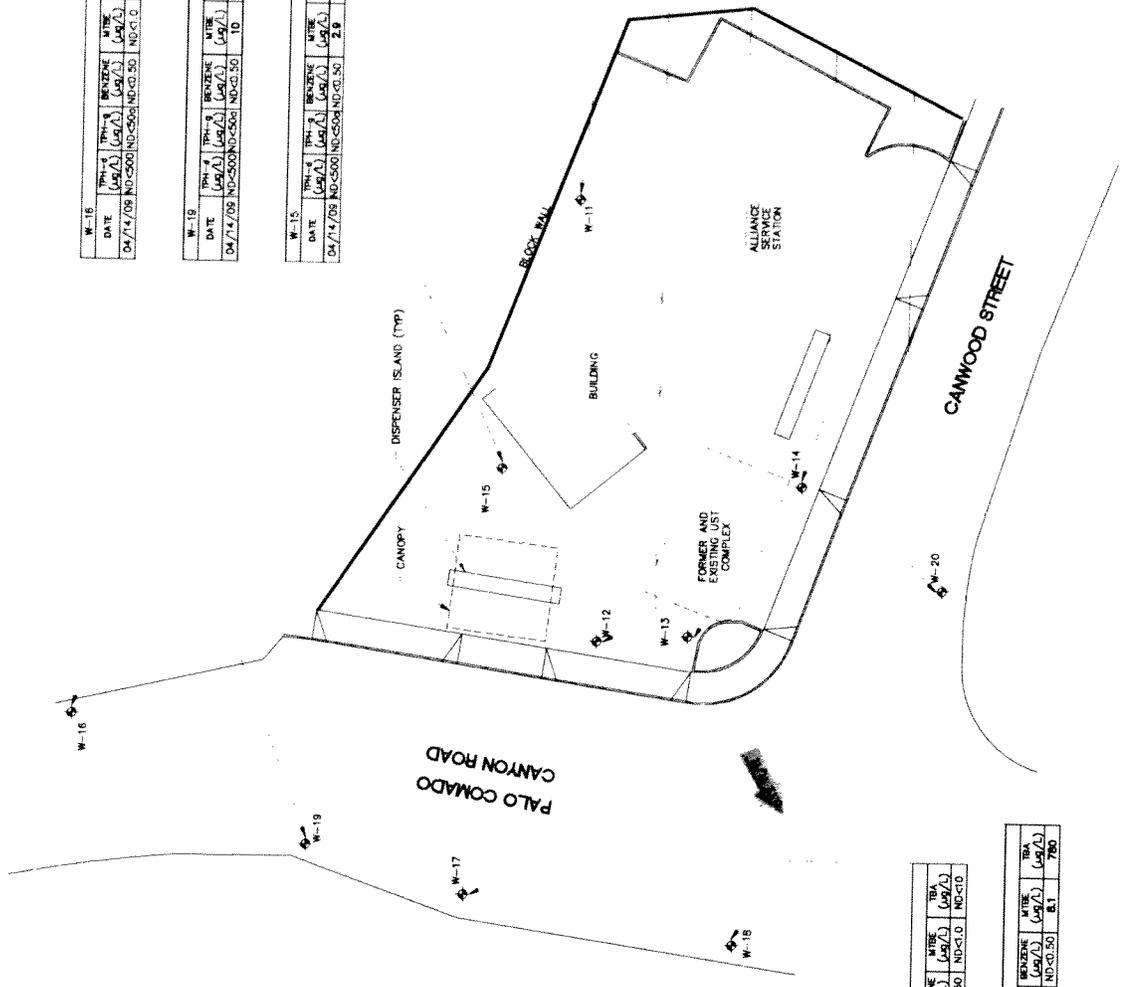


FILENAME: SCA5226P1A_0902.DWG\FIG2_GWCONTOURS

PROJECT NUMBER SCAS226P1A
 APPROVED BY
 CHECKED BY
 DRAWN BY
 DATE 05/20/2009
 ICD

SCALE IN FEET
 0 15 30

FILENAME: SCAS226P1A_0902 DWG\FIG13_HYDROCARBONS



W-16

DATE	TPH-4 (ug/L)	TPH-5 (ug/L)	BENZENE (ug/L)	MTE (ug/L)	TBA (ug/L)
04/14/09	ND<0.500	ND<0.500	ND<0.500	ND<0.50	ND<0.0

W-19

DATE	TPH-4 (ug/L)	TPH-5 (ug/L)	BENZENE (ug/L)	MTE (ug/L)	TBA (ug/L)
04/14/09	ND<0.500	ND<0.500	ND<0.500	10	17

W-15

DATE	TPH-4 (ug/L)	TPH-5 (ug/L)	BENZENE (ug/L)	MTE (ug/L)	TBA (ug/L)
04/14/09	ND<0.500	ND<0.500	ND<0.500	2.9	ND<0.0

W-11

DATE	TPH-4 (ug/L)	TPH-5 (ug/L)	BENZENE (ug/L)	MTE (ug/L)	TBA (ug/L)
04/14/09	ND<0.500	ND<0.500	ND<0.500	ND<0.0	ND<0.0

W-12

DATE	TPH-4 (ug/L)	TPH-5 (ug/L)	BENZENE (ug/L)	MTE (ug/L)	TBA (ug/L)
04/14/09	ND<0.500	97.6	ND<0.500	4.0	360

W-13

DATE	TPH-4 (ug/L)	TPH-5 (ug/L)	BENZENE (ug/L)	MTE (ug/L)	TBA (ug/L)
04/14/09	ND<0.500	86.6	ND<0.500	1.7	ND<0.0

W-14

DATE	TPH-4 (ug/L)	TPH-5 (ug/L)	BENZENE (ug/L)	MTE (ug/L)	TBA (ug/L)
04/14/09	ND<0.500	ND<0.500	ND<0.500	3.1	72

W-20

DATE	TPH-4 (ug/L)	TPH-5 (ug/L)	BENZENE (ug/L)	MTE (ug/L)	TBA (ug/L)
04/14/09	ND<0.500	ND<0.500	ND<0.500	ND<0.0	ND<0.0

W-18

DATE	TPH-4 (ug/L)	TPH-5 (ug/L)	BENZENE (ug/L)	MTE (ug/L)	TBA (ug/L)
04/14/09	ND<0.500	ND<0.500	ND<0.500	ND<0.50	ND<0.0

W-17

DATE	TPH-4 (ug/L)	TPH-5 (ug/L)	BENZENE (ug/L)	MTE (ug/L)	TBA (ug/L)
04/14/09	ND<0.500	86.6	ND<0.500	8.1	780

LEGEND

- MONITORING WELL LOCATION AND ASSOCIATED TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- MONITORING WELL LOCATION AND ASSOCIATED TOTAL PETROLEUM HYDROCARBONS AS DIESEL
- METHYL TERT-BUTYL
- TEST BUTYL ALCOHOL
- MICROGRAMS PER LITER
- NOT DETECTED ABOVE LIMIT
- APPROXIMATE GROUNDWATER GRADIENT DIRECTION (11/11)
- TOTAL PURGEABLE PETROLEUM HYDROCARBONS ANALYZED USING BUBBLE

DELTA CONSULTANTS
 SHELL OIL PRODUCTS, U.S.
 FORMER SHELL SERVICE STATION
 AGOURA HILLS, CALIFORNIA

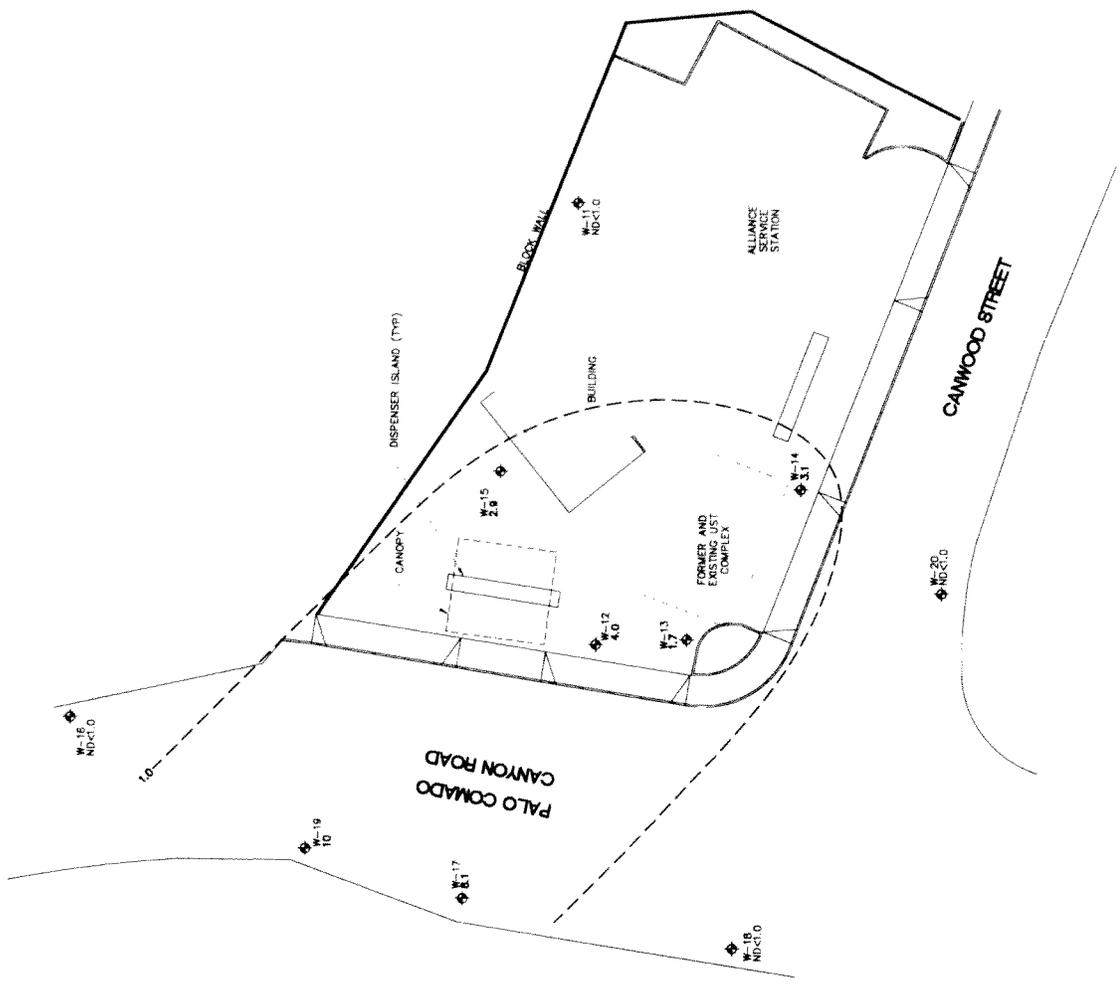
**FIGURE 3
 GROUNDWATER HYDROCARBON
 DISTRIBUTION MAP
 04/14/2009**

