



KAPREALIAN ENGINEERING  
INCORPORATED

STD #  
4252

*10/1/95  
Followed to Bob  
Kapurion to notify  
Jad had report (by email)*

July 28, 1995

Alameda County Health Care Services  
1131 Harbor Bay Parkway, 2nd Floor  
Alameda, CA 94502

Attention: Ms. Susan Hugo

RE: Wells Fargo Bank  
(Walter Blumert Paint Co.)  
490 - 43rd Street  
Oakland, California

Dear Ms. Hugo:

Per the request of Mr. Rick Montesano of Paradiso Mechanical, Inc., enclosed please find our report dated July 27, 1995, for the above referenced site.

If you should have any questions, please feel free to call our office at (510) 602-5100.

Sincerely,

Kaprealian Engineering, Inc.

Judy A. Dewey  
Executive Secretary

jad\82

Enclosure

cc: Mr. Rick Montesano, Paradiso Mechanical



KAPREALIAN ENGINEERING  
INCORPORATED

KEI-P91-1201.QR6  
July 27, 1995

Wells Fargo Bank  
525 Market Street, 18th Floor  
MAC #0103-181  
San Francisco, CA 94105

Attention: Mr. Jeffrey Hirsch

RE: Quarterly Report  
Wells Fargo Bank  
(Walter Blumert Co., Inc.)  
490 - 43rd Street  
Oakland, California

Dear Mr. Hirsch:

This Kaprealian Engineering, Inc. (KEI) report presents the results of the most recent quarter of monitoring and sampling of the monitoring wells at the referenced property. The wells are currently monitored and sampled on a quarterly basis.

#### SITE DESCRIPTION AND BACKGROUND

The subject property formerly contained one underground gasoline storage tank and one underground paint thinner storage tank. The two underground storage tanks were removed from the site in December of 1991. The underground storage tank pit was subsequently overexcavated in order to remove contaminated soil. Three monitoring wells (one on-site and two off-site) have been installed and two exploratory borings (off-site) have been drilled at and in the vicinity of the site.

A site description, detailed background information including a summary of all of the soil and ground water subsurface investigation/remediation work conducted to date, site hydrogeologic conditions, and tables that summarize all of the soil and ground water sample analytical results are presented in KEI's report (KEI-P91-1201.R6) dated July 20, 1994.

#### RECENT FIELD ACTIVITIES

The three monitoring wells (MW1 through MW3) were monitored three times and were sampled once during the quarter. Additionally, the wells were also purged on two occasions during the quarter. During monitoring, the wells were checked for depth to water and the presence of free product. Prior to sampling, the wells were also checked for the presence of a sheen. No free product or sheen was noted in any of the wells during the quarter. The monitoring data collected this quarter are summarized in Table 1.

Ground water samples were collected from the wells on June 28, 1995. Prior to sampling, the wells were each purged of approximately 8 gallons of water by the use of a surface pump. During purging operations, the field parameters pH, temperature, and electrical conductivity were recorded and are presented in Table 2. Once the field parameters were observed to stabilize, and a minimum of approximately four casing volumes had been removed from each well, samples were then collected using a clean Teflon bailer. The samples were decanted into clean VOA vials and/or one-liter amber bottles, as appropriate, which were then sealed with Teflon-lined screw caps, labeled, and stored in a cooler, on ice, until delivery to a state-certified laboratory.

#### HYDROLOGY

The measured depth to ground water at the property on June 28, 1995, ranged between 10.91 and 10.99 feet. Based on the water level data gathered on June 28, 1995, the ground water flow direction appeared to be to the southwest, as shown on the attached Ground Water Flow Direction Map, Figure 1. The ground water flow direction has been predominantly to the southwest for the past six quarters. The average hydraulic gradient at the site on June 28, 1995, was approximately 0.02.

#### ANALYTICAL RESULTS

The ground water samples collected this quarter were analyzed at Sequoia Analytical Laboratory and were accompanied by properly executed Chain of Custody documentation. The samples were analyzed for total petroleum hydrocarbons (TPH) as gasoline by EPA method 5030/modified 8015, benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA method 8020, and TPH as paint thinner by EPA method 3510/modified 8015.

