

SITE SUMMARY

Berkeley Land Company
"Temescal Plaza"
51st Street & Telegraph Avenue
Oakland, California

January 22, 1997

Site Description:

The subject property was reported to have contained a street car barn for the "Key System," a former regional public transit system. All of the former buildings have been removed. The site has been re-developed and currently contains retail shops. Three underground kerosene storage tanks were removed from the site in 1995. A total of five ground water monitoring wells have been installed at the site, one of which has been properly abandoned. A total of 21 exploratory borings have been drilled at the site. Minor overexcavation was conducted at and around the locations of seven of these borings.

A Location Map and Site Plan are attached. The vicinity of the site is generally developed with a mixture of commercial and residential structures.

Soil borings drilled at the site indicate that the site is underlain by sand and gravel fill materials to depths of between 1 and 13 feet below grade (fbg), except in the vicinity of borings EB6B and EB20, where the fill extends to the total depth explored of 15 and 17.5 fbg, respectively. The fill is in turn generally underlain by alluvium to at least the maximum depth explored, 17.5 fbg. The alluvium underlying the site consists predominantly of clayey silt and clayey gravel with lesser amounts of sandy or silty clay, and sand with silt and gravel. The depth to ground water at the site fluctuates seasonally from approximately 10.36 to 17.81 fbg.

Laboratory Results:

The laboratory results of all of the soil and ground water samples collected at the site are presented in the attached tables.

UST Removal and Sampling:

10/06/95

Two 500 gallon underground storage tanks (UST) were removed from the site (by Harza Engineering). The tanks were made of steel and were apparently used for kerosene storage (Figure 1). Copies of the laboratory analyses sheets for the soil samples collected by Harza Engineering are included in Appendix A.

10/23/95

One additional 500 gallon kerosene UST was removed from the site (by KEI). The tank was also made of steel (Figure 1). Visual inspection of the tanks indicated no holes or cracks.

Laboratory analyses of the soil sample, BT(8), collected from underneath the UST at a depth of 8 fbg indicated total extractable petroleum hydrocarbons (TEPH) as kerosene at a concentration of 1,500 ppm and TOG at a concentration of 570 ppm. TPH as diesel and benzene were non-detectable in this sample (Table 1).

11/01-04/95

Overexcavation of soil was conducted in the area of the former USTs to a depth of approximately 18 fbg (Figure 1). The analytical results of the final confirmatory soil samples (SW-1, SW-3, SW-4, SW-5, SW6, SW7, and SW-8) from the excavation indicated non-detectable concentrations of TPH as diesel, and benzene. Kerosene was detected at concentrations ranging from non-detectable to 110 ppm. TEPH as motor oil ranged from non-detectable to 67 ppm (Table 1). The laboratory noted that TPH as gasoline detected in the samples was in the total extractable hydrocarbons range (>C8).

Ground water samples, labeled Water-E1 and Water-E2, were collected from the excavation on November 1 and November 4, respectively. BTEX were relatively low to non-detectable. TEPH as diesel, TEPH as motor oil, and TOG were non-detectable in these samples (Table 2).

A total of approximately 975 tons of soil were excavated.

8/06/96

At the request of the East Bay Municipal Utility District (EBMUD), KEI collected soil samples in the northwest portion of the property (Figure 2). These samples were collected and analyzed per the direction of EBMUD, prior to utility connection. The analytical results of the soil samples indicated non-detectable concentrations of TPH as diesel, TPH as gasoline, BTEX, and all volatile organics by EPA 8240. All CAM 17 metals were within Title 22 limits (Table 3).

Soil Borings and Soil Sampling:

4/87

Five exploratory soil borings (EB1 through EB5) were drilled at the site (by J.H. Kleinfelder Associates). The analytical results of the soil and ground water samples collected by Kleinfelder Associates and the associated figure showing boring locations are included in Appendix B.

The analytical results of the soil samples indicated that the concentrations of each of the metals analyzed for was below the total threshold limits set forth by the California Code of Regulations, Title 22. In addition, the analytical results of the ground water samples analyzed for was below the maximum contaminant levels (MCL) for drinking water set forth by the U.S. EPA.

11/91

Monitoring wells MW1, MW2, MW3, MW4, and MW5 were installed at the site by another consultant (Figure 3).

7/26-30/93

Twenty-one exploratory soil borings (EB1 through EB6A and EB6B through EB20) were drilled at the site (Figure 3). The borings were drilled to depths ranging from 11.5 to 17.5 fbg.

