

# THRIFTY OIL CO.

November 10, 1986

Alameda County  
Environmental Health Services  
470 27th Street  
Suite 324  
Oakland, CA 94612

ATTENTION: Ted Gerow

RE: Thrifty Oil Co. SS #49  
3400 San Pablo Avenue  
Oakland, California

Dear Mr. Gerow,

Pursuant to our telephone conversation of November 6, 1986 I have enclosed a revised copy of Woodward-Clyde Consultants proposal dated November 7, 1986 for subsurface site assessment for the above referenced location.

As discussed, we will proceed to install wells as outlined by letter and site plan and will submit the results of soil/water analysis to you as they become available.

Please contact me if you have any questions regarding this program.

Yours truly,



Peter D'Amico  
Manager  
Environmental Affairs

PD/dmt  
Enclosure

cc: Peter Johnson, Regional Water Quality Control Board  
Mark B. Gilmartin, Straw & Gilmartin



November 7, 1986

Mr. Peter D'Amico  
Manager, Environmental Affairs  
Thrifty Oil Co.  
10000 Lakewood Boulevard  
Downey, CA 92040

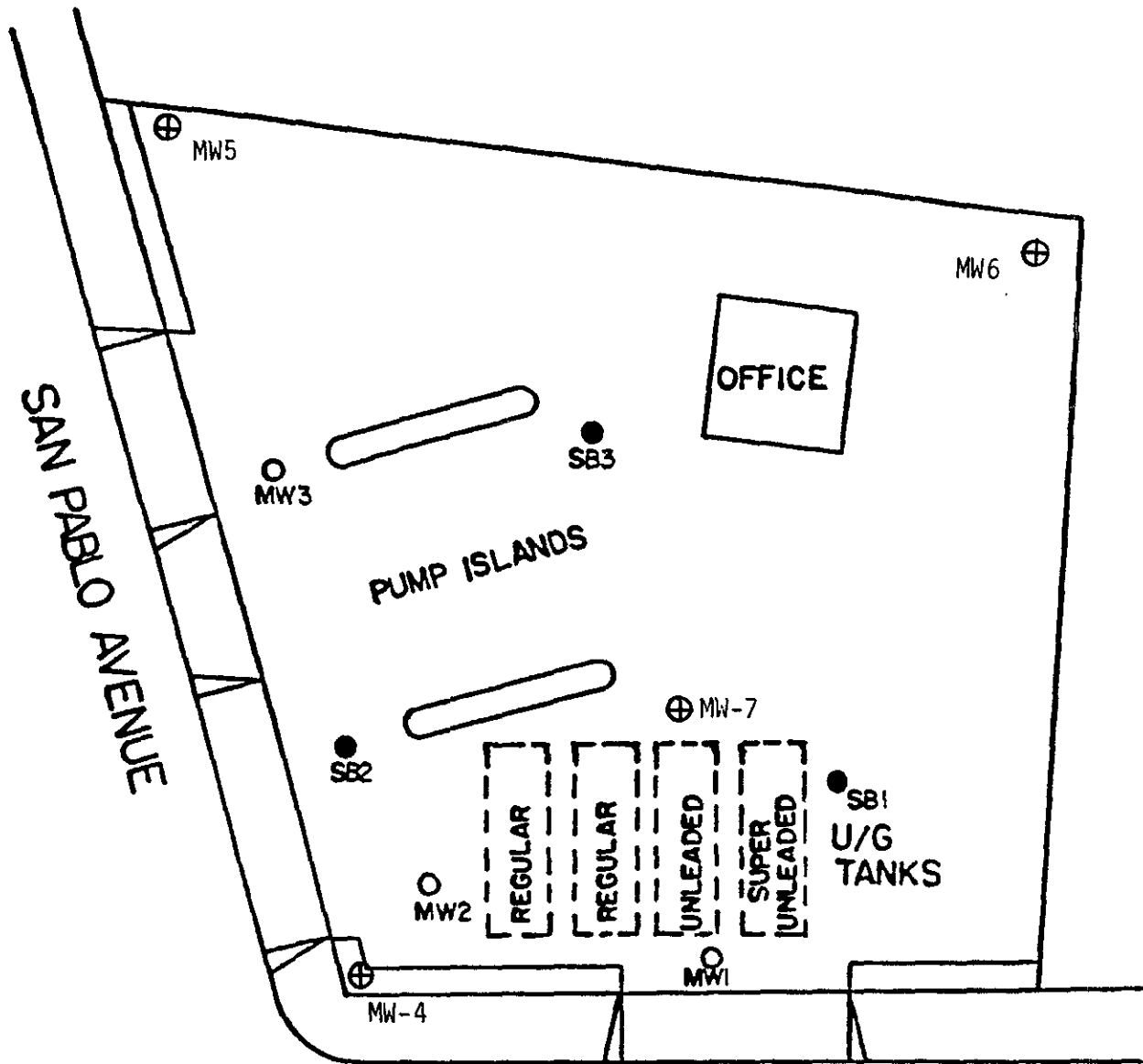
Subject: Remedial Investigation Proposal for:  
Thrifty Oil Company  
Service Station No. 49  
3400 San Pablo Avenue  
Oakland, California

