JELLY BEAN SQUARE

10/31/89

October 27, 1989

Mr. Dennis Byrne
Hazardous Materials Specialist
Alameda County Health Care Services Agency
Department of Environmental Health
Hazardous Materials Division
80 Swan Way, Room 200
Oakland, California 94621

Dear Mr. Byrne,

Thank you for agreeing last April to provide me with an explanation of the reasons that you want us to test for substances other than Total Petroleum Hydrocarbons—Diesel. It will help me to evaluate the request if I understand the reasoning behind it.

Pending receipt of that explanation, I have asked Geomatrix Consultants, Inc. to continue the quarterly Diesel monitoring program so that we have regular verification of Diesel presence or absence in our groundwater.

The results of the most recent samples are enclosed. Please feel free to give me a call any time if you want to discuss any of this.

Very truly yours,

Andrew Getz

enclosure: October 26, 1989 report from Geomatrix

cc: Nancy T. Bice, C.E.G.
Senior Project Hydrogeologist
Geomatrix Consultants, Inc.

TELEPHONE (415) 652-4191
1355 OCEAN AVENUE, EMERYVILLE, CALIFORNIA 94608

One Market Plaza
Spear Street Tower, Suite 717
San Francisco, CA 94105
(415) 957-9557

GEOMATRIX

26 October 1989
Project 1382B

Mr. Andrew Getz
HFH Limited
1351 Ocean Avenue
Emeryville, California 94608

Subject: Groundwater Sampling and Analysis
Monitoring Well 1A
1351 Ocean Avenue
Emeryville, California

Dear Mr. Getz:

As outlined in our 18 October 1988 scope of services, Geomatrix Consultants, Inc. (Geomatrix) has resampled monitoring well 1A, located at the subject site. Geomatrix collected the shallow groundwater sample for analysis of total petroleum hydrocarbons as diesel as part of the self-monitoring program designed to determine if diesel is present above detection limits in the shallow groundwater at the site.

The monitoring well, located approximately 10 feet west of a former diesel tank location (Figure 1), was installed on 3 November 1988 at the request of Mr. Dennis Byrne of the Alameda County Department of Health, Division of Hazardous Materials. Analyses of soil samples collected during construction of the well and of a groundwater sample collected on 11 December 1988, indicated no total petroleum hydrocarbons as diesel were present.

Geomatrix resampled well 1A on 17 July 1989 in accordance with the groundwater sampling protocol in our February 1989 Soil Sampling and Groundwater Monitoring Report for the subject site (Appendix A, Protocol No. 3). A groundwater sample and duplicate were collected and delivered to Brown and Caldwell Laboratories in Emeryville, California for analysis of total petroleum hydrocarbons as diesel, using the California Department of Health Services test method for the presence of diesel.

As indicated in the attached laboratory report, no diesel was present above the detection limit of 0.2 milligram per liter. In summary, the results of the resampling efforts substantiate our previous findings that the soil and shallow groundwater surrounding the former diesel tank location have not been significantly impacted.

Please contact the undersigned if you have any questions or require further information.

Sincerely yours,
GEOMATRIX CONSULTANTS, INC.

