KAPREALIAN ENGINEERING
INCORPORATED

rec'd 4/8/94

KEI-P91-1201.QR1
January 21, 1994

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

SITE DESCRIPTION AND BACKGROUND

The subject site occupies the north-northeastern corner of the intersection of 43rd Street and Telegraph Avenue in Oakland, California. The site formerly contained one underground unleaded gasoline storage tank and one underground paint thinner storage tank.

KEI's initial field work was conducted on December 11, 1991, when one underground 1,000 gallon regular unleaded gasoline storage tank and one 350 gallon underground paint thinner storage tank were removed from the site. The tanks were made of steel, and no apparent holes or cracks were observed in the unleaded gasoline storage tank. However, the paint thinner storage tank was partially deteriorated on top. Tank removal and soil sampling were performed in the presence of Ms. Susan Hugo of the Alameda County Health Care Services (ACHCS) Agency. Inspector Christian of the City of Oakland Fire Department was also present during tank removal.

Two soil samples, labeled A1 and A2, were collected from beneath the gasoline storage tank and one sample, labeled B1, was collected from beneath the paint thinner tank at depths of approximately 10 feet below grade. The undisturbed samples were collected from bulk material excavated by backhoe.

2401 Stanwell Drive, Suite 400
Concord, California 94520
Tel: 510/671-2500 Fax: 510/687-0602

In an attempt to remove as much of the contaminated soil as possible, KEI returned to the site on March 31, 1992, in order to observe additional soil excavation in both the gasoline and the paint thinner tank pits. Soil was excavated in the tank pits to depths of approximately 11.5 feet below grade. One soil sample, labeled A(11.5), was collected from beneath the former gasoline tank and one soil sample, labeled B(11.5), was collected from beneath sample point location B1 at depths of about 11.5 feet below grade. Both soil samples were moist. Ground water was observed at the bottom of the excavation. Four additional soil samples, labeled SW-N, SW-S, SW-E, and SW-W, were collected from the sidewalls of the tank pit excavation at depths of about 10 feet below grade. Ms. Hugo of the ACHCS was again present during soil sampling activities. The sample point locations are shown on the attached Figure 5. The excavated soil was stockpiled on-site and sampled. Per the direction of Ms. Hugo and for safety considerations, the tank pit was backfilled with clean imported soil.

All samples were analyzed by Sequoia Analytical Laboratory in Concord, California. The samples were analyzed for total petroleum hydrocarbons (TPH) as gasoline by EPA method 5030 in conjunction with modified 8015, and benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA method 8020. In addition, samples A1, A2, and B1 were analyzed for TPH as diesel by EPA method 3550 in conjunction with modified 8015, and samples A(11.5), B(11.5), SW-N, SW-S, SW-E, and SW-W were also analyzed for TPH as paint thinner by EPA method 3550 in conjunction with modified 8015.

Analytical results of the soil samples indicated levels of TPH as gasoline ranging from 110 ppm to 720 ppm, except for samples SW-N and SW-W, which showed 3.6 ppm and non-detectable levels, respectively. TPH as diesel was detected in samples A1, A2, and B1 at levels ranging from 7.8 ppm to 76 ppm. TPH as paint thinner was detected at levels ranging from non-detectable to 25 ppm, except for sample SW-E, which showed 190 ppm. The results of the soil analyses are summarized in Table 3.

To continue defining the extent of soil contamination beneath the site, and to determine if the ground water beneath the site had been impacted by hydrocarbon contamination, KEI proposed the installation of three monitoring wells in a letter accompanying KEI's report (KEI-91-1201.R1) dated June 29, 1992.

On April 12, 1993, three two-inch diameter monitoring wells (designated as MW1, MW2, and MW3 on the attached Figure 1) were installed at and in the vicinity of the site. The three wells were each drilled and completed to total depths ranging from 22 to 23 feet below grade. Ground water was encountered at depths ranging

from 12 to 12.5 feet below grade during drilling. The surface of each well cover was surveyed by Kier & Wright of Pleasanton, California, to Mean Sea Level (MSL) and to a vertical accuracy of 0.01 foot. The wells (MW1 through MW3) were developed on April 22, 1993, and were initially sampled on April 29, 1993.

Documentation of well installation procedures, sample collection techniques, and the analytical results are presented in KEI's report (KEI-P91-1201.R3) dated June 2, 1993.

Based on the analytical results of the ground water samples collected from the wells, KEI recommended the implementation of a monthly monitoring and quarterly sampling program at the site.

