



KAPREALIAN ENGINEERING  
INCORPORATED

KEI-P93-0603.R2  
November 9, 1993

Paradiso Construction  
P.O. Box 1836  
2600 Williams Street  
San Leandro, California 94577

Attention: Mr. Rick Montesano

RE: Subsurface Investigation and Remediation  
Berkeley Land Company  
51st Street & Telegraph Avenue  
Oakland, California

DOCUMENT  
3

Dear Mr. Montesano:

This report presents the results of Kaprealian Engineering, Inc's. (KEI) most recent subsurface investigation and remediation by excavation for the subject site, in accordance with KEI's proposal (KEI-P93-0603.P2) dated September 27, 1993. Soil excavation was conducted in areas of known soil contamination. KEI collected confirmatory sidewall soil samples from each area of excavation. The scope of the work performed by KEI consisted of the following:

- Coordination with regulatory agencies
- Soil sampling
- Ground Water Sampling
- Laboratory analyses
- Data analyses, interpretation, and report preparation

#### SITE DESCRIPTION AND BACKGROUND

The subject property was reported to have contained a 'street car barn' for the "Key System," a former regional public transit system. Berkeley Land Company apparently obtained the subject property subsequent to the termination of all Key System operations. Due to the anticipated sale and potential redevelopment of the subject property, Berkeley Land Company requested that KEI conduct a subsurface investigation.

All buildings and above ground improvements have been removed from the property. It is located in Oakland, and is bounded by 51st Street to the north and Telegraph Avenue to the east. A total of five ground water monitoring wells were previously installed at the site by others. A Location Map is attached to this report.

The existing monitoring wells (MW1 through MW5) were developed by KEI on June 22, 1993. Prior to development, the wells were checked for depth to the water table (by the use of an electronic sounder) and the presence of free product (by the use of an interface probe or paste tape). No free product was noted in any of the wells. Monitoring and well development data are summarized in Table 3.

The existing monitoring wells were sampled by KEI on June 29, 1993. Prior to sampling, the wells were checked for depth to water and the presence of free product or sheen. No free product or sheen was noted in any of the wells. After recording the monitoring data, the wells were each purged of between 6 and 12 gallons of water by the use of a surface pump. Water samples were then collected by the use of a clean Teflon bailer.

In June of 1993, 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 feet.

On July 26 through July 30, 1993, 21 exploratory borings (designated as EB1 through EB6A and EB6B through EB20 on the attached Figure 2) were drilled at the site. The 21 borings were drilled to total depths ranging from 11.5 to 17.5 feet below grade. Exploratory boring EB6A was first drilled to a depth of 5 feet 7 inches below grade, but due to an obstruction (possibly a piece of concrete) was moved to a new location about 10 feet to the southwest (EB6B), where it was drilled to a total depth of 15 feet below grade. During drilling, ground water was encountered in six of the 21 exploratory borings (EB2, EB9, EB12, EB13, EB15, and EB20) at depths ranging from 11 to 17 feet below grade. Soil samples were collected for laboratory analysis and for lithologic logging purposes at a maximum spacing of 5 foot intervals, at significant changes in lithology, at obvious areas of contamination, and at or near the soil/ground water interface, beginning at a depth of approximately 4 to 5 feet below grade and continuing to the total depth drilled.

After completion of drilling and soil sampling, the exploratory borings were fully sealed with neat cement grout, which was placed from the bottom of the borings up to the surface in one continuous pour.

All samples were analyzed at Sequoia Analytical Laboratory in Concord, California, and were accompanied by properly executed Chain of Custody documentation. Selected soil samples from the 21 borings EB1 through EB6A and EB6B through EB20 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 total oil and grease (TOG) by Standard Methods 5520E&F. In addition, the soil samples collected from the borings of EB1, EB3, EB5, EB6A, EB6B, EB9, EB11, EB12, EB14, EB18, and EB20 were analyzed for TPH as diesel by EPA method 3550/modified 8015. The soils samples from these 11 borings, plus the sample collected from EB17 were also analyzed for EPA method-8010 constituents. Lastly, the samples collected from the borings of EB1, EB3, EB4, EB6A, EB6B, and EB20 were analyzed for EPA method-8270 constituents. The results of soil analyses are summarized in Tables 6 and 7.

Ground water samples collected from the five existing monitoring wells were analyzed for TPH as gasoline by EPA method 5030/modified 8015, BTEX by EPA method 8020, TPH as diesel by EPA method 3550/modified 8015, TOG by Standard Methods 5520B&F, and EPA method 8010 and 8270 constituents. The results of the water analyses are summarized in Tables 4 and 5.