Analytical results for all of the ground water samples collected from the monitoring wells to date are summarized in Table 3. The concentrations of TPH as gasoline, benzene, and TPH as paint thinner detected in the ground water samples collected this quarter are shown on the attached Figure 2. Copies of the laboratory analytical results and the Chain of Custody documentation are attached to this report.

#### DISCUSSION

Based on the analytical results of the ground water samples collected and evaluated to date, KEI recommends the continuation of the current ground water monitoring and sampling program. The three wells (MW1, MW2, and MW3) are monitored and sampled on a quarterly basis. Ground water samples are analyzed for TPH as

gasoline, TPH as paint thinner, and BTEX.

Additionally, previous intermittent purging of the three monitoring wells does not appear to have significantly impacted the concentrations of dissolved hydrocarbons in the ground water. Therefore, purging of the three wells has been discontinued.

Lastly, as previously reported, it is KEI's understanding that an off-site underground storage tank, located under the sidewalk and downgradient of the subject property, currently exists. Based on an agreement with the Alameda County Health Care Services (ACHCS) Agency, additional subsurface investigative work will be evaluated subsequent to the removal of the subject off-site underground storage tank by the tank owner.

#### DISTRIBUTION

A copy of this report should be sent to Ms. Susan Hugo of the ACHCS, and to the Regional Water Quality Control Board, San Francisco Bay Region.

#### LIMITATIONS

Environmental changes, either naturally-occurring or artificially-induced, may cause changes in ground water levels and flow paths, thereby changing the extent and concentration of any contaminants.

Our studies assume that the field and laboratory data are reasonably representative of the site as a whole, and assume that subsurface conditions are reasonably conducive to interpolation and extrapolation.

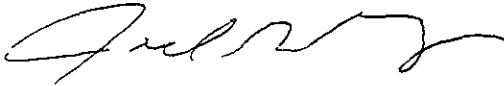
The results of this study are based on the data obtained from the field and laboratory analyses obtained from a state-certified laboratory. We have analyzed these data using what we believe to be currently applicable engineering techniques and principles in the Northern California region. We make no warranty, either expressed or implied, regarding the above, including laboratory analyses, except that our services have been performed in accordance with generally accepted professional principles and practices existing for such work.

KEI-P91-1201.QR6  
July 27, 1995  
Page 4

If you have any questions regarding this report, please do not hesitate to call at (510) 602-5100.

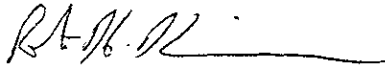
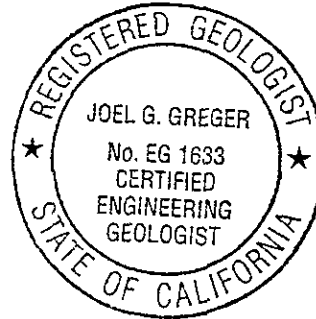
Sincerely,

Kaprealian Engineering, Inc.



Joel G. Greger, C.E.G.  
Senior Engineering Geologist

License No. EG 1633  
Exp. Date 8/31/96



Robert H. Kezerian  
Project Manager

\jad

Attachments: Tables 1, 2 & 3  
Location Map  
Ground Water Flow Direction Map - Figure 1  
Petroleum Hydrocarbon Concentrations - Figure 2  
Laboratory Analyses  
Chain of Custody documentation

TABLE 1  
SUMMARY OF MONITORING DATA

<u>Well #</u>	<u>Ground Water Elevation (feet)</u>	<u>Depth to Water (feet)♦</u>	<u>Product Thickness (feet)</u>	<u>Sheen</u>	<u>Water Purged (gallons)</u>	<u>Well Depth (feet)♦</u>
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(Monitored and Sampled on June 28, 1995)

MW1	80.11	10.91	0	No	8	22.84
MW2	79.60	10.95	0	No	8	21.36
MW3	79.91	10.99	0	No	8	21.77

(Monitored and Purged on May 10, 1995)

MW1	80.91	10.11	0	--	50	*
MW2	80.55	10.00	0	--	50	*
MW3	80.74	10.16	0	--	50	*

(Monitored on April 12, 1995)

MW1	81.31	9.71	0	--	0	*
MW2	80.96	9.59	0	--	0	*
MW3	81.18	9.72	0	--	0	*

<u>Well #</u>	<u>Top of Casing Elevation (feet)*</u>
MW1	91.02
MW2	90.55
MW3	90.90

♦ The depth to water level and total well depth measurements were taken from the top of the well casings.

