ENVIRONMENTAL

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Chevron

Chevron U.S.A. Products Company
6001 Bollinger Canyon Rd., Bldg. L
P.O. Box 5004
San Ramon, CA 94583-0804

Site Assessment & Remediation Group
Phone (510) 842-9500

July 10, 1995

Ms. Eva Chu
Alameda Co. Dept. of Environmental Health
1131 Harbor Bay Pkwy, 2nd Floor
Alameda, CA 94502-6577

Re : Former Chevron Service Station 9-7127
Interstate 580 & Grantline Rd.

Dear Ms. Chu :

The enclosed work plan from Pacific Environmental Group dated July 6, 1995 outlines the additional investigation that will be conducted once your office approves it. Please review the enclosed work plan. If there are comments which will change the work plan, please notify my office. If it meets your approval, please send a written letter to my office. If you have any questions or comments, please give me a call at (510) 842-8752.

Sincerely,
Chevron U.S.A. Products Co.

Kenneth Kan
Engineer

LKAN/97127R02

Enclosure

cc : Person in Charge of Tracy (Alameda Co.), RWQCB-Central Valley Region
3443 Routier Rd., Sacramento, CA 95827-3098

William Carnazzo M.D., Carnazzo Land Company, Inc.
P.O. Box 6031, Atascadero, CA 93423

Mr. & Mrs. Joe Jess, Jess Ranch
Route 5, Box 704-A, Tracy, CA 95376

Ms. Bette Owen, Chevron U.S.A. Products Co.

PACIFIC
ENVIRONMENTAL
GROUP, INC.

Faxed site plan to K. Kan on recommend mw locations

Spoke w/ Dale at PEG and James at CV RWQCB - will move mw locations and send revised site plan
CV RWQCB wants ND of MCLs in outlying wells - No N.A., but long term monitoring w/ no further action could be alternative.

July 6, 1995
Project 325-004.1B

Mr. Kenneth Kan
Chevron U.S.A. Products Company
P.O. Box 5004
San Ramon, California 94583-0804

Re: Work Plan for Additional Off-Site Investigation
Former Chevron U.S.A. Service Station 9-7127
Grant Line Road at Interstate 580
Tracy, California

Dear Mr. Kan:

This letter, prepared by Pacific Environmental Group, Inc. (PACIFIC) for Chevron U.S.A. Products Company (Chevron), presents a work plan for the installation of three off-site groundwater monitoring wells at the site referenced above (Figures 1 and 2). The purpose of the proposed work is to further delineate the lateral extent of dissolved hydrocarbons in groundwater beneath the site. This work plan includes discussion of site background, scope of work, and schedule. Field and analytical procedures are presented as Attachment A.

SITE BACKGROUND

The site is a former Chevron service station located at the southeast corner of the junction between Grant Line Road and Interstate 580 in Tracy, California (Figure 1). The site lies adjacent the freeway and is situated within rolling foothills northwest of Tracy. With the exception of a water-supply well, all site improvements have been removed. The site is currently used for cattle-grazing. Grant Line Road terminates at the south-end of the site creating a cul-de-sac which commuters use for daily parking.

The site operated as a gasoline service station between 1971 and 1986. The service station had three underground gasoline storage tanks (two 9,500-gallon and one 5,750-gallon) in a common excavation. Based on the extent of backfill materials northeast of the tank complex, it appears that the fuel tank complex may have formerly contained a fourth tank. A 1,500-gallon waste oil tank and a 850-gallon heating fuel tank were located in a common excavation northeast of the station building (Figure 2). All tanks were constructed of single-

walled fiberglass. The underground tanks and associated piping were removed on April 4, 1991.

Site Setting

The site elevation is approximately 326 feet above mean sea level. Based on previous investigations conducted at the site, soil beneath the site consists of surficial fill approximately 6 to 17 feet thick overlying sandstone bedrock of the Miocene Neroly Formation (Bishop, 1970) to the maximum depth explored of 40 feet below ground surface (bgs). The Neroly Formation has been described as a marine blue to gray sandstone, which is pebbly in some locations (Dibblee, 1980).