5226 PALO COMADO CANYON ROAD
 AGOURA HILLS, CALIFORNIA



LEGEND

- W-1-1 GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- 4.0 MTBE CONCENTRATION IN GROUNDWATER MICROGRAMS PER LITER (µg/L)
- 0.1 --- LINE OF EQUAL MTBE CONCENTRATION
- MTBE METHYL TERT-BUTYL ETHER MICROGRAMS PER LITER
- ND<< NOT DETECTED ABOVE LUM*



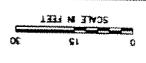
DELTA CONSULTANTS

SHELL OIL PRODUCTS US
 FORMER SHELL SERVICE STATION
 AGOURA HILLS, CALIFORNIA

FIGURE 4

MTBE ISOCONCENTRATION MAP
 04/14/2009
 5226 PALO COMADO CANYON ROAD
 AGOURA HILLS, CALIFORNIA

PROJECT NUMBER	SCA5226P1A
DRAWN BY	05/20/2009
CHECKED BY	
APPROVED BY	



FILENAME: SCA5226P1A_0902.DWG\FID4_MTBE

2 VI
002548-024668

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

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

FOR LOCAL AGENCY USE ONLY
 I HEREBY CERTIFY THAT I HAVE DISTRIBUTED THIS INFORMATION ACCORDING TO THE DISTRIBUTION SHOWN ON THE INSTRUCTION SHEET ON THE BACK PAGE OF THIS FORM.
 SIGNED: *Carl W. Sjoberg* DATE: 2/24/99

REPORT DATE: M M D D Y Y CASE #

REPORTED BY: NAME OF INDIVIDUAL FILING REPORT: *Stephen Boyd* PHONE: (714) 428-6572 SIGNATURE: *Stephen Boyd*

REPRESENTING: OWNER/OPERATOR LOCAL AGENCY OTHER REGIONAL BOARD COMPANY OR AGENCY NAME: *Tosco Marketing*

ADDRESS: *P.O. Box 25376* CITY: *Santa Ana* STATE: *CA* ZIP: *92799*

RESPONSIBLE PARTY: NAME: *Tosco Marketing* CONTACT PERSON: *Stephen Boyd* PHONE: (714) 428-6572

ADDRESS: *P.O. Box 25376* CITY: *Santa Ana* STATE: *CA* ZIP: *92799*

SITE LOCATION: FACILITY NAME (IF APPLICABLE): *Circle K Stores* OPERATOR: *Store Manager* PHONE: (518) 991-6241

ADDRESS: *28203 Dorothy* CITY: *Los Angeles* COUNTY: *91301* ZIP: *91301*

CROSS STREET: *Cheseboro*

IMPLEMENTING AGENCIES: LOCAL AGENCY: *Los Angeles DPW* AGENCY NAME: *Los Angeles DPW* CONTACT PERSON: *Carl Sjoberg* PHONE: (626) 458-3539

REGIONAL BOARD: () PHONE: ()

SUBSTANCES INVOLVED: (1) *Gasoline* NAME: *Gasoline* QUANTITY LOST (GALLONS): *60* UNKNOWN

(2) ()

DISCOVERY/ABATEMENT: DATE DISCOVERED: 01/03/99 HOW DISCOVERED: INVENTORY CONTROL SUBSURFACE MONITORING NUISANCE CONDITIONS

TANK TEST TANK REMOVAL OTHER: *Visually*

DATE DISCHARGE BEGAN: 01/03/99 UNKNOWN

METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY): REMOVE CONTENTS CLOSE TANK & REMOVE REPAIR PIPING

REPAIR TANK CLOSE TANK & FILL IN PLACE CHANGE PROCEDURE

REPLACE TANK OTHER: *Turn Off Pump*

HAS DISCHARGE BEEN STOPPED? YES NO IF YES, DATE: 01/03/99

SOURCE/CAUSE: SOURCE OF DISCHARGE: TANK LEAK PIPING LEAK UNKNOWN OTHER

CAUSE(S): OVERFILL CORROSION RUPTURE/FAILURE UNKNOWN OTHER: *Comments*

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

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

REMEDIAL ACTION: CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS): CAP SITE (CD) CONTAINMENT BARRIER (CB) VACUUM EXTRACT (VE) EXCAVATE & DISPOSE (ED) EXCAVATE & TREAT (ET) NO ACTION REQUIRED (NA) OTHER (OT): *No further action required.* REMOVE FREE PRODUCT (FP) PUMP & TREAT GROUNDWATER (GT) TREATMENT AT HOOKUP (HU) ENHANCED BIO DEGRADATION (IT) REPLACE SUPPLY (RS) VENT SOIL (VS)

COMMENTS: *Dispenser failed to shut-off. The spill was to the surface only. Spill was contained and cleaned up. No further action required.*

CLSR

002548-24668

SECOR
International Incorporated

June 2, 2000

Re: piping

RVI

Ms. Rani Iyer
County of Los Angeles
Department of Public Works
900 South Fremont Avenue
Alhambra, California 91803

RECEIVED

JUN 07 2000

DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROGRAMS DIVISION

2911052
CS01167

Re: Summary of Station Upgrade Activities
76 Station 7426
28203 Dorothy Drive
Agoura Hills, California
LARWQCB I.D. No. R-02634

Dear Ms. Iyer:

SECOR International, Inc. (SECOR) is pleased to submit this station upgrade report for the Tosco Marketing Company (Tosco) site referenced above. All excavation and construction activities associated with the station upgrade were conducted by S.J. Weaver Contracting Inc, of Paramount, California, under contract to Tosco. The site is currently an open release case. Ongoing site assessment activities are being overseen by the Los Angeles Regional Water Quality Control Board (LARWQCB).

1.0 INTRODUCTION

The site is located west of the eastbound Chesebro off-ramp on the Ventura Freeway (U.S. 101) and north of Dorothy Drive in Agoura Hills, California (Figure 1). The site is an active 76 Products service station containing three 20,000-gallon underground storage tanks (USTs) containing gasoline, one 20,000-gallon UST containing diesel, and eleven product dispensers, including two remote diesel dispenser areas for truck fueling (Figure 2).

2.0 BACKGROUND

In 1994, a leak detection assessment was performed at the site consisting of the installation of four groundwater monitoring wells (GW-1 through GW-4). During the assessment soil and groundwater samples were collected from the vicinity of the USTs, product piping and dispenser islands. Results of the sampling indicated the presence of petroleum hydrocarbon-impacted soil and groundwater beneath the site. Laboratory analytical results of groundwater samples indicated concentrations of total petroleum hydrocarbons as gasoline (TPHg) to be as high as 14,000 micrograms per liter (µg/l), benzene as high as 1,400 µg/l, and toluene as high as 1,300 µg/l. Total petroleum

A 263255

hydrocarbons as diesel (TPHd) were not detected in groundwater samples. Soil laboratory analytical results indicated the presence of TPHg at 2,300 milligrams per kilogram (mg/kg), benzene at 6.0 mg/kg, and TPHd at 1,500 mg/kg. The majority of the impacted material appeared to be located near the USTs (Pacific Environmental Group [PEG], 1998).

In 1998, PEG installed three groundwater monitoring wells (GW-5 through GW-7) on the site to further assess petroleum hydrocarbon-impacted soil and groundwater. During this investigation, depth to groundwater was determined to be approximately 13 feet below grade (fbg) flowing toward the southwest (PEG, 1998).

In 1999, a workplan was submitted to the Los Angeles Regional Water Quality Control Board (LARWQCB) to install three offsite monitoring wells. Currently, Tosco is in negotiations with the property owner immediately west of the site regarding access for groundwater monitoring well installation.

2.1 REGIONAL GEOLOGY

The subject property is located within the Transverse Ranges Geomorphic Province of Southern California. This structurally complex area results from the transition between the strike-slip tectonics of the Peninsular Ranges and the convergent tectonics of the Transverse Ranges (Yerkes et al., 1969).

Based on previous drilling conducted at the site, the soils beneath the site generally consist of silts and sands, with some gravel, to the maximum depths explored, approximately 30 fbg (PEG, 1998).

2.2 REGIONAL HYDROGEOLOGY

Based on a review of the LARWQCB Water Quality Control Plan for the Los Angeles Region, the site lies within the Malibu Creek Hydrologic Area of the Malibu Hydrologic Unit. The site is more specifically in part of the Russell Valley Las Virgenes Canyon area and has existing beneficial uses for agricultural supply and potential beneficial uses for municipal and domestic supply and industrial service supply (LARWQCB, 1994).

Based on groundwater monitoring and sampling conducted on January 4, 2000, depth to groundwater at the site ranges from approximately 14.30 to 15.18 fbg. Groundwater is interpreted to be flowing toward the southwest with an approximate gradient of 0.01 (foot/foot). Based on this sampling, TPHg concentrations in groundwater range from below laboratory detection limits to 3,900 µg/l, benzene concentrations in groundwater range from below laboratory detection limits to 180 µg/l, and MTBE concentrations in groundwater range from below laboratory detection limits to 3,900 µg/l (TRC Alton Geoscience, 2000).

3.0 FIELD ACTIVITIES

Beginning on March 13, 2000, S.J. Weaver conducted station upgrade activities at the site. Station upgrade activities consisted of the installation of dispenser sumps, and the replacement of UST sumps and all product piping. SECOR personnel conducted air monitoring, soil segregation and soil sampling associated with these upgrade activities.

3.1 AIR MONITORING

In accordance with the South Coast Air Quality Management District (SCAQMD) Rule 1166 Contaminated Soil Mitigation Plan (Plan No. 364277, Reference No. 132096/132380), volatile organic compound (VOC) concentrations were monitored during all excavation activities conducted at the site. SECOR personnel monitored VOC concentrations with a photo-ionization detector (PID) calibrated with hexane (100 parts per million by volume [ppmv]). The Rule 1166 monitoring records are included in Appendix A.

3.2 SOIL SAMPLING

On March 20, 2000, personnel from County of Los Angeles Department of Public Works (LADPW) were scheduled to be onsite to direct soil sample collection from beneath the product piping. LADPW personnel did not arrive onsite, therefore SECOR personnel collected sixteen soil samples from beneath the former product piping and dispensers (PP1-3 through PP16-3) (Figure 3). Soil samples were collected in general accordance with the closure permit issued by the LADPW (Appendix B). General field procedures are included in Appendix C.