\* Based on the City of Oakland Benchmark #2859 (elevation = 83.05 Mean Sea Level).

\* Total well depth not measured.

-- Sheen determination was not performed.

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 July 27, 1995

TABLE 2

RECORD OF THE TEMPERATURE, CONDUCTIVITY, AND pH VALUES  
 IN THE MONITORING WELLS DURING PURGING AND PRIOR TO SAMPLING

(Measured on June 28, 1995)

<u>Well #</u>	<u>Gallons per Casing Volume</u>	<u>Time</u>	<u>Gallons Purged</u>	<u>Casing Volumes Purged</u>	<u>Temperature (°F)</u>	<u>Conductivity ([μmhos/cm]x100)</u>	<u>pH</u>
MW1	2.03	10:30	0	0	73.4	4.90	7.24
			2	0.99	71.3	3.92	8.05
			4	1.97	71.2	3.99	7.63
		10:40	6	2.96	72.9	3.79	8.35
			8	3.94	73.2	3.70	8.43
MW2	1.77	12:20	0	0	79.3	5.56	7.10
			2	1.13	75.4	5.78	6.88
			4	2.26	72.8	5.79	6.89
		12:40	6	3.39	71.7	5.69	6.84
			8	4.52	71.6	5.66	6.80
MW3	1.83	11:20	0	0	76.4	3.86	8.96
			2	1.09	73.7	3.99	8.90
			4	2.19	73.5	4.01	8.66
		11:40	6	3.28	73.6	4.33	8.35
			8	4.37	73.3	4.45	8.29

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TABLE 3

SUMMARY OF LABORATORY ANALYSES  
 WATER

<u>Sample Number</u>	<u>TPH as Paint Thinner</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethylbenzene</u>	<u>Xylenes</u>
(Collected on June 28, 1995)						
MW1	130	720	100	7.8	23	32
MW2	8,700	11,000	1,700	ND	230	78
MW3	2,100	14,000	650	18	70	54
(Collected on March 14, 1995)						
MW1	65	630	39	ND	7.0	8.6
MW2	670	14,000	1,500	41	160	66
MW3	480	5,600	250	11	25	30
(Collected on December 8, 1994)						
MW1	170	420	16	3.0	2.9	2.7
MW2	3,200	11,000	1,700	34	200	86
MW3	2,100	1,500	820	ND	52	28
(Collected on September 13, 1994)						
MW1	73	170	6.6	1.6	2.4	3.3
MW2	5,400	12,000	1,400	50	200	89
MW3	8,700	6,800	430	14	45	37
(Collected on June 16, 1994)						
MW1	1,200	2,100	250	12	27	38
MW2	11,000	18,000	2,100	ND	200	70
MW3	4,700	7,700	910	ND	86	50
(Collected on December 13, 1993)						
MW1	820*	1,700♦	170	22	19	48
MW2	2,600	11,000♦	1,400	66	150	94
MW3	3,500	6,200♦	580	120	65	120
(Collected on April 29, 1993)						
MW1**	600	290	31	1.9	2.7	5.4
MW2**	4,100	11,000	2,400	51	76	160
MW3**	5,800	8,500	840	17	40	42