Previous Investigations

Based on previous investigations, hydrocarbon impacted soil at the site is limited to the vicinity of the former underground storage tanks. Groundwater analytical results indicate dissolved hydrocarbons extending off-site to the north and south. Separate-phase hydrocarbons are noted in Well MW-1 located in the former underground storage tank complex.

Groundwater at the site occurs from approximately 29.87 feet below ground surface (bgs) in MW-1 (within the surficial fill) to 13.3 feet bgs in MW-5 (outside the surficial fill). The average historical groundwater gradient has been 0.005 ft/ft with flow direction varying from north to west.

SCOPE OF WORK

The purpose of this investigation is to delineate the lateral extent of dissolved hydrocarbons in groundwater beneath the site. Therefore the scope of work for this investigation includes:

- **Permitting.** Appropriate well permits and encroachment permits will be obtained from the Alameda County Water District (ACWD), City of Tracy, and CALTRANS.
- **Well Installation.** Three groundwater monitoring wells will be installed north (MW-6), west (MW-7), and south (MW-8) of the site at the locations shown on Figure 1.
- **Soils Analyses.** Selected soil samples will be submitted to a California State-certified laboratory for analysis of total petroleum hydrocarbons calculated as gasoline (TPH-g), and benzene, toluene, ethylbenzene, and xylenes (BTEX compounds).
- **Well Elevation Survey.** Wells MW-6, MW-7, and MW-8 will be surveyed to mean sea level (MSL).

- **Well Development and Sampling.** Wells MW-6, MW-7, and MW-8 will be developed prior to groundwater sampling. Collected groundwater samples will be submitted to a California State-certified laboratory for analysis of TPH-g and BTEX compounds.
- **Reporting.** A report that documents the findings of the investigation will be submitted upon completion of the work.

SCHEDULE

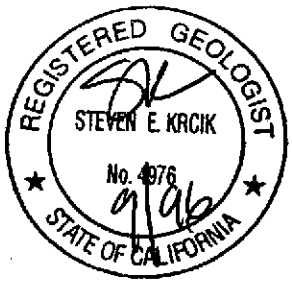
Upon approval of this work plan procurement of appropriate well an encroachment permits, PACIFIC is prepared to commence performing the field work approximately 2 weeks after notification to proceed. The report of findings will be submitted approximately 6 weeks after initiation of field work unless an accelerated or rush schedule is requested.

If you have any questions regarding the contents of this letter, please call.

