FACSIMILE COVER SHEET

CUSA MARKETING

WEST CENTRAL REGION

SR-2410 CAMINO RAMON

MAIL ADDRESS: CHEVRON U.S.A. INC.
P.O. Box 5004
San Ramon, CA 94583-0904
(Street: 2410 CAMINO RAMON)

DATE: Nov 20, 1989

TO: Name of Person, Company, Address, Facsimile Number (If Available)

Mr. Hary Seto
Alameda County Dept of Health
Hazmat Section
Oakland, CA-

FAX NUMBER: (415) 271-4320

FROM:

Kelly Davis

PHONE NO. (415) 842-9591

FAX NO. (415) 842-9530

SUBJECT:

Workplan for Division St # 9139

REMARKS:

Please begin to review as we would like drilling to begin Nov 27, 1989

NUMBER OF PAGES INCLUDING COVER SHEET 2

If transmission is interrupted or received incomplete, please contact our Facsimile Operator: (415) 842-9530

Reply by Facsimile - Dial:
(415) 842-9591

OPERATOR: _____ TIME: _____ DATE: _____

CONFIRMED BY: _____ TIME: _____ DATE: _____

Chevron U.S.A. Inc.
2410 Camino Ramon, San Ramon, California • Phone (415) 842-9500
Mail Address PO Box 5004, San Ramon, CA 94583 0804

Marketing Operations
D. Moller
Manager, Operations
S. L. Patterson
Area Manager, Operations
C. G. Trumbach
Manager, Engineering

November 17, 1989

Mr. Larry Seto
Alameda County Dept. of Health
HAZMAT Section
470 27th Street, Room 324
Oakland, California 94612

Re: Chevron Service Station #98139
16304 Foothill Boulevard
San Leandro, California

Dear Mr. Seto:

Please find attached the work plan for the additional subsurface work Chevron is proposing at the subject site. The additional borings/wells proposed will help delineate the extent of hydrocarbon contamination in both soil and groundwater and provide valuable information to be incorporated into the development of a remedial action plan if required.

Additionally, a check in the amount of $831.00 is attached for the deposit refund fee your office requires for workplan processing.

Chevron will proceed with this work upon approval from your office. As I may be on vacation, please contact Mr. Dave Tight of CHEMPRO (415) 524 - 9372, with your verbal approval to begin.

I declare under penalty of perjury that the information contained in the attached report is true and correct, and that any recommended actions are appropriate under the circumstances, to the best of my knowledge.

If you have any questions or comments regarding this letter, please feel free to call me at (415) 842 - 9040.

Very Truly Yours,

D. Moller

by Michael R. Brown
Michael R. Brown
CUSA Environmental Engineer

cc: RWQCB, Ms. Dyan Whyte
City of San Leandro, Mr. Robert Nolan
File

CHEMICAL PROCESSORS, INC.
Northern California Division

CHEMPRO
A Burlington Environmental Inc. Company

950 Gilman Street, Suite B
Berkeley, California 94710
(415) 524-9372

Chevron U.S.A., Inc.
P.O. Box 5004
San Ramon, California
Attn: Mr. Michael Brown

November 9, 1989
Job No. 987158

WORKPLAN FOR PRELIMINARY SOIL AND GROUND-WATER CHARACTERIZATION: CHEVRON SERVICE STATION NO. 9-8139, 16304 FOOTHILL BOULEVARD, SAN LEANDRO, CALIFORNIA

Dear Mr. Brown:

Chemical Processors, Inc. (Chempro) is pleased to submit this workplan to perform an environmental investigation at Chevron U.S.A., Inc. (Chevron) Service Station No. 9-8139, located at 16304 Foothill Boulevard, San Leandro, California. The purpose of this investigation is to obtain additional data to characterize the impact of fuel hydrocarbons on the soil and ground water beneath the site.

