



STID 3570

JUN 22 2001

June 19, 2001

Mr. Amir K. Gholami, REHS  
Hazardous Materials Specialist  
Alameda County Health Care Services  
1131 Harbor Bay Parkway  
Alameda, California, 94502-6577

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**RE: RESPONSE TO JUNE 4, 2001 LETTER**  
**2585 Nicholson Street in San Leandro, California (STID 3570)**

Dear Mr. Gholami:

Versar, Inc. (Versar) has prepared this letter to: 1) provide the additional information requested in your letter to Ms. Donna Proffitt of Bank of America dated June 4, 2001; 2) confirm our telephone conversation of June 4, 2001 concerning issues raised in that letter; and 3) propose specific criteria for evaluating closure for the above-referenced property (subject property).

**Additional Information**

Soil Depth in Risk Calculation

Your June 4 letter requested the basis for use of four-foot soil samples in risk calculations for the subject property.

The risk assessment for soil impact was presented in Versar's May 15, 2001 letter. The risk assessment for soil impact utilized data obtained in 1992 by Hageman-Aquire, Incorporated (HAI). The HAI document presented soil data from depths of four and six feet below ground surface (bgs). As indicated in the May 15 document, soil data from four feet bgs was utilized in the risk analysis. Soil data from six feet bgs was not used in the analysis for the following reasons:

In reviewing the HAI data, it appears that released petroleum constituents migrated on top of the groundwater table outside the area of soil excavation, as evidenced by relatively low concentrations of petroleum constituents in four-foot samples (see HAI Figure 5 included in Attachment 1 to this letter) and relatively high concentrations of petroleum constituents in the six-foot sample (see HAI Figure 6 included in Attachment 1 to this letter). HAI

• SACRAMENTO AREA OFFICE •

7844 MADISON AVENUE, SUITE 167 • FAIR OAKS, CA 95628 • TELEPHONE (916) 962-1612 FAX (916) 962-2678



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reported the depth to groundwater at approximately 6.6 feet bgs during sample collection, and free-floating hydrocarbons were reported on the groundwater table at this time. Consequently, the six-foot samples represent potentially saturated soil samples, which, at that time, contained free-phase hydrocarbons.

The purpose for the soil risk assessment is to evaluate the migration of volatilized hydrocarbons upward through the vadose zone, for the purpose of determining risks to users of the subject property. The HAI four-foot soil samples were reportedly collected immediately above the six-foot samples, and as such constitute a more accurate representation of upward volatilization at the subject property.

It should be noted that the HAI data was collected immediately following source removal actions at the subject property, which occurred approximately nine years ago. Groundwater sampling data obtained subsequent to these actions has documented the natural attenuation of petroleum constituents beneath the subject property. Consequently, the HAI soil data creates an extremely conservative estimate of risk at the subject property.

#### MTBE Analysis

Your June 4 letter requested information regarding MTBE analysis at the subject property. In its October 29, 1999 letter to Mr. John Schovanec of Bank of America, Alameda County Health Care Services stated that no further analysis of MTBE was warranted or would be required at the subject property. A copy of that letter along with tabulated analytical results from Versar's report dated October 18, 1999 is included in Attachment 2.

#### **Plume Stability**

It is Versar's understanding, based on our June 4 telephone conversation and your June 4 letter, that the County's concern regarding plume stability is the only remaining obstacle for obtaining closure of the subject property.

Using historic concentrations from non-source area monitoring wells, Versar has presented evidence that the plume is stable (see Versar May 15, 2001 letter). Evidence suggests a correlation between groundwater elevations and concentrations, as illustrated on the graph included in Attachment 3 to this letter. We understand, however, that the County is concerned by varying concentrations observed in the source area monitoring well. Based on our conversation with you, we understand that concern to be based on a comparison of data obtained by Bank of America (April 1999 through January 2001) to data obtained by the former occupant of the subject property (June 1992 through September 1995). Versar has indicated that sampling



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techniques and the former presence of hydrocarbon absorbent materials in the well could bias the data collected by the former occupant. Accordingly, we continue to believe that the plume is stable, and encourage review of our May 15, 2001 document by your colleague, as you suggested during our June 4 telephone conversation.

