

THRIFTY OIL CO.

November 10, 1986

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

*PP
Per W. Jones*

ATTENTION: Ted Gerow

RE: Thrifty Oil Co. SS #63
6125 Telegraph Avenue
Oakland, CA 94603

Dear Mr. Gerow,

Pursuant to our telephone conversation of November 6, 1986 I have enclosed a 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
P862454

Mr. Peter D'Amico
Manager, Environmental Affairs
Thrifty Oil Co.
10000 Lakewood Boulevard
Downey, Ca 90240

Subject: Remedial Investigation Proposal for:
Thrifty Oil Co.
Service Station #63
6125 Telegraph Avenue
Oakland, California

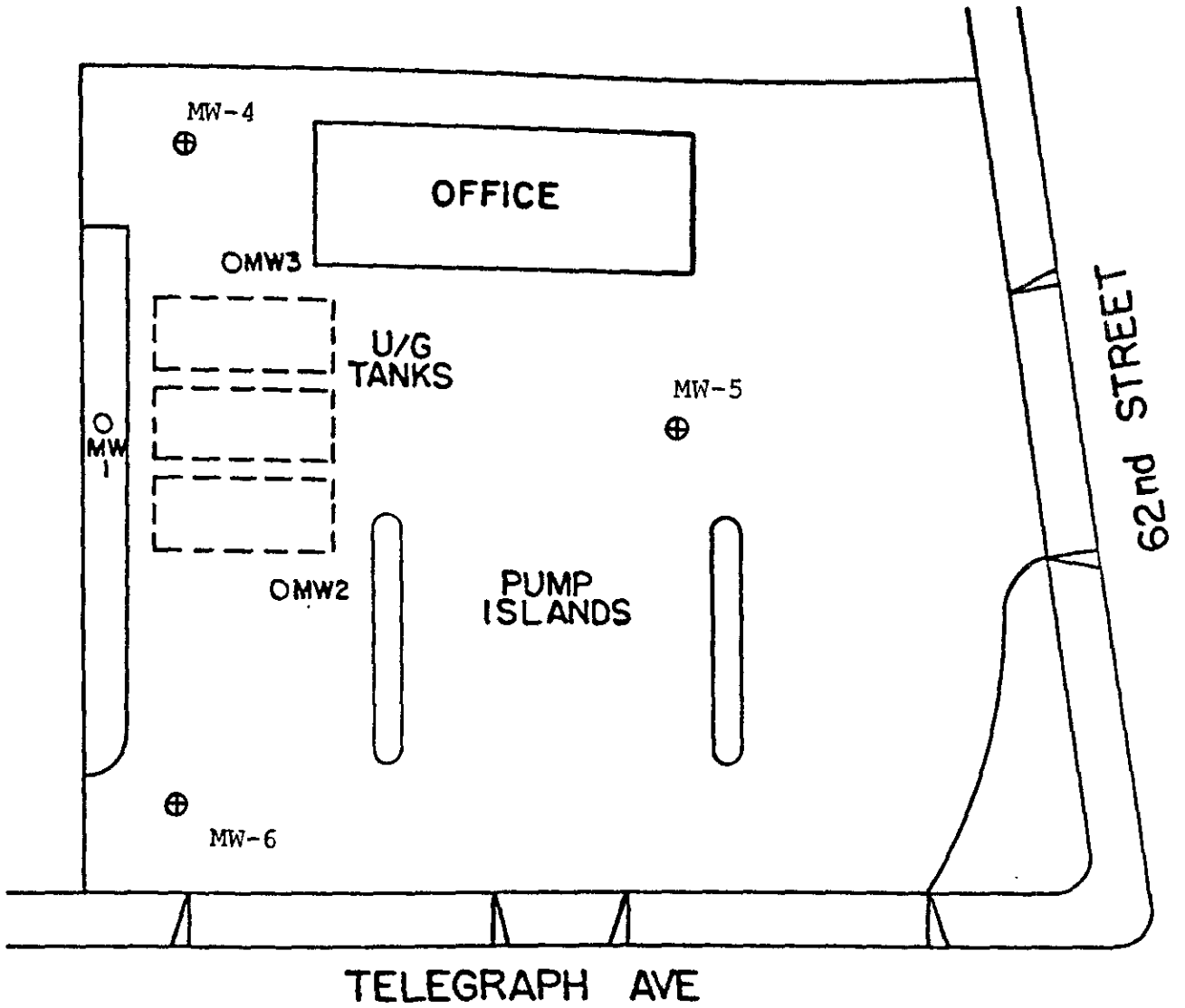
Dear Mr. D'Amico:

Woodward-Clyde Consultants is pleased to submit this letter proposal for the remedial investigation at Station 63 in Oakland, California. This proposal is in response to your request of October 15, 1986. The objective of the proposed work will be to further delineate the extent of the free product plume and the soil and groundwater contamination identified in a previous investigation at the site. Based on the results of this additional work, recommendations will be made as to what, if any, remedial actions will be necessary.

The previous investigation identified free product floating on the groundwater in all three wells ranging from 0.01 to 0.84 ft in apparent thickness. Relatively high levels of total hydrocarbons and BTX were also found in both the soil and water samples. The water sample analyses are, however, somewhat suspect due to the presence of the free product on the water table. Often times, droplets of product become entrained in the sample and are identified as dissolved hydrocarbons during analysis. The free product thickness in well MW-1 (0.01 ft) is also questionable in view of the hydrocarbon levels found in the soils and water. This could be explained, at least in part, by the well apparently being screened below the water table which would prevent free product from entering the well.