The proposed work includes a survey of all water wells located within one-half mile of the site, and the installation and sampling of four ground-water monitor wells. Upon completion of this work, a report will be prepared presenting the results of our findings.

BACKGROUND

Site Description

The site is occupied by an operating service station on Foothill Boulevard in southern San Leandro, California (see Figure 1). The service station is located approximately 250 feet east of Highway 580, and 6,000 feet south of Lake Chabot. Properties surrounding the site are occupied primarily by residential housing and small commercial businesses.

The site is approximately 120 feet above sea level and the topography slopes gently to the southwest. Regional ground-water flow direction is to the southwest toward San Francisco Bay.

Previous Work

On June 29, 1989, EA Engineering Science and Technology, Inc. (EA) conducted a soil-vapor survey at the Chevron facility. The soil-vapor sampling points are shown on Figure 2. Very low concentrations of light hydrocarbons were detected near the tank field and at the west end of the south pump island. Measurable

near the tank field and at the west end of the south pump island. Measurable concentrations of benzene, toluene, xylenes and ethylbenzene (BTXE) were detected at V4, near the west corner of the tank field, at a value of 1 part per million (ppm). No BTXE were found above the detection limits at any of the other sampling points.

High vacuums and long release times were required to obtain vapor samples from almost every sampling point. This indicates that soil conditions at the site are tight (low permeability). Because of the poor transport of vapors into the probe, the results of the vapor analyses may have been lower than actual concentrations (EA, "Report of Investigation, Soil Vapor Contaminant Assessment; Chevron SS 9-8139"; July, 1989).

There are currently two monitor wells at the facility, located adjacent to soil-vapor sampling points V1 and V3 (see Figure 2). Both wells are composed of 6-inch diameter polyvinyl chloride (PVC) casing. The well next to V1 has a total depth of 11.2 feet below ground level, and the well adjacent to V3 has a depth of 13.5 feet. On October 13, 1989, the wells were inspected by Chempro and found to be dry.

SCOPE OF WORK

The following scope of work has been prepared to characterize the soil and ground water beneath the site. The scope of work includes performing prefield activities, conducting a survey of wells located within one-half mile of the site, drilling and sampling four soil borings, converting the borings to ground-water monitor wells (if water is found), and sampling the ground water from each of the wells installed.

A detailed description of these tasks follows.

Task 1 - Prefield Activities

To prepare for field activities, Chempro will review previous reports, interview site personnel regarding past site activities, obtain drilling permits, arrange for field materials and equipment, and contract an underground utility locating service to clear exploratory boring locations.

Task 1.1 - Well Survey. A survey will be conducted of the active, inactive, and destroyed water wells within a one-half mile radius of the site. The survey will consist of a review of the wells on file at appropriate county agencies.

Task 2 - Monitor Well Installation

Four soil borings will be drilled at the proposed monitor well locations shown on Figure 2. The borings will be drilled with 8-inch outer-diameter hollow-stem augers.

The borings will provide chemical and stratigraphic data for the soils at the tank field, pump islands, and waste oil tank. Soil samples will be collected for soil classification and chemical analysis at 5-foot intervals using a modified split-spoon

The total depth of each boring will be determined by the hydrogeologic conditions encountered during drilling. The borings will be drilled to 45 feet unless ground water is encountered. If ground water is found, the boring will be drilled 10 feet into the ground water or five feet into a confining layer beneath ground water.

Based on geologic maps of the area, it is likely that bedrock will be encountered at a depth of fewer than 45 feet, which may prevent auger advance. If this occurs, the drilling will be terminated at that depth. The boring will then be either cement-grouted to the surface if ground water has not been encountered, or the boring will be converted to a monitor well.