Based on the analytical results of the soil samples collected from the 21 exploratory borings, KEI recommended excavation in the areas of exploratory borings EB3, EB6, EB8, EB15, EB16, and EB20. Documentation of the exploratory boring drilling procedures, sample collection techniques, and the analytical results are presented in KEI's report (KEI-P93-0603.R1) dated August 30, 1993.

#### RECENT FIELD ACTIVITIES

On September 29, 1993, KEI collected soil samples following soil excavation in the areas of exploratory borings EB3, EB6, and EB8. One soil sample (labeled EB3-E) was collected from the east sidewall of the EB3 excavation at a depth of approximately 16.5 feet below grade. Three soil samples (labeled EB6-N, EB6-S, and EB6-E) were collected from the north, south, and east sidewalls, respectively, of the EB6 excavation at depths of approximately 14.5 feet below grade. Due to the fact that a 10' x 7' concrete culvert was encountered in the west side of the excavation, a sidewall sample was not collected from the west sidewall of the EB6 excavation. Four soil samples (labeled EB8-N, EB8-S, EB8-E, and EB8-W) were collected from the north, south, east, and west sidewalls, respectively, of the EB8 excavation at depths of approximately 8 feet below grade. Mr. Brian Oliva of the Alameda County Health Care Services (ACHCS) Agency was present during the excavation and soil sampling on September 29, 1993.

KEI returned to the site on September 30, 1993, to collect soil samples following the excavation in the areas of exploratory borings EB15, EB16, and EB20, and the additional excavation in the area of exploratory boring EB3. Three soil samples (labeled EB3-N,

EB3-S, and EB3-W) were collected from the north, south, and west sidewalls, respectively, of the EB3 excavation at depths of approximately 16.5 feet below grade. Four soil samples (labeled EB15-N, EB15-S, EB15-E, and EB15-W) were collected from the north, south, east, and west sidewalls, respectively, of the EB15 excavation at depths of approximately 5 feet below grade. Four soil samples (labeled EB16-N, EB16-S, EB16-E, and EB16-W) were collected from the north, south, east, and west sidewalls, respectively, of the EB16 excavation at depths of approximately 7 feet below grade. Four soil samples (labeled EB20-N, EB20-S, EB20-E, and EB20-W) were collected from the north, south, east, and west sidewalls, respectively, of the EB20 excavation at depths of approximately 15 feet below grade.

The undisturbed soil samples were collected from bulk material excavated by backhoe. The samples were placed in clean, two-inch diameter brass tubes, sealed with aluminum foil, plastic caps and tape, and stored in a cooled ice chest for delivery to a state-certified laboratory.

On October 13, 1993, approximately 1,500 gallons of ground water were pumped from the EB3 excavation and disposed of by Erickson, Inc. of Richmond, California. On October 14, 1993, a water sample (labeled EB3-W) was collected by the use of a Teflon bailer. The samples were decanted into clean glass VOA vials and one-liter amber bottles with Teflon-lined screw caps. The water sample was also stored as described above. Ground water sampling was performed in the presence of Mr. Oliva of the ACHCS.

KEI returned to the site on October 15, 1993, to collect soil samples following the overexcavation of the soil in the areas of the aforementioned exploratory borings. Three soil samples (labeled EB6-N2, EB6-S2, and EB6-E2) were collected from the north, south, and east sidewalls, respectively, of the EB6 overexcavation at depths of approximately 14.5 feet below grade. Two soil samples (labeled EB15-N2 and EB15-W2) were collected from the north and west sidewalls, respectively, of the EB15 overexcavation at depths of approximately 5 feet below grade.

KEI returned to the site on October 22, 1993, to collect soil samples following the additional overexcavation of soil in the area of exploratory boring EB15. Two soil samples (labeled EB15-N3 and EB15-W3) were collected from the north and west sidewalls, respectively, of the EB15 overexcavation at depths of approximately 5 feet below grade.

The soil sample point locations for each excavation are shown on the attached Figure 1.

### ANALYTICAL RESULTS

All samples were analyzed at Sequoia Analytical Laboratory in Concord, California, and were accompanied by properly executed Chain of Custody documentation. The soil samples collected from the excavations in the areas of EB3, EB6, EB8, EB15, and EB16 were analyzed for TOG by Standard Methods 5520E&F. Additionally, the soil samples collected from the EB3 excavation were also analyzed for TPH as diesel by EPA method 3550/modified 8015 and for EPA method 8270 constituents. The soil samples collected from the EB20 excavation were analyzed for EPA method 8010 constituents.

The ground water sample collected from the EB3 excavation was analyzed for TPH as gasoline by EPA method 5030/modified 8015, BTEX by EPA method 8020, TOG by Standard Methods 5520B&F, and for EPA method 8010 and 8270 constituents.