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July 27, 1995

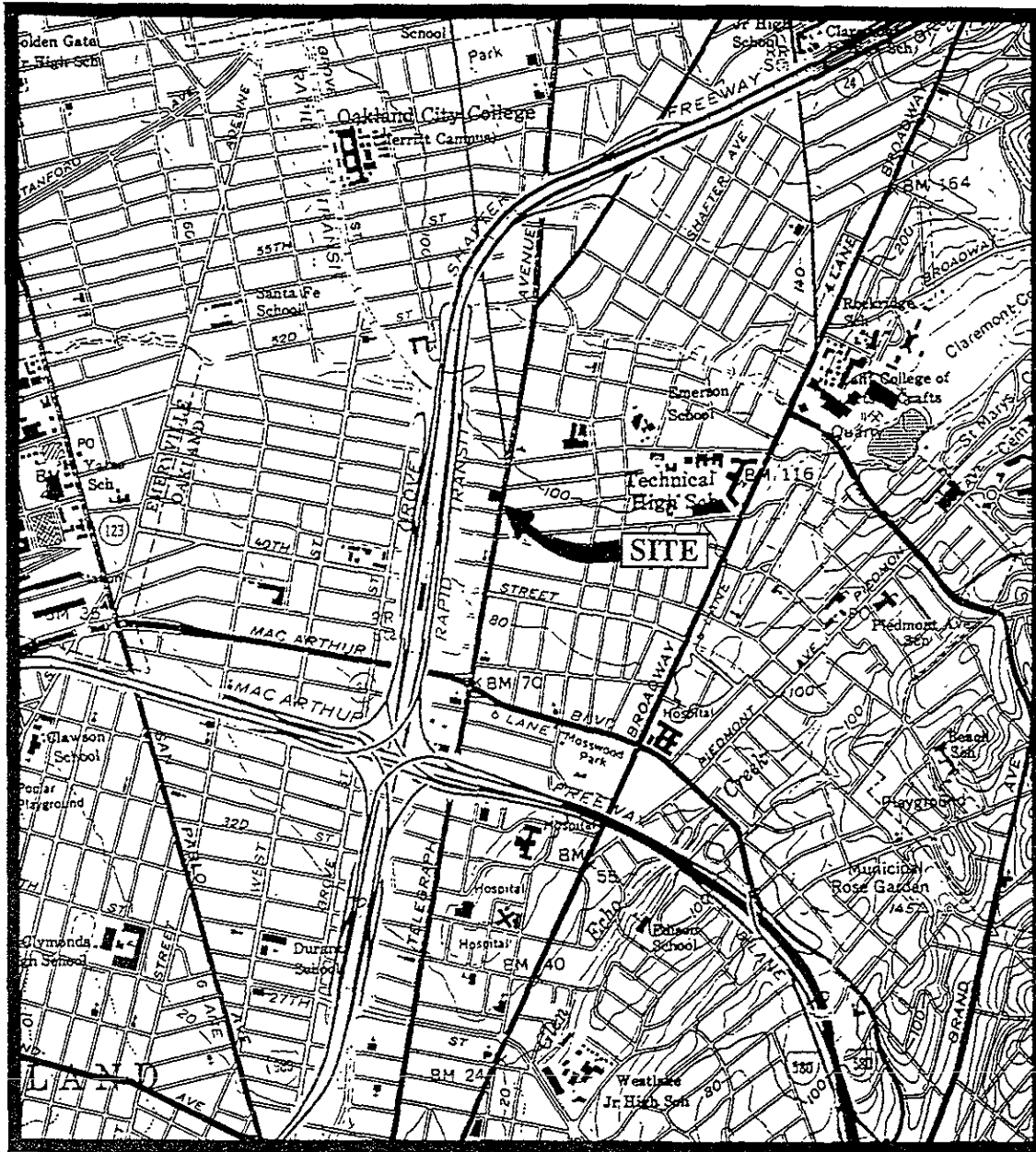
TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES  
WATER

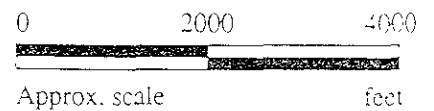
- ♦ Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.
- \* Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a paint thinner and non-paint thinner mixture.
- \*\* TPH as diesel was detected in MW1, MW2, and MW3 at concentrations of 650  $\mu\text{g/L}$ , 3,600  $\mu\text{g/L}$ , and 4,300  $\mu\text{g/L}$ , respectively; however, Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be diesel.

ND = Non-detectable.

Results are in micrograms per liter ( $\mu\text{g/L}$ ), unless otherwise indicated.