A total of 54 soil samples collected from the borings were analyzed. The analytical results indicated of non-detectable concentrations of benzene in all of the samples, except for 0.013 ppm, 0.027 ppm, and 0.019 ppm detected in three samples. TOG was detected in 5 borings at concentrations ranging from 70 ppm to 9,900 ppm, and was non-detectable in all remaining samples (Table 4).

Of the 17 samples analyzed for EPA 8270 constituents, all samples indicated non-detectable concentrations, except for EB3. Only the constituent 2-methylnaphthalene was detected in this sample at a maximum concentration of 1,900 ppb (1.9 ppm). EPA 8010 constituents were non-detectable in all samples, except for the constituent tetrachloroethene detected at a maximum concentration of 2,400 ppb (2.4 ppm) in EB20. (Table 5).

9/30-10/22/93

Overexcavation was conducted in the areas of exploratory borings EB3, EB6A, EB6B, EB8, EB15, EB16, and EB20. Overexcavation was conducted in the area of EB3, EB6A, EB6B, EB8, EB15, and EB16 in order to remove TOG impacted soil (and relatively low levels of methylnaphthalene in MW3). Overexcavation was conducted in the area of EB20 in order to remove soil impacted with relatively low concentrations of tetrachloroethene. Reference Figure 4.

Laboratory analyses of the final confirmatory soil samples collected from EB3, EB6A, EB6B, EB8, EB15, and EB16 indicated non-detectable concentrations of TOG in all samples (and non-detectable concentrations of methylnaphthalene in samples collected from MW3). In addition, the final confirmatory soil samples collected from EB20 indicated relatively low concentrations of tetrachloroethene, ranging from 0.050 to 0.17 ppm (Table 6).

A total of approximately 325 tons of soil were excavated.

10/13 & 14/93

Prior to backfilling the excavation around EB3, approximately 1,500 gallons of ground water were pumped from the excavation and properly disposed. A ground water sample was

collected the following day, labeled EB3-W. TOG, benzene, and all EPA method 8270 constituents were non-detectable in this sample (Table 7).

2/29/96

Monitoring well MW3 was properly abandoned by over-drilling in order to accommodate re-development activities in the northwest portion of the property (Figure 3).

Soil Excavation and Stockpiled Soil Management:

12/23/93

A cumulative total of approximately 325 tons of soil were excavated from the area around the locations of EB3, EB6A, EB6B, EB8, EB15, EB16, and EB20. This soil was subsequently sampled, analyzed, and disposed of at Forward Landfill, Inc. in Manteca, California, an approved disposal facility.

11/16/95-3/27/95

A total of approximately 975 tons of soil were excavated from the underground fuel storage tank pit, to a maximum depth of 18 fbg. This soil was subsequently sampled, analyzed, and disposed of at two facilities. 550 tons were disposed of at the REMCO facility in Richmond, California, and 425 tons at the ECDC facility in East Carbon, Utah. Both are approved recycling/disposal facilities.

File Reviews of Adjacent Sites

9/09/93

KEI conducted a file review of adjacent sites at the offices of the RWQCB, San Francisco Bay Region. Files for the following sites were reviewed: 1) Chevron, 1501 Telegraph Avenue; 2) ARCO, 5131 Telegraph Avenue; 3) Marshall Steel Dry Cleaners, 5427 Telegraph Avenue; 4) PG&E, 51st Street; 5) Dollar Cleaners, 4868 Telegraph Avenue.

No files were available for the Marshall Steel, PG&E, or the Dollar Cleaners sites. These sites are located approximately 1,000 feet upgradient, 100 feet upgradient, and 100 feet partially upgradient, respectively, of the Berkeley Land Company property.

The Chevron site is located 300 feet upgradient. Ground water samples collected from the

monitoring wells are analyzed for TPH as gasoline and BTEX. Samples are not analyzed for chlorinated solvents.

The Arco site is located approximately 800 feet to the northwest (cross-gradient) of the Berkeley Land Company Property, and appears to be downgradient of the Marshall Steel site. An October 1992 report showed ground water samples containing tetrachloroethene of up to 23 ppb. Trichloroethene and dichloroethane were detected at concentrations up to 2.2 ppb and 0.5 ppb, respectively.