Dear Mr. D'Amico:

Woodward-Clyde Consultants is pleased to submit this revised proposal for the remedial investigation of subsurface contamination at Station 49 in Oakland, California. This proposal is in response to your request of November 5, 1986. The objective of the proposed work will be to delineate the extent of the groundwater contamination identified in a previous investigation at the site and to determine what remedial actions, if any, will be necessary. In light of the results of the previous investigation's groundwater analyses, and the current policies of the cognizant regulatory agencies, we feel that the limits of the contaminate plume should be better defined. Therefore, we propose that four additional groundwater monitoring wells be installed at the site as shown in Figure 1. Well MW-4 is located in the southwest corner of the site to better assess the extent of contamination found in MW-2 and, to some degree, MW-1. The two wells (MW-5 and MW-6) located along the northern boundary of the site will serve to assess the limits of the plume in the northerly direction and/or provide a means for determining background contaminate levels. Well MW-7 has been added to provide some control for potential contamination that could be migrating north from the tank area.

Shallow groundwater in heavily urbanized areas such as the Station 49 site would be expected to contain hydrocarbons and although an active local well was identified in the previous investigation, it is expected to be drawing from a deeper aquifer. Establishing the ambient water quality, existing or potential beneficial uses of the nearsurface groundwater and the construction details of the active well will be required in establishing cleanup levels if such action is deemed necessary. Therefore, we propose that a literature review be conducted to determine, to the extent possible, the above parameters. We anticipate that the proposed well in the northeast corner of the site may be outside the plume and provide the necessary background water quality data.





**EXPLANATION**

- MWI-MONITORING WELL
- SBI-SOIL BORING
- ⊕ Proposed Monitoring Wells

**SITE PLAN**



Figure 1. PROPOSED MONITORING WELL LOCATIONS

Mr. D'Amico  
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The monitoring wells will be constructed of PVC casing and extend to a depth of 20 ft. Wells MW-4 and MW-7 will be 4 inches in diameter such that they can be used for recovery should significant levels of contamination be found. Wells MW-5 and MW-6 will be 2 inches in diameter as they will be used for monitoring only. Due to the close proximity of the groundwater to the surface (6 to 7 ft) and the relative absence of soil contamination encountered in the previous investigation, no soil sampling is proposed. The wells will be screened from approximately four feet below grade to the 20 foot completion depth. An annular seal of concrete and bentonite will extend from the surface to a depth of three feet. Locking well caps and traffic rated Christy Boxes will be used to complete the wells at the surface. A composite sample will be taken of the boring cuttings and analyzed for total petroleum hydrocarbons. The cuttings will be drummed, secured, appropriately labeled and left onsite pending the lab results. If the soils are found to contain elevated hydrocarbon levels, then various disposal options will be explored.

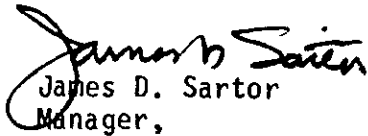
All wells will be developed following installation and sampled. As with the cuttings, the development water will be placed in drums, secured, appropriately labeled and left onsite pending the lab results of the well samples. Should the contaminant levels require special disposal, a hazardous material disposal service will be contracted to provide transportation and proper disposal. The water samples will be analyzed for total petroleum hydrocarbons, benzene, toluene and xylene using EPA Method 602 or equivalent. Upon completion of the site investigation and receipt of the laboratory results, a report will be prepared and submitted to Thrifty Oil Co. The report will include a summary of activities conducted at the site, boring/well logs, laboratory results and a description of local groundwater uses and ambient water quality. Based on the findings of the investigation, a discussion of our conclusions and recommendations for additional investigative or remedial activities, if any, will also be included in the report.