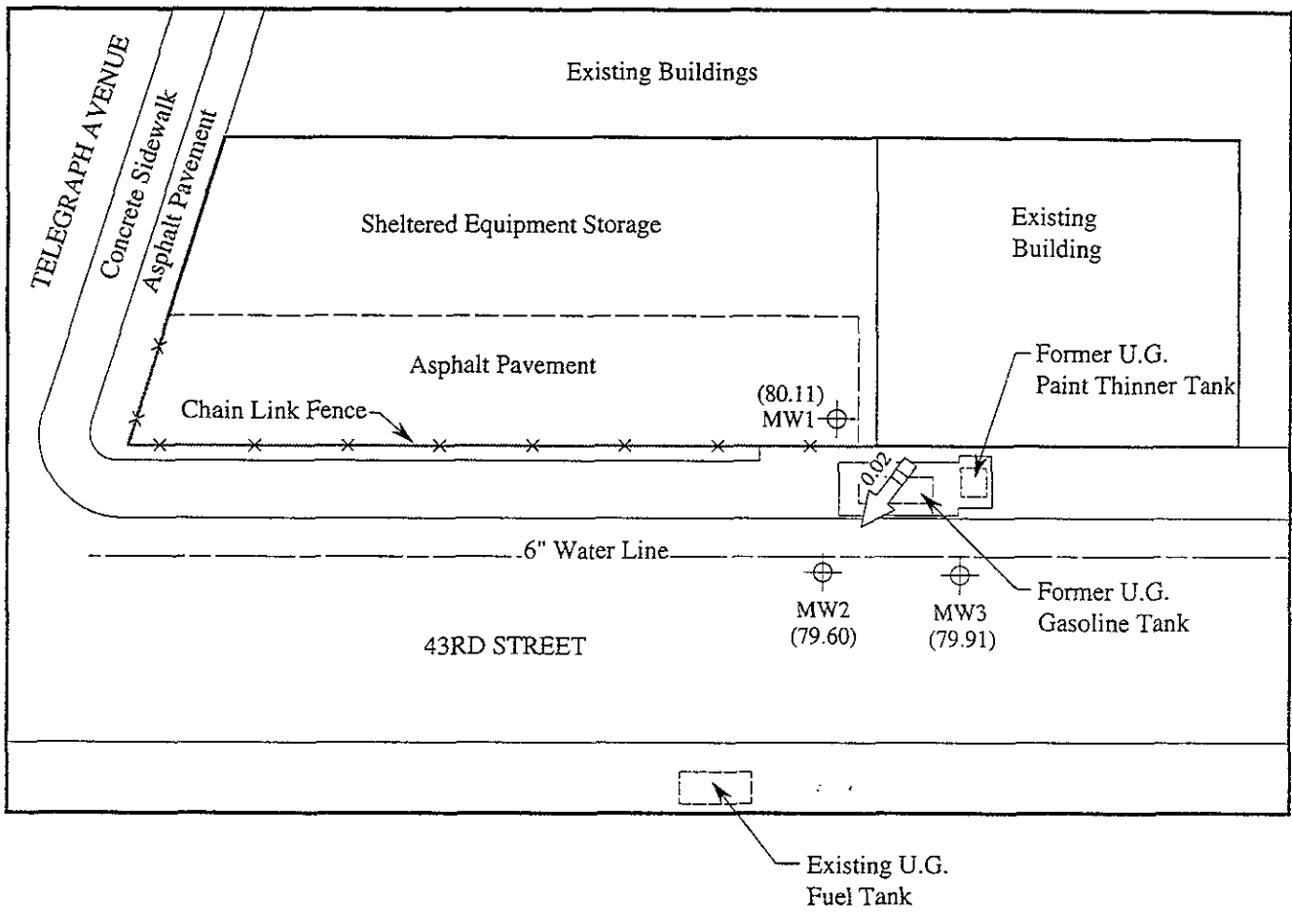
Base modified from 7.5 minute U.S.G.S. Oakland East and West Quadrangles  
(both photorevised 1980)






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KAPREALIAN ENGINEERING  
INCORPORATED

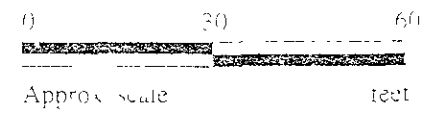
WELLS FARGO BANK  
(WALTER BLUMERT CO., INC.)  
490 43RD STREET  
OAKLAND, CA

LOCATION  
MAP



**LEGEND**

-  Monitoring well
-  Ground water elevation in feet above Mean Sea Level
-  Direction of ground water flow with approximate hydraulic gradient