Soil samples collected from beneath the dispensers and product piping were sent to BC Analytical of Bakersfield, California for analysis. Soil samples collected from beneath diesel and gasoline product piping and dispensers were analyzed for TPHg and TPHd using EPA Method 8015m, and benzene, toluene, ethylbenzene, and total xylenes (BTEX) and MTBE using EPA 8020. Soil samples collected from beneath only diesel product piping and dispensers were analyzed for TPHd using EPA Method 8015m (Table 1). Laboratory reports and chain-of-custody documents are included in Appendix D.

For characterization purposes, two soil samples (TC1W-3 and TC2W-2) were collected from soil overburden in the UST cavity. Additionally, five soil samples (SP1-1 through SP1-5) were collected from stockpiles of soil temporarily stored onsite for subsequent offsite disposal. All soil samples collected from excavated material were analyzed for TPHg and TPHd using EPA Method 8015m, and BTEX and MTBE using EPA Method 8020.

3.3 SOIL DISPOSAL

All excavated material generated during the station upgrade activities was removed from the site. Approximately 741 tons of petroleum hydrocarbon impacted soil was transported to TPS Technologies, Inc. (TPS) in Adelanto, California, for disposal. Copies of disposal manifests are included in Appendix E.

4.0 FINDINGS

4.1 AIR MONITORING

Soil with VOC concentrations greater than 1,000 ppmv, was periodically detected during excavation activities at the site. Soil which had VOC concentrations greater than 1,000 ppmv, was excavated and loaded directly onto trucks for transport offsite to TPS for disposal. All excavated material not loaded directly onto trucks was temporarily stockpiled onsite and covered with plastic sheeting, pending offsite disposal.

4.2 SOIL SAMPLING

Analytical results of samples collected from beneath the former gasoline product piping and dispensers indicate that TPHg concentrations in soil range from below laboratory detection limits to 20 mg/kg. One soil sample analyzed had a detectable concentration of benzene at 0.052 mg/kg. MTBE concentrations in soil samples analyzed range from below laboratory detection limits to 1.7 mg/kg (Table 1; Figure 3).

TPHd concentrations in soil samples collected from beneath former diesel product piping and dispensers range from below laboratory detection limits to 6,400 mg/kg. (Table 1; Figure 3).

TPHg and TPHd concentrations in soil samples from soil removed from the site were reported to be as high as 500 mg/kg and 2,100 mg/kg, respectively. MTBE and benzene concentrations in these soil samples were all reported to be below laboratory detection limits (Table 2).

5.0 CONCLUSIONS

- SECOR personnel conducted air monitoring in accordance with SCAQMD Rule 1166 during all excavation activities conducted at the site during the station upgrades;
- Approximately 741 tons of hydrocarbon-impacted soil was excavated and removed from the site. TPHg and TPHd concentrations in samples from the soil removed from the site were reported as high as 500 mg/kg and 2,100 mg/kg, respectively. MTBE and benzene concentrations in samples from the soil removed from the site were below laboratory detection limits;

- Soil samples collected beneath the former product piping and product dispensers had TPHg and TPHd concentrations as high as 20 mg/kg and 6,400 mg/kg, respectively. One soil sample analyzed had a detectable benzene concentration of 0.052 mg/kg. MTBE concentrations in soil samples analyzed were as high as 1.7 mg/kg.

6.0 LIMITATIONS

This report has been prepared for the exclusive use of Tosco and its representatives as it pertains to the property located at 28203 Dorothy Dr. in Agoura Hills, California. Evaluations of the geologic conditions at the site for the purposes of this investigation are inherently limited due to the number of observation points. There are no representations, warranties, or guarantees that the points selected for sampling are representative of the entire site. Data from this report reflects the conditions at specific locations at a specific point in time. No other interpretation, representations, warranties, guarantees, express or implied, are included or intended in the report findings.

7.0 REFERENCES

- Los Angeles Regional Water Quality Control Board (LARWQCB), 1994. Los Angeles Regional Water Quality Control Board. *Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties*, dated June 13, 1994.
- Pacific Environmental Group (PEG), 1998. *Summary of Well Installation Activities, Tosco 7426, 28203 Dorothy Drive, Agoura Hills, California*, Pacific Environmental Group, In., Pasadena, CA, dated November 4, 1998.
- TRC Alton Geoscience, 2000. *First Quarter 2000: Fluid Level Monitoring and Groundwater Sampling Report. Tosco 7426, 28203 Dorothy Drive, Agoura Hills, California*, dated March 31, 2000.
- Yerkes, R.F., McCulloh, T.H., Schoellhamer, J.E. and Vedder, J.G., 1969, *Geology of the Los Angeles Basin, California - an introduction*: United States Geological Survey Professional Paper 420-A, 57 pp., 2 plates.

If you have any questions or require additional information, please contact Mr. Jack Oman of SECOR at (714) 379-3366.

Sincerely,
SECOR International, Inc.


Michael D. Bartosek *for*
Assistant Geologist


Jack Oman, RG 6925
Project Manager



Attachments: Table 1 – Results of Laboratory Analysis of Product Piping Soil Samples
Table 2 – Results of Laboratory Analysis of Stockpile Soil Samples

Figure 1 – Site Location Map
Figure 2 – Site Plan
Figure 3 – Petroleum Hydrocarbons in Soil

Appendix A – Rule 1166 Soil Monitoring Records
Appendix B – LADPW Closure Permit
Appendix C – General Field Procedures
Appendix D – Analytical Lab Reports with Chain-of-Custody Records
Appendix E – Soil Disposal Manifests

cc: Mr. Daniel P. Piroton, Los Angeles Regional Water Quality Control Board
Ms. Liz Sewell, Tosco Marketing Company

TABLE 1
RESULTS OF LABORATORY ANALYSIS OF PRODUCT PIPING SOIL SAMPLES
 76 STATION 7426
 28203 DOROTHY DRIVE
 AGOURA HILLS, CALIFORNIA
 MARCH 2000

SOIL SAMPLE ID	DATE	SAMPLE		TPHg	TPHd	BENZENE mg/kg	TOLUENE mg/kg	ETHYL-BENZENE mg/kg	TOTAL XYLENES mg/kg	MTBE mg/kg
		DEPTH (feet)								
PP1-3	03/20/00	3		2.1	<10.0	<0.005	0.0064	0.015	<0.01	0.45
PP2-3	03/20/00	3		20	3,600	0.052	0.052	0.44	0.092	0.36
PP3-3.5	03/20/00	3.5		<1.0	<10	<0.005	<0.005	<0.005	<0.01	<0.02
PP4-2.5	03/20/00	2.5		1.3	250	<0.005	<0.005	<0.005	<0.01	0.046
PP5-2.5	03/20/00	2.5		<1.0	<10.0	<0.005	<0.005	<0.005	0.011	<0.02
PP6-2.5	03/20/00	2.5		3.1	220	<0.005	0.0075	0.034	0.053	1.4
PP7-3.5	03/20/00	3.5		NA	5,900	NA	NA	NA	NA	NA
PP8-3	03/20/00	3		NA	29	NA	NA	NA	NA	NA
PP9-3.5	03/20/00	3.5		NA	6,400	NA	NA	NA	NA	NA
PP10-3.5	03/20/00	3.5		NA	51	NA	NA	NA	NA	NA
PP11-2.5	03/20/00	2.5		NA	<10.0	NA	NA	NA	NA	NA
PP12-3	03/20/00	3		1.0	<10.0	<0.005	0.011	<0.005	0.015	1.7
PP13-3	03/20/00	3		NA	4,900	NA	NA	NA	NA	NA
PP14-3.5	03/20/00	3.5		NA	3,800	NA	NA	NA	NA	NA
PP15-3.5	03/20/00	3.5		NA	130	NA	NA	NA	NA	NA
PP16-3	03/20/00	3		NA	<10.0	NA	NA	NA	NA	NA

Notes:

- NA = Not Analyzed
- TPHg = Total Petroleum Hydrocarbons as Gasoline - Analyzed by EPA Method 8015M
- TPHd = Total Petroleum Hydrocarbons as Diesel - Analyzed by EPA Method 8015M
- MTBE = Methyl Tertiary Butyl Ether - Analyzed by EPA Method 8020
- mg/kg = Milligrams per Kilogram

TABLE 2
RESULTS OF LABORATORY ANALYSIS OF STOCKPILE SOIL SAMPLES

76 STATION 7426
 28203 DOROTHY DRIVE
 AGOURA HILLS, CALIFORNIA
 MARCH 2000

SOIL SAMPLE ID	DATE	TPHg mg/kg	TPHd mg/kg	BENZENE mg/kg	TOLUENE mg/kg	ETHYL- BENZENE mg/kg	TOTAL XYLENES mg/kg	MTBE mg/kg
TC1W-3	03/15/00	34	260	<0.03	<0.03	<0.03	<0.05	<0.4
TC2W-2	03/15/00	500	2,100	<0.1	<0.1	<0.1	<0.2	<0.4
SP1-1	03/17/00	<1.0	40	<0.005	<0.005	<0.005	<0.01	<0.02
SP1-2	03/17/00	39	300	<0.005	<0.005	<0.005	0.028	<0.4
SP1-3	03/17/00	<1.0	24	<0.005	<0.005	<0.005	<0.01	<0.02
SP1-4	03/17/00	<1.0	<10.0	<0.005	<0.005	<0.005	<0.01	<0.02
SP1-5	03/17/00	<1.0	28	<0.005	<0.005	<0.005	<0.01	<0.02

Notes:

