PACIFIC
ENVIRONMENTAL
GROUP INC.

FACSIMILE TRANSMITTAL

DATE: MARCH 18, 1993 PROJ. # 305-94.01

TO: LARRY SETO FAX: 510-569-4757

ACHCSA

FROM: DREW WILLERTON

IF YOU HAVE ANY PROBLEMS RECEIVING THIS FACSIMILE, PLEASE CALL (408) 441-7500

SHEETS TO FOLLOW COVER PAGE

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COMMENTS: LARRY - THIS IS A COPY OF THE WORKPLAN FOR CASTRO VALLEY SHELL SITE. PLEASE REVIEW AND CONTACT MYSELF AT YOUR EARLIEST CONVENIENCE.

-DREW

2025 Gateway Place, Suite 440, San Jose, California 95110 (408) 441-7500 FAX (408) 441-7539
620 Contra Costa Blvd., Suite 209, Pleasant Hill, California 94523 (510) 825-0855 FAX (510) 825-0882

March 18, 1993
Project 305-94.01

DRAFT

Mr. Randy Orlowski
Shell Oil Company
P.O. Box 5278
Concord, California 94520

Re: Former Shell Service Station
2724 Castro Valley Boulevard at Lake Chabot Road
Castro Valley, California
WIC No 204-1381-0407

Dear Mr. Orlowski:

This letter presents a workplan prepared by Pacific Environmental Group, Inc. (PACIFIC) for Shell Oil Company at the site referenced above (Figures 1 and 2). The purpose of this work is to excavate soils at the site which have been impacted by oil and grease, diesel and gasoline. The scope of work proposed in this work plan includes the following:

- Additional excavation and disposal of soils impacted by gasoline and diesel in the vicinity of the former waste oil tank and station building.
- Laboratory analysis of soil samples.
- Backfill of excavation with clean material.

Included in this work plan is a brief discussion of site background, scope of work and procedures for the work to be performed, and a schedule of events.

INTRODUCTION

Background

The site is located at the northeast corner of Castro Valley Boulevard and Lake Chabot Road in Castro Valley, California (Figures 1 and 2). The site lies at the

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western edge of Castro Valley, south of the San Leandro Hills. Topography in the vicinity of the site is rolling. The site is approximately 100 feet above mean sea level. The nearest natural drainage is approximately 300 feet west of the site. Depth to groundwater in the vicinity is approximately 4 to 10 feet. Groundwater flow at the site is to the south.

Environmental investigation at the site was initiated in November 1986, when the waste oil tank was replaced. Results from investigation in the vicinity of the waste oil tank are summarized below:

- In November 1986, Blaine Tech Services (Blaine) replaced one 550-gallon waste oil tank with a double-walled tank and conducted field sampling. Analysis of a soil sample collected at a depth of 7 feet in the excavation showed oil and grease at a concentration of 69 parts per million (ppm).
- In January 1990, Converse Environmental West, Inc. (CEW) installed and sampled Wells MW-1 through MW-3 and MW-5, and drilled Soil Boring SB-1. Analysis of the soil samples found maximum concentrations of total petroleum hydrocarbons calculated as diesel (TPH-d) and total petroleum hydrocarbons calculated as motor oil (TPH-mo) at a depth of 5 feet in Well MW-1 of 5.8 and 73 ppm, respectively. Soil from Well MW-2 near the waste oil tank location had a maximum concentration of 370 ppm oil and grease.
- In May 1990, CEW drilled and sampled Boring SB-2 near the station building. Analysis of the soil samples showed 1.0 ppm total petroleum hydrocarbons calculated as gasoline (TPH-g), 14 ppm TPH-d, and 73 ppm TPH-mo at a depth of 4.5 feet.
- In August 1991, CEW collected soil samples in the excavations for the removal of the new waste oil and fuel tanks. Five soil samples were collected from the waste oil tank excavation. Analytical results indicated concentrations up to 7.8 ppm TPH-g and 1,400 ppm oil and grease in the sample closest to the southeast corner of the station building.
- In September, 1991 CEW drilled Borings SB-6 through SB-9 through the floor in the southeast corner of the station building, near the location of the former waste oil tank. Samples were analyzed, and the highest concentrations were found in

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Boring SB-9 at a depth of 5 feet. This sample contained 1,800 ppm TPH-g, 380 ppm TPH-d, and 1,800 ppm oil and grease. Concentrations of 770 ppm TPH-g, 280 ppm TPH-d, and 740 ppm oil and grease were found in Boring SB-6 at a depth of 5 feet.