RECENT FIELD ACTIVITIES

The three monitoring wells (MW1 through MW3) were monitored three times and were sampled once 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 December 13, 1993. Prior to sampling, the wells were each purged of between 10 and 12 gallons of water by the use of a surface pump. The samples were collected by the use of 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 site on December 13, 1993, ranged between 10.14 and 10.20 feet. Based on the water level data gathered during the quarter, the ground water flow direction appeared to be to the southwest, as shown on the attached Ground Water Flow Direction Maps, Figures 1, 2, and 3. The flow direction reported this quarter is similar to the flow direction reported on April 29, 1993. The average hydraulic gradient at the site on December 13, 1993, was approximately 0.02.

Based on review of regional geologic maps (USGS, Miscellaneous Geologic Investigations, Map I-239, Areal and Engineering Geology of the Oakland West Quadrangle, California, by D.H. Radbruch, 1957), the subject site is underlain by the Quaternary-age alluvial

fan deposits of the Temescal formation (Qtc). These deposits are described as typically consisting of clayey gravel, sandy and silty clays, and sand-clay-silt mixtures. The depth to bedrock is presently unknown to KEI.

Based on the results of our subsurface study, the site is underlain by alluvium to the maximum depth explored (23 feet below grade). The alluvium underlying the site consists predominantly of clayey or sandy silt, with lesser amounts of clayey or silty gravel and clayey or silty sand.

As of December of 1993, the unsaturated zone beneath the site is approximately 11 feet thick and consists mainly of clayey or sandy silt, clayey gravel, clayey or silty sand, and clay, in order of decreasing abundance.

The first water bearing units beneath the site (first aquifer) also consist largely of sandy or clayey silt, with subordinate amounts of silty gravel and silty sand. The units immediately above and below the water table consist of gravelly or sandy silt in MW1 and MW3, and silty or clayey gravel in MW2.

The particle size analysis (sieve and hydrometer) of the soil sample collected from the saturated zone in monitoring well MW3 at a depth of 14 to 15 feet below grade indicates that the sample is composed of approximately 65% sand, 33% silt and clay, and 2% gravel. The sample is classified as silty sand with gravel (SM).

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 TPH as gasoline by EPA method 5030/modified 8015, 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 2. 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 4. Copies of the laboratory analytical results and the Chain of Custody documentation are attached to this report.

DISCUSSION

Based on the analytical results for the ground water samples collected and evaluated to date, and no evidence of free product or sheen in any of the wells, KEI recommends the continuation of the current monitoring and sampling program. The wells are currently monitored monthly and sampled on a quarterly basis.

DISTRIBUTION

A copy of this report should be sent to 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.

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

Sincerely,

Kaprealian Engineering, Inc.

Sarkis A. Soghomonian
Staff Engineer

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

License No. EG 1633
Exp. Date 6/30/94

Robert H. Kezerian
Project Manager

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Attachments: Tables 1 & 2
Location Map
Ground Water Flow Direction Maps - Figures 1, 2 & 3
Concentrations of Petroleum Hydrocarbons - Figure 4
Laboratory Analyses
Chain of Custody documentation

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January 21, 1994

TABLE 1

SUMMARY OF MONITORING DATA

Well #	Ground Water Elevation (feet)	Depth to Water (feet)♦	Product Thickness (feet)	Sheen	Water Purged (gallons)
(Monitored and Sampled on December 13, 1993)					
MW1	80.85	10.17	0	No	12
MW2	80.41	10.14	0	No	10
MW3	80.70	10.20	0	No	10
(Monitored on November 9, 1993)					
MW1	78.46	12.56	0	--	0
MW2	78.05	12.50	0	--	0
MW3	78.21	12.69	0	--	0
(Monitored on October 15, 1993)					
MW1	78.68	12.34	0	--	0
MW2	78.10	12.45	0	--	0
MW3	78.36	12.54	0	--	0

Well #	Top of Casing Elevation (feet Mean Sea Level [MSL])*
MW1	91.02
MW2	90.55
MW3	90.90

♦ The depth to water level measurement was taken from the top of the well casing. Prior to October 15, 1993, the water level measurement was taken from the top of the well cover.

* Based on City of Oakland Benchmark #2859 (elevation = 83.05 feet MSL).

-- Sheen determination was not performed.