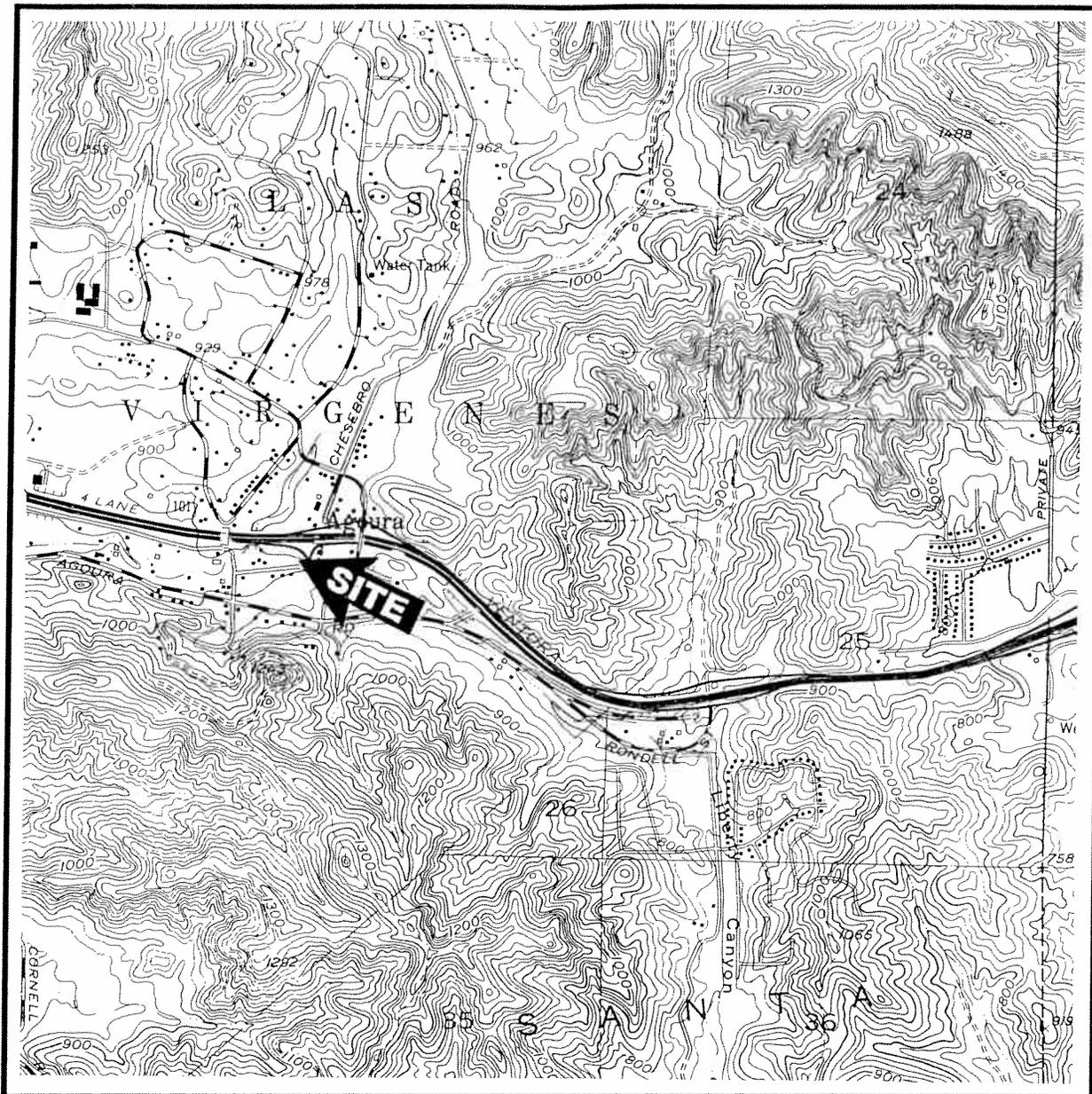
NA = Not Analyzed

TPHg = Total Petroleum Hydrocarbons as Gasoline - Analyzed by EPA Method 8015m

TPHd = Total Petroleum Hydrocarbons as Diesel - Analyzed by EPA Method 8015m

MTBE = Methyl Tertiary Butyl Ether - Analyzed by EPA Method 8020

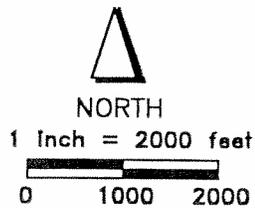
mg/kg = Milligrams per Kilogram



Reference: U.S.G.S., 1952, Calabassas Quadrangle California - Los Angeles County, 7.5' Series (Topographic). Photorevised 1967

SECOR
*International
 Incorporated*

c:\nta\active\tosco\7426\graphics\figure1



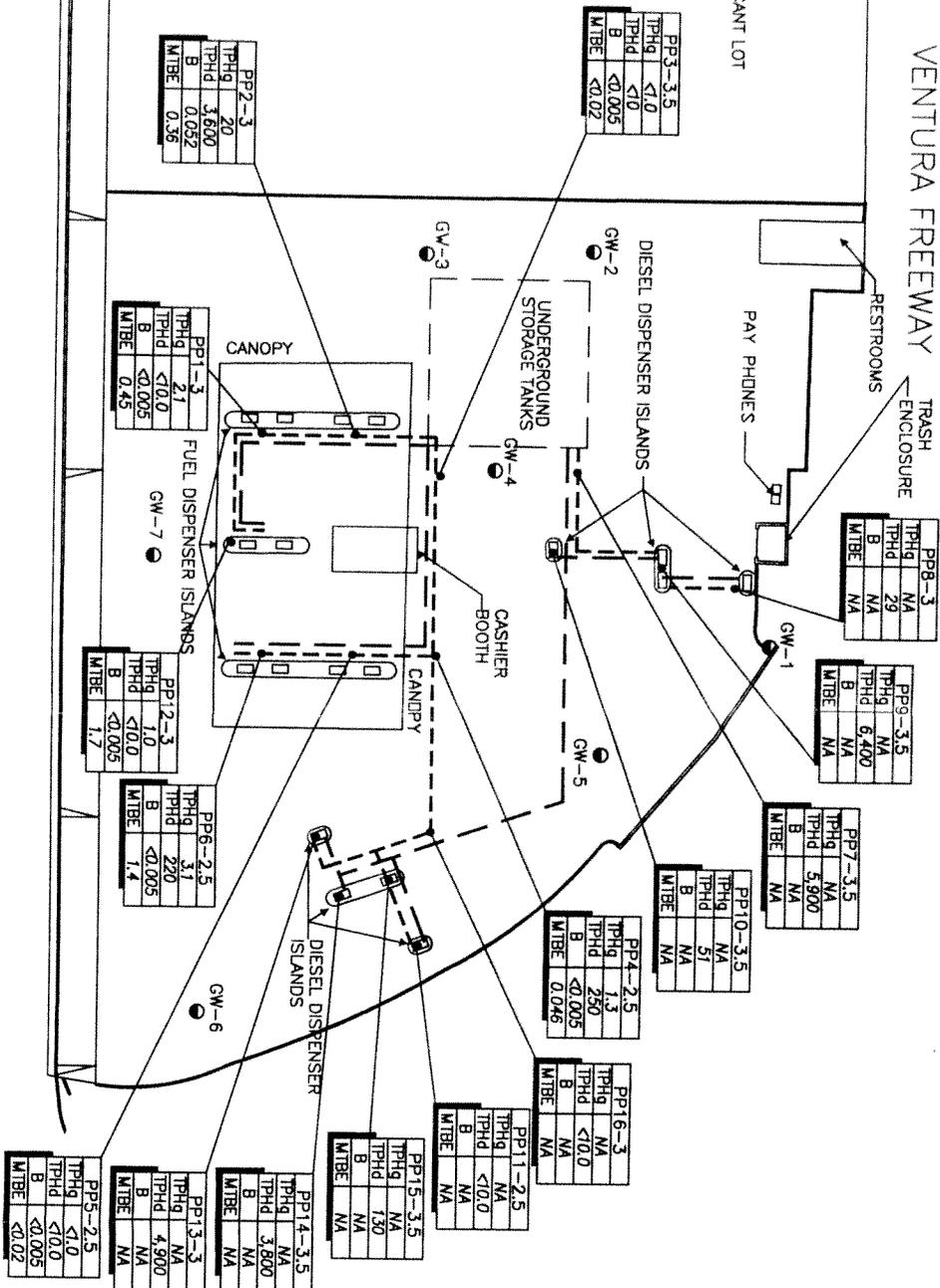
NOTES:

FIGURE 1
SITE LOCATION
 TOSCO STATION 7426
 28203 DOROTHY DRIVE
 AGOURA HILLS, CALIFORNIA

VENTURA FREEWAY

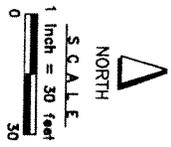
VACANT LOT

DOROTHY DRIVE



EXPLANATION

- SOIL SAMPLE WITH PETROLEUM HYDROCARBON CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM (mg/kg)
- GROUNDWATER MONITORING WELL
- OLD PRODUCT PIPING CONFIGURATION
- NEW PRODUCT PIPING CONFIGURATION



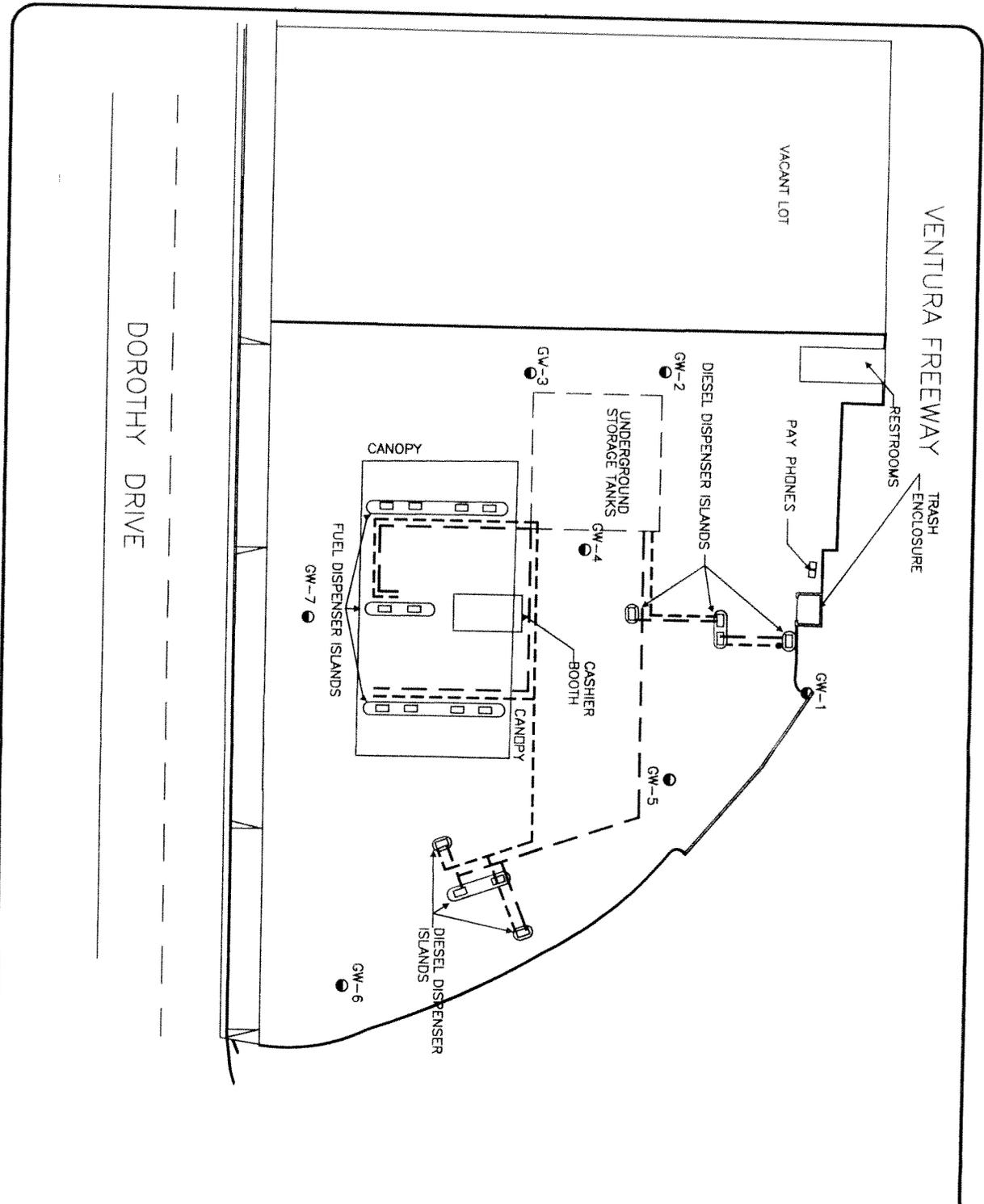
NOTES:

- ALL LOCATIONS & DIMENSIONS ARE APPROXIMATE
- TPH_g = TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- TPH_d = TOTAL PETROLEUM HYDROCARBONS AS DIESEL
- B = BENZENE
- MTBE = METHYL TERTIARY BUTYL ETHER
- NA = NOT ANALYZED
- FIGURE BASED ON MAP PROVIDED BY PACIFIC ENVIRONMENTAL GROUP

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International
Incorporated

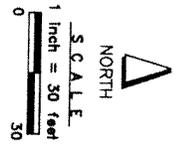
FIGURE 3
PETROLEUM HYDROCARBON
CONCENTRATIONS IN SOIL
TOSCO STATION 7426
28203 DOROTHY DRIVE
AGOURA HILLS, CALIFORNIA

CLIENT: AECOM, PROJECT: 7426, DRAWING: 7426-03-01.DWG



EXPLANATION

- GW-1 ● GROUNDWATER MONITORING WELL
- - - OLD PRODUCT PIPING CONFIGURATION
- NEW PRODUCT PIPING CONFIGURATION



NOTES:

1. ALL LOCATIONS & DIMENSIONS ARE APPROXIMATE
2. FIGURE BASED ON MAP PROVIDED BY PACIFIC ENVIRONMENTAL GROUP

SECOR
International
Incorporated

FIGURE 2
SITE PLAN
TOSCO STATION 7426
28203 DOROTHY DRIVE
AGOURA HILLS, CALIFORNIA

GLENN V. JONES/TORONTO/VALENZUELA/17/4/89/03.DWG



APPLICATION FOR CLOSURE
HAZARDOUS MATERIALS UNDERGROUND STORAGE
COUNTY OF LOS ANGELES-DEPARTMENT OF PUBLIC WORKS
WASTE MANAGEMENT DIVISION
900 S. FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331

Permit	8094 B
File	6055 R/C 54
Fee	\$ 255
Check	<input checked="" type="checkbox"/> Cash <input type="checkbox"/>

OWNER: Name GHAUSHYAM AMIN Phone _____
Mailing Address 5116 CHESTBRO City AGOURA HILLS State CA Zip 91301

FACILITY:
Occupant Name GHAUSHYAM AMIN Phone _____
Site Address 5116 CHESTBRO City AGOURA Zip 91301
Mailing Address 5116 CHESTBRO City AGOURA State CA Zip 91301
Contact Person MR AMIN Title OWNER

CONTRACTOR complete below: OWNER/OPERATOR AS CONTRACTOR
Name PAUS ASSOCIATES INC. Phone 818-281-1031
State License No. 309495 Class B, C-66

CLOSURE REQUESTED:
 PERMANENT, TANK REMOVAL (See Conditions A and C Attached)
How many underground tanks will remain after this closure? 4
 PERMANENT, CLOSURE IN PLACE (See Conditions A and D Attached)
 TEMPORARY (See Conditions A and B Attached)

TANK DESCRIPTION:	PLOT PLAN ATTACHED <input checked="" type="checkbox"/>			EXISTING HMUSP NO. <u>5564</u>
Tank No.	Tank Mat'l	Age	Capacity	Materials Stored (Past/Present)
1	STIR	UNKNOWN	8,000	U.L.
2	STIR	✓	8,000	SUPR
3	STIR	✓	5,000	Q68
4	STIR	✓	1,000	W.O.

COMPLETE THE FOLLOWING:

Has an unauthorized release ever occurred at this site?	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
Have structural repairs ever been made to these tanks?	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
Will new underground tanks be installed after closure?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
Will any wells, including monitoring wells, be abandoned?	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>

NOTICE: CONTAMINATED TANKS AND RESIDUES THAT MAY BE LEFT IN TANKS TO BE CLOSED MAY BE A HAZARDOUS WASTE WHICH MUST BE TRANSPORTED AND DISPOSED OF PURSUANT TO CHAPTER 6.5, CALIFORNIA HEALTH & SAFETY CODE. FAILURE TO COMPLY MAY BE PROSECUTED AS A FELONY VIOLATION.

By signature below the applicant certifies that all statements and disclosures above are true and correct and that they have read and agree to abide by this permit and all conditions and limitations attached.

Applicant's Signature T. A. Tideman Date 4/29/91
(Print Name) T. A. TIDEMAN Phone 818-281-1031
Owner Operator Contractor

-----TO BE COMPLETED BY THE DEPARTMENT OF PUBLIC WORKS-----
PURSUANT TO SECTION 11.80.070B, LOS ANGELES COUNTY CODE, PERMISSION IS HEREBY GRANTED TO PROCEED WITH THE CLOSURE DESCRIBED ABOVE SUBJECT TO THE ATTACHED CONDITIONS AND LIMITATIONS . THIS PERMIT EXPIRES 180 DAYS FROM THE DATE BELOW.

T.A. TIDEMANSON
Director of Public Works

CONDITIONS A -- GENERAL

Cleaners shall be carried out such that all applicable regulations from the following agencies are complied with: Los Angeles County, Department of County Engineer-Facilities; Los Angeles County Fire Department, Fire Prevention Division or the appropriate City Fire Department; South Coast Air Quality Management District; and Los Angeles County Department of Health Services.

The County Engineer and Fire Departments shall be notified in advance of any closures in accordance with the following:

- a. Removal of tank shall require a letter to the business dry business notification.
- b. Permanent closure of a tank in place or a temporary closure shall require a 30 day written notification.

The fee is \$100 for the first tank plus \$30 for each additional tank.

All abandoned tanks shall be destroyed in such a way that they will not produce vapor or act as a channel for interchange of water, when such interchanges may result in deterioration of the quality of water in any or all water bearing formations penetrated, or present a hazard to the safety and well-being of people and animals.

A well construction permit issued by the Los Angeles Department of Health Services shall be required for all wells requiring a permit for their initial construction.

Well construction shall be accomplished according to methods described in the latest Major Well Standards, State of California, by the Department of Water Resources, contained in Bulletin 74-81, December 1953, or any other methods that will provide equivalent or better protection.

Plans for the demonstration of a facility shall be submitted to the County Engineer for approval no later than 30 days before the commencement of such operations. Other agencies having jurisdiction shall also be notified. These agencies include the California Regional Water Quality Board, the Los Angeles County Department of Health Services, and the South Coast Air Quality Management District.

Demonstrations shall require the following, as a minimum:

- a. Cleaning operations shall be done under the supervision of persons who understand the hazardous potential of the original liquid stored and its components.
- b. The personnel shall be sufficiently skilled to safely carry out such operation.
- c. Contaminated materials removed from such facility shall be disposed of at legal point of discharge.
- d. The operation shall be carried out in a manner that will not endanger the health of the public and the environment.

CONDITIONS B -- TEMPORARY

All temporary closures shall be carried out as indicated in Los Angeles County Fire Department, Fire Prevention Division, Supplement #A -- Inspection Guide #6, "Abandonment or Removal of Underground Tanks, Part A and any other applicable Parts.

A temporary closure shall not exceed 90 days.

CONDITIONS C -- PERMANENT, TANK(S) REMOVAL

1. All tank removals shall be carried out as indicated in Los Angeles County Fire Department, Fire Prevention Division, Supplement #A -- Inspection Guide #6, Part B and any other applicable Parts.

2. Owners/operators shall notify the Building Department having jurisdiction at the place of removal if a grading permit is necessary.

3. Removed tanks shall not be transported away from the site until an inspection to establish site integrity is carried by the County Engineer.

4. If an appointment has been arranged with a County Engineer Inspector to inspect the removal of a tank, the inspector will only wait at the site a reasonable amount of time (approximately one hour) after arriving for the removal to commence. Another closure fee may be charged if the inspector has to return to the site.

5. After inspection, tanks shall be transported to a legal disposal point.

6. If the tank had stored materials other than motor fuel, fuel oil, or waste oil, site integrity shall be demonstrated using the soil sample and analysis procedures described in CONDITIONS D below.

7. The site shall be backfilled and reconnected to a relative completion of 90%.

CONDITIONS D -- PERMANENT, TANK(S) IN PLACE

1. All permanent closures of tanks in place shall comply with Los Angeles County Fire Department, Fire Prevention Division, Supplement #A -- Inspection Guide #6, Parts B or C, and any other applicable Parts.

2. Owners/operators shall demonstrate past site integrity as follows:

a. Test borings shall be slant drilled to intercept a point beneath the center of the tank, if possible. If slant drilling is not feasible, the test borings may be drilled vertically and the reason stated in the report in 2.b. below.

b. For single tanks, a minimum of two test borings will be required, each located on opposite sides of the tank along the major axis of the tank.

c. For multiple tanks, as a minimum, borings shall be placed at 20 foot intervals around the tank cluster. The actual number and location of borings shall be evaluated on a case-by-case basis. Tanks separated by 20 feet or more shall be considered single tank for the purpose of test location and placement.

d. Soil samples shall be taken at depths of 5, 10, 20, 30 and 40 feet below grade level.

e. A Shelby Tube or a Modified California Sampler shall be utilized for taking all soil samples.

f. Soil samples shall be capped immediately with teflon or aluminum.

g. Soil samples shall not be extruded in the field but are to be immediately placed in a refrigerated ice chest and transported to a state certified laboratory for analysis, using suitable methods.

h. A report containing the results of the above analysis shall be submitted to the County Engineer.

3. If the soil analysis in 2. above indicates the presence of contaminants, the County Engineer shall require a site investigation as described in Chapter V of the County's "Underground Storage of Hazardous Materials -- Guidelines."

4. A report shall be submitted to the County Engineer containing the results of the site investigation.

NOTICE TO CLOSURE PERMIT APPLICANTS

The South Coast Air Quality Management District (SCAQMD) has adopted Rule 1166 regulating emissions of Volatile Organic Compounds (VOC) from decontamination of soil effective August 8, 1988.