9/13/93

KEI conducted a file review of the nearby Marshall Steel Dry Cleaners, at the office of the City of Oakland Fire Prevention Bureau. This site is located approximately 1,000 feet upgradient of the Berkeley Land Company property. A total of 17 USTs were removed from the site in 1992. Two of the USTs were fuel storage tanks. The remaining 15 USTs were solvent and waste solvent tanks. Holes of up to 4 inches in diameter were observed in 13 of the solvent tanks. Tetrachloroethene was detected in soil samples at concentrations up to 210 ppm (210,000 ppb). Trichloroethene, cis-1,2-dichloroethene, and stoddard solvent were detected in the soil at concentrations up to 35 ppm, 5.2 ppm, and 1,580 ppm, respectively.

1/2-Mile Radius Well Survey:

1/26/94

A review of records, of the Alameda County Public Works Agency, Water Resources Section, on water producing wells within a 1/2-mile radius of the site was performed by KEI. Based on the information provided, 5 water producing well were identified within the study area. The nearest well is located approximately 1,000 feet northwest (cross-gradient) of the site. A copy of KEI's well survey is included in the attached Appendix C.

Ground Water Monitoring and Sampling:

6/29/93

The five monitoring wells (MW1 through MW5) were initially sampled by KEI.

2/25/95

A ground water monitoring and sampling program was initiated. The existing wells are monitored and sampled on a quarterly basis. No free phase product has been detected in any well to date.

Based on the monitoring data, the predominant ground water flow direction has consistently been toward the southwest. Based on this flow direction, MW5 appears to be located at the downgradient portion of the subject site. Copies of the previous Potentiometric Surface Maps are included in Appendix D.

The analytical results of the ground water samples collected from MW1 through MW5 have consistently indicated non-detectable concentrations of TOG since the inception of the quarterly sampling over two hydrologic cycles ago. Benzene has also consistently been non-detectable, except for one anomalous event. All EPA 8010 constituents have been non-detectable, except for relatively low concentrations of cis-1,2-dichloroethene, trichloroethene, and chloroform, and declining concentrations of tetrachloroethene. The analytical results of all of the ground water samples collected from the wells to date are summarized in the attached Tables 8 and 9.

Discussion:

Based on the following criteria, the subject site appears to qualify within the classification of a "low risk" site:

*Is there free product floating on the ground water at the site?
Has the source been removed?*

Free product has never been detected in any of the wells since the inception of monitoring and sampling in February of 1995 (over one hydrologic cycle).

Primary source removal (removal of the underground fuel storage tanks) was conducted in 1995. Secondary source removal was conducted in two phases of excavation of hydrocarbon impacted soil. Over-excavation of impacted soil was conducted in the area of the former USTs, to a depth of 18 fbg. In addition, excavation was conducted in the areas of exploratory borings EB3, EB6A, EB6B, EB8, EB15, EB16, and EB20, to varying depths. A cumulative total of 1,300 tons of

hydrocarbon impacted soil were excavated and removed from the site.

Has the extent of soil and ground water contamination been defined?

Based on the analytical results of all of the samples collected from the site to date, the extent of hydrocarbon impacted soil remaining at the site appears to be well defined. The majority of the known accessible impacted soil has been excavated and removed from the site. Residual hydrocarbon impacted soil appears to be predominantly limited to the southeast corner of the former underground fuel storage tank pit.

The extent of dissolved hydrocarbons also appears to be limited in extent and well defined. Based on the analytical results of all of the ground water samples collected to date, the concentrations of dissolved hydrocarbon in the ground water have been relatively low to non-detectable.

As previously reported, and based on the results of KEI's file reviews, a nearby off-site source of EPA 8010 constituents appears to exist in the upgradient vicinity of the subject site. These constituents have also been detected in the ground water samples collected at a nearby cross-gradient ARCO site. Therefore, it appears likely that the constituents detected at the site are at least partially due to migration from an off-site source.

Is the dissolved phase plume migrating or stable?

As discussed previously, the predominant ground water flow direction has consistently been toward the southwest. Based on a southwest gradient, MW5 is located at the downgradient portion of the property. The analytical results of the ground water samples collected from MW5 have consistently shown relatively low to non-detectable concentrations of all analytes (including TEPH as kerosene) since the February 1995 sampling event (over one hydrologic cycle). Therefore, the dissolved hydrocarbons detected in the remaining wells appear to be stable and do not appear to be significantly migrating.