The results of soil analyses are summarized in Table 1, and the results of the water analyses are summarized in Table 2. Copies of the laboratory analyses and the Chain of Custody documentation are attached to this report.

### GEOLOGY AND HYDROLOGY

The subsurface soil observed in the excavations consisted primarily of fill materials and construction debris. Ground water was encountered only in the EB3 excavation at a depth of approximately 17 feet below grade.

On June 29, 1993, the measured depth to ground water in the existing monitoring wells ranged from 12.15 to 17.72 feet below grade. The ground water flow direction appeared complex, as shown on the attached Figure 3. The hydraulic gradient at the site on June 29, 1993, varied between approximately 0.03 and 0.008, based on the water level data collected from the monitoring wells prior to purging. As previously noted, during drilling, ground water was encountered in six of the 21 exploratory borings (EB2, EB9, EB12, EB13, EB15, and EB20) at depths ranging from 11 to 17 feet below grade.

Based on review of regional geologic maps (U.S. Geological Survey Miscellaneous Geologic Investigations Map I-239 "Areal and Engineering Geology of the Oakland West Quadrangle, California" by D.H. Radbruch, 1957), the site is underlain by Quaternary-age alluvium fan deposits (Temescal Formation), which typically consist of lenses of clayey gravel, sandy silty clay, and sand-clay-silt mixtures.

Based on the results of our subsurface study, the site is underlain by fill materials to depths of between 1 and approximately 13 feet below grade, except in the vicinity of exploratory borings EB6B and EB20, where the fill extends to the total depth explored of 15 and 17.5 feet below grade, respectively. Predominantly sandy fill was also encountered along with gravel fill in borings EB8 and EB13. The fill is in turn generally underlain by alluvium to at least the maximum depth explored (17.5 feet below grade). The alluvium underlying the site consist predominantly of clayey silt and clayey gravel with lesser amounts of sandy or silty clay, and sand with silt or gravel.

#### FILE REVIEW OF ADJACENT SITES

During a recent meeting between representatives of Berkeley Land Company, Paradiso Construction, and KEI on September 2, 1993, Berkeley Land Company stated that they were unaware of any underground storage of hazardous chemicals at the subject property.

On September 9, 1993, a representative of KEI reviewed the files of the Regional Water Quality Control Board (RWQCB), San Francisco Bay Region, in order to determine if the activities at any adjacent sites may be contributing (or may have contributed) to the ground water contamination detected at the subject property. KEI attempted to review the files for the following nearby sites: 1) Marshall Steel Dry Cleaners (Telegraph Business Park), 5427 Telegraph Avenue; 2) PG&E, 51st Street; 3) Chevron, 5101 Telegraph Avenue; 4) Arco, 5131 Telegraph Avenue, and; 5) Dollar Cleaners, 4868 Telegraph Avenue.

1. Marshall Steel Dry Cleaners: No files were found at the RWQCB. This site appears to be located approximately 1,000 feet upgradient of the Berkeley Land Company property.
2. PG&E: No files were found at the RWQCB. This site is located less than 100 feet to the north and appears to be located partially upgradient of the Berkeley Land Company property.
3. Chevron: A quarterly ground water monitoring and sampling report dated June 17, 1992, was reviewed. Ground water samples collected from the Chevron site are analyzed for TPH as gasoline and BTEX only. This site is located approximately 300 feet to the north-northeast, and appears to be located upgradient of the Berkeley Land Company property.
4. Arco: The analytical results of the ground water samples collected during the period of March through October of 1992 at the site (by RESNA) indicated concentrations of tetra-

chloroethene (PCE) of up to 23 ppb. Additionally, trichloroethene (TCE) and dichloroethane (DCE) have been detected at concentrations of up to 2.2 ppb and 0.5 ppb, respectively. The Arco site is located approximately 800 feet to the northwest of the Berkeley Land Company property. Based on the southwest ground water flow direction reported by RESNA, the subject Arco site appears to be located crossgradient of the subject Berkeley Land Company property and downgradient of the Marshall Steel Cleaners site.

5. Dollar Cleaners: No files were found at the RWQCB. This site is located approximately 100 feet to the east-southeast, and appears to be located partially upgradient of the Berkeley Land Company property.