Based on the results of the previous investigation and the current policies of the cognizant regulatory agencies concerning groundwater contamination, we propose that three additional wells be installed onsite. The wells would serve to better define the extent of the free product plume as well as the soil and groundwater contamination. Locations of the proposed wells are shown in Figure 1. The apparent center of the contamination is the tank pit area. Little is known about the local groundwater gradient, although the regional gradient should be to the west towards the bay. The





EXPLANATION

- MWI-MONITORING WELL
- ⊕ Proposed Monitoring Wells

SITE PLAN



Figure 1. LOCATIONS OF PROPOSED WELLS

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greatest free product thickness is, however, present in well MW-3 which would suggest a southeasterly gradient. Because of the number of possible scenarios, the proposed wells have been located in a somewhat symmetrical pattern around the tank area. Following installation of the proposed wells, elevations will be surveyed in for all wells to better assess the local groundwater gradient.

Well installation and construction will be conducted to maximize the amount of data collected and potential uses of the wells. They will be constructed of 4-inch PVC casing and generally screened from a depth of 10 ft to the completion depth of 30 ft. The 4-inch casing will allow the wells to be used for recovery should significant levels of free product and/or contaminated groundwater be encountered. Soil samples will be taken every 5 ft to the water table or just beneath it (15 to 20 ft below grade). The samples will be examined in the field for hydrocarbons both visually and using an HNU or organic vapor meter to take headspace measurements. Based on this examination, the sample with highest apparent contamination from each well will be submitted to a certified laboratory for total hydrocarbons and BTX analyses. If no apparent contamination is noted, then the sample nearest the water table will be submitted for analysis. The wells will be completed at the surface with Christy Boxes and locking well caps and will have an annular seal of concrete and bentonite extending from the surface to a depth of at least 5 ft. 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. Prior to analysis, the samples will be filtered to remove any suspended droplets of product that may be present.

Shallow groundwater in heavily urbanized areas, such as the Station 63 site, would be expected to contain some hydrocarbons from runoff, and although active wells have been identified locally, they would be expected to draw from a deeper aquifer. Determining the ambient water quality, the existing or potential beneficial nearsurface groundwater uses and the

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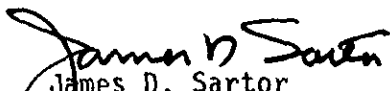
construction details of the local wells will be essential in establishing appropriate cleanup levels if such action is deemed necessary. We propose that a literature review be conducted to determine, to the extent possible, the above parameters. We anticipate that proposed well MW-5 may be outside the groundwater contaminant plume and could provide the necessary background water quality data.

Following completion of the site investigation, literature review 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 the local groundwater uses and ambient water quality. Based on the findings of the investigation, a discussion of our conclusions will be included as will our recommendations for additional investigative or remedial activities, if any are required.

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 that no extenuating circumstances or problems will arise in obtaining well permits and that all permit fees and deposits will be paid by Thrifty Oil Co.

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

MC/sst
PRP/P862454

Enclosures

cc: Mark Gilmartin
Jim Hartley

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		
	8 hrs Driller	\$1,200	
	4 hrs Project Manager	320	
	12 hrs Geologist	780	
	1 Equipment Rental	140	
	1 Materials	1,500	
	8 ea Sample Analysis	1,400	
	8 hrs Field Technician	<u>320</u>	\$ 5,660
3.	Groundwater Use Survey**		
	16 hrs Hydrogeologist	<u>1,040</u>	\$ 1,040
4.	Waste Disposal***		
	3 drums Development Water	600	
	4 drums Soil Cuttings	<u>800</u>	\$ 1,400
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>1,240</u>	<u>1,440</u>
			\$13,900

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

** Will not be required if Groundwater Use Survey for Station 49 is conducted at same time.

***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.

File ~~AG~~ TANKS

9/12/86 Mark Gilmartin + Pete Demio
Thrifty Oil Co. - (213) - 923 - 9876

- All tank systems have now tested tight -
= Groundwater Technology. -

① 6175 - Telegraph Oakland →

Total → 50-735 hydrocarbon - ^{surface product} at the water table.

Requested further investigation to determine
if there is more contaminants deeper down -

② ~~20,200~~ ^{20,200} Hyperion Blvd - ~~the~~ Hayward.

Total Hydro carbons 20-499 -

OK

③ 3400 San Pablo - Oakland

Total 22 to 67 ppm Hydrocarbons

OK

STRAW & GILMARTIN
A PROFESSIONAL LAW CORPORATION
11377 WEST OLYMPIC BOULEVARD
SEVENTH FLOOR
LOS ANGELES, CALIFORNIA 90064
TELEPHONE (213) 312-3293

File UG/TANICS

LAWRENCE J. STRAW, JR.
MARK B. GILMARTIN

FILE NO. T063

September 24, 1986

RECEIVED
SEP 26 1986

**ENVIRONMENTAL HEALTH
ADMINISTRATION**

Mr. Ted Gerow
Public Health Engineer
Alameda County
Environmental Health Services
470 27th Street, Suite 324
Oakland, California 94612

Re: Thrifty Oil Co.
Station No. 63
6125 Telegraph Avenue, Oakland, CA

Dear Mr. Gerow:

On September 12, 1986, I advised you of the results of a subsurface investigation recently performed at the above-referenced service station.

Enclosed for your information is: (1) Hallmark Petroleum's Tank Test Certification, dated June 22, 1986; and (2) Groundwater Technology's Site Assessment Investigation Report, dated August 18, 1986.

Please contact me after you have had an opportunity to review the enclosed material.

Very truly yours,

Mark B. Gilmartin

Mark B. Gilmartin

MBG:kg
Enclosures

cc: Peter D'Amico, Thrifty Oil Co.