- Gettler-Ryan Inc. and Geostrategies, Inc. recently collected soil samples below the hydraulic lifts inside the station building. Two samples were collected below the hydraulic lifts and contained 38 ppm and 98 ppm TPH-mo.
- Approximately 1,200 cubic yards of soil have been excavated and removed from the site. The soils were excavated from the former tank complex area in three stages between March and October, 1989, and disposed of at a Class II waste disposal site.

Initial excavation began on December 16, 1992. A work plan dated November 5, 1992 was prepared for this initial phase of the excavation, and addressed primarily excavation of soils impacted by oil and grease. Analytical results of the soil samples collected from the excavation during this initial phase indicated the presence of TPH-g in concentrations up to 480 ppm, TPH-d in concentrations up to 340 ppm, and oil and grease in concentrations up to 100 ppm.

Objective and Scope of Proposed Work

The objective of the proposed scope of work is to excavate hydrocarbon-impacted soils in the vicinity of the former waste-oil tank and in the vicinity of the former station building. The scope of work will consist of: collecting soil samples while supervising overexcavation; screening samples in the field using an organic vapor analyzer; submitting samples for laboratory analysis; sampling to characterize the stockpiled soils for disposal, and detailing the results in a report.

PROCEDURES

All soil samples will be collected in accordance with Regional Water Quality Control Board guidelines as described in "Regional Board Staff Recommendations for Initial Evaluation and Investigation of Underground Tanks". The samples will be collected using a backhoe. When a backhoe bucket of soil is brought to the surface, approximately 3 inches of soil will be scraped off and a clean brass ring will be driven into the soil. The ends of the brass ring will be covered with Teflon sheets and plastic caps, sealed with silicon tape, and the ring labeled and placed in plastic bag. The samples will be logged onto chain-of-custody forms and immediately placed on ice for transport to a California State-certified laboratory.

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Soils will be excavated to low or non-detectable levels of TPH-g and TPH-d in all directions from the southeast corner of the former station building. Oil and grease levels are currently below 100 ppm in all locations except one. Minor excavation in this location of soils impacted by oil and grease is planned to concentrations less than 100 ppm. Additional excavation is not planned for oil and grease. Groundwater at the site is approximately 4 feet below grade; the excavation is not expected to be deeper than 6 feet.

Laboratory Analysis

The analysis for oil and grease will be performed according to gravimetric method SM 5520 E&F. Analysis for TPH-g and TPH-d will be performed according to Modified EPA Method 8015. Analysis for BTEX compounds will be by EPA Method 8020. All analyses will be performed by a state-certified laboratory.

SCHEDULE

A revised schedule of work has been adopted at the site. Additional excavation of the soils impacted by hydrocarbons at the site is now expected to begin March 17, 1993, according to the following schedule:

- Excavation and sampling between March 17, 1993 and March 19, 1993.
- Submittal of samples to the laboratory by March 21, 1993.
- Review of analytical results and schedule of spoils pile disposal and excavation backfill by April 12, 1993.

PACIFIC will provide the Alameda County Health Care Services Agency with a revision to the schedule if required.

REPORT

Following completion of the above scope of services, a report will be issued which will include the laboratory analytical results with chain-of-custody documentation, a map showing the extent of the excavation, and a discussion of findings.