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TABLE 2

SUMMARY OF LABORATORY ANALYSES
WATER

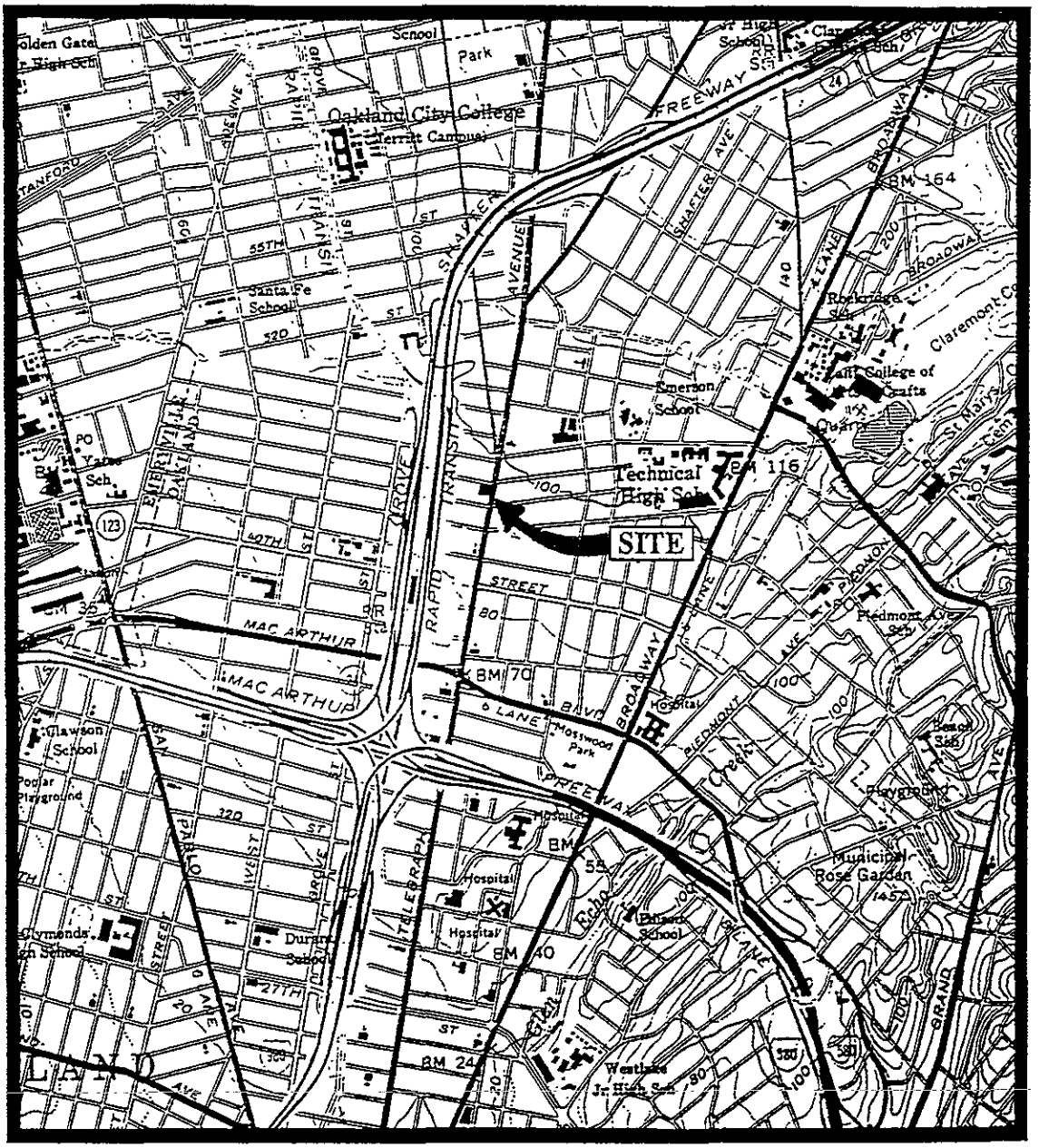
Sample Number	TPH as Paint Thinner	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes
		(Collected on December 13, 1993)				
MW1	820*	1,700♦	170	22	19	48
MW2	2,600	11,000♦	1,400	66	150	94
MW3	3,500	6,200♦	580	120	65	120
		(Collected on April 29, 1994)				
MW1**	600	290	31	1.9	2.7	5.4
MW2**	4,100	11,000	2,400	51	76	160
MW3**	5,800	8,500	840	17	40	42

♦ 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 ppb, 3,600 ppb, and 4,300 ppb, respectively; however, Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be diesel.

Results in parts per billion (ppb), unless otherwise indicated.