Matthew T. Turner
Staff Environmental Scientist

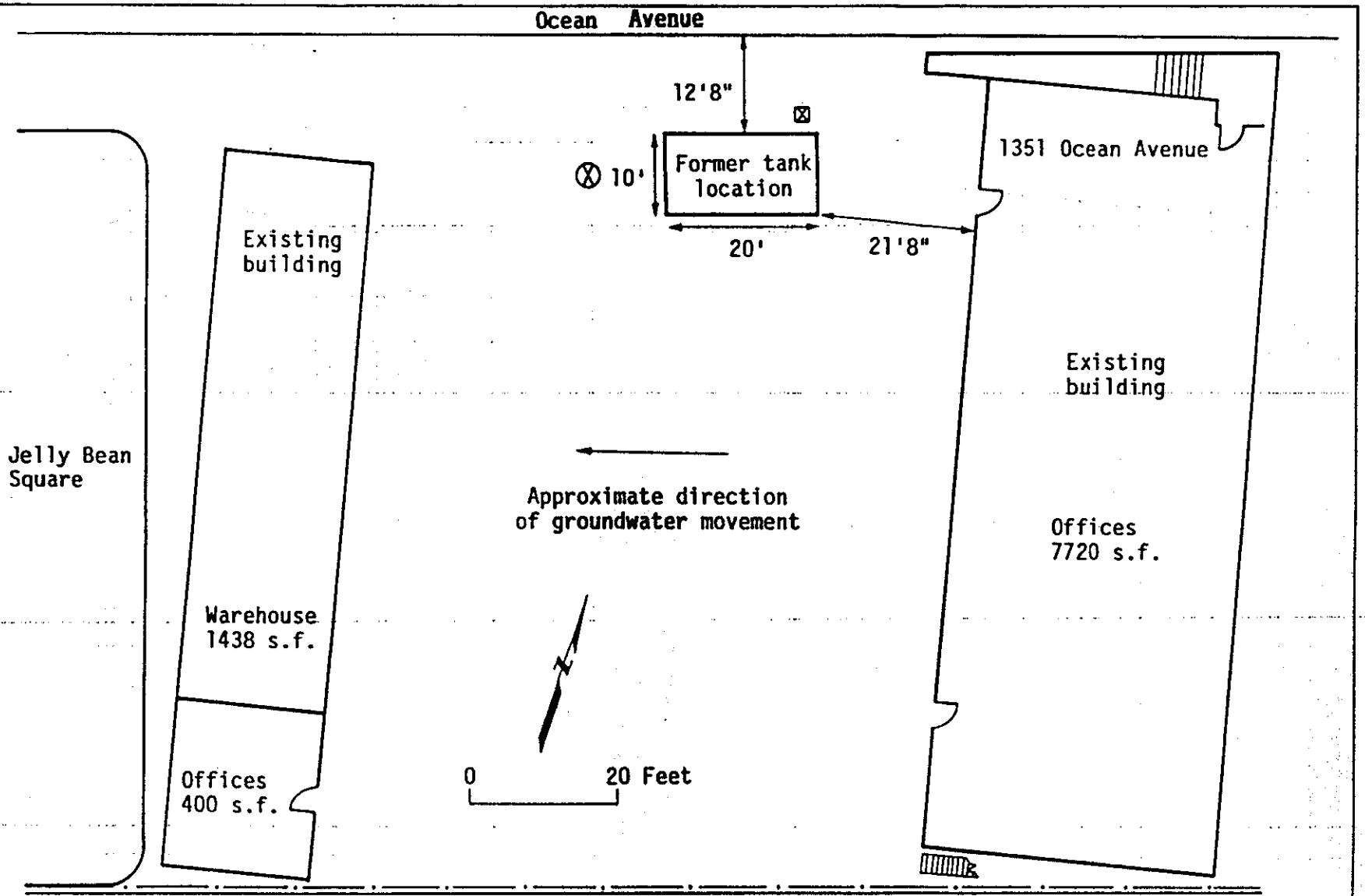
Nancy T. Bice, C.E.G.
Senior Project Hydrogeologist

Enclosure

cc: Dennis Byrne, Alameda County Department of Environmental Health
Lisa McCann, California Regional Water Control Board, San Francisco Bay Region
Philip Tringale, Geomatrix Consultants, Inc.

GEOMATRIX

FORMER DIESEL TANK EXCAVATION AND MONITORING WELL LOCATION MAP
1351 Ocean Avenue
Emeryville, California



EXPLANATION

⊠ Former diesel dispenser location

⊗ Approximate location of shallow groundwater monitoring well

Figure 2

Project No. 1382B

GEOMATRIX

ANALYTICAL LABORATORY REPORTS

BROWN AND CALDWELL LABORATORIES
1255 POWELL STREET EMERYVILLE, CA 94608 • (415) 428-2300

ANALYTICAL REPORT

LOG NO: E89-07-711

Received: 31 JUL 89
Reported: 17 AUG 89

Mr. Matt Turner
Geomatrix Consultants
1 Market Plaza, Spear Tower, Ste.717
San Francisco, California 94105

Project: 1382B

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED
07-711-1	G.E. 0731-1	31 JUL 89

PARAMETER	07-711-1
TPH - Semivolatile Hydrocarbons	
Date Analyzed	08.15.89
Dilution Factor, Times	1
C12 to C25 Hydrocarbons, mg/L	<0.2
Other TPH - Semivolatile Hydrocarbons	---

Hedy J. Ficklin for
Sim D. Lessley, Ph.D., Laboratory Director

BROWN AND CALDWELL LABORATORIES

BATCH QC REPORT
ORDER E8907711

DATE REPORTED : 08/18/89

MATRIX QC PRECISION (DUPLICATE SPIKES)

PARAMETER	DATE ANALYZED	BATCH NUMBER	S1 RESULT	S2 RESULT	UNIT	RE %
TPH - Semivolatile Hydrocarbons						
Dilution Factor	08.15.89	77	1	1	Times	
C12 to C25 Hydrocarbons	08.15.89	77	0.7	0.9	mg/L	
TPH - Semivolatile Hydrocarbons						
Dilution Factor	08.16.89	77	1	1	Times	
C12 to C25 Hydrocarbons	08.16.89	77	1.2	1.3	mg/L	
TPH - Semivolatile Hydrocarbons						
Dilution Factor	08.15.89	77	1	1	Times	
C12 to C25 Hydrocarbons	08.15.89	77	0.4	0.6	mg/L	