Does the contamination at the site present a significant risk to human health and the environment?

Based on the results of the 1/2-mile well survey, no water producing wells were identified within 250 feet of the subject site. The nearest known water producing well is approximately 1,000 feet from and in the cross-gradient direction of the site. Therefore, the previous activities at the subject site

do not appear to present a threat (or a potential threat) to ground water use in the vicinity of the site.

A Risk-Based Corrective Action (RBCA) for fuel-oil related sites includes concentration action levels for the constituents naphthalene and benzo(a)pyrene. As seen in the attached Table 8, ground water samples collected from all of the five wells, during the June 1993 sampling event, were analyzed for EPA method 8270 constituents. The analytical results of the samples indicated non-detectable concentrations of all of the EPA method 8270 constituents (including naphthalene and benzo(a)pyrene). In addition, benzene has essentially been non-detectable in all samples, except for one anomalous sampling event (February 1996).

Has the remediation strategy been effective?

As described in previous sections, approximately 1,300 tons of hydrocarbon-impacted soil were excavated and removed from the site. In addition, approximately 1,500 gallons of ground water were purged from the excavation around EB3.

The analytical results of the ground water samples have consistently shown non-detectable concentrations of benzene and TOG. In addition, all of the EPA 8270 constituents were non-detectable during the June 1993 sampling event. EPA 8010 constituents have been non-detectable, except for relatively low concentrations of the constituents listed in Table 9. It appears that these constituents are at least partially due to an upgradient off-site source. As seen in the attached Graph 1, the concentrations of tetrachloroethene in the wells appear to have decreased significantly, and show a continued decreasing trend.

Has bioremediation or natural attenuation occurred? If so, will it continue to occur?

As discussed in the previous section, the concentrations of tetrachloroethene appear to have decreased significantly in the wells, and show a continued decreasing trend. Other analytes have consistently been relatively low to non-detectable. Therefore, it appears that natural attenuation and/or natural biodegradation is occurring. This is expected to continue.

In summary, based on the six criteria above, the subject site appears to meet the classification as a "low risk" site. This "low risk" site classification is consistent with the results of the report submitted by the Lawrence Livermore National Laboratory (for underground petroleum releases), authorized by the California

Senate Bill 1764 Technical Advisory Committee. Therefore, KEI recommends that the Berkeley Land Company apply for site closure based on this apparent "low risk" classification. Once site closure has been granted, KEI will submit a work plan to properly destroy the remaining four monitoring wells.

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.

Attachments: Tables 1 through 9
Graph 1
Location Map
Figures 1 through 4
Appendix A - Harza Engineering data
Appendix B - Kleinfelder Associates data
Appendix C - Well Survey
Appendix D - Potentiometric Surface Maps

Berkeley Land Company
 "Temescal Plaza"
 51st Street & Telegraph Avenue
 Oakland, California

TABLE 1

SUMMARY OF LABORATORY ANALYSES
 SOIL

<u>Date</u>	<u>Sample</u>	<u>Depth (feet)</u>	<u>TPH as Kerosene</u>	<u>TPH as Motor Oil</u>	<u>TOG</u>	<u>TPH as Diesel</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>Xylenes</u>
10/23/95	BT(8)	8.0	1,500	--	570	ND	2,300*	ND	ND	3.6	17
11/02/95	SW-1	13.0	110	51	72	ND	140*	ND	1.0	1.1	3.5
	SW-2	13.0	23	13	ND	ND	9.7*	ND	ND	ND	0.14
	SW-3	13.0	3.6	67	ND	ND	3.0*	ND	0.013	0.017	0.061
	SW-4	13.0	22	12	ND	ND	62*	ND	0.40	0.46	1.4
11/03/95	SW-5	17.5	ND	ND	ND	ND	ND	ND	ND	ND	ND
11/04/95	SW-6	17.0	77	ND	63	ND	170*	ND	ND	0.30	0.94
	SW-7	13.0	2.0	ND	ND	ND	3.2*	ND	ND	0.0085	0.025
	SW-8	14.0	19	60	340	ND	76*	ND	0.26	0.39	0.44

<u>Sample</u>	<u>EPA Method 8010 Constituents (µg/kg)</u>	<u>Cadmium</u>	<u>Chromium</u>	<u>Lead</u>	<u>Nickel</u>	<u>Zinc</u>
SW-1	ND	ND	24	10	28	39

* Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be gasoline.
 ND = Non-detectable.