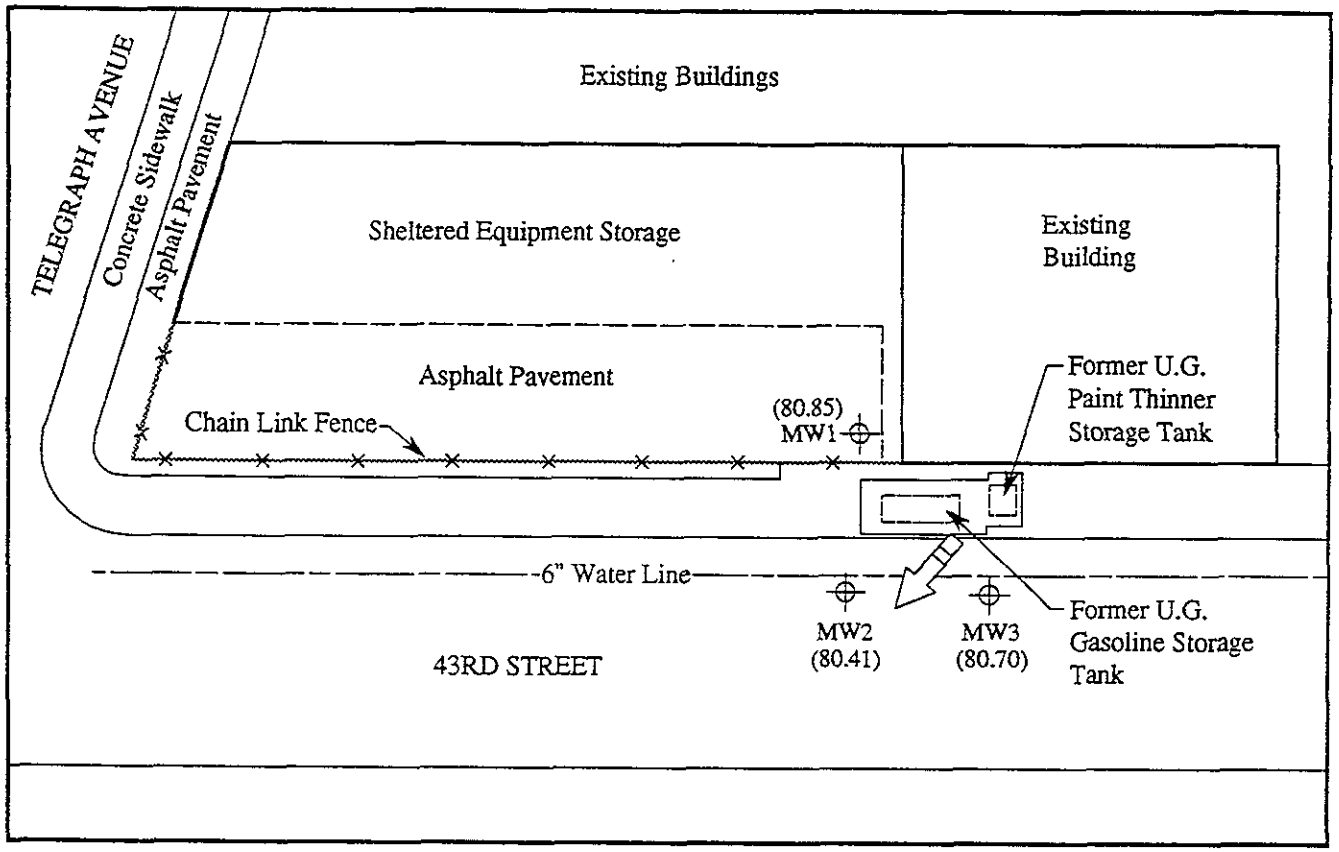


Base modified from 7.5 minute U.S G.S. Oakland East and West Quadrangles (both photorevised 1980)