Acknowledging the consistency observed in non-source area wells (MW-2 through MW-5), your June 4 letter authorized eliminating (but not abandoning) MW-2 through MW-5 from the sampling program. Your June 4 letter further authorized reducing the monitoring of the source area well (MW-1) to a semi-annual basis. The source area monitoring well will be analyzed for the constituents of concern; total petroleum hydrocarbons as gasoline, and benzene, toluene, ethylbenzene, and xylenes. This revised program is tentatively scheduled to be initiated in October 2001.

#### **Proposed Evaluation Criteria For Closure**

Given the differing opinions regarding plume stability, and the long history of work at this site, the property owner is concerned that closure of the subject property will continue to be delayed, and the subject property rendered unsalable unless the parties are able to establish objective criteria for site closure. Versar has demonstrated that residual impact does not pose a risk for industrial or commercial activities at the subject property. To address the single remaining issue, plume stability, Versar proposes using the following criteria for evaluating data from the source area monitoring well:

1. Concentrations from April 1999 through the current monitoring period will be used to evaluate concentration trends. This eliminates the potential for biased sampling data from 1992 to 1995, and the data gap from 1995 through 1998, and focuses on the current conditions beneath the subject property; and
2. Data will be plotted to determine the concentration slope for the above-described period. If the statistical slope is flat or decreasing, closure for the subject property will be strongly considered. If the statistical slope is increasing, monitoring will continue. This evaluation will be performed after each sampling event.



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The before mentioned evaluation criteria will provide all parties with a mutual understanding in proceeding forward with monitoring at the subject property. Please contact Scott Allin at (916) 863-9325 to discuss your concurrence with this general approach to further evaluation of the subject property, and to address any questions regarding the information presented herein.

Sincerely,  
Versar, Inc.

Scott Allin, R.E.A.  
Senior Program Manager

Tim Berger, R.G.  
Supervising Geologist

- Attachment 1 - HAI Figures
- Attachment 2 - MTBE Documentation
- Attachment 3 - Benzene Versus Depth to Groundwater

- cc: Ms. Donna Proffitt (Bank of America)  
Ms. Janet Giannini (Bank of America)  
Mr. Stuart Block (Cox, Castle & Nicholson, LLP)  
Mr. Mike Bakaldin (City of San Leandro Fire Department)