Soil sample collection and chemical analyses will be conducted under strict chain-of-custody procedures and will follow the guidelines established by Chevron and the Environmental Protection Agency (EPA). The procedures are presented in Appendix B. A minimum of one sample and a maximum of three samples will be analyzed from each boring. Samples will be chosen for analysis using a portable photoionization detector (PID) to determine the presence or absence of volatiles in the samples. The samples collected from the upgradient soil boring (MW-1) and the boring located south of the waste oil tank (MW-2) will be analyzed for the parameters specified by Chevron to be used in the vicinity of used oil or fuel oil tanks (see Table 1). The soil samples collected in the vicinity of the Tank Field and pump islands (borings MW-3 and MW-4) will be analyzed for the parameters listed in Table 2, which are the Chevron minimum requirements. Soil sample analyses will be performed by Superior Analytical Laboratories of San Francisco.

If ground water is encountered during the drilling of any of the borings, each of these borings will be converted to 2-inch-diameter ground-water monitor wells, according to the procedures cited in Appendix A. The screened interval will extend from the bottom of the boring to 5 feet above static water level. Care will be taken to prevent cross-communication between distinct hydraulic zones if more than one hydraulic zone is encountered. The screen will be packed with No. 3 rounded sand to a minimum of 2 feet above the screened section. The sand pack will be capped with a bentonite and cement seal and the well head will be protected with a locked vault box, as described in Appendix A. The monitor wells will be developed to remove trapped sediments from within the gravel pack prior to sampling (see Appendix A).

Following well development, ground-water samples will be collected and analyzed for TPH-as-gasoline using EPA method 8015, BTXE using EPA method 602, and ethylene dibromide (EDB) using the Department of Health Service's method AB1803. In addition to those parameters, samples from wells MW-1 and MW-2, located by the waste oil tank, will also be analyzed for oil and gas by EPA method 503, and Cd, Pb, Zn, and Cr by Atomic Absorption methods. Ground-water samples will be collected under strict chain-of-custody in accordance with the guidelines presented in Appendix B. Superior Analytical Laboratories will perform the analyses.

Chevron SS # 9-8139
San Leandro, California

November 9, 1989
Job No. 987158

TABLE 1

SOIL SAMPLE ANALYTICAL METHODS
Used-Oil or Fuel-Oil Tank Locations

Analysis	Method
TPH (G & O)	Modified EPA 8015
Oil & Grease	503D & E
BTXE	EPA 8240
Metals: Cd, Cr, Pb, Zn	Atomic Absorption