BROWN AND CALDWELL LABORATORIES

BATCH QC REPORT
ORDER E8907711

DATE REPORTED : 08/18/89

MATRIX QC ACCURACY (SPIKES)

PARAMETER	DATE ANALYZED	BATCH NUMBER	SBAR RESULT	TRUE VALUE	UNIT	PERC RECO
TPH - Semivolatile Hydrocarbons						
Dilution Factor	08.15.89	77	1	1	Times	
C12 to C25 Hydrocarbons	08.15.89	77	0.8	0.9	mg/L	
TPH - Semivolatile Hydrocarbons						
Dilution Factor	08.16.89	77	1	1	Times	
C12 to C25 Hydrocarbons	08.16.89	77	1.25	1.0	mg/L	
TPH - Semivolatile Hydrocarbons						
Dilution Factor	08.15.89	77	1	1	Times	
C12 to C25 Hydrocarbons	08.15.89	77	0.5	0.9	mg/L	

BROWN AND CALDWELL ANALYTICAL LABORATORIES

BATCH QC REPORT
Definitions and Terms

Accuracy: The ability of a procedure to determine the "true" concentration of an analyte.

Batch: A group of samples analyzed sequentially using the same calibration curve, reagents, and instrument.

Laboratory Control Standard (LCS): Laboratory reagent water spiked with known compounds and subjected to the same procedures as the samples. The LCS thus indicates the accuracy of the analytical method and, because it is prepared from a different source than the standard used to calibrate the instrument, it also serves to double-check the calibration.

LC Result: Laboratory result of an LCS analysis.

LT Result: Expected result, or true value, of the LCS analysis.

Matrix QC: Quality control tests performed on actual client samples. For most inorganic analyses, the laboratory uses a pair of duplicate samples and a spiked sample. For most organic analyses, the laboratory uses a pair of spiked samples (duplicate spikes).

Percent Recovery: The percentage of analyte recovered.
For LCS, the percent recovery calculation is

$$LC \div LT \times 100.$$

For spike recoveries, the percent recovery calculation is

$$\frac{(S\ Bar - Sample\ Concentration)}{Spike\ Amount} \times 100$$

Precision: The reproducibility of a procedure demonstrated by the agreement between analyses performed on either duplicates of the same sample or a pair of duplicate spikes.

R1, R2 Result: Result of the analysis of replicate aliquots of a sample, with R1 indicating the first analysis of the sample and R2 its corresponding duplicate; used to determine precision.

Relative Percent Difference (RPD): Calculated using one of the following:

$$\frac{(R1 - R2) \times 100}{(R1 + R2) \div 2} \qquad \frac{(S1 - S2) \times 100}{(S1 + S2) \div 2}$$

S Bar Result: The average of spike analysis results.

S1, S2 Result: Result of the analysis of replicate spiked aliquots, with S1 indicating one spike of the sample and S2 the second spike; used to determine precision and accuracy.

True value: The theoretical, or expected, result of a spike sample analysis.

LOG # 890771

GEOMATRIX CONSULTANTS

ONE MARKET PLAZA
SPEAR STREET TOWER SUITE 717
SAN FRANCISCO, CALIFORNIA 94105
(415) 957-9557

Chain of Custody Record

00579

DATE 7-31-1989 PAGE 1 OF 1

PROJECT NO. 1382 B

SAMPLERS: (SIGNATURE)

DATE	TIME	SAMPLE NUMBER	GENERAL MINERAL	PRIORITY POLLUTANT METALS	EPA METHOD 624	EPA METHOD 625	EPA METHOD 601	EPA METHOD 602	EPA METHOD 608	PETROLEUM HYDROCARBONS	~~8015~~ 8015 Mod. Gas					NUMBER OF CONTAINERS
7-31	1435	G.E 0731-1									1					1

ANALYSES

REMARKS (SAMPLE PRESERVATION, HANDLING PROCEDURES, OBSERVATIONS, ETC.)

Normal Turnaround Time,

Send Results to Matt Turner

TOTAL NUMBER OF CONTAINERS 1

RELINQUISHED BY:	DATE / TIME	RECEIVED BY:	RELINQUISHED BY:	DATE / TIME	RECEIVED BY: (LAB)
SIGNATURE		SIGNATURE	SIGNATURE John V. Sibule III		SIGNATURE
PRINTED NAME		PRINTED NAME	PRINTED NAME Geomatrix		PRINTED NAME
COMPANY		COMPANY	COMPANY		LABORATORY

RELINQUISHED BY:	DATE / TIME	RECEIVED BY:	METHOD OF SHIPMENT:
SIGNATURE		SIGNATURE	LABORATORY COMMENTS / OBSERVATIONS
PRINTED NAME		PRINTED NAME	
COMPANY		COMPANY	

DISTRIBUTION: WHITE - LAB; YELLOW - LABORATORY; PINK - ORIGINATOR