-- Indicates analysis was not performed.

Results are in milligrams per kilogram (mg/kg), unless otherwise indicated.

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TABLE 2

SUMMARY OF LABORATORY ANALYSES
 WATER

<u>Date</u>	<u>Sample</u>	<u>Depth to Water (feet)</u>	<u>TPH as Kerosene</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethylbenzene</u>	<u>Xylenes</u>	<u>TOG (mg/L)</u>
11/01/95	Water-E1	17.0	190	340	5.7	3.6	3.6	15	ND
11/04/95	Water-2	18.0	330	ND	ND	ND	ND	ND	ND

<u>Sample</u>	<u>TPH as Diesel</u>	<u>TPH as Motor Oil</u>	<u>Total Lead (mg/L)</u>	<u>Cadmium (mg/L)</u>	<u>Chromium (mg/L)</u>	<u>Nickel (mg/L)</u>	<u>Zinc (mg/L)</u>	<u>EPA Method 8010 Constituents</u>
Water E-1	ND	ND	ND	--	--	--	--	--
Water E-2	ND	ND	ND	ND	ND	ND	ND	ND*

* EPA method 8010 constituents were all non-detectable, except for bromodichloromethane, 2-chloroethylvinyl ether, chloroform, and dibromochloromethane, detected at 8.3 µg/L, 4.3 µg/L, 18 µg/L, and 1.3 µg/L, respectively.

-- Indicates analysis was not performed.

ND = Non-detectable.

Results are in micrograms per liter (µg/L), unless otherwise indicated.

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 51st Street & Telegraph Avenue
 Oakland, California

TABLE 3

SAMPLE ANALYTICAL RESULTS
 SOIL

<u>Date</u>	<u>Sample</u>	<u>Depth (feet)</u>	<u>TPH as Diesel</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>Xylenes</u>	<u>EPA Method 8240 Constituents</u>
8/06/96	STR(1-2)*	N/A	ND	ND	ND	ND	ND	ND	ND
	STR1(3.25)	3.25		ND	ND	ND	ND	ND	ND

ADDITIONAL ANALYSES
 CAM 17 METALS

<u>Metal</u>	<u>Title 22 Limit</u>	<u>STR(1-2)</u>	<u>STR(3.25)</u>
Antimony	500	7.2	7.6
Arsenic	500	ND	ND
Barium	10,000	160	170
Beryllium	75	0.54	0.60
Cadmium	100	ND	ND
Chromium(III)	2,500	31	36
Cobalt	8,000	10	11
Copper	2,500	31	36
Lead	1,000	7.9	7.8
Mercury	20	0.14	0.085
Molybdenum	3,500	4.1	4.9
Nickel	2,000	45	47
Selenium	100	ND	ND
Silver	500	ND	ND
Thallium	700	ND	ND
Vanadium	2,400	36	ND
Zinc	500	51	83

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TABLE 3 (Continued)

SAMPLE ANALYTICAL RESULTS
SOIL

* This sample is a four-part composite sample.

N/A = Not applicable.

ND = Non-detectable.

Results are in milligrams per kilogram (mg/kg), except for EPA method 8240 analysis, which is in micrograms per kilogram ($\mu\text{g}/\text{kg}$).

Berkeley Land Company
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TABLE 4