In addition to the requirements of your Closure Permit, persons excavating any underground storage tank that previously contained VOC's must:

- Notify the SCAQMD Executive Officer by telephone at (818) 572-6195, 24 hours prior to tank excavation. 1166(c)(1)(A)
- Monitor the excavated material during the excavation for VOC contamination. 1166(c)(1)(B)
- When VOC contamination is detected:
 - * Cease excavation
 - * Cover the contaminated soil until implementation of approved mitigation measures. 1166(c)(1)(C)
 - * Notify the SCAQMD Executive Officer at (818) 572-6195 within 24 hours of detection of VOC contaminated soil. 1166(c)(2)(A)
- A person shall not engage in or allow any on-site or off-site spreading of VOC contaminated soil which results in uncontrolled evaporation of VOC to the atmosphere. 1166(c)(3)

Exemptions

- Treatment of less than one (1) cubic yard of contaminated soil. 1166(d)(1)(A)
- Decontamination of soil containing organic compounds that have initial boiling point of 302°F or greater, Reid Vapor Pressure less than 80mm Hg or Absolute Vapor Pressure less than 36mm Hg at 20°C. 1166(d)(1)(B)
- Removal of soil for sampling purposes pursuant to EPA methods. 1166(d)(1)(C)
- Accidental spillage of five (5) gallons or less of VOC. 1166(d)(1)(D)
- Decontamination of soil which is contaminated through natural seepage of VOC from oil and gas wells or other natural sources. 1166(d)(1)(E)

SPECIFIC QUESTIONS ON RULE 1166 SHOULD BE REFERRED TO THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (818) 572-6200

POLICY CLARIFICATION

SUCTION AND GRAVITY FLOW PIPING SYSTEMS

Effective Date: January 17, 1989

NEW CONSTRUCTION: All suction and gravity piping systems that contains product during normal operation shall be equipped with secondary containment and a leak detection system. The leak detection system for piping shall be separate from the tank leak detection system.

LEAK DETECTION INVESTIGATION/CLOSURE: Samples will be required at 20 foot intervals along the piping run plus one additional sample at each dispenser island. Samples shall be obtained at an elevation, five (5) feet below the plane of the piping or dispenser island.

MONITORING (EXISTING SINGLE WALL PIPING):

Vadose Monitored Tanks - The installation of continuous vapor monitoring sensors at 20 foot intervals along the piping run, starting at the dispenser island, in monitoring wells converted from borings previously used to obtain leak detection samples or similar vadose monitoring wells constructed specifically monitoring purposes is required. Sensors shall be placed at least two (2) feet below the piping depth.

Tank Level Monitor (TLM) Systems - Piping that contains product during normal tank operations and associated with a container monitored by an approved TLM shall be tested annually by subjecting to a hydrostatic pressure of at least 50 psi for a minimum of five (5) minutes. A pressure drop of more than 5 psi per minute indicates a leaking pipeline system.

5116 CHESTER
Avenue, 91301



LOCATION OF
ALARM SYSTEM
VEEDEV ROOT
TILS 2501

REMOVE EXISTING U.G
1-5,000 G GALLON 1-1000 GALLON
1-2,800 G GALLON TANKS
EACH AND COMPACT

ALL PIPING FITTINGS AND TANKS
TO BE METWAL COMPATIBLE

96.23



1000 GAL
4

4A

5000 GALLON
3A

1A 5000 GALLON
1B

5000 GALLON
2A 2B

3B

2A

2B

3. All soil samples obtained shall be discrete, undisturbed and unexposed prior to analysis. The method used to obtain the samples and the date of sampling shall be included in the final report.
4. If groundwater is encountered during sampling, a groundwater monitoring well shall be established at the most downgradient sampling point. The well shall be developed by removing a minimum of four well volumes and a groundwater sample shall be obtained and analyzed.
5. The analytical results for all soil samples shall be expressed milligrams per kilogram (mg/kg), or micrograms per kilogram (ug/kg) as appropriate. Practical quantitation limits of 5-10 ug/kg (ppb) for volatile organics and 1 mg/kg (ppm) for the petroleum hydrocarbons must be achieved by the laboratory. Analytical results for groundwater samples shall be expressed in ug/l (ppb) and practical quantitation limits of .5-5 ug/l (ppb) for volatile organics, and 1 mg/l (ppm) for petroleum hydrocarbons must be achieved by the laboratory.
6. Analytical results shall be reported on laboratory letterhead and shall include the following information: a) The date the analysis was conducted; b) The method of extraction (if applicable); c) Detection limits for each analytical procedure and determination; d) The method of analysis; e) Signature of chemist certifying results.
7. All soil/groundwater samples obtained shall be handled and transported to laboratory in strict accordance with applicable EPA regulations utilizing chain-of-custody procedures. Chain-of-custody documentation shall be included in the final report.
8. If the soil/groundwater analysis indicates undefined contamination at the facility, additional sampling shall be required to define the vertical and lateral extent present.
9. A final report that contains all of the above required information shall be submitted to the office above within one (1) month from the sampling date or 180 days from the date of this permit, whichever is earlier.

LOS ANGELES COUNTY
DEPARTMENT OF PUBLIC WORKS
CLOSURE REPORT REQUIREMENTS

A closure report shall be submitted to the Los Angeles County Department of Public Works, Waste Management Division, P.O. Box 1460, Alhambra, CA 91802-1460, containing:

1. File number of facility and closure permit number.
2. Plot plan to scale showing locations of tanks, sampling points, buildings, adjacent streets and north arrow.
3. Description of methods for obtaining, handling and transporting samples.
4. Time and date samples were obtained.
5. If borings were established, boring logs certified by a CA Registered Geologist, CA Certified Engineering Geologist or CA Registered Civil Engineer with sufficient experience in soils.
6. Chain-of-custody documentation initiated by person obtaining sample through person at State Department of Health Services certified laboratory.
7. Disposal destination of tanks and evidence of legal disposal.
8. Analysis results by a State certified laboratory submitted on laboratory letterhead showing analysis date, methods of extraction and methods of analysis.
9. Documentation as to depth of groundwater at facility.
10. Manifests to document hazardous waste disposal of any removed soil.
11. Any observations of site contamination.
12. Remedial action plan to mitigate contamination.
13. Report to be signed by CA Registered Geologist, CA Certified Engineering Geologist or CA Registered Civil Engineer with sufficient experience in soils.

Signature

J. Stou
POORVICK

Date

4/29/91

ATTENTION CONTRACTOR

NOTIFICATION REQUIREMENTS

Pursuant to Los Angeles County Code, Section 11.78.045, and the Conditions and Limitations of the attached Hazardous Materials Underground Storage Closure Permit, you are required to complete ALL of the agency notifications indicated below within the time period specified prior to commencement of work on this closure.

- 72 HOURS - DEPARTMENT OF PUBLIC WORKS WASTE CONTROL ENGINEERING INSPECTORS:

Unless otherwise noted DPW inspectors are available at the following offices between 8:00 a.m. and 9:30 a.m. ONLY.

- BELLFLOWER DISTRICT - (213) 804-2584; 804-2585
16600 Civic Center Drive, Bellflower, CA 90607
- CENTINELA VALLEY REGION - (213) 534-4862; 534-4859
24320 South Narbonne Avenue, Lomita, CA 90717
- LENNOX DISTRICT - (213) 419-5650
4353 Lennox Boulevard, Lennox, CA 90304
- SAN GABRIEL VALLEY DISTRICT - (818) 574-0962
125 South Baldwin Avenue, Arcadia, CA 91006
- EAST LOS ANGELES DISTRICT - (213) 260-3466; 260-3467
5141 East Pomona Boulevard, Los Angeles, CA 90022
- SAN DIMAS REGION - M, W, F, (818) 574-0957; (818) 574-0958
- T, TH, (818) 961-9611
125 South Baldwin Avenue, Arcadia, CA 91006
- NEWHALL REGION - (805) 253-7207
23757 West Valencia Boulevard, Santa Clarita, CA 91355

- 24 HOURS (OR AS REQUIRED) - LOCAL FIRE DEPARTMENT FIRE PREVENTION INSPECTOR:

City of _____

Los Angeles County Fire Department (213) 317-1351

- 24 HOURS - SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

(818) 572-6195

FAILURE TO PROVIDE NOTICE AS REQUIRED ABOVE MAY RESULT IN PERMIT REVOCATION, ADDITIONAL SITE ASSESSMENT REQUIREMENTS AND/OR ADMINISTRATIVE PENALTIES AS PROVIDED BY LAW.

CLOSENOTE
04/91

184/ATTENT

AGOURA MOBIL MINIMART
5116 CHESEBRO ROAD 706-2169
AGOURA, CA 91301

File # 6055
Permit # 80, -B

0020

4/29/ 1991 90-3856/1222

PAY TO THE ORDER OF DEPT OF PUBLIC WORKS.

\$ 255⁰⁰

Two Hundred Fifty Five DOLLARS



CHARTER PACIFIC BANK
30141 AGOURA ROAD
AGOURA, CALIF. 91301

FOR Removal OF Tanks

[Handwritten Signature]

⑈005620⑈ ⑆122238569⑆ 001012177⑈

RECEIVED

APR 1991

DEPARTMENT OF PUBLIC WORKS
WASTE MANAGEMENT DIVISION

File # 5841-6057



State of California
State Water Resources Control Board

(Instructions on reverse)

CERTIFICATION OF FINANCIAL RESPONSIBILITY FOR UNDERGROUND STORAGE TANKS CONTAINING PETROLEUM

A. I am required to demonstrate Financial Responsibility in the required amounts as specified in Section 2807, Chapter 18, Div. 3, Title 23, CCR:

500,000 dollars per occurrence
or
 1 million dollars per occurrence

AND

1 million dollars annual aggregate
or
 2 million dollars annual aggregate

B. GHANSHYAM AMIN hereby certifies that it is in compliance with the requirements of Section 2807,
(Name of Tank Owner or Operator)

Article 3, Chapter 18, Division 3, Title 23, California Code of Regulations.
The mechanisms used to demonstrate financial responsibility as required by Section 2807 are as follows:

C. Mechanism Type	Name and Address of Issuer	Mechanism Number	Coverage Amount	Coverage Period	Corrective Action	Third Party Comp.
STATE UST FUND	STATE UST CLEAN UP FUND P.O. Box 944212 SACRAMENTO CAL 95824-2120	NA	995,000 PER OCC. AND ANNUAL AGG.	STATE UST CLEAN UP CONTINUOUS	YES	YES
CHIEF FINANCIAL OFFICER LETTER	AGOURA MOBIL MINIMART 5116 CHESBRO RD AGOURA CA 91301	NA	500. - PER OCC. AND ANNUAL AGG	ANNUAL	YES	YES

RECEIVED

NOV 24 1998

DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL PROGRAMS DIVISION

C240758

Note: If you are using the State Fund as any part of your demonstration of financial responsibility, your execution and submission of this certification also certifies that you are in compliance with all conditions for participation in the Fund.