0 2000 4000

Approx. scale feet

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

0 30 60

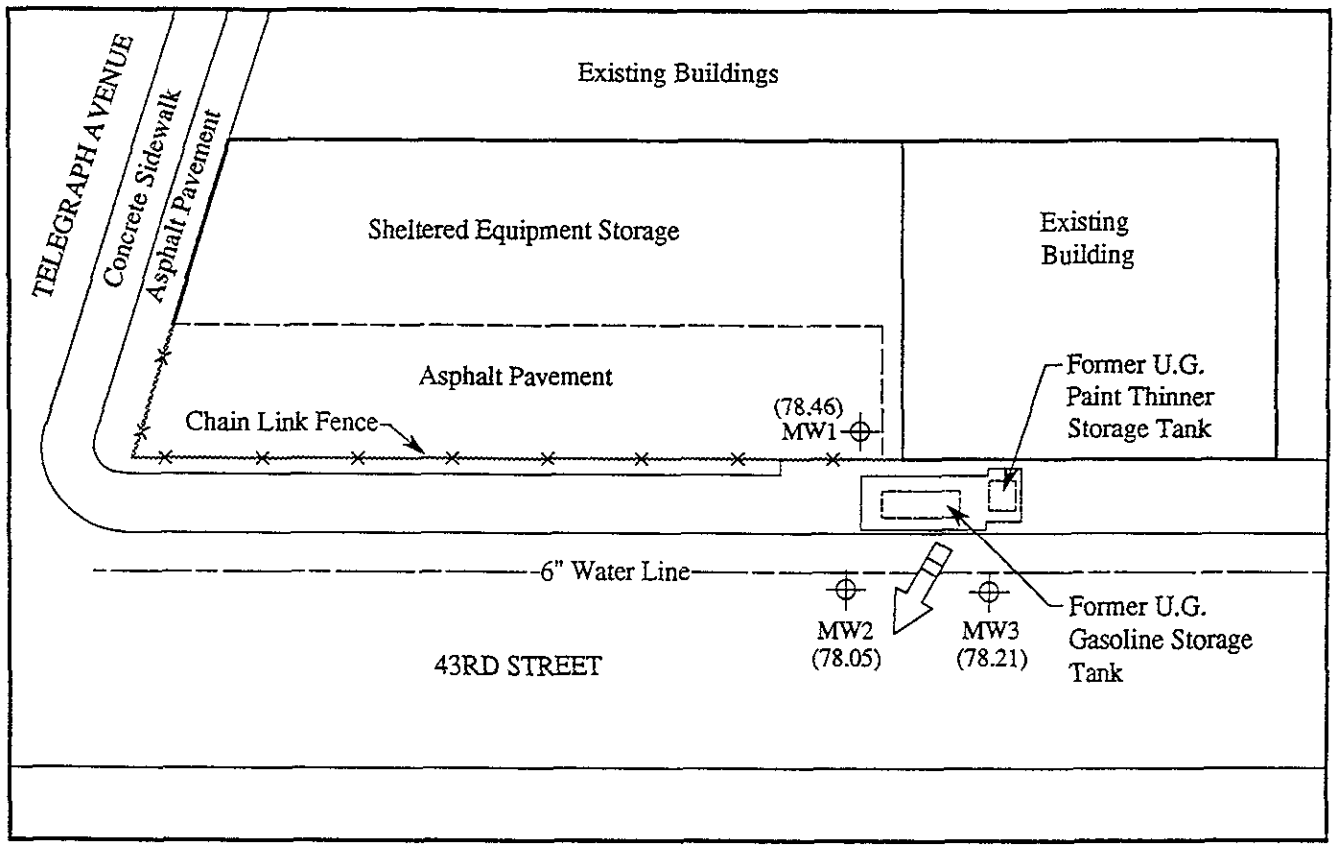
Approx. scale feet

GROUND WATER FLOW DIRECTION MAP FOR THE DECEMBER 13, 1993 MONITORING EVENT

KAPREALIAN ENGINEERING
INCORPORATED

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

FIGURE
1



LEGEND

- Monitoring well
- ( ) Ground water elevation in feet above Mean Sea Level
- Direction of ground water flow