SUMMARY OF LABORATORY ANALYSES
 SOIL

<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>	<u>TOG</u>
7/28/93	EB1(5)	ND	ND	ND	ND	ND	ND	ND
	EB1(10)	ND	ND	ND	ND	ND	ND	ND
	EB1(15)	1.0♦	1.2	ND	0.0073	0.0060	0.016	ND
7/29/93	EB2(5.5)	--	ND	ND	ND	ND	ND	ND
	EB2(10.5)	--	ND	ND	ND	ND	ND	ND
	EB3(5)	5.9♦♦	2.7	0.013	0.012	0.016	0.051	270
	EB3(10.5)	8.2♦♦	10*	ND	ND	0.026	0.059	ND
	EB3(15.5)	290♦♦	440*	ND	1.4	2.6	5.9	70
7/28/93	EB4(5)	--	ND	ND	ND	ND	ND	ND
	EB4(10)	--	ND	ND	ND	ND	ND	ND
	EB4(15)	--	ND	ND	ND	ND	ND	ND
	EB5(5)	ND	ND	ND	ND	ND	ND	ND
	EB5(10)	ND	ND	ND	ND	ND	ND	ND
	EB5(15)	ND	ND	ND	ND	ND	ND	ND
	EB6A(5)	4.4♦♦	ND	ND	ND	ND	ND	ND
7/29/93	EB6B(10.5)	8.4♦♦	ND	ND	ND	ND	ND	1,700
	EB6B(14.5)	11.0♦♦	ND	ND	ND	ND	ND	210
7/29/93	EB7(5)	--	ND	ND	ND	ND	ND	ND
	EB7(10)	--	ND	ND	ND	ND	ND	ND
	EB7(15)	--	ND	ND	ND	ND	ND	ND
	EB8(5.5)	--	ND	ND	ND	ND	ND	9,900
	EB8(11)	--	1.5	0.027	0.025	0.0063	0.030	1,200
	EB8(13)	--	1.1	0.019	0.016	0.0052	0.023	90
	EB9(15)	--	ND	ND	ND	ND	ND	ND
7/27/93	EB9(5)	ND	ND	ND	ND	ND	ND	ND
	EB9(10)	ND	ND	ND	ND	ND	ND	ND
7/26/93	EB10(10)	--	ND	ND	ND	ND	ND	ND
	EB10(14.5)	--	ND	ND	ND	ND	ND	ND

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TABLE 4 (Continued)

SUMMARY OF LABORATORY ANALYSES
 SOIL

<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>	<u>TOG</u>	
7/28/93	EB11(5.5)	ND	ND	ND	ND	ND	ND	ND	
	EB11(10)	ND	ND	ND	ND	ND	ND	ND	
	EB11(15)	ND	ND	ND	ND	ND	ND	ND	
7/30/93	EB12(6)	ND	ND	ND	ND	ND	ND	ND	
	EB12(10.5)	ND	ND	ND	ND	ND	ND	ND	
	EB13(5.5)	--	ND	ND	ND	ND	ND	ND	
	EB13(11)	--	ND	ND	ND	ND	ND	ND	
7/28/93	EB14(5)	ND	ND	ND	ND	ND	ND	ND	
	EB14(10)	ND	ND	ND	ND	ND	ND	ND	
	EB14(13)	ND	ND	ND	ND	ND	ND	ND	
	EB15(5)	--	ND	ND	ND	ND	ND	230	
	EB15(12)	--	ND	ND	0.0071	0.0052	0.011	ND	
	EB16(6.5)	--	ND	ND	ND	ND	0.0071	160	
	EB16(10.5)	--	ND	ND	ND	ND	ND	190	
	EB16(12)	--	ND	ND	ND	ND	ND	ND	
	7/29/93	EB17(5)	--	ND	ND	ND	ND	ND	ND
		EB17(10)	--	ND	ND	ND	ND	ND	ND
EB17(15)		--	ND	ND	ND	ND	ND	ND	
7/28/93	EB18(5)	ND	ND	ND	ND	ND	ND	ND	
	EB18(10)	ND	ND	ND	ND	ND	ND	ND	
	EB18(14.5)	ND	ND	ND	0.0053	ND	0.0065	ND	
	EB19(7)	--	ND	ND	ND	ND	ND	ND	
	EB19(12)	--	ND	ND	ND	ND	ND	ND	
	EB19(15)	--	ND	ND	0.0071	0.0052	0.011	ND	
7/30/93	EB20(5.5)	ND	ND	ND	ND	ND	ND	ND	
	EB20(10.5)	1.9	ND	ND	ND	ND	ND	ND	
	EB20(16)	ND	ND	ND	ND	ND	ND	ND	

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TABLE 4 (Continued)

SUMMARY OF LABORATORY ANALYSES
SOIL

NOTE: The soil samples were collected at the depths below grade indicated in the () of the respective sample number.

ND = Non-detectable.

-- Indicates analysis was not performed.

- * Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be gasoline.
- ◆ Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be diesel.
- ◆◆ Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be diesel and non-diesel mixture.

Results are in milligrams per kilogram (mg/kg), unless otherwise indicated.