On September 13, 1993, a representative of KEI reviewed the file for the Marshall Steel Cleaners site at the City of Oakland Fire Prevention Bureau. A report dated July 21, 1992, by Sierra Environmental Services was contained in the file. Based on this report, during the period of April 30 through May 22, 1992, a total of 17 underground storage tanks and associated piping were removed from the subject property. The tanks consisted of one 10,000 gallon underground gasoline storage tank, one 2,500 gallon underground diesel storage tank, one 1,000 gallon cleaning solvent tank, nine 3,500 gallon cleaning solvent tanks, and five cleaning solvent waste storage tanks in sizes ranging from 500 gallons to 1,500 gallons. Holes of up to four inches in diameter were observed in the bottoms of 13 of the 15 solvent and waste solvent tanks.

The analytical results of the soil samples collected during tank removal indicated detectable concentrations of tetrachloroethene (PCE) of up to 210 ppm (210,000 ppb). Additionally, trichloroethene (TCE), cis-1,2-dichloroethene (DCE), and stoddard solvent were detected in the soil at concentrations of up to 35 ppm, 5.2 ppm, and 1,580 ppm, respectively. Although overexcavation was conducted to a depth of 25 feet below grade below one of the 550 gallon solvent waste tanks, there is no indication whether additional soil samples were collected or whether ground water was encountered.

KEI's file reviews to date indicate that a regional chlorinated solvent problem appears to exist in the upgradient vicinity of the subject Berkeley Land Company property. Based on the reported condition of the tanks removed from the Marshall Steel Cleaners site, other potential sources in the area, and based on the apparent direction of ground water flow, it appears that the solvent contamination detected in the ground water at the Berkeley

Land Company property has most likely emanated from an off-site upgradient source(s).

#### DISCUSSION

As seen in Table 1, the analytical results of the (final) sidewall soil samples collected from the excavations in the areas of exploratory borings EB3, EB6, EB8, EB15, and EB16 indicated non-detectable concentrations of TOC. Additionally, TPH as diesel and all EPA method 8270 constituents were non-detectable in the sidewall soil samples collected from the EB3 excavation. The analytical results of the sidewall soil samples collected from the excavation in the area of exploratory borings EB20 indicated non-detectable concentrations of all EPA method 8010 constituents, except for tetrachloroethene (PCE), which was detected at concentrations ranging from 50 ppb to 170 ppb.

The RWQCB, San Francisco Bay Region, adopted "Ground Water Basin Plan Amendments" on October 21, 1992. The following paragraph is excerpted from Page 19 of the Ground Water Basin Plan Amendments, and pertain to the RWQCB's policy on soil cleanup levels at sites within their jurisdiction:

"Several Regional Water Board Orders, adopted primarily for Superfund sites, include cleanup standards of 1 mg/kg (ppm) for total VOC's (EPA method 8010 constituents) and 10 ppm for semi-volatiles (EPA method 8270). This standard is based on the modeling results at a Superfund site in the Region, the existence of similar standards in the state of New Jersey, and the professional judgement of Regional Water Board staff. As this is a cleanup standard for total VOC's, levels for individual constituents are generally significantly lower than 1 ppm."

*0.17 ppm*

The analytical results of the sidewall soil samples collected from the EB20 excavation showed PCE concentrations ranging from 0.050 ppm to 0.170 ppm. Based on the RWQCB's cleanup standards for VOC's, the concentrations of PCE detected at the subject site are well below the 1 ppm maximum allowable.

Based on the analytical results of all of the soil samples collected and evaluated at the subject property to date, it appears that the majority of the hydrocarbon contaminated soil in the vicinity of the areas investigated has been removed from the subject property. Therefore, no further soil excavation appears to be warranted at the subject property.



#### DISTRIBUTION

A copy of this report should be sent to Mr. Brian Oliva of the ACHCS, and to the RWQCB, San Francisco Bay Region.

#### LIMITATIONS

Soil deposits and rock formations may vary in thickness, lithology, saturation, strength and other properties across any site. In addition, 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.

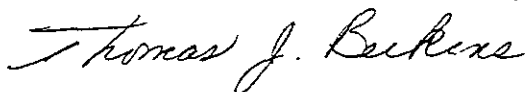
The results of this study are based on the data obtained from the field and laboratory analyses obtained from a state-certified laboratory. We have analyzed this data using what we believe to be currently applicable engineering techniques and principles in the Northern California region. We make no warranty, 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.

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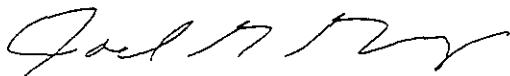
Should you have any questions on this report, please call us at  
(510) 602-5100.

Sincerely,

Kaprealian Engineering, Inc.