Sincerely,

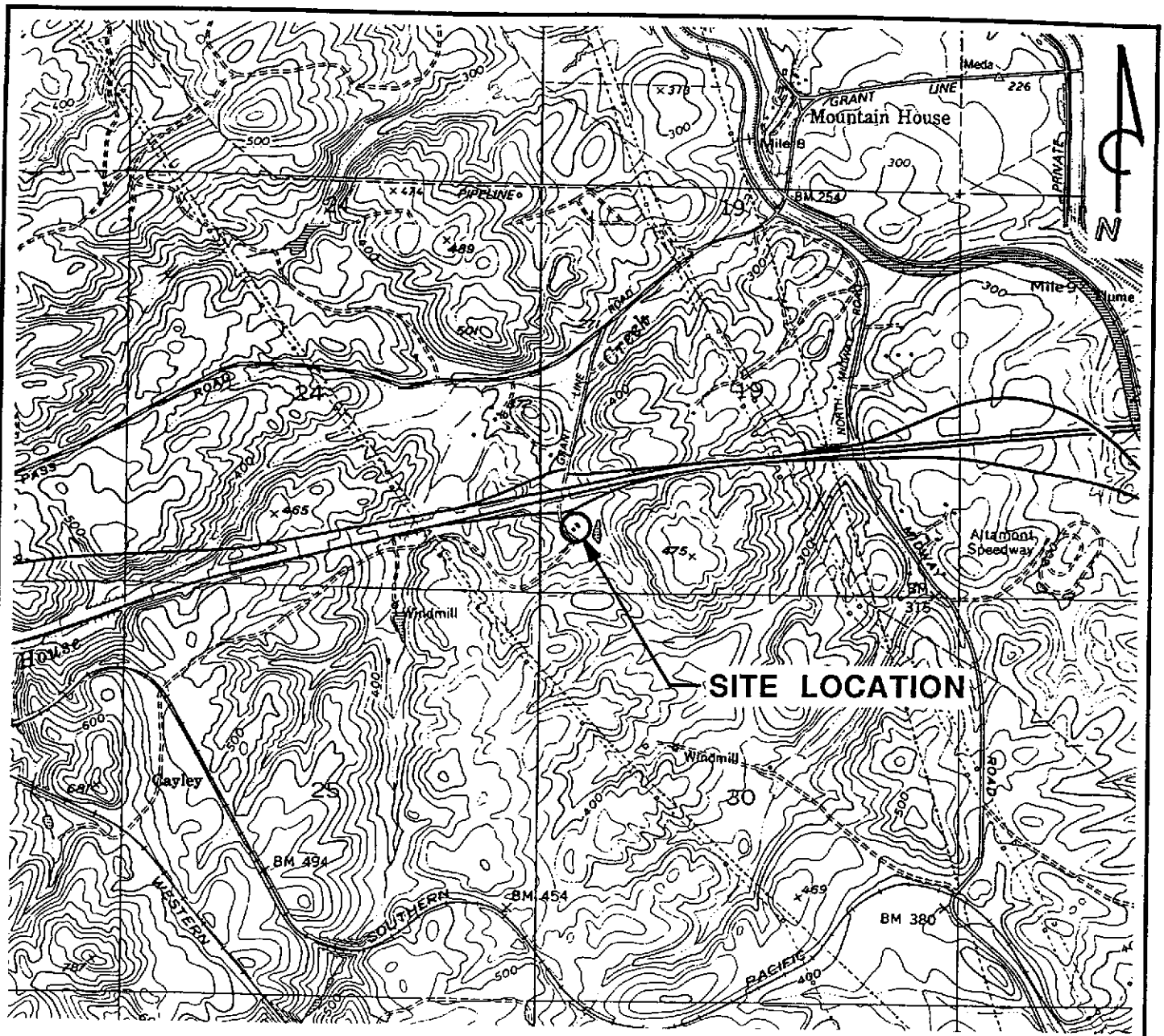
Pacific Environmental Group, Inc.

David Reinsma
Project Geologist



Steven E. Krcik
Senior Staff Geologist
RG 4976

Attachments: Figure 1 - Site Location Map
Figure 2 - Proposed Well Location Map
Attachment A - Field and Laboratory Procedures



QUADRANGLE LOCATION

REFERENCES:
USGS 7.5 MIN. TOPOGRAPHIC MAP
TITLED: MIDWAY, CALIFORNIA
DATED: 1953 REVISED: 1980
TITLED: CLIFTON COURT FOREBAY, CALIFORNIA
DATED: 1978

SCALE
2000 0 2000 FEET

PACIFIC ENVIRONMENTAL GROUP, INC.