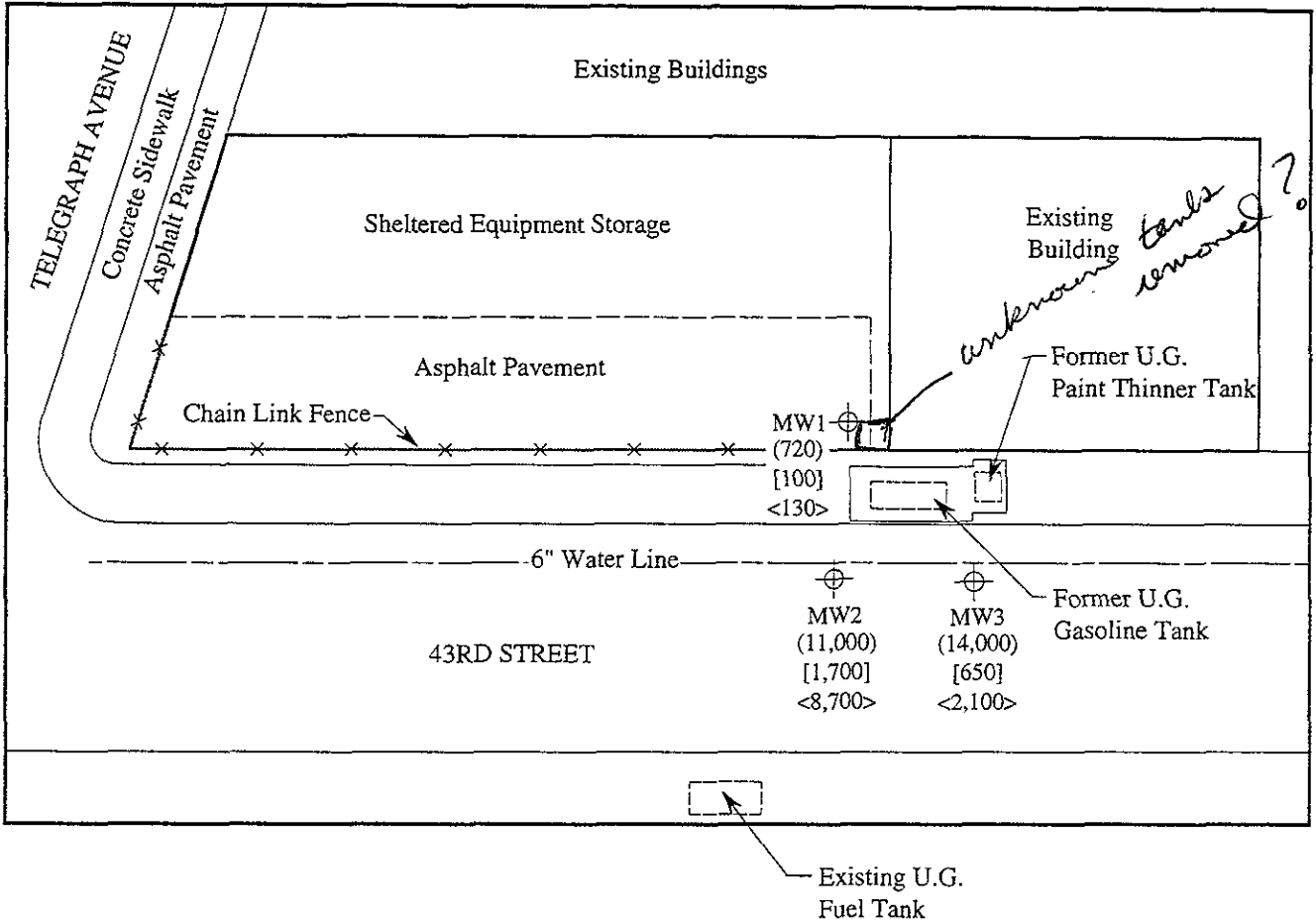


GROUND WATER FLOW DIRECTION MAP FOR THE JUNE 28, 1995 MONITORING EVENT



WELLS FARGO BANK  
(WALTER BLUMERT CO. INC.)  
490 43RD STREET  
OAKLAND, CALIFORNIA

FIGURE  
**1**



**LEGEND**

- ⊕ Monitoring well
- ( ) Concentration of TPH as gasoline in  $\mu\text{g/L}$
- [ ] Concentration of benzene in  $\mu\text{g/L}$
- < > Concentration of TPH as paint thinner in  $\mu\text{g/L}$



PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON JUNE 28, 1995



WELLS FARGO BANK  
(WALTER BLUMERT CO., INC.)  
490 43RD STREET  
OAKLAND, CALIFORNIA

FIGURE  
**2**



MPDS Services  
2401 Stanwell Dr., Ste. 300  
Concord, CA 94520  
Attention: Sarkis Karkarian

Client Project ID: Wells Fargo Bank, 490 43rd St., Oakland  
Matrix Descript: Water  
Analysis Method: EPA 5030/8015 Mod./8020  
First Sample #: 506-2132

Sampled: Jun 28, 1995  
Received: Jun 28, 1995  
Reported: Jul 13, 1995

**TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION**

Sample Number	Sample Description	Purgeable Hydrocarbons µg/L	Benzene µg/L	Toluene µg/L	Ethyl Benzene µg/L	Total Xylenes µg/L
506-2132	MW 1	720	100	7.8	23	32
506-2133	MW 2	11,000	1,700	ND	230	78
506-2134	MW 3	14,000	650	18	70	54

Detection Limits:	50	0.50	0.50	0.50	0.50
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Total Purgeable Petroleum Hydrocarbons are quantitated against a fresh gasoline standard.  
Analytes reported as ND were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp  
Project Manager





MPDS Services  
2401 Stanwell Dr., Ste. 300  
Concord, CA 94520  
Attention: Sarkis Karkarian

Client Project ID: Wells Fargo Bank, 490 43rd St., Oakland  
Matrix Descript: Water  
Analysis Method: EPA 5030/8015 Mod./8020  
First Sample #: 506-2132

Sampled: Jun 28, 1995  
Received: Jun 28, 1995  
Reported: Jul 13, 1995

**TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION**

Sample Number	Sample Description	Chromatogram Pattern	DL Mult. Factor	Date Analyzed	Instrument ID	Surrogate Recovery, % QC Limits: 70-130
506-2132	MW 1	Gasoline	10	7/3/95	HP-9	99
506-2133	MW 2	Gasoline	100	7/5/95	HP-4	104
506-2134	MW 3	Gasoline	20	7/6/95	HP-9	110

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B Kemp  
Project Manager





MPDS Services  
2401 Stanwell Dr., Ste. 300  
Concord, CA 94520  
Attention: Sarkis Karkarian

Client Project ID: Wells Fargo Bank, 490 43rd St., Oakland  
Sample Matrix: Water  
Analysis Method: EPA 3510/8015 Mod.  
First Sample #: 506-2132

Sampled: Jun 28, 1995  
Received: Jun 28, 1995  
Reported: Jul 13, 1995

**TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS AS PAINT THINNER**

Analyte	Reporting Limit µg/L	Sample I.D. 506-2132 MW 1	Sample I.D. 506-2133 MW 2	Sample I.D. 506-2134 MW 3
Extractable Hydrocarbons	50	130	8700	2100

Chromatogram Pattern:                      Paint Thinner      Paint Thinner      Paint Thinner

**Quality Control Data**

Report Limit Multiplication Factor:	1.0	1.0	1.0
Date Extracted:	7/3/95	7/3/95	7/3/95
Date Analyzed:	7/5/95	7/5/95	7/5/95
Instrument Identification:	HP-3A	HP-3A	HP-3A

Extractable Hydrocarbons are quantitated against a fresh paint thinner standard  
Analytes reported as N.D. were not detected above the stated reporting limit

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp  
Project Manager





MPDS Services  
 2401 Stanwell Dr., Ste. 300  
 Concord, CA 94520  
 Attention: Sarkis Karkarian

Client Project ID: Wells Fargo Bank, 490 43rd St., Oakland  
 Matrix: Liquid

QC Sample Group: 5062132-34

Reported: Jul 13, 1995

**QUALITY CONTROL DATA REPORT**

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
<b>Method:</b>	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015 Mod.
<b>Analyst:</b>	M. Creusere	M. Creusere	M. Creusere	M. Creusere	J. Dinsay

