

PIERS



**Environmental
Services, Inc.**

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San Jose, CA 95128

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Alameda County Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway, Second Floor
Alameda, CA 94502

August 27, 1999

STO 666 RES-20000
9/20/99

Attn: Mr. Amir Gholami; Haz Mat. Specialist for : 2896 Castro Valley Blvd., Castro Valley

Re: Report of Groundwater Sampling

Dear Mr. Gholami,

On July 14, 1999, a single round of groundwater samples were obtained from monitoring wells MW1 through MW3.

The groundwater samples were collected as follows:

Each well was bailed until the volume of water withdrawn was equal to at least four casing volumes. To assure that a representative groundwater sample was collected, periodic measurements of the temperature, pH and specific conductance were made. The sample was collected only when the temperature, pH, and/or specific conductance reached relatively constant values.

A hand operated bailer was used for evacuating each well casing (purging) of the monitor wells. Water samples were collected using a new, disposable bailer. An effort was made to minimize exposure of the sample to air.

Sample containers, obtained directly from the analytical laboratory, were labeled with self-adhesive tags. Field personnel labeled each tag, using waterproof ink, with the following information: Sampling location and number; project name; date and time samples were collected; treatment (preservatives, filtered, etc.); name of sampler

Subsequent to collection, the samples were immediately stored on ice in an appropriate ice chest. Samples were transported under Chain-of-Custody procedures to Entech Analytical Labs (Entech) of Sunnyvale.

Sampling equipment was cleaned after its use at each sampling location. Care was taken to collect all excess water resulting from the sampling and cleaning procedures. The excess water was contained in a pre-labeled 55-gallon drum on-site pending receipt of laboratory analyses.

59 SEP 10 PM 3:11
ENVIRONMENTAL PROTECTION

The following analyses was performed by Entech on groundwater samples obtained from the monitor wells:

TPH-gas,TPH/diesel(EPA Method 8015M); BTEX (EPA Method 602)

The results of the groundwater sample were as follows:

Results in Parts Per Billion (PPB)

Well#	Sample#	TPH/g	Benzene	Toluene	EthylBenzene	Xylene	TPH/d
W-MW	MW1	ND	ND	ND	ND	ND	ND
E-MW	MW2	ND	ND	ND	ND	ND	ND
S-MW	MW3	ND	ND	ND	ND	ND	ND

Determination of Horizontal Groundwater Gradient

On July 14, 1999, in order to obtain accurate groundwater elevations, monitor well head elevations were surveyed by a California Registered Civil Engineer to an accuracy of 0.01 feet.. An assumed bench mark of 150.00 was assigned to the top of casing for well MW3 based on a USGS topographic map. Elevations were then transferred to the other well casings relative to MW3.

On July 14, 1999, water levels in each of the monitor wells were measured within a one hour period. The water surface elevations in the wells were calculated using the survey data. Then, the horizontal hydraulic gradient was calculated based on accurately determined well locations.

The gradient calculated showed a 0.45% slope in a **southwestern** direction. Figure 2 shows survey data and groundwater topography.

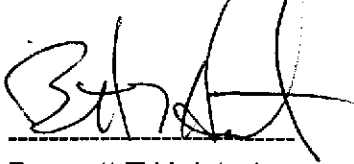
Soil Waste Disposal Manifests

PIERS has submitted a written request to **Browning-Ferris Industries (BFI) Vasco Road Landfill** to obtain the waste profile code, and corresponding manifests, for the soil removed from the site in 1994 and on February 7, 1995. An Environmental Restoration Services check dated 2-7-95 (attached) is known to be used for the last shipment of soil. By reviewing the incoming weight tags for this day, BFI should be able to cross reference the waste code and then locate the manifests. **Because these documents have been archived, BFI staff indicated that locating the documents could take 60 to 90 days. As of the date of this report, BFI has not located the requested documents.**


LIMITATIONS

The observations and conclusions presented in this report are professional opinions based on the scope of work outlined herein. This report was prepared in accordance with generally accepted standards of environmental geological practice in California at the time this investigation was performed. The opinions presented apply to site conditions existing at the time of our study and cannot apply to site conditions or changes of which we are not aware or have not had the opportunity to evaluate. This investigation was conducted solely to evaluate environmental conditions of the groundwater with respect to hydrocarbons identified during previous work. Evaluation of the geologic conditions at the site for the purpose of this investigation is made from a limited number of observation points. Subsurface conditions may vary away from the data points available. Additional work, including subsurface investigation, can reduce the inherent uncertainties associated with this type of investigation. It must be recognized that any conclusions drawn from these data rely on the integrity of the information available at the time of investigation and that a full and complete determination of environmental contamination and risks cannot be made.