**ATTACHMENT 1**

**HAI Figures**

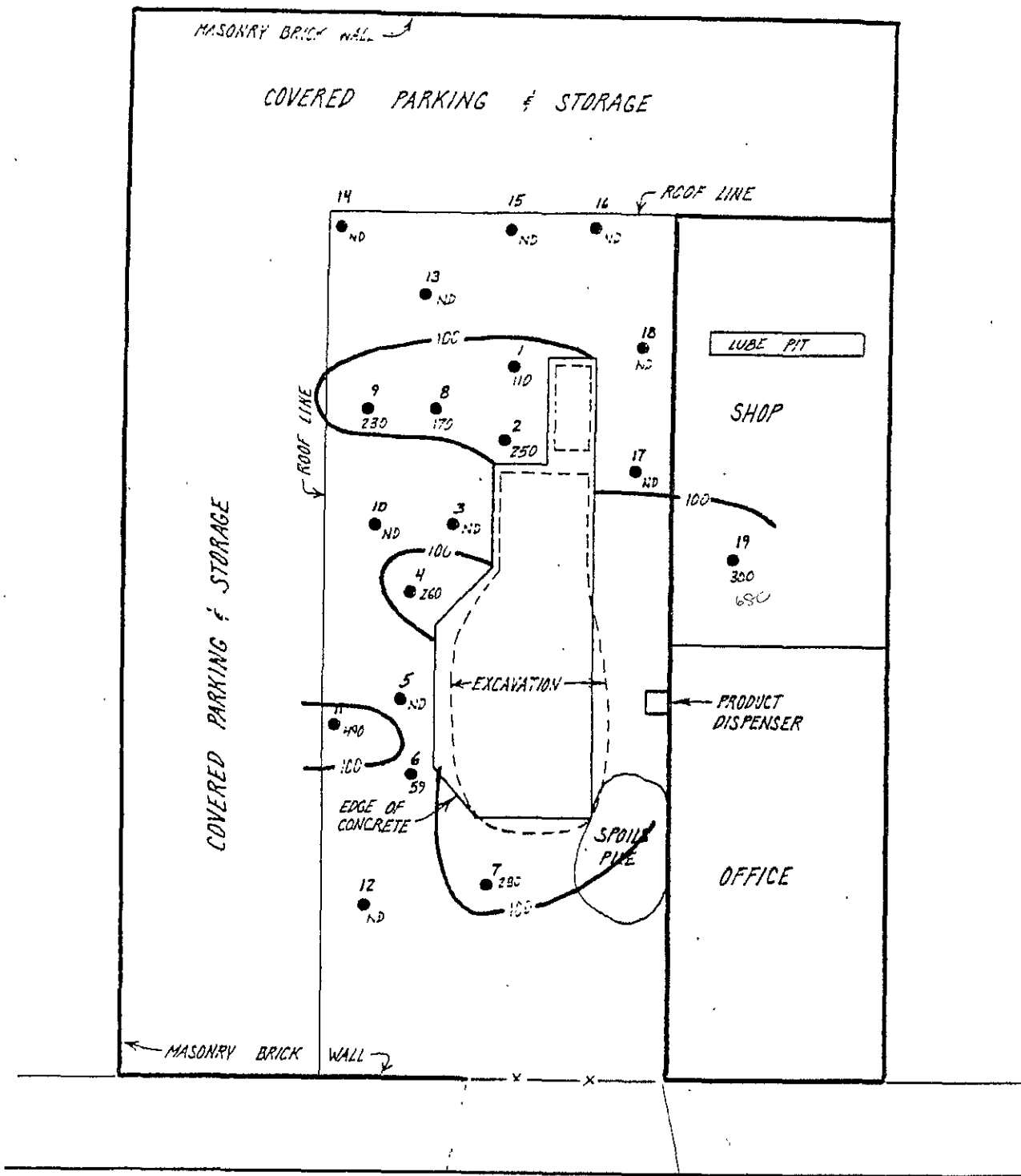


FIGURE 5. Lines of Equal Concentration of Total Recoverable Hydrocarbons in mg/Kg (ppm) in the Soil at 4-foot Depth.