Thomas J. Berkins  
Senior Environmental Engineer



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

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



Robert H. Kezerian  
Project Engineer

/jad

Attachments: Tables 1 through 7  
Location Map  
Figures 1, 2 & 3  
Laboratory Analyses  
Chain of Custody documentation

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TABLE 1

SUMMARY OF ANALYTICAL RESULTS  
SOIL

<u>Date</u>	<u>Sample Number</u>	<u>Depth (feet)</u>	<u>TPH as Diesel</u>	<u>TOG</u>	<u>PCE (ppb)</u>	<u>2-Methyl-naphthalene (ppb)</u>
9/30/93	EB3-N*	16.5	ND	ND	--	ND
	EB3-S*	16.5	ND	ND	--	ND
	EB3-W*	16.5	ND	ND	--	ND
9/29/93	EB3-E*	16.5	ND	ND	--	ND
	EB6-N	14.5	--	570	--	--
	EB6-S	14.5	--	52	--	--
	EB6-E	14.5	--	680	--	--
10/15/93	EB6-N2	14.5	--	ND	--	--
	EB6-S2	14.5	--	ND	--	--
	EB6-E2	14.5	--	ND	--	--
9/29/93	EB8-N	8.0	--	ND	--	--
	EB8-S	8.0	--	ND	--	--
	EB8-W	8.0	--	ND	--	--
	EB8-E	8.0	--	ND	--	--
9/30/93	EB15-N	5.0	--	210	--	--
	EB15-S	5.0	--	ND	--	--
	EB15-W	5.0	--	54	--	--
	EB15-E	5.0	--	ND	--	--
10/15/93	EB15-N2	5.0	--	460	--	--
	EB15-W2	5.0	--	82	--	--
10/22/93	EB15-N3	5.0	--	ND	--	--
	EB15-W3	5.0	--	ND	--	--
9/30/93	EB16-N	7.0	--	ND	--	--
	EB16-S	7.0	--	ND	--	--
	EB16-W	7.0	--	ND	--	--
	EB16-E	7.0	--	ND	--	--
	EB20-N**	15.0	--	--	120	--
	EB20-S**	15.0	--	--	50	--
	EB20-W**	15.0	--	--	77	--
	EB20-E**	15.0	--	--	170	--

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TABLE 1 (Continued)

SUMMARY OF ANALYTICAL RESULTS  
SOIL

NOTE: N, S, E, & W label the sidewall samples collected on the north, south, west, and east sidewalls, respectively.

ND = Non-detectable.

-- Indicates analysis was not performed.

PCE = Tetrachloroethene

\* All EPA method 8270 constituents were non-detectable.

\*\* All EPA method 8010 constituents were non-detectable, except for PCE as noted above.

Results in parts per million (ppm), unless otherwise indicated.

TABLE 2  
SUMMARY OF ANALYTICAL RESULTS  
WATER

<u>Sample Number</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>Xylenes</u>	<u>TOG (ppm)</u>
(Collected on October 14, 1993)						
EB3-W*	ND	ND	ND	ND	1.7	ND

NOTE: The water sample was collected from the excavation. The results of the analysis may not be representative of formation water, and should be used for comparative informational purposes only.

ND = Non-detectable.

\* All EPA method 8270 and 8010 constituents were non-detectable, except for cis-1,2-dichloroethene, which was detected at a concentration of 0.98 ppb.

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

TABLE 3

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>
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(Monitored and Sampled on June 29, 1993)

MW1	99.04	16.55	0	No	6
MW2	95.29	15.98	0	No	6
MW3	94.72	17.27	0	No	8
MW4	96.30	12.15	0	No	12
MW5	93.99	13.45	0	No	11

(Monitored and Developed on June 22, 1993)

MW1	99.10	16.49	0	--	50
MW2	95.35	15.92	0	--	45
MW3	94.72	17.72	0	--	40
MW4	96.33	12.12	0	--	50
MW5	89.63	17.81	0	--	30

<u>Well #</u>	<u>Surface Elevation* (feet)</u>
MW1	115.59
MW2	111.27
MW3	112.44
MW4	108.45
MW5	107.44

-- Sheen determination was not performed.

\* The elevation of the tops of the well covers have been surveyed relation to MSL, per City of Oakland Benchmark #2874 (elevation = 116.41 MSL.)

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TABLE 4  
SUMMARY OF LABORATORY ANALYSES  
WATER

<u>Date</u>	<u>Sample Number</u>	<u>TPH as Diesel</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>Xylenes</u>
6/29/93	MW1*	ND	76♦	ND	ND	ND	ND
	MW2*	ND	ND	ND	ND	ND	ND
	MW3*	ND	ND	ND	ND	ND	ND
	MW4*	ND	ND	ND	ND	ND	ND
	MW5*	ND	ND	0.64	ND	ND	ND

♦ Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be gasoline.

\* TOG and all EPA method 8270 constituents were non-detectable.

ND = Non-detectable.