0 30 60

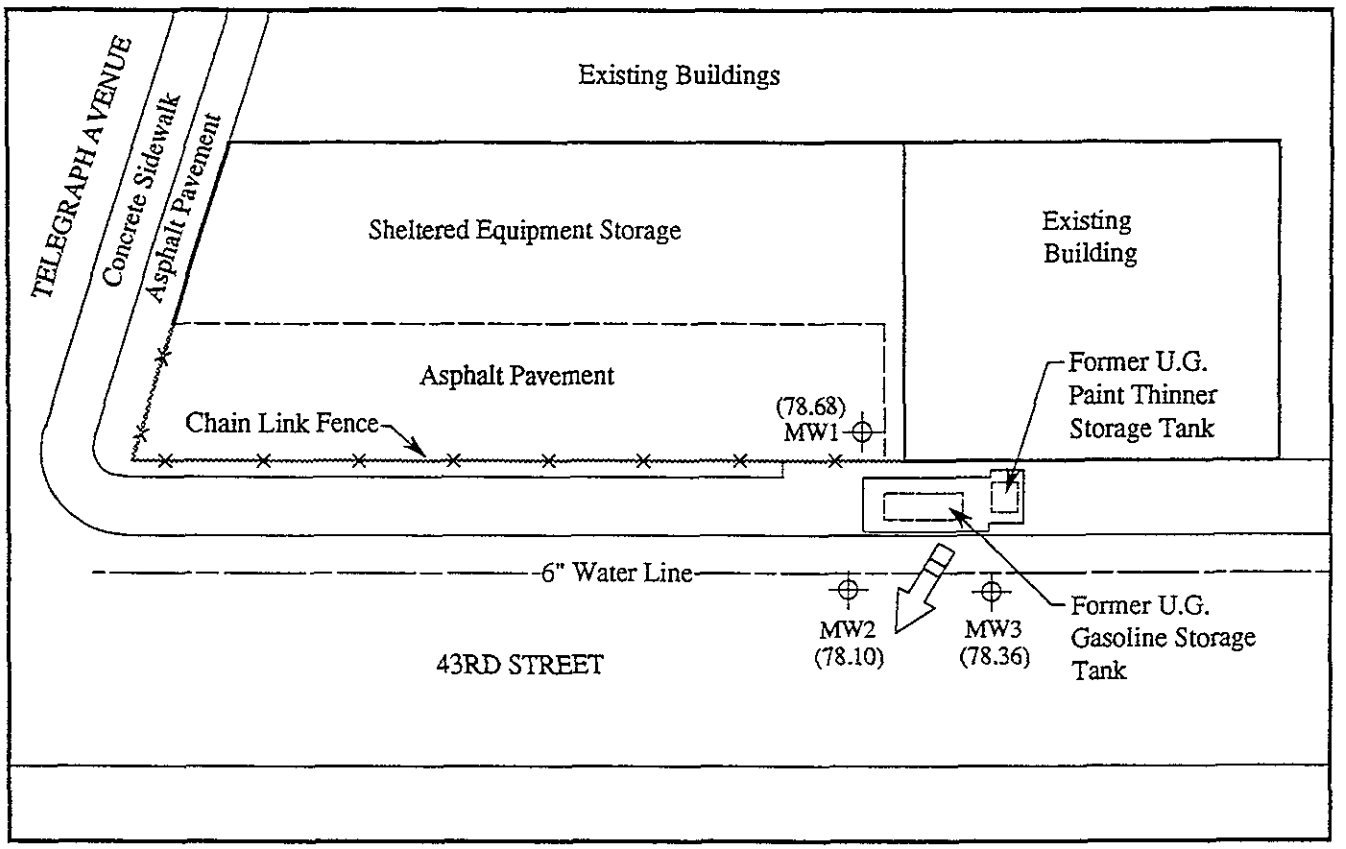
Approx. scale feet

GROUND WATER FLOW DIRECTION MAP FOR THE NOVEMBER 9, 1993 MONITORING EVENT

KAPREALIAN ENGINEERING INCORPORATED

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

FIGURE
2



LEGEND

- Monitoring well
- ( ) Ground water elevation in feet above Mean Sea Level
- Direction of ground water flow