Respectfully submitted this 27th day of August, 1999,



Bennett T Halsted
Project Manager



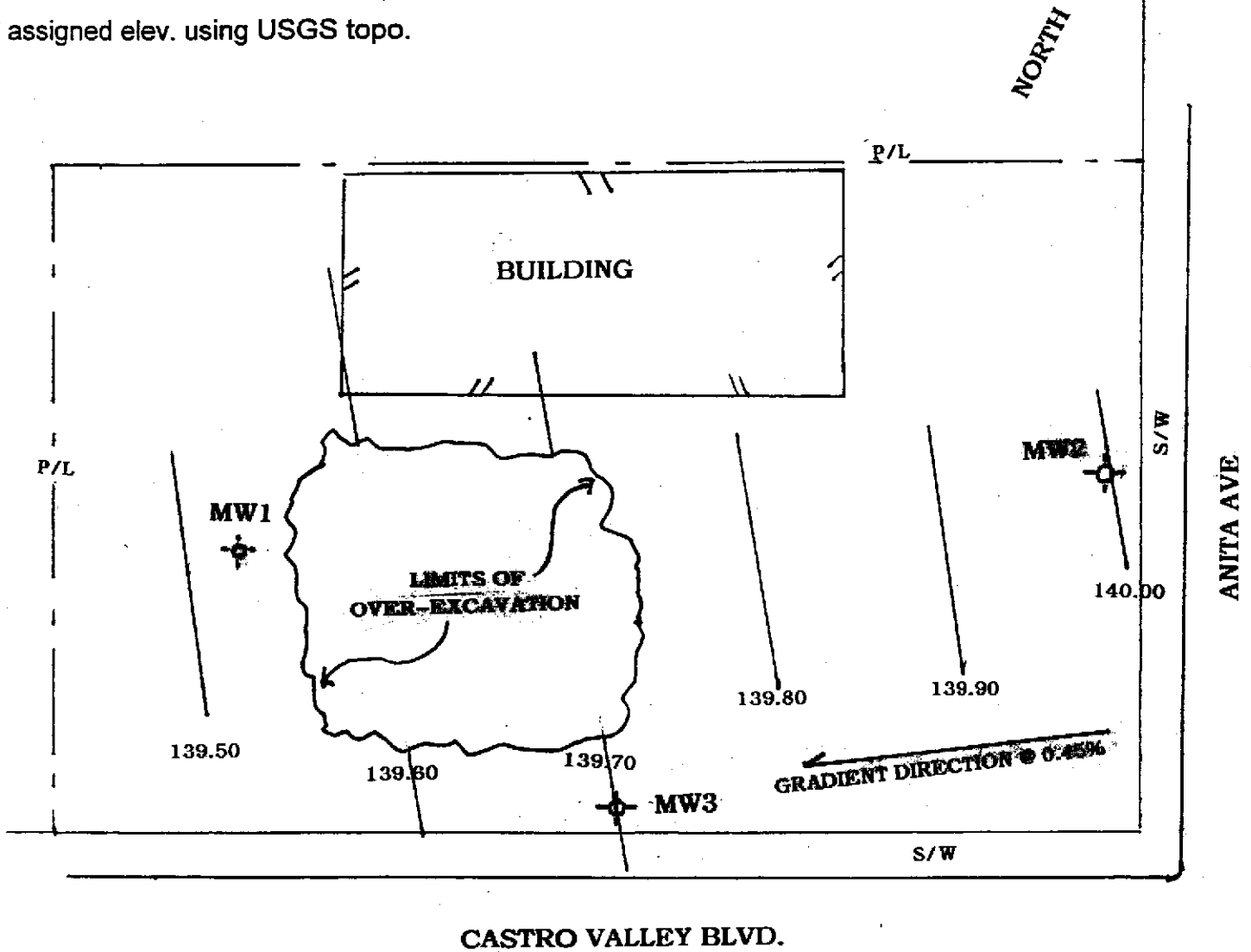
Samuel H Halsted P.E.
CE 14095



VICINITY MAP		
2896 CASTRO VALLEY BLVD., CASTRO VALLEY, CA		
SCALE: 1"=2200'	APPROVED BY:	DRAWN BY:
DATE: 4/22/99		REVISED:
PIERS ENVIRONMENTAL SERVICES, INC.		
1330 S. BASCOM AVENUE, SUITE F, SAN JOSE, CA 95128		FIGURE 1

Well#	Casing Elev.	Depth to Grndwtr.	Grndwtr. Elev.
MW1	150.11	10.57	139.54
MW2	150.66	10.67	139.99
MW3	150.00*	10.29	139.71

* assigned elev. using USGS topo.



SITE PLAN		
2896 CASTRO VALLEY BLVD., CASTRO VALLEY, CA		
SCALE: 1"=20'	APPROVED BY:	DRAWN BY:
DATE: 8/16/99		REVISED
PIERS ENVIRONMENTAL SERVICES, INC.		
1330 S. BASCOM AVENUE, SUITE F, SAN JOSE, CA 95128		FIGURE 2

Entech Analytical Labs, Inc.

CA ELAP # I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

Piers Environmental Services
 1330 South Bascom Avenue
 San Jose, CA 95128
 Attn: Ben Halsted

Date: 7/21/99
 Date Received: 7/14/99
 Project: Castro Valley
 PO #:
 Sampled By: Client

Certified Analytical Report

Water Sample Analysis:

Sample ID	MW#1			MW#2			MW#3				
Sample Date	7/14/99			7/14/99			7/14/99				
Sample Time	13:45			14:20			14:52				
Lab #	15235-001			15235-002			15235-003				
	Result	DF	DLR	Result	DF	DLR	Result	DF	DLR	PQL	Method
Results in µg/Liter:											
Analysis Date	7/14/99			7/14/99			7/14/99				
TPH-Diesel	ND	1.0	50	ND	1.0	50	ND	1.0	50	50	8015M
Analysis Date	7/15/99			7/15/99			7/15/99				
TPH-Gas	ND	1.0	50	ND	1.0	50	ND	1.0	50	50	8015M
Benzene	ND	1.0	0.50	ND	1.0	0.50	ND	1.0	0.50	0.50	8020
Toluene	ND	1.0	0.50	ND	1.0	0.50	ND	1.0	0.50	0.50	8020
Ethyl Benzene	ND	1.0	0.50	ND	1.0	0.50	ND	1.0	0.50	0.50	8020
Xylenes (total)	ND	1.0	0.50	ND	1.0	0.50	ND	1.0	0.50	0.50	8020

DF=Dilution Factor ND= None Detected above DLR PQL=Practical Quantitation Limit DLR=Detection Reporting Limit
 Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)


 Michelle Anderson, Lab Director

Environmental Analysis Since 1983