

**BLMYER**  
ENGINEERS, INC.



December 10, 1990  
BEI Job No. 89070

90 DEC 12 PM 11:01

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

Subject: **Quarterly Groundwater Sampling  
Peterson Properties  
1301 - 65th Street  
Emeryville, California**

Dear Mr. Byrne:

This letter report documents the fourth round of quarterly groundwater sampling for the second year at the subject site.

The existing monitoring well (MW-1), shown on the enclosed site plan, was sampled on November 12, 1990. The well was purged prior to sampling by removal of three well casing volumes of water. A representative sample was collected with a Teflon bailer and placed in three 40-milliliter volatile organics analysis (VOA) vials provided by the laboratory. The Well Purging and Sampling Data sheet for this well is enclosed. The sample containers were packed on ice and delivered via courier to NET Pacific, Inc., a California-certified laboratory. The sample was analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline using modified EPA Method 8015 and benzene, toluene, xylenes and ethylbenzene using EPA Method 602. An equipment blank was collected after initial decontamination of the bailer, but was not analyzed by the laboratory.

As indicated in the enclosed analytical report, TPH as gasoline, benzene, and toluene were detected in the sample at concentrations of 180 parts per billion (ppb), 9.4 ppb, and 1.8 ppb, respectively. Ethylbenzene and xylenes were not found above the method detection limit of 0.5 ppb.

A table summarizing the depth to water measurements and water sample analytical results for the second year of groundwater sampling at this site is enclosed.

Mr. Dennis Byrne  
Alameda County Health Care Services Agency  
December 10, 1990  
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If you have any questions, please contact me at (415) 521-3773.

Cordially,

BLYMYER ENGINEERS, INC.



Michael S. Lewis  
Manager, UST Services

enclosures

cc: Mr. Lester Feldman, RWQCB  
Mr. Ed Peterson  
Mr. Robert Coussan  
Mr. Charles Gensler  
Mr. Lawrence C. Jones, Jr.  
Rick Griffith, Esq.

ml\89C70.4q2

**SUMMARY OF DEPTH TO WATER  
AND WATER SAMPLE ANALYTICAL RESULTS  
FOR THE PERIOD 2/90 TO 11/90**

	<u>2/8/90</u>	<u>5/10/90</u>	<u>8/8/90</u>	<u>11/12/90</u>
Depth to Water (feet)	3.67	3.90	3.99	4.45
<u>Analytical Parameter</u>				
TPH as gasoline (ppb)	560	290	620	180
Benzene (ppb)	440	200	430	9.4
Toluene (ppb)	5.6	<3	<5	1.8
Xylenes, total (ppb)	13	<10	<10	<0.5
Ethylbenzene (ppb)	<10	<5	25	<0.5