FORMER CHEVRON USA STATIONS 9-7127
Grant Line Road at Interstate 580
Tracy, California

SITE LOCATION MAP

FIGURE: 1
PROJECT: 325-004.1B

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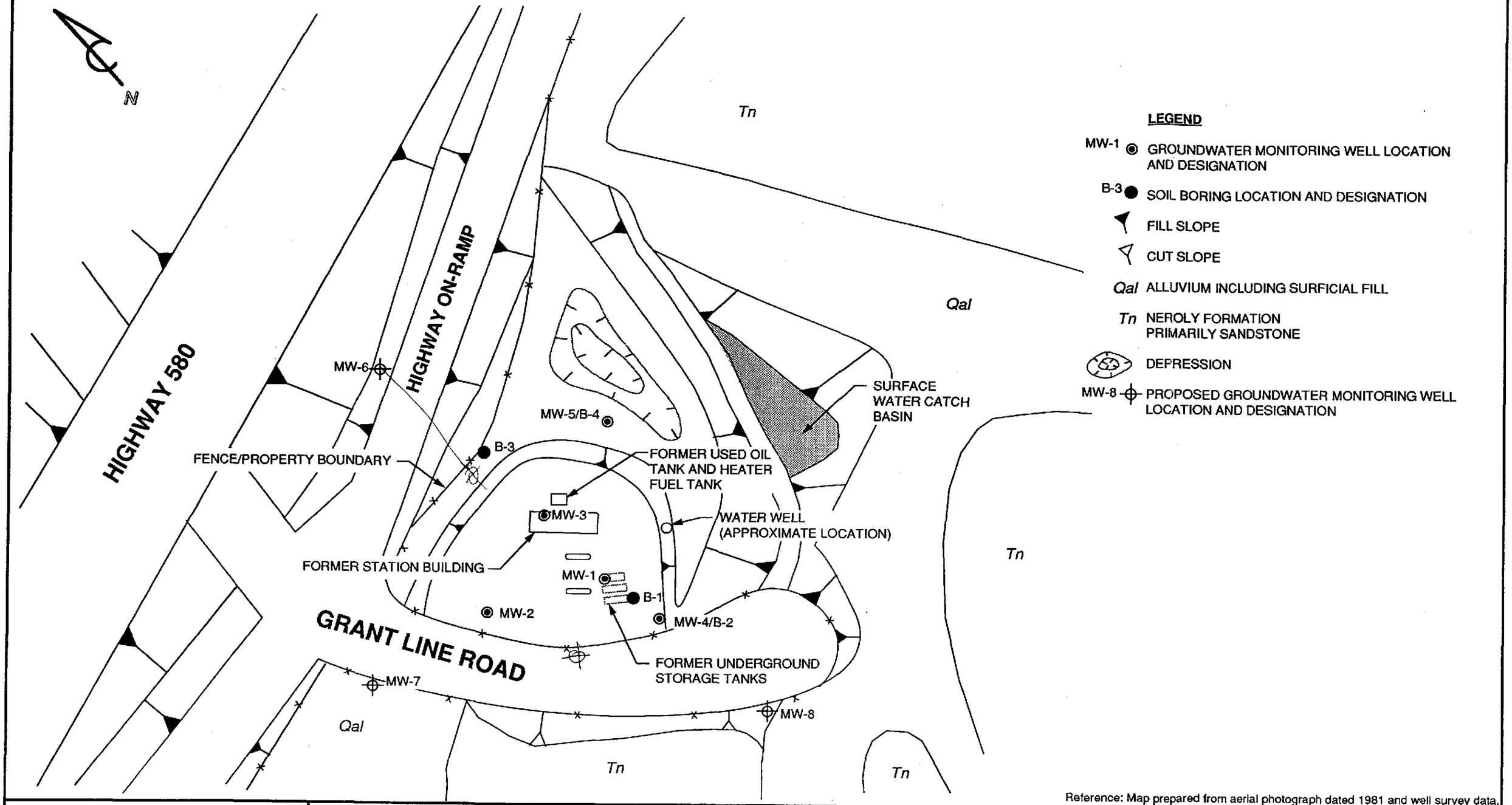

Reference: Map prepared from aerial photograph dated 1981 and well survey data.

PACIFIC ENVIRONMENTAL GROUP, INC.