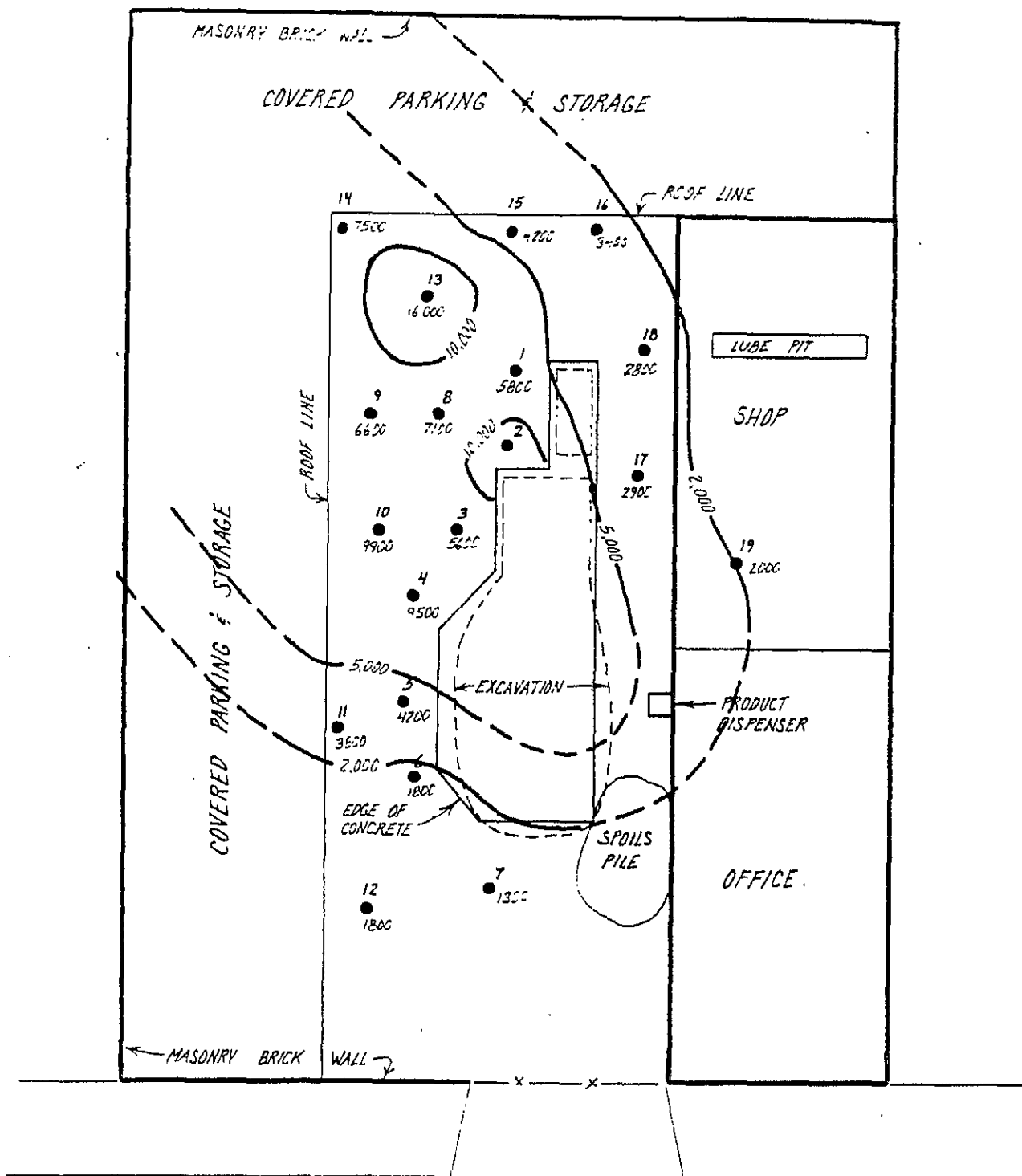


FIGURE 6. Lines of Equal Concentration of Total Recoverable Hydrocarbons in mg/Kg (ppm) in the Soil at 6-foot Depth.

**ATTACHMENT 2**

**MTBE Documentation**



ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



To	Scott Allin	From	Juliet Shin
Co.	Versar	Co.	Alameda County
Dept.		Phone #	510-567-6763
Fax #	916-962-2678	Fax #	510-337-9335

ENVIRONMENTAL HEALTH SERVICES  
ENVIRONMENTAL PROTECTION  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-5577  
(510) 657-6700

October 29, 1999

Mr. John Schovanec  
Bank of America Environmental Services  
4000 MacArthur Blvd., Ste 1000  
Newport Beach, CA 92660