MS/MSD Batch#:	BLK070395	BLK070395	BLK070395	BLK070395	BLK070395
<b>Date Prepared:</b>	7/3/95	7/3/95	7/3/95	7/3/95	7/3/95
<b>Date Analyzed:</b>	7/3/95	7/3/95	7/3/95	7/3/95	7/5/95
<b>Instrument I.D.#:</b>	HP-9	HP-9	HP-9	HP-9	HP-3A
<b>Conc. Spiked:</b>	20 µg/L	20 µg/L	20 µg/L	60 µg/L	300 µg/L
<b>Matrix Spike % Recovery:</b>	120	120	125	135	50
<b>Matrix Spike Duplicate % Recovery:</b>	115	115	120	128	43
<b>Relative % Difference:</b>	4.3	4.3	4.1	5.3	15

LCS Batch#:	4LCS070395	4LCS070395	4LCS070395	4LCS070395	BLK070395
<b>Date Prepared:</b>	7/3/95	7/3/95	7/3/95	7/3/95	7/3/95
<b>Date Analyzed:</b>	7/3/95	7/3/95	7/3/95	7/3/95	7/5/95
<b>Instrument I.D.#:</b>	HP-9	HP-9	HP-9	HP-9	HP-3A
<b>LCS % Recovery:</b>	102	105	103	112	50

% Recovery Control Limits:	71-133	72-128	72-130	71-120	38-122
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**Please Note**  
 The LCS is a control sample of known, interelement free matrix that is analyzed using the same reagents preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B Kemp  
 Project Manager





MPDS Services  
 2401 Stanwell Dr., Ste. 300  
 Concord, CA 94520  
 Attention: Sarkis Karkarian

Client Project ID: Wells Fargo Bank, 490 43rd St., Oakland  
 Matrix: Liquid

QC Sample Group: 5062132-34

Reported: Jul 13, 1995

**QUALITY CONTROL DATA REPORT**

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	M. Creusere	M. Creusere	M. Creusere	M. Creusere

MS/MSD Batch#:	5062178	5062178	5062178	5062178
Date Prepared:	7/5/95	7/5/95	7/5/95	7/5/95
Date Analyzed:	7/5/95	7/5/95	7/5/95	7/5/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	85	90	90	90
Matrix Spike Duplicate % Recovery:	100	105	105	107
Relative % Difference:	16	15	15	17

LCS Batch#:	2LCS070595	2LCS070595	2LCS070595	2LCS070595
Date Prepared:	7/5/95	7/5/95	7/5/95	7/5/95
Date Analyzed:	7/5/95	7/5/95	7/5/95	7/5/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
LCS % Recovery:	98	103	104	104

% Recovery Control Limits:	71-133	72-128	72-130	71-120
----------------------------	--------	--------	--------	--------

**Please Note**  
 The LCS is a control sample of known intererent free matrix that is analyzed using the same reagents preparation and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B Kemp  
 Project Manager





MPDS Services  
2401 Stanwell Dr., Ste. 300  
Concord, CA 94520  
Attention: Sarkis Karkarian

Client Project ID: Wells Fargo Bank, 490 43rd St., Oakland  
Matrix: Liquid

QC Sample Group: 5062132-34

Reported: Jul 13, 1995

**QUALITY CONTROL DATA REPORT**

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	J.Fontecha	J.Fontecha	J.Fontecha	J.Fontecha

MS/MSD	Benzene	Toluene	Ethyl Benzene	Xylenes
Batch#:	5062365	5062365	5062365	5062365
Date Prepared:	7/6/95	7/6/95	7/6/95	7/6/95
Date Analyzed:	7/6/95	7/6/95	7/6/95	7/6/95
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	115	115	115	130
Matrix Spike Duplicate % Recovery:	115	115	115	128
Relative % Difference:	0.0	0.0	0.0	1.6

LCS Batch#:	Benzene	Toluene	Ethyl Benzene	Xylenes
4LCS070695	4LCS070695	4LCS070695	4LCS070695	4LCS070695
Date Prepared:	7/6/95	7/6/95	7/6/95	7/6/95
Date Analyzed:	7/6/95	7/6/95	7/6/95	7/6/95
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
LCS % Recovery:	97	100	98	107

% Recovery Control Limits:	Benzene	Toluene	Ethyl Benzene	Xylenes
	71-133	72-128	72-130	71-120

**Please Note**

The LCS is a control sample of known interferent free matrix that is analyzed using the same reagents preparation and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B Kemp  
Project Manager