D. Facility Name	Facility Address
AGOURA MOBIL MINIMART	5116 CHESBRO RD AGOURA

Signature of Tank Owner or Operator: JEFF AMIN Date: 11-19-98
 Signature of State Representative: M.D. THOMPSON Date: 11-19-98

EXHIBIT B

The Chief Financial Officer or the owner or operator must sign, under penalty of perjury, a letter worded EXACTLY as follows or you may complete this letter by filling in the blanks with appropriate information:

LETTER FROM CHIEF FINANCIAL OFFICER

I am the Chief Financial Officer AGOURA MOBIL MINIMART.
(Business name, business address, and correspondence address of owner or operator)
5116 CHICSEBRO RD AGOURA CA 91301

This letter is in support of the use of the **Underground Storage Tank Cleanup Fund** to demonstrate financial responsibility for taking corrective action and/or compensating third parties for bodily injury and property damage caused by an unauthorized release of petroleum in the amount of at least \$ 5000.00 per occurrence and \$ 5000.00 annual aggregate coverage.
(Dollar Amount) (Dollar Amount)

Underground storage tanks at the following facilities are assured by this letter:

(Name and address of each facility for which financial responsibility is being demonstrated.)

- 1. Amount of annual aggregate coverage being assured by this letter..... \$ 5000.00.
- 2. Total tangible assets..... \$ 6000.000.00.
- 3. Total liabilities..... \$ 1,800,000.00.
- 4. Tangible net worth (subtract line 3 from line 2. Line 4 must be at least 10 times line 1)..... \$ 4,200,000.00

I hereby certify that the wording of this letter is identical to the wording specified in subsection 2808.1(d)(1), Chapter 18, Division 3, Title 23 of the California Code of Regulations.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Executed at AGOURA CALIFORNIA
(Place of Execution)

On NOV 18 1996
(Date)

[Signature]
(Signature)

CHANGSHAN AMIN
(Printed Name)

OWNER
(Title)

100A-C4

FILE

APPLICATION FOR CLOSURE
HAZARDOUS MATERIALS UNDERGROUND STORAGE
COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
WASTE MANAGEMENT DIVISION
900 S FREMONT AVE
ALHAMBRA, CA 91803

4273B

4273 B

"P" - 5564 - (AT)

"A" - 1487A - 264

OWNER:

NAME JEFF AMIN
ADDRESS 5116 CHESEBRO RD. CITY AGOURA STATE CA ZIP 91301

FACILITY:

NAME AMIN MOBIL MINI-MARKET
SITE ADDRESS 5116 CHESEBRO RD. CITY AGOURA ZIP 91301
MAILING ADDRESS - SAME - CITY STATE ZIP
CONTACT PERSON JEFF AMIN TITLE OWNER PHONE 818/706-2169

CLOSURE REQUESTED:

- TEMPORARY (REFER TO CONDITIONS A AND B ON BACK OF THIS FORM)
EFFECTIVE DATE OF CLOSURE _____
DATE OPERATION WILL RESUME _____
- PERMANENT, TANK(S) REMOVAL DISPOSAL DESTINATION TO BE SPECIFIED
(REFER TO CONDITIONS A AND C ON BACK OF THIS FORM)
- PERMANENT, TANK(S) IN PLACE
(REFER TO CONDITIONS A AND D ON BACK OF THIS FORM)

TANK(S) DESCRIPTION: (ATTACH ADDITIONAL LIST IF NECESSARY.)

TANK NO.	MATERIAL	AGE (YEARS)	CAPACITY (GAL)	MATERIALS STORED (PAST AND PRESENT)
	STEEL		3,000	STEEL SUPER UNLEAD
	STEEL		6,000	- SUPER UNLEAD
			8,000	- REGULAR LEADED
			10,000	- UNLEAD

- HAS ANY UNAUTHORIZED DISCHARGE EVER OCCURRED AT THIS SITE? YES NO
- HAVE STRUCTURAL REPAIRS EVER BEEN MADE ON THESE TANKS? YES NO
- WILL NEW UNDERGROUND TANKS BE INSTALLED FOLLOWING CLOSURE? YES NO
- WILL ANY WELLS, INCLUDING MONITORING WELLS, BE ABANDONED? YES NO

IF THE RESPONSE TO ANY OF THE ABOVE QUESTIONS IS YES, ATTACH EXPLANATION.
NEW UNDERGROUND TANKS WILL BE INSTALLED.

BY SIGNATURE BELOW THE APPLICANT CERTIFIES THAT HE/SHE HAS READ AND UNDERSTANDS THE CONDITIONS ON THE REVERSE SIDE OF THIS FORM AND THAT THE STATEMENTS AND DISCLOSURES ABOVE ARE TRUE AND CORRECT.

APPLICANT'S SIGNATURE [Signature] DATE 4-15-88
OWNER OPERATOR CONTRACTOR DPEDCO CONST. INC.
STATE LICENSE NO. 436167

TO BE COMPLETED BY THE COUNTY ENGINEER

BY SIGNATURE BELOW APPLICANT IS GRANTED APPROVAL TO PROCEED WITH THE CLOSURE.

FEE COLLECTED \$ 255
PERMIT NO. 4273B
FILE NO. 5066 R/CAH

[Signature] DATE 4/15/88
TO ARRANGE FOR AN INSPECTION, TELEPHONE (818) 233 7254

LOS ANGELES COUNTY
DEPARTMENT OF PUBLIC WORKS
CLOSURE REPORT REQUIREMENTS

A closure report shall be submitted to the Los Angeles County Department of Public Works, Waste Management Division, P.O. Box 4089, Los Angeles, CA 90051 containing:

1. File number of facility and closure permit number.
2. Plot plan to scale showing locations of tanks, sampling points, buildings, adjacent streets and north arrow.
3. Description of methods for obtaining, handling and transporting samples.
4. Time and date samples were obtained.
5. If borings were established, boring logs certified by a CA Registered Geologist, CA Certified Engineering Geologist or CA Registered Civil Engineer with sufficient experience in soils.
6. Chain-of-custody documentation initiated by person obtaining sample through person at State Department of Health Services certified laboratory.
7. Disposal destination of tanks and evidence of legal disposal.
8. Analysis results by a State certified laboratory submitted on laboratory letterhead showing analysis date, methods of extraction and methods of analysis.
9. Documentation as to depth of groundwater at facility.
10. Manifests to document hazardous waste disposal of any removed soil.
11. Any observations of site contamination.
12. Remedial action plan to mitigate contamination.
13. Report to be signed by CA Registered Geologist, CA Certified Engineering Geologist or CA Registered Civil Engineer with sufficient experience in soils.

Signature Frank W. FRENCH Date 11-15-80

CLOSURE PERMIT SUPPLEMENT
 HAZARDOUS MATERIALS UNDERGROUND STORAGE
 LOS ANGELES COUNTY
 DEPARTMENT OF PUBLIC WORKS
 WASTE MANAGEMENT DIVISION
 2250 ALCAZAR STREET
 LOS ANGELES, CALIFORNIA 90033

Closure Permit
 No. 4273 B
 File No.
 I-10055-514

To satisfy the permanent closure requirements for underground storage tanks previously storing hazardous materials, site integrity must be demonstrated by the analysis of soil samples and, if applicable, groundwater samples as outlined below. These requirements are in addition to the conditions listed on the Application for Closure or contained in an approved Closure Plan.

1. Samples shall be obtained at the sampling points (SP) indicated on the attached plot plan.
2. For each SP, samples shall be obtained at the following depths:

SP	Depth(s)	Compounds	Analysis Method
<u>1A-2B</u>	<u>4'-6' BELOW TANK INVERT</u>	<u>TPH</u>	<u>8015</u>
<u>2A-2B</u>	<u>" " " "</u>	<u>TPH</u>	<u>8015</u>
<u>3A-3B</u>	<u>" " " "</u>	<u>TPH & ORGANIC LEAD</u>	<u>8015</u>
<u>4A-4B</u>	<u>" " " "</u>	<u>TPH</u>	<u>8015</u>
5A-5B	" " " "	TPH	8015

All soil samples obtained shall be undisturbed and unexposed prior to analysis. The method used to obtain the samples and the date of sampling shall be included in the final report.

If groundwater is encountered during sampling, a groundwater monitoring well shall be established at the most downgradient sampling point. The well shall be developed by removing a minimum of four well volumes and a groundwater sample shall be obtained and analyzed.

The analysis results for all soil samples shall be expressed in milligrams per kilogram (mg/kg). Analysis results for groundwater samples shall be expressed in parts per billion (ppb).

Analysis results shall be reported on laboratory letterhead and shall include the following information: a) The date the analysis was conducted; b) The method of extraction (if applicable); c) The method of analysis.

All soil/groundwater samples obtained shall be handled and transported to a laboratory in strict accordance with applicable EPA regulations utilizing chain-of-custody procedures. Chain-of-custody documentation shall be included in the final report.

If the soil/groundwater analysis indicates undefined contamination at the facility, additional sampling shall be required to define the vertical and lateral extent present.

A final report that contains all of the above required information shall be submitted to the office above within 90 days of the date of the final analysis.

HAZARDOUS MATERIAL UNDERGROUND STORAGE PERMIT
INTERIM MONITORING OPTION

PERMIT NO. 5564

EXPIRATION DATE: August 1, 1989

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
WASTE MANAGEMENT DIVISION
P.O. BOX 4089, TERMINAL ANNEX
LOS ANGELES, CALIFORNIA 90051

PERMISSION IS HEREBY GRANTED UNDER LACC TITLE 11, DIVISION 4 TO:

<p>6055-5H </p> <p>RECEIVED TO</p>	<p><<<<<<<< FILE NUMBER</p> <p><<<<<<<< PERMITTEE</p> <p><<<<<<<< FACILITY ADDRESS</p>
-------------------------------------	---

TO STORE HAZARDOUS MATERIALS IN UNDERGROUND TANK(S) LOCATED AT THE FACILITY ABOVE.

NUMBER OF PERMITTED TANKS: 3

THIS PERMIT IS SUBJECT TO THE FOLLOWING REQUIREMENTS:

PART A -- GENERAL CONDITIONS AND LIMITATIONS (ATTACHED).

PART B -- AUTHORIZED HAZARDOUS MATERIAL STORAGE TANKS (ATTACHED).