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

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TABLE 5  
SUMMARY OF LABORATORY ANALYSES  
WATER

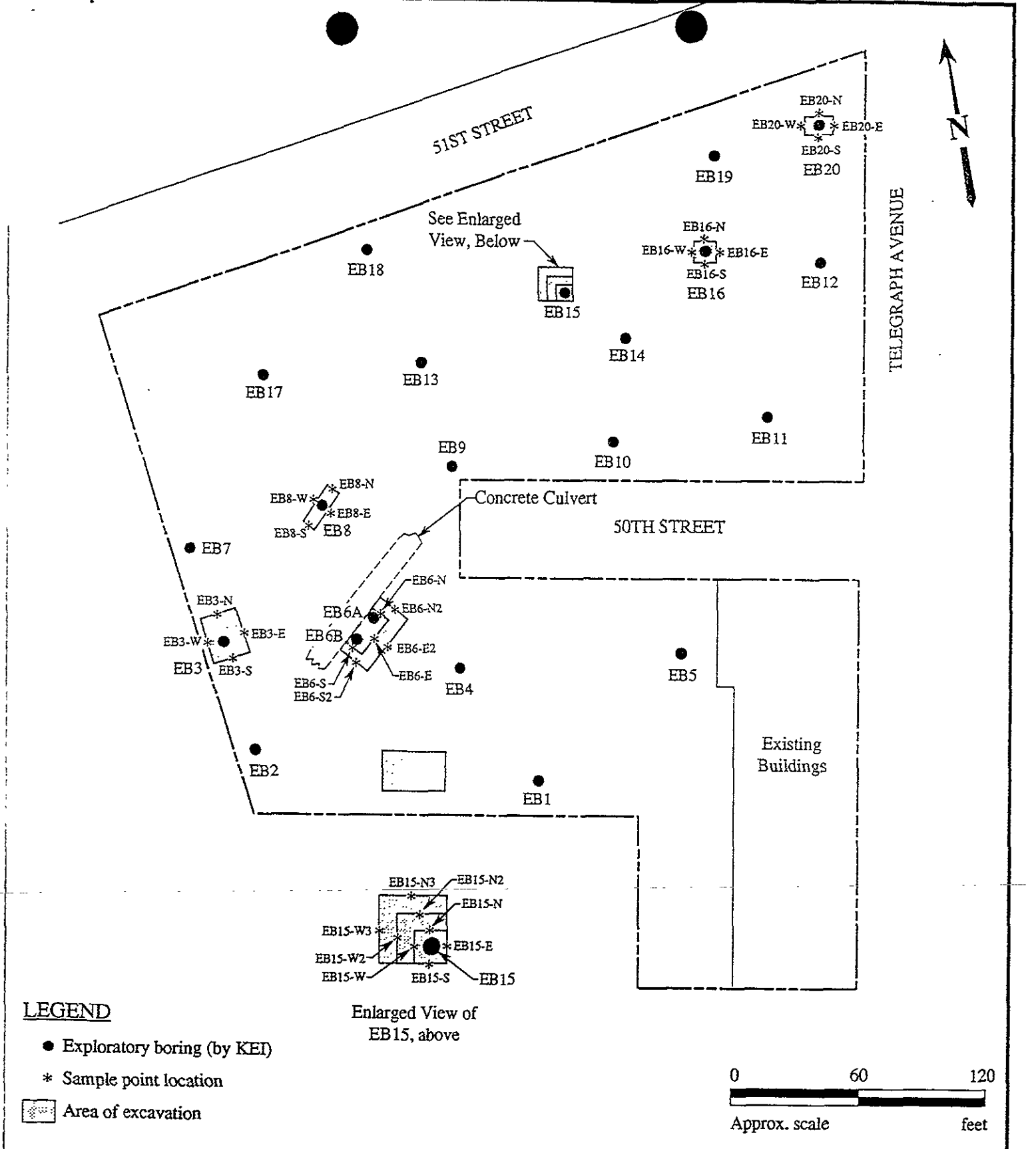
<u>Date</u>	<u>Sample Number</u>	<u>cis-1,2-Dichloro-ethene</u>	<u>Tetrachloro-ethene</u>	<u>Trichloro-ethene</u>	<u>Vinyl Chloride</u>
6/29/93	MW1*	ND	250	ND	ND
	MW2*	ND	78	ND	ND
	MW3*	5.5	130	11	ND
	MW4*	ND	16	0.68	ND
	MW5*	24	17	5.9	3.0

\* All EPA method 8010 constituents were non-detectable, except for the above compounds.

ND = Non-detectable.