TPH = Total Petroleum Hydrocarbons

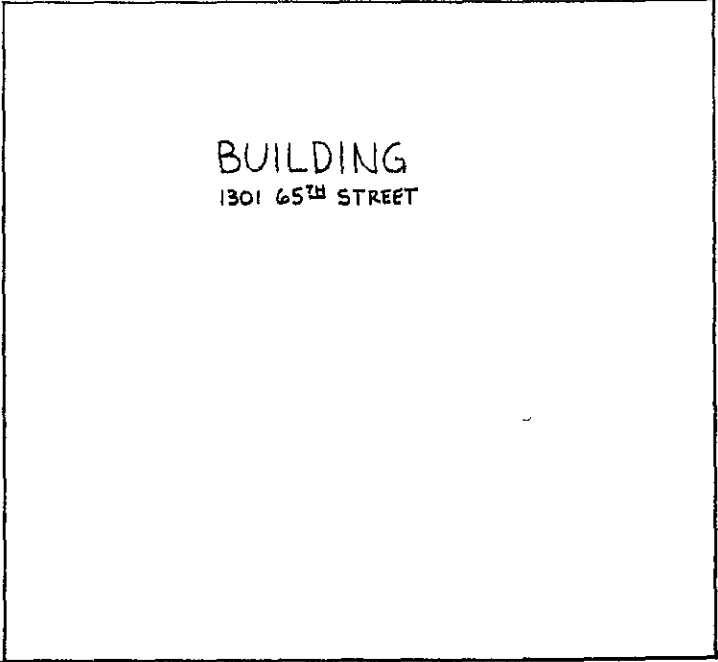
ppb = Parts Per Billion

65<sup>TH</sup> STREET

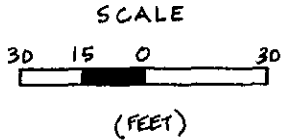
UTILITY POLE  
(TYP. 2 LOCATIONS) TANK  
EXCAVATION

MW-1

HOLLIS STREET



N ↑



PL

BLYMYER & SONS ENGINEERS, INC. 1829 CLEMENT STREET • ALAMEDA, CA 94601	
SCALE	FOR HENRY HORN & SONS
DRAWN DATE 8/14/88	TITLE PLOT PLAN
CHECKED	
APPROVED	
JOB NO. 8897.1	DRAWING NO. REV.

**WELL PURGING AND SAMPLING DATA**

DATE: 11/12/90 PROJECT NUMBER: 89070 PROJECT NAME: Peterson - Emeryville

WELL NUMBER MW-1 BORING DIAMETER 8" CASING DIAMETER 2"

<u>Column of Liquid in Well</u>		<u>Volume to be Removed</u>	
Depth to product	<u>N/A</u>	gal per ft of casing =	<u>0.17</u>
Depth to water	<u>4.45'</u>	column of water =	<u>18.55'</u>
Total depth of well	<u>23'</u>	volume of casing =	<u>3.15g</u>
Column of water	<u>18.55'</u>	number of volumes to remove	<u>3</u>
		total volume to remove	<u>= 9.45g</u>

Method of measuring liquid Oil/water interface probe

Method of purging well Hand bailing rate N/A

Method of decon TSP solution/distilled water rinse

Physical appearance of water (clarity, color, particulates, odor)

Initial Clear, slight petroleum odor

During Slightly silty, petroleum odor

Final Silty, petroleum odor

<u>Field Analysis</u>	<u>Initial</u>	<u>During</u>	<u>Final</u>
Time	<u>14:35</u>	<u>14:43</u>	<u>14:55</u>
Conductivity	<u>1768</u>	<u>1731</u>	<u>1746</u>
pH	<u>6.24</u>	<u>6.53</u>	<u>6.71</u>
Temperature	<u>70.1</u>	<u>67.9</u>	<u>65.1</u>

Method of measurement Hydac meter

Total volume purged 9.5 gal.

Comments \_\_\_\_\_

Sample Number MW-1 Amount of Sample 3 - 40-ml VOAs

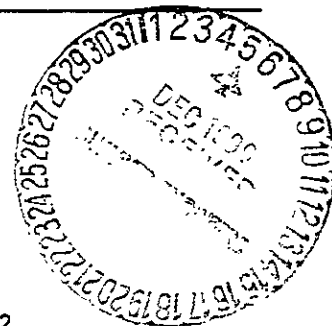
Signed/Sampler \_\_\_\_\_ Date \_\_\_\_\_

Signed/Reviewer \_\_\_\_\_ Date \_\_\_\_\_



NATIONAL  
ENVIRONMENTAL  
TESTING, INC.

NET Pacific, Inc.  
435 Tesconi Circle  
Santa Rosa, CA 95401  
Tel: (707) 526-7200  
Fax: (707) 526-9623



Michael Lewis  
Blymyer Engineers, Inc  
1829 Clement Ave  
Alameda, CA 94501


Date: 12-05-90  
NET Client Acct. No: 495  
NET Pacific Log No: 4902  
Received: 11-13-90 0800

Client Reference Information

Peterson, Emeryville; Project: 89070

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:

  
Jules Skamarack  
Laboratory Manager

Enclosure(s)



Client Acct: 495  
 Client Name: Blymyer Engineers, Inc  
 NET Log No: 4902

Date: 12-05-90  
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NET Pacific, Inc.