TABLE 2

SOIL SAMPLE ANALYTICAL METHODS
Minimum Chevron Analytical Methods Required

Analysis	Method
TPH as Gasoline	Modified EPA 8015
BTXE	EPA 8240

PROJECT SCHEDULE

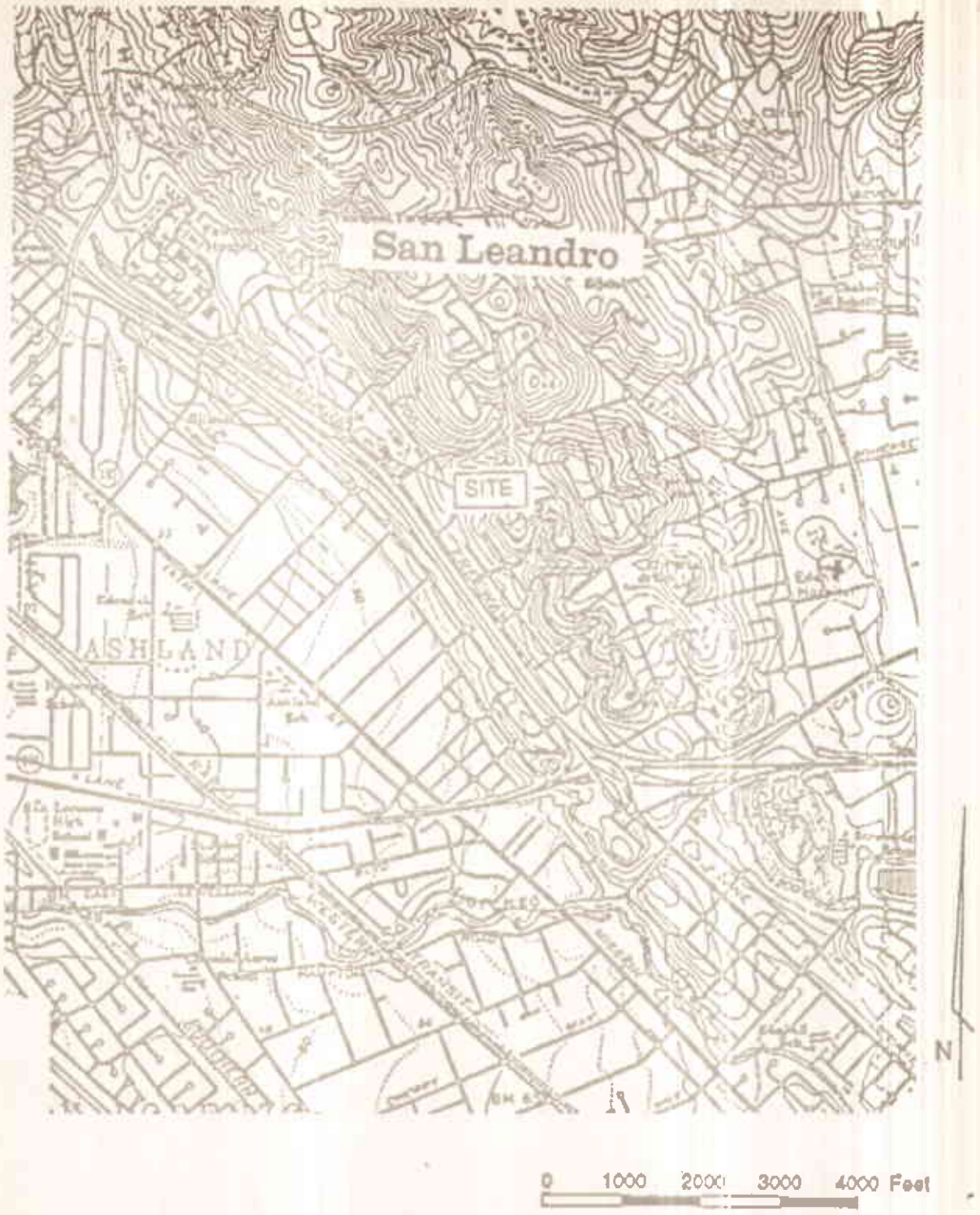
ACTIVITY / WEEK:	1	2	3	4	5	6	7	8	9	10
Pre-Field Scheduling										
Monitor Well Installation										
Well Development and Sampling										
Sample Analysis										
Well Survey										
Report Preparation										

CHEVRON SERVICE STATION #9-8135
11304 FOOTHILL BOULEVARD
SAN LEANDRO, CALIFORNIA

Schedule assumes:

*Regulatory or other constraints do not create unforseen delays

TABLE 3



Note: (Map adapted from EA Engineering Science, and Technology, Inc. July 1989 report)