STID: 3570

Re: Investigations at 2585 Nicholson Street, San Leandro, CA

Dear Mr. Schovanec,

This office has reviewed the October 18, 1999 Groundwater Monitoring Report, prepared by Versar Inc. (Versar) for the above site. Based on the fact that the identified levels of Methyl Tertiary Butyl Ether (MTBE) were below the 200 parts per billion (ppb) threshold value currently being employed by the San Francisco Bay-Regional Water Quality Control Board (RWQCB), no further analysis for MTBE or the other fuel oxygenates will be required in future groundwater monitoring events. Additionally, since the level of naphthalene, which is one of the more toxic Semi-Volatile Organic Compounds (SVOCs), was below the tap water threshold value given in Region IX Environmental Protection Agency's Preliminary Remediation Goals, no further groundwater monitoring for SVOCs will be required at the site. Due to the Non Detect results of the TPH-mo, analysis for this constituent may also be discontinued.

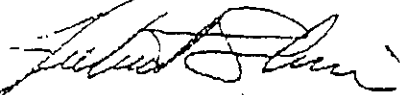
According to Figure 2 in Versar's June 30, 1999, storm sewer lines, as well as gas and electrical lines, were identified in and around the site. Based on this information and the shallow groundwater at the site, this office requested in a July 14, 1999 letter that you submit information on the depths of the utility line trenches to try and determine whether they could be intercepting and locally redirecting the migration of the contaminant plume. However, Versar did not even address the storm sewer lines in the October 18, 1999 report, and only speculated that the electrical and gas trenches were located above the water table. Per Section 2725, Chapter 16, Division 3, Title 23 California Code of Regulations, this office is requiring that information on the depths of all three of these utility line trenches be submitted with the next report. If you and Versar are going to make the argument that these utility line trenches are not influencing the direction of the contaminant plume, your argument must be supported by solid documentation.

Quarterly groundwater must continue at the site. The next monitoring event is due to take place in October 1999. Groundwater samples should be analyzed for TPHg, TPHd, and BTEX.

Mr. John Schovanec  
Re: 2585 Nicholson Ave.  
October 29, 1999  
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If you have any questions or comments, please contact me at (510) 567-6763.

Sincerely,



Juliet Shin, R.G.  
Hazardous Materials Specialist

Cc: Scott Allin  
Versar, Inc.  
7844 Madison Avenue, Ste 167  
Fair Oaks, CA 95628

Mike Bakaidin  
City of San Leandro  
835 East 14<sup>th</sup> Street  
San Leandro, CA 94577

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FROM VER-SAR  
OCT. 18, 99 REPORT

Table 2 (continued)  
Analytical Results for Groundwater Samples  
2585 Nicholson Street  
San Leandro, California

Monitoring Well No.	Date	Chemicals of Concern						
		Tert-Butanol (µg/L)	Methyl-tert-Butyl Ether (µg/L)	Di-isopropyl Ether (µg/L)	Ethyl-tert-Butyl Ether (µg/L)	Tert-Amyl Methyl Ether (µg/L)	1,2-Dichloroethane (µg/L)	1,2-Dibromoethane (µg/L)
MW-1	May-99	NA	NA	NA	NA	NA	NA	NA
	Jul-99	<25	11	<0.5	<0.5	<0.5	<0.5	<0.5
MW-2	Apr-99	NA	NA	ND	NA	NA	NA	NA
	Jul-99	<25	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-3	Apr-99	NA	NA	NA	NA	NA	NA	NA
	Jul-99	<25	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-4	Apr-99	NA	NA	NA	NA	NA	NA	NA
	Jul-99	<25	10	<0.5	<0.5	<0.5	<0.5	<0.5
MW-5	Apr-99	NA	ND	NA	NA	NA	NA	NA
	Jul-99	<25	7.3	<0.5	<0.5	<0.5	<0.5	<0.5

**Notes and Abbreviations:**

µg/L = micrograms per liter, equivalent to parts per billion (ppb).

ND = not detected at or above the method reporting limit.

NA = not analyzed

**ATTACHMENT 3**

**Benzene Versus Depth to Groundwater**

## Concentrations of Benzene Versus Depth to Groundwater (MW-1)