Ref: Peterson, Emeryville; Project: 89070

SAMPLE DESCRIPTION: MW-1            11-12-90        1500  
 LAB Job No: (-67970 )

Parameter	Method	Reporting Limit	Results	Units
PETROLEUM HYDROCARBONS			--	
VOLATILE (WATER)			--	
DILUTION FACTOR *			1	
DATE ANALYZED			11-26-90	
METHOD GC FID/5030			--	
as Gasoline			0.05	mg/L
METHOD 602			--	
DILUTION FACTOR *			1	
DATE ANALYZED			11-26-90	
Benzene			0.5	ug/L
Ethylbenzene			0.5	ug/L
Toluene			0.5	ug/L
Xylenes, total			0.5	ug/L



NET Pacific, Inc.

Client Acct: 495  
Client Name: Blymyer Engineers, Inc  
NET Log No: 4902

Date: 12-04-90  
Page: 3

Ref: Peterson, Emeryville; Project: 89070

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verf Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
Gasoline	0.05	mg/L	102	ND	93	95	1.0
Benzene	0.5	ug/L	92	ND	93	96	3.2
Toluene	0.5	ug/L	102	ND	96	97	1.0

COMMENT: Blank Results were ND on other analytes tested.





## KEY TO ABBREVIATIONS and METHOD REFERENCES

NET Pacific, Inc

- < : Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit.
- \* : Reporting Limits are a function of the dilution factor for any given sample. To obtain the actual reporting limits for this sample, multiply the stated Reporting Limits by the dilution factor (but do not multiply reported values).
- ICVS : Initial Calibration Verification Standard (External Standard).
- mean : Average; sum of measurements divided by number of measurements.
- mg/Kg (ppm) : Concentration in units of milligrams of analyte per kilogram of sample, wet-weight basis (parts per million).
- mg/L : Concentration in units of milligrams of analyte per liter of sample.
- mL/L/hr : Milliliters per liter per hour.
- MPN/100 mL : Most probable number of bacteria per one hundred milliliters of sample.
- N/A : Not applicable.
- NA : Not analyzed.
- ND : Not detected; the analyte concentration is less than applicable listed reporting limit.
- NTU : Nephelometric turbidity units.
- RPD : Relative percent difference,  $100 \text{ [Value 1 - Value 2]}/\text{mean value}$ .
- SNA : Standard not available.
- ug/Kg (ppb) : Concentration in units of micrograms of analyte per kilogram of sample, wet-weight basis (parts per billion).
- ug/L : Concentration in units of micrograms of analyte per liter of sample.
- umhos/cm : Micromhos per centimeter.

### Method References

Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.

Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986.

SM: see "Standard Methods for the Examination of Water & Wastewater, 16th Edition, APHA, 1985.

BEI Field Services

1829 Clement Avenue

Alameda, CA 94501

CHAIN OF CUSTODY RECORD

4902

PROJ NO.		PROJECT NAME				NO OF CONTAINERS	TPH as gasoline + BTXE	TPH as diesel	Oil & Grease (SM503E)	VOC (EPA 624/8240)	Semi-VOC (EPA 625/8270)	HOLD	REMARKS
89070		Peterson - Emeryville											
SAMPLERS (Signature)													
<i>Michael S. L.</i>													
DATE	TIME	COMP.	GRAB	SAMPLE LOCATION									
11-12-90	14:25		X	Bailer Blank	3-VOCs						X		
11-12-90	15:00		X	MW-1	3VOCs	X						10 day TAT	
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Relinquished by: (Signature)		Date/Time		Received by: (Signature)			
<i>Michael S. L.</i>		11/12/90 17:00		<i>Jeff Wick</i>		<i>Jeff Wick</i>		11/12		<i>custody seal</i>			
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Relinquished by: (Signature)		Date/Time		Received by: (Signature)			
Relinquished by: (Signature)		Date/Time		Received for Laboratory by: (Signature)		Date/Time		Remarks					
<i>(via NCS)</i>				<i>Tramp</i>		11/13/90 0800		Bill to: Blymyer Engineers					