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

Sincerely,

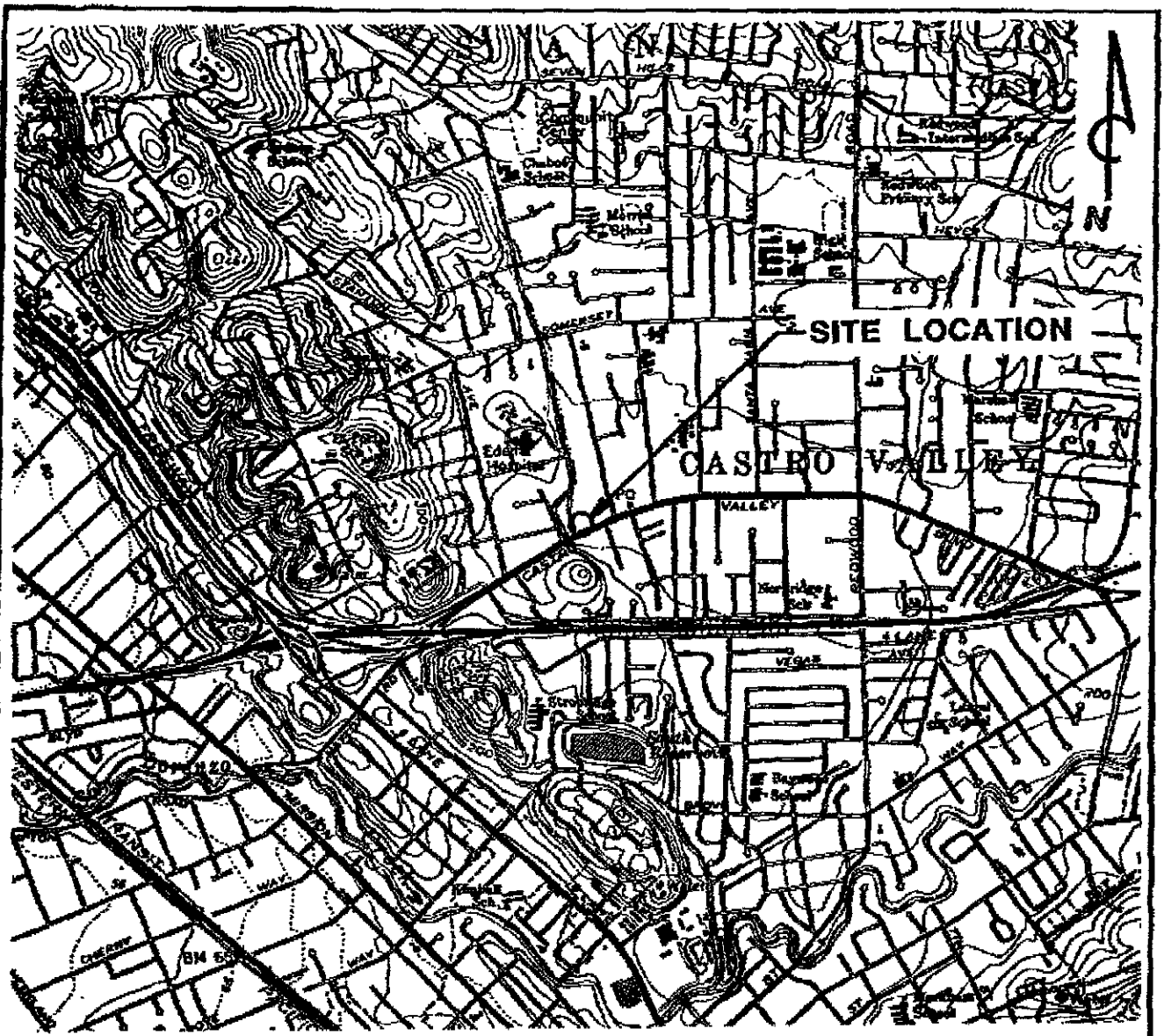
Pacific Environmental Group, Inc.

Andrew Willerton
Senior Staff Geologist

Michael Hurd
Project Geologist
RG 5319

Attachments: Figure 1 - Site Location Map
Figure 2 - Site Map with Former Waste Oil Tank Location

cc: Mr. Larry Seto, Alameda County Health Care Services Agency
Mr. Rich Hiett, Regional Water Quality Control Board
Mr. Larry Turner, Shell Oil Company
Mr. Richard Fenn, Larson, Burnham and Turner
Mr. David Swope, Shell Oil Company
Dr. Mohsen Mehran, Owner Consultant
Mr. Matthew Righetti, Righetti Law Firm
Mr. Richard A. Schoenberger, Esq., Walkup, Shelby, Bastian, Melodia, Kelly, Echeverria and Link