PART C -- SPECIFIC CONDITIONS AND LIMITATIONS:

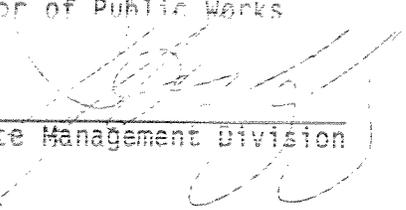
1. The results of the second annual tank tests must be submitted to the Department of Public Works (DPW) by August 1, 1988.
2. The results of the third annual tank tests must be submitted to DPW by August 1, 1989, unless Application for Closure has been filed prior to that date.
3. Records of daily inventory reconciliation must be kept for a period of three years. If any allowable variation is exceeded, the permittee must notify DPW within 24 hours. See attached Inventory Reconciliation Requirements.

PART D -- SPECIAL CONDITIONS AND LIMITATIONS.

An Application for Closure must be on file with DPW prior to August 1, 1989.

Proposals for Leak Detection and Tank Monitoring must be submitted to DPW by July 1, 1989.

T. A. TIDEMANSON
Director of Public Works

By 

Waste Management Division

Attach 

Issue Date March 16 1989

PART B — TANK DATA
HAZARDOUS MATERIALS UNDERGROUND STORAGE PERMIT NO. 5564

AUTHORIZED HAZARDOUS MATERIAL STORAGE TANKS

<u>TANK NUMBER</u>	<u>CAPACITY (GALLONS)</u>	<u>CONTENTS</u>	
1	15,000	Diesel Regular	do. wait stuff
2	15,000	Unleaded	
3	15,000	Super Unleaded	

... Engine (covered) ...
do. wait.

JOB #1R1002

I-6055-514

Waste



RVI (3)

FINAL REPORT
 FOR
 SOIL REMEDIATION
 AT
 5116 CHESEBORO
 AGOURA, CALIFORNIA
 FOR

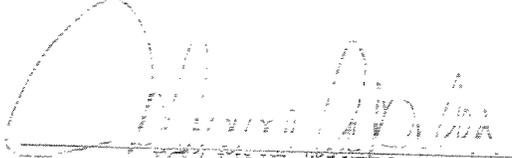
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NOV 21 1991

DEPARTMENT OF PUBLIC WORKS
WASTE MANAGEMENT DIVISION

DEPARTMENT OF PUBLIC WORKS
 WASTE MANAGEMENT DIVISION
 P. O. BOX 1460
 ALHAMBRA, CALIFORNIA 91802

OCTOBER 25, 1991


 JOANNE AKELY
 ENVIRONMENTAL SERVICES

INTRODUCTION

The subject site is located at 5116 Chesebro Road, Agoura Hills, California. The site had two former underground storage fuel tanks (UST), which were utilized for the storage of unleaded fuel. During the tank removal activities slightly elevated concentrations of total petroleum hydrocarbon (TPH) were detected below the base of one of the UST's. The tanks were removed and the soil was tested for contamination. Laboratory results, of the samples taken after the tanks were removed, indicated that the soil was contaminated with TPH. The highest level of contamination was listed at 200 ppm TPH. The client was not going to backfill the excavated soil but have it hauled to a Class III Landfill.

Ensotech was contracted by Mr. Jeff Amin to remediate approximately 200 cubic yards of soil contaminated with gasoline. The contaminated soil was remediated utilizing Ensotech's LANDTREAT/PETROXY process in conjunction with the Sifter and Mobile Air Cleaning System (MACS).

THE LANDTREAT/HYDROGEN PEROXIDE PROCESS

The soil was treated with a mixture of PETROXY and LANDTREAT. The peroxide oxidizes the organics, while the LANDTREAT provides an adsorbent catalyst for the reaction. This process has been shown to be effective in treating Hydrocarbon contaminated soils over a wide contamination range.

LANDTREAT is a patented Ensotech product. It is a silicate-based inorganic polymer and functions as a catalytic surface furthering decomposition of the hydrocarbons and reduction of odors.

Hydrocarbon Oxidative Destruction

The efficacy of PETROXY in the oxidative destruction of several classes of toxic or noxious organic chemicals is well known. PETROXY (H_2O_2) reacts with, among other things, cyanides (CN^-), sulfides (S^{-2}), mercaptans (RSH), and a broad spectrum of hydrocarbons.

The reaction products are nontoxic, so no hazardous residue remain after treatment. PETROXY has several advantages over other strong oxidants. Its reaction products are non-toxic and basically odor-free unlike chlorine, another oxidant, which produces hydrochloric acid and chlorinated hydrocarbons as by-products. These are acutely toxic compounds. In general, the reaction products of PETROXY and hydrocarbons are carbon dioxide, water and basic calcium carbonate/bicarbonate ($Ca(OH)_2CaCO_3$) which are naturally present in our atmosphere and soil. PETROXY, if present in high concentrations, will spontaneously decompose into carbon dioxide and water over time, leaving no harmful residue behind.

5116 Chesebro Road
Job #1R1002

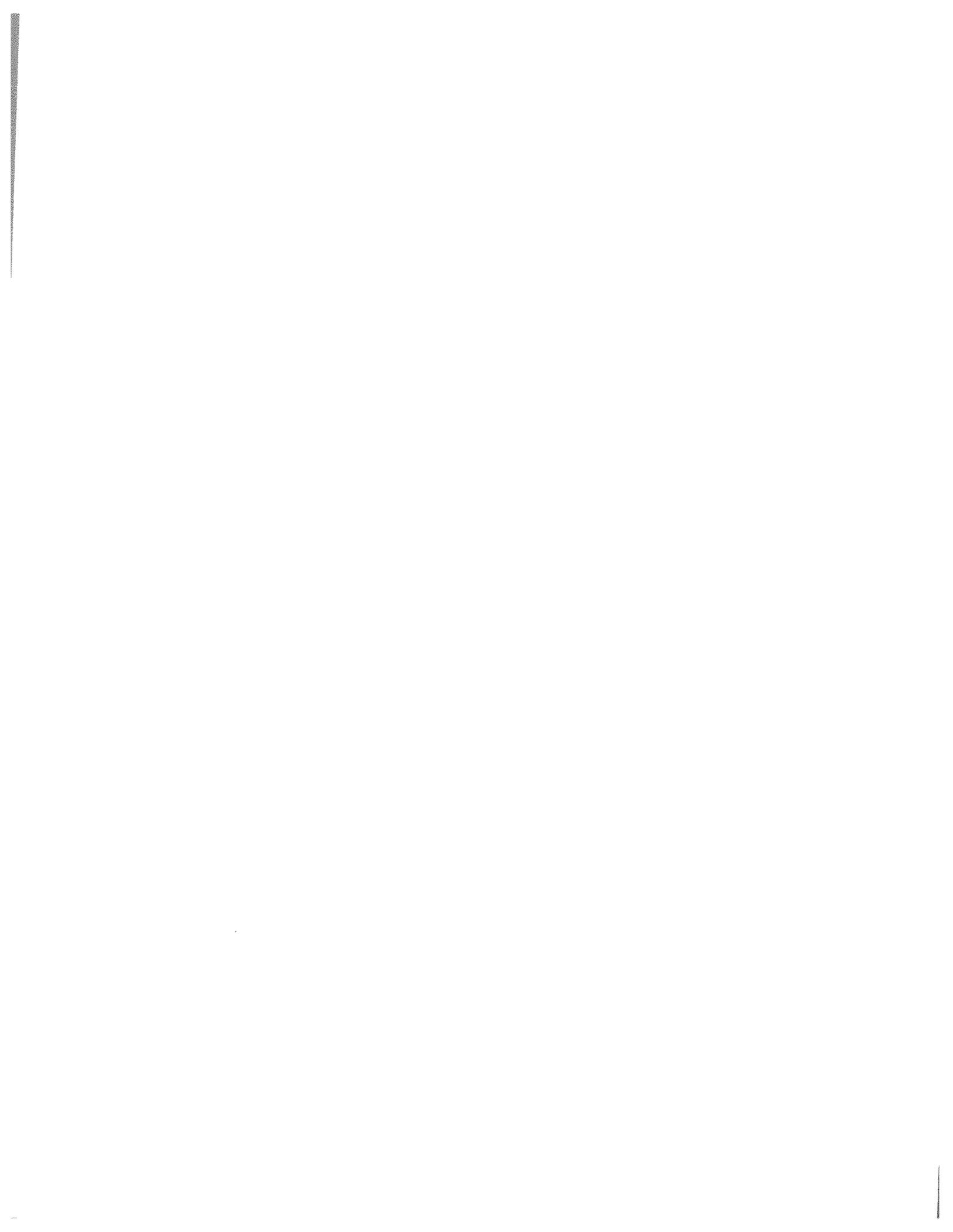
Chain of custody forms were filled out each day and given to the lab with the samples. The forms include the following information:

- 1) contact person and phone No.
- 2) client name and address
- 3) site name and address
- 4) lab #
- 5) field #
- 6) date sampled
- 7) time sampled
- 8) type of sample
- 9) sample description and location
- 10) No. of containers
- 11) analyses required
- 12) field observations

SITE CLOSURE

The treatment operation began October 26, 1991 with mobilization of the equipment and chemicals. Grab samples were taken at the end of each day. The treatment was successfully completed on October 28, 1991. Representative soil samples were taken from the stockpiled soil.

The laboratory results indicated that all BTXE and TPH levels were reduced to below permissible levels. The treated soil is suitable for hauling to a Class III Landfill.





COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (818) 458-5100

THOMAS A. TIDEMANSON, Director

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

June 8, 1994

IN REPLY PLEASE
REFER TO FILE

I-14817

MR FRED SPERBER
HYDRO-WEST
28215 WEST AGOURA HILLS RD
AGOURA HILLS CA 91301-0116

Dear Mr. Sperber:

**HAZARDOUS MATERIALS UNDERGROUND STORAGE
REMEDIAL ACTION COMPLETION CERTIFICATION
CLOSURE PERMIT NO. 5458B
LOCATION: 28244 DOROTHY DRIVE, AGOURA HILLS**

This letter confirms the completion of site investigation and remedial action for the underground storage tank(s) at the above site. Thank you for your cooperation throughout this investigation. With the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground tank release is required based on the available information as set forth in the California Code of Regulations, Title 23, Division 3, Chapter 16, Article 11, Section 2721(e) (Underground Storage Tank Corrective Action Regulations).

If the present or proposed use of the site changes, it is the property owner's responsibility to promptly notify this agency.

If you have any questions regarding this matter, please contact Nicole Long at (818) 458-3572.

Very truly yours,

HARRY W. STONE
Acting Director of Public Works

Brian D. Hooper
Supervising Civil Engineer IV
Waste Management Division

NL:rm
WP/14817

cc: Mr. Eijah Hill, California Regional Water Quality Control Board
Ms. Janice Paulson, State Water Resources Control Board