October 1989

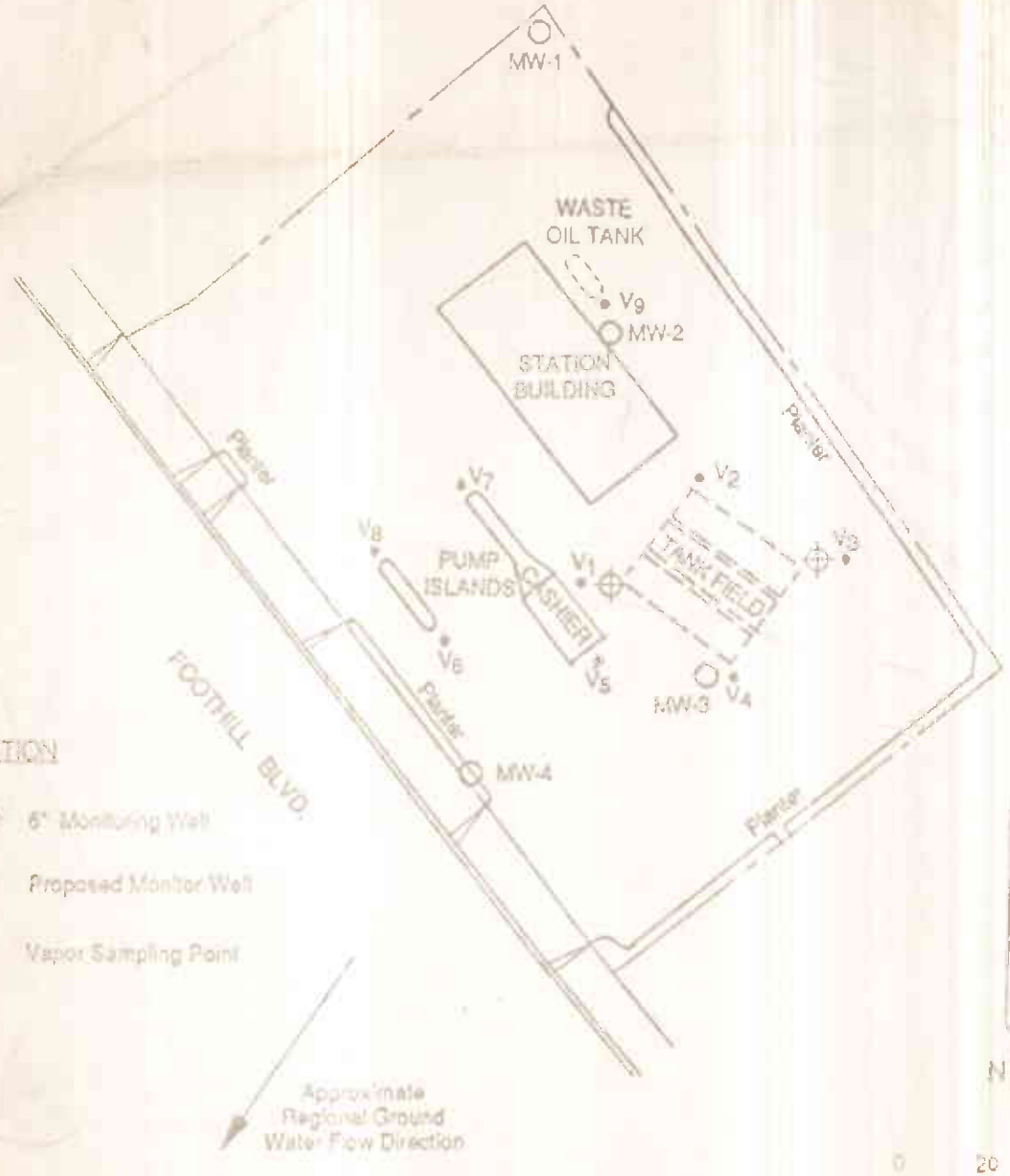
CHEMPRO
A Burlington Environmental Inc. Company

CHEMICAL PROCESSORS, INC.
850 - 8th Gilman Street
Berkeley, CA 94710

SITE LOCATION MAP
Chevron SS 9-8139
16304 Foothill Boulevard
San Leandro, California

Figure 1

987158



Note: (Map adapted from EA Engineering Science, and Technology, Inc. July 1989 report)

October 1989

CHEMPRO
A Burlington Environmental Inc Company

CHEMICAL PROFESSIONALS, INC.
950 'B' Gilman Street
Berkeley, CA 94710

SITE PLAN
Chevron SS 9-8139
16304 Foothill Boulevard
San Leandro, California

Figure 2

987158