QUADRANGLE LOCATION

REFERENCES:
USGS 7.5 MIN. TOPOGRAPHIC MAP
TITLED: HAYWARD, CALIFORNIA
DATED: 1959 REVISED: 1980

SCALE
2000 0 2000 FEET

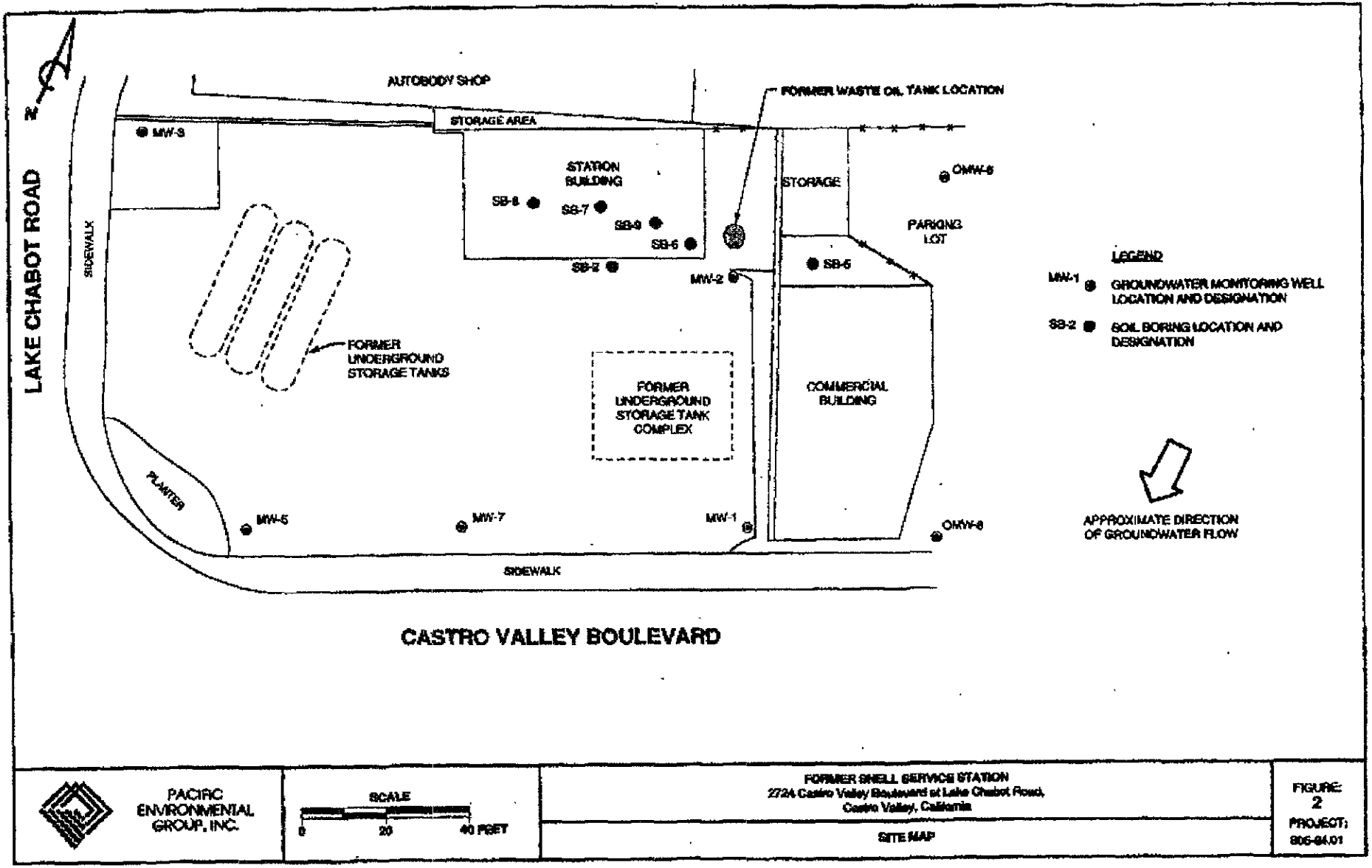
PACIFIC ENVIRONMENTAL GROUP, INC.

FORMER SHELL SERVICE STATION
2724 Castro Valley Boulevard at Lake Chabot Road
Castro Valley, California

SITE LOCATION MAP

FIGURE: 1
PROJECT: 305-94.01

REORDER NO. AS4081



PACIFIC ENVIRONMENTAL GROUP, INC.

SCALE
0 20 40 FEET

FORMER SHELL SERVICE STATION
2724 Castro Valley Boulevard at Lake Chabot Road,
Castro Valley, California

SITE MAP

FIGURE: 2
PROJECT: 806-94.01

11/04/92