APPROXIMATE SCALE
0 100 200 FEET

FORMER CHEVRON USA SERVICE STATION 9-7127
Grant Line Road at Interstate 580
Tracy, California

PROPOSED WELL LOCATION MAP

FIGURE: 2
PROJECT: 325-004.1B

ATTACHMENT A

FIELD AND LABORATORY PROCEDURES

ATTACHMENT A
FIELD AND LABORATORY PROCEDURES

Exploratory Drilling and Monitoring Well Installation

The soil borings for the groundwater monitoring wells will be drilled using air rotary drilling equipment, and logged by a Pacific Environmental Group, Inc. geologist using the Unified Soil Classification System and standard geologic techniques. Soil samples for logging will be collected continuously using a dry-core sampling system with brass liners. Soil samples for chemical analysis will be retained in brass liners, capped with Teflon squares and plastic end caps, taped, and sealed in clean zip-lock bags. The samples will be placed on ice for transport to the laboratory accompanied by chain-of-custody documentation. Down-hole sampling equipment will be washed in a tri-sodium phosphate solution between samples. All down-hole drilling and sampling equipment will be steam-cleaned following the completion of each soil boring.

All residual soils obtained from drilling operations will be stockpiled on site and covered with plastic sheeting until laboratory analyses are completed and the results evaluated. Arrangements will then be made for disposal to an appropriate landfill based on the evidence of detected gasoline concentrations.

The borings will be converted to groundwater monitoring wells by installing 2-inch diameter, flush-threaded, Schedule 40 PVC casing with 0.020-inch factory-slotted screen. Approximately 20 feet of screen will be placed in the bottom of the boring. An RMC 2 x 12 sand pack will be placed in the annular space across the entire screened interval, and will extend approximately 1 foot above the top of the screen for the well. A bentonite and Portland cement seal will extend from the sand pack to the ground surface. A traffic rated well vault box will be installed on top of each well.

Following well completion, the vault box elevation and the elevation of the top of the PVC well casing of the monitoring wells will be surveyed to the nearest 0.01 foot, relative to mean sea level, by a licensed surveyor. The boring logs will show well construction details and the wellhead elevations.

Organic Vapor Procedures

Soil samples collected at 5-foot depth intervals during drilling will be analyzed in the field for ionizable organic compounds using the HNU Model PI-101 (or equivalent) photo-ionization detector (PID) with a 10.2 eV lamp. The test procedure will involve measuring approximately 30 grams from an undisturbed soil sample, placing this subsample in a zip-lock bag. The bag will be warmed for approximately 20 minutes (in the sun), then head-space within the bag will be tested for total organic vapor, measured in ppm (volume/volume). The instrument will be calibrated prior to drilling using a 100-ppm isobutylene standard (in air) and a sensitivity factor of 55 which relates the photo-ionization potential of benzene to that of isobutylene at 100 ppm. The results of the field testing will be noted on the boring logs. PID readings are useful for indicating relative levels of contamination, but cannot be used to evaluate hydrocarbon levels with the confidence of laboratory analyses.

Well Development and Groundwater Sampling

The groundwater monitoring wells will be developed and sampled after completion. The development procedure for each well will consist of pumping or bailing water from the well until the water is visibly clear, or until a minimum of ten casing volumes have been removed. The sampling procedure will consist of first measuring the water level in the well, and checking it for the presence of separate-phase hydrocarbons (SPH) using an MMC oil-water interface probe. If no SPH is present the well will then be purged of a minimum of five casing volumes of water using a centrifugal pump. During purging, temperature, pH, and electrical conductivity will be monitored until stable to document that a representative sample is collected. After the water level recovers, a sample will be collected from each well using a Teflon bailer and placed into appropriate EPA-approved containers. The samples will be labeled, logged onto a chain-of-custody document, and transported on ice to a California State-certified laboratory.

Laboratory Procedures

Selected soil samples collected from the soil borings and groundwater samples collected from the monitoring wells will be analyzed by a California State-certified laboratory for the presence of TPH-g and BTEX compounds according to EPA Methods 8015 (modified) and 8020.