The estimated costs for completing the proposed investigation are given in Table 1. A schedule of our current fees and charges is also attached. The costs assume no extenuating circumstances or problems will arise in obtaining well permits and that all permit fees and deposits will be paid by Thrifty.

Mr. D'Amico  
Thrifty Oil Co.  
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We look forward to working with you on this project and if you have any questions or require additional detail, please contact Mr. Martin Cramer who will be the engineer managing the investigation.

Sincerely,

  
James D. Sartor  
Manager,

Environmental and Engineering Services

JDS:lnb  
THRIFTY-LR

TABLE 1. ESTIMATED COST BREAKDOWN\*

1. Project Management - regulatory interaction, Q.A. health and safety, field coordination, etc.			
24 hrs	Project Manager	\$ 1,920	
4 hrs	Project Reviewer	400	
2 hrs	Health and Safety Officer	<u>120</u>	\$ 2,440
2. Well Installation, Development, Permits and Sample Analysis			
10 hrs	Driller	\$ 1,500	
4 hrs	Project Manager	320	
14 hrs	Geologist	780	
1	Equipment Rental	140	
1	Materials	1100	
6 ea	Sample Analysis	1300	
8 hrs	Field Technician	<u>320</u>	\$ 5,460
3. Groundwater Use Survey			
16 hrs	Hydrogeologist	<u>1040</u>	\$ 1,040
4. Waste Disposal**			
2 drum	Development Water	400	
4 drums	Soil Cuttings	<u>800</u>	\$ 1,200
5. Report Preparation			
8 hrs	Geologist	480	
16 hrs	Project Manager	1,280	
4 hrs	Secretary	<u>160</u>	\$ 1,920
6. Miscellaneous			
	Travel and miscellaneous expenses	150	
	Phone, copying, mailing charges	50	
	Contingency-10 percent	<u>1,400</u>	\$ 1,440
			\$13,500

\* Assumes no additional sampling or analysis will be required by the agencies

\*\* May not be required.

**WOODWARD-CLYDE CONSULTANTS**

**Environmental and Engineering Services**

**1986 SCHEDULE OF CHARGES**

This Schedule of Charges applies to services rendered in the current year and until a new schedule of charges is issued. A new schedule of charges is issued at the beginning of each year. Unless other arrangements have been made, charges for all services, including those for projects initiated in the prior year, will be based on the new schedule of charges.

Service of Personnel

Personnel charges are for professional, technical, and support services directly related to projects. Personnel charges are not made for secretarial service, office management, accounting and maintenance, since these items are included in overhead. Personnel categories and corresponding hourly rates are as follows:

<u>Personnel Category</u>	<u>Hourly Rate</u>
Principal, Senior Consultant .....	\$125
Senior Associate .....	115
Associate .....	105
Senior Project* .....	100
Project* .....	80
Senior Staff* .....	65
Staff* .....	55
Draft person, Editor .....	50
Technical Field or Office Assistant .....	40
Technical Typist, Word Processor, Printer .....	40

\*Includes Engineer, Geologist, Chemist, Scientist, Etc.

Time for preparation of and providing expert testimonies and depositions is charged at a rate of \$150 per hour with a minimum of 4 hours per day. A premium of \$15 per hour is added to the hourly rates of nonexempt personnel for overtime. Travel time is charged at hourly rates with a maximum of 8 hours per day. Charges for contract personnel are made according to the hourly rate of their category.

WCC Laboratory and Computer Services

Services rendered by WCC laboratories and computer facilities are charged in accordance with the applicable Schedule of Laboratory Charges and Schedule of Computer Charges, which are available upon request.

WCC Equipment and Vehicle Rentals

WCC equipment (such as surveying, geotechnical, geology, water resources, geophysical, seismology, microcomputer, health and safety, etc.) and WCC vehicles used on a project are charged in accordance with the applicable Schedule of Equipment and Vehicle Rentals which is available upon request.

Other Direct Expenses

Other expenses directly identifiable to the project including (but not limited to) those examples listed below will be charged at cost times 1.15.

- Personal Expenses (such as travel, subsistence and vehicle rentals incurred by personnel while on project activities)
- Subcontracts
- Outside Consultants and Services
- Equipment or Sample Shipping
- Communications (telephone, telex, telecopy, courier, etc.)
- Special Supplies (drafting and printing, photos, reference materials, expendable materials such as containers and chemicals, etc.)
- Special Fees, Licenses, Permits, Insurances, etc.