0 30 60

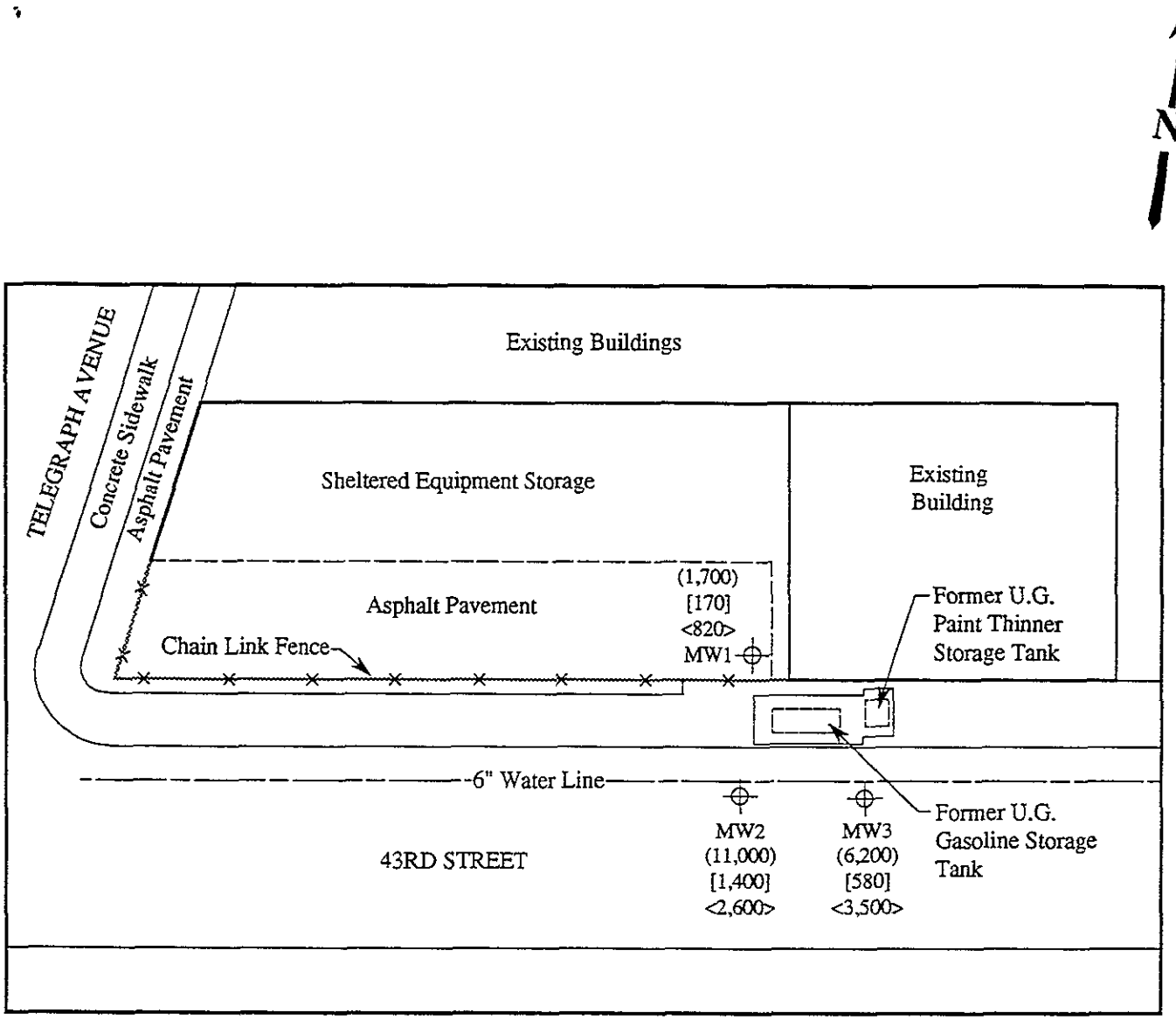
Approx. scale feet

GROUND WATER FLOW DIRECTION MAP FOR THE OCTOBER 15, 1993 MONITORING EVENT

KAPREALIAN ENGINEERING
INCORPORATED

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

FIGURE
3



LEGEND

- ⊕ Monitoring well
- ( ) Concentration of TPH as gasoline in ppb
- [ ] Concentration of benzene in ppb
- < > Concentration of TPH as paint thinner in ppb

0 30 60

Approx. scale feet

PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON DECEMBER 13, 1993

KAPREALIAN ENGINEERING INCORPORATED

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

FIGURE
4

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

Kaprealian Engineering, Inc.	Client Project ID:	Wells Fargo Bank, 490 43rd St., Oakland	Sampled: Dec 13, 1993
2401 Stanwell Dr., Ste. 400	Sample Matrix:	Water	Received: Dec 14, 1993
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Reported: Dec 29, 1993
Attention: Avo Avedissian	First Sample #:	312-0972	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 312-0972 MW 1	Sample I.D. 312-0973 MW 2	Sample I.D. 312-0974 MW 3	Sample I.D. Method Blank
Purgeable Hydrocarbons	50	1,700	11,000	6,200	
Benzene	0.5	170	1,400	580	
Toluene	0.5	22	66	120	
Ethyl Benzene	0.5	19	150	65	
Total Xylenes	0.5	48	94	120	
Chromatogram Pattern:		Gasoline & Non-Gasoline Mixture >C9	Gasoline Non-Gasoline Mixture >C9	Gasoline Non-Gasoline Mixture >C9	

Quality Control Data

Report Limit Multiplication Factor:	1.0	20	50	1.0
Date Analyzed:	12/28/93	12/26/93	12/26/93	12/26/93
Instrument Identification:	HP-2	HP-4	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)	94	78	81	101

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard
Analytes reported as N D were not detected above the stated reporting limit