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

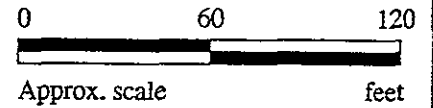




**LEGEND**

- Exploratory boring (by KEI)
- \* Sample point location
- ▨ Area of excavation

Enlarged View of  
EB15, above



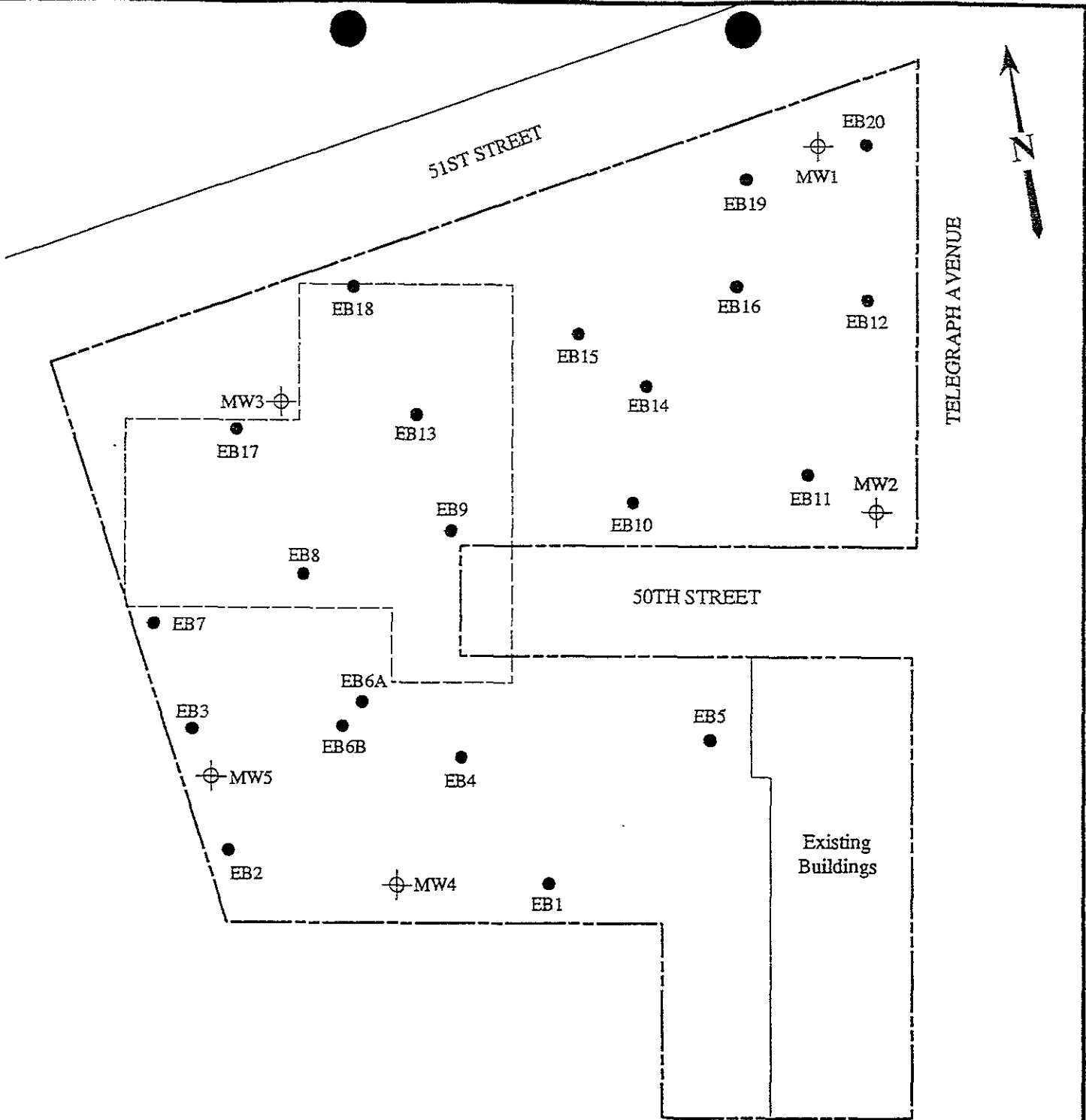
Base map modified from an Advanced Soil Technology Inc. site plan

**SAMPLE POINT LOCATION MAP**



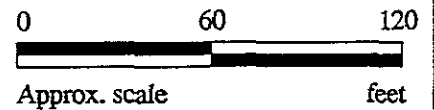
**BERKELEY LAND COMPANY  
51ST STREET & TELEGRAPH AVE.  
OAKLAND, CALIFORNIA**

**FIGURE  
1**



**LEGEND**

- Exploratory boring (by KEI)
- ⊕ Monitoring well (by others)