SEQUOIA ANALYTICAL

Alan B. Kemp
Project Manager

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

Kaprealian Engineering, Inc.	Client Project ID:	Wells Fargo Bank, 490 43rd St., Oakland	Sampled:	Dec 13, 1993
2401 Stanwell Dr., Ste. 400	Sample Matrix:	Water	Received:	Dec 14, 1993
Concord, CA 94520	Analysis Method:	EPA 3510/3520/8015	Reported:	Dec 28, 1993
Attention: Avo Avedissian	First Sample #:	312-0972		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS AS PAINT THINNER

Analyte	Reporting Limit µg/L	Sample I.D. 312-0972 MW 1*	Sample I.D. 312-0973 MW 2	Sample I.D. 312-0974 MW 3	Sample I.D. Method Blank
Extractable Hydrocarbons	50	820	2600	3500	
Chromatogram Pattern:		Paint Thinner & Non-Paint Thinner Mixture <C12	Paint Thinner	Paint Thinner	

Quality Control Data

Report Limit Multiplication Factor:	1.0	10	10	1.0
Date Extracted:	12/20/93	12/20/93	12/20/93	12/20/93
Date Analyzed:	12/22/93	12/22/93	12/22/93	12/22/93
Instrument Identification:	HP-3A	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

Alan B. Kemp
Project Manager

Please Note
*Non-Paint Thinner Mixture <C12 is probably Gasoline

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1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

Kaprealian Engineering, Inc.
2401 Stanwell Dr., Ste. 400
Concord, CA 94520
Attention: Avo Avedissian

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

QC Sample Group: 3120972-74

Reported: Jan 4, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon	K. Wimer
MS/MSD Batch#:	3120977	3120977	3120977	3120977	BLK122093
Date Prepared:	12/26/93	12/26/93	12/26/93	12/26/93	12/20/93
Date Analyzed:	12/26/93	12/26/93	12/26/93	12/26/93	12/22/93
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4	HP-3A
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	300 µg/L
Matrix Spike % Recovery:	95	100	95	93	90
Matrix Spike Duplicate % Recovery:	90	100	90	90	88
Relative % Difference:	5.4	0.0	5.4	3.3	2.6
LCS Batch#:	LCS122693	LCS122693	LCS122693	LCS122693	BLK122093
Date Prepared:	12/26/93	12/26/93	12/26/93	12/26/93	12/20/93
Date Analyzed:	12/26/93	12/26/93	12/26/93	12/26/93	12/22/93
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4	HP-3A
LCS % Recovery:	91	97	90	91	90
% Recovery Control Limits:	71-133	72-128	72-130	71-120	28-122

SEQUOIA ANALYTICAL

Alan B. Kemp
Project Manager

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

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

Kaprealian Engineering, Inc.
2401 Stanwell Dr., Ste. 400
Concord, CA 94520
Attention: Avo Avedissian

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

QC Sample Group: Method Blank

Reported: Jan 4, 1994

QUALITY CONTROL DATA REPORT

SURROGATE

Method:	EPA 8015
Analyst:	K. Wimer
Reporting Units:	µg/L
Date Analyzed:	Dec 22, 1993
Sample #:	Method Blank

Surrogate % Recovery:	93

SEQUOIA ANALYTICAL

Alan B. Kemp
Project Manager

% Recovery	$\frac{\text{Conc of M S - Conc of Sample}}{\text{Spike Conc Added}}$	x 100
Relative % Difference	$\frac{\text{Conc of M S - Conc of M S D}}{(\text{Conc of M.S + Conc of M S D}) \div 2}$	x 100

KAPREALIAN ENGINEERING
INCORPORATED

CHAIN OF CUSTODY

SAMPLER: John Giddings
WITNESSING AGENCY:
SITE NAME & ADDRESS: Wells Fargo Bank 490 43rd. St. Oakland

SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION
MW1	12/13	16:15		✓			3	
MW2	"	16:30		✓			3	
MW3	"	16:45		✓			3	

ANALYSES REQUESTED

TPH-G	BTEX	TPH as Diesel					
✓	✓	✓					
✓	✓	✓					
✓	✓	✓					

TURN AROUND TIME: Regular

REMARKS

3120972 A-C
0973
0974

Relinquished by: (Signature) John Giddings	Date/Time 12/14/93 8:00	Received by: (Signature) Lisa Kammerud
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)

The following MUST BE completed by the laboratory accepting samples for analysis:

1. Have all samples received for analysis been stored in ice? Y
2. Will samples remain refrigerated until analyzed? Y
3. Did any samples received for analysis have head space? N
4. Were samples in appropriate containers and properly packaged? Y

Signature: [signature] Title: LS Date: 12/14/93

2101 Stanwell Drive, Suite 400
Concord, California 94520
Tel 510 602 5100 Fax 510 602 0602