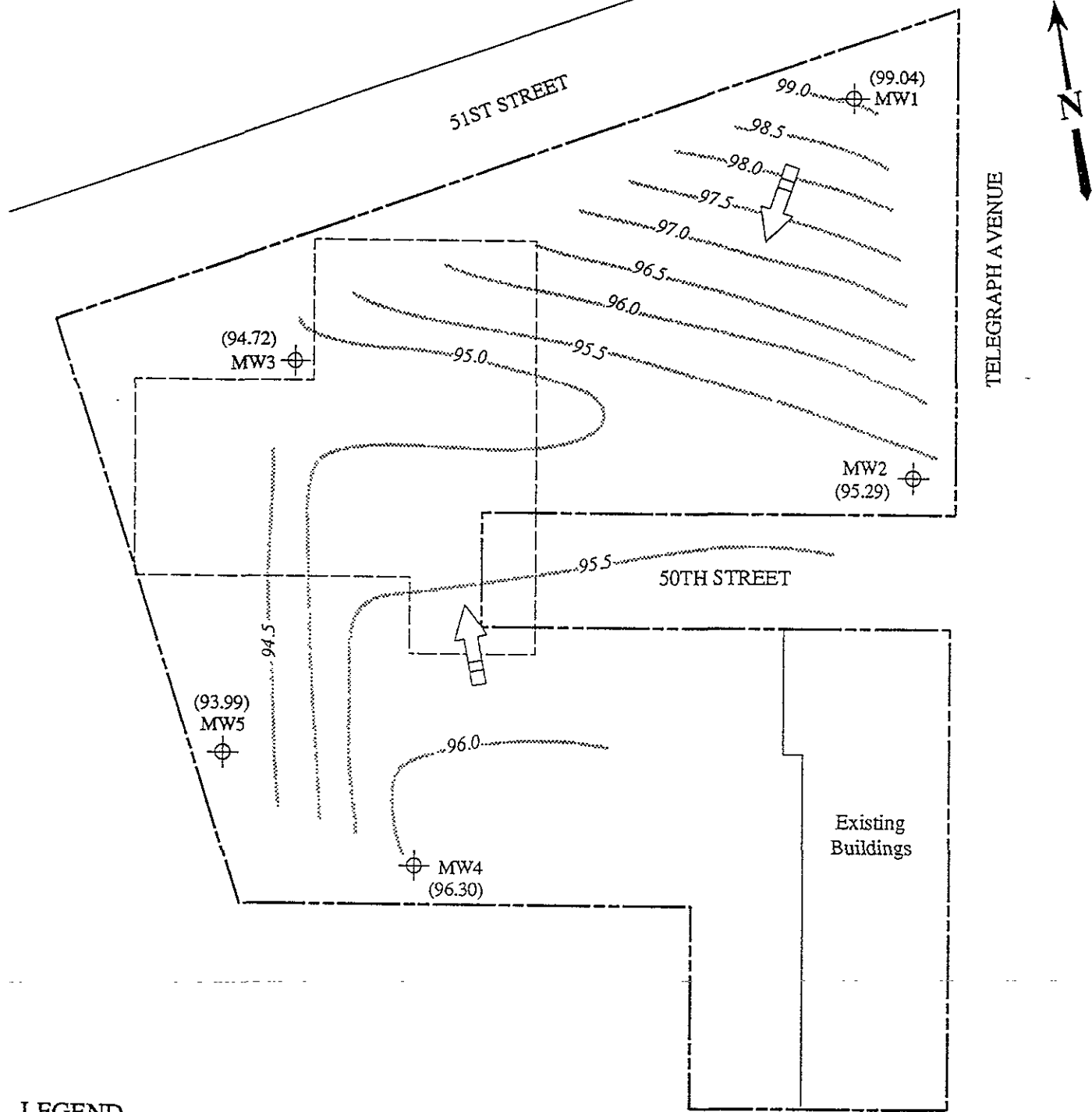
Base map modified from an Advanced Soil Technology Inc. site plan

**EXPLORATORY BORING AND MONITORING WELL LOCATION MAP**



**BERKELEY LAND COMPANY  
51ST STREET & TELEGRAPH AVE.  
OAKLAND, CALIFORNIA**

**FIGURE  
2**



**LEGEND**

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



Base map modified from an Advanced Soil Technology Inc. site plan

**POTENTIOMETRIC SURFACE MAP FOR THE JUNE 29, 1993 MONITORING EVENT**



**BERKELEY LAND COMPANY  
51ST STREET & TELEGRAPH AVE.  
OAKLAND, CALIFORNIA**

**FIGURE  
3**