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TABLE 5

SUMMARY OF LABORATORY ANALYSES
 SOIL

<u>Date</u>	<u>Sample Number</u>	<u>Tetrachloroethene</u> <u>($\mu\text{g}/\text{kg}$)</u>	<u>2-Methylnaphthalene</u> <u>($\mu\text{g}/\text{kg}$)</u>
7/28/93	EB1(5)	ND	ND
	EB1(10)	ND	ND
	EB1(15)	ND	ND
7/29/93	EB3(5)	ND	ND
	EB3(10.5)	ND	150
	EB3(15.5)	ND	1,900
7/28/93	EB4(5)	--	ND
	EB4(10)	--	ND
	EB4(15)	--	ND
	EB5(5)	ND	--
	EB5(10)	ND	--
	EB5(15)	ND	--
7/29/93	EB6A(5)	ND	ND
	EB6B(10.5)	12	ND
	EB6B(14.5)	ND	ND
	EB9(5)	ND	--
	EB9(10)	ND	--
7/28/93	EB11(5.5)	ND	ND
	EB11(10)	ND	ND
	EB11(15)	ND	ND
7/30/93	EB12(6)	ND	--
	EB12(10.5)	5.2	--
7/28/93	EB14(5)	ND	--
	EB14(10)	ND	--
	EB14(13)	ND	--
7/29/93	EB17(5)	ND	--
	EB17(10)	ND	--
	EB17(15)	ND	--

Berkeley Land Company
"Temescal Plaza"
51st Street & Telegraph Avenue
Oakland, California

TABLE 5 (Continued)

SUMMARY OF LABORATORY ANALYSES
SOIL

<u>Date</u>	<u>Sample Number</u>	<u>Tetrachloroethene</u> <u>($\mu\text{g}/\text{kg}$)</u>	<u>2-Methylnaphthalene</u> <u>($\mu\text{g}/\text{kg}$)</u>
7/28/93	EB18(5)	ND	--
	EB18(10)	ND	--
	EB18(14.5)	42	--
7/30/93	EB20(5.5)	66	ND
	EB20(10.5)	770	ND
	EB20(16)	2,400	ND

NOTE: All EPA method 8010 and 8270 constituents were non-detectable in the soil samples analyzed, except as shown above.

-- Indicates analysis was not performed.

ND = Non-detectable.

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

Berkeley Land Company
 "Temescal Plaza"
 51st Street & Telegraph Avenue
 Oakland, California

TABLE 6

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 (µg/kg)</u>	<u>2-Methyl-naphthalene (µg/kg)</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	--

Berkeley Land Company
"Temescal Plaza"
51st Street & Telegraph Avenue
Oakland, California

TABLE 6 (Continued)

SUMMARY OF ANALYTICAL RESULTS
SOIL

NOTE: N, S, E, and 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 are in milligrams per kilogram (mg/kg), unless otherwise indicated.

Berkeley Land Company
"Temescal Plaza"
51st Street & Telegraph Avenue
Oakland, California

TABLE 7

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

Berkeley Land Company
 "Temescal Plaza"
 51st Street & Telegraph Avenue
 Oakland, California

TABLE 8

SUMMARY OF LABORATORY ANALYSES
 WATER

Date	Sample Number	TPH as Kerosene	TOG	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
11/25/96	MW1	--	ND	ND	ND	ND	ND	ND
	MW2	--	ND	ND	ND	ND	ND	ND
	MW4	WELL WAS INACCESSIBLE						
	MW5	ND	ND	ND	ND	ND	ND	ND
8/30/96	MW1	--	ND	ND	ND	ND	ND	ND
	MW2	--	ND	ND	ND	ND	ND	ND
	MW4	WELL WAS INACCESSIBLE						
	MW5	64	ND	ND	ND	ND	ND	ND
5/21/96	MW1	--	ND	ND	ND	ND	ND	ND
	MW2	--	ND	ND	ND	ND	ND	ND
	MW3	WELL WAS DESTROYED ON FEBRUARY 29, 1996						
	MW4	WELL WAS INACCESSIBLE						
	MW5	200+	ND	ND	ND	ND	ND	ND
2/19/96	MW1	--	ND	ND	1.0	6.2	0.60	3.9
	MW2	--	ND	ND	0.82	4.8	0.52	3.5
	MW3	--	ND	ND	1.4	8.1	0.73	4.4
	MW4	WELL WAS INACCESSIBLE						
	MW5	ND	ND	ND	1.1	6.7	0.63	4.2
10/06/95	MW1	--	ND	69♦	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	ND	ND	ND	ND
9/18/95**	MW1	--	ND	81♦	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	ND	ND	ND	ND
8/24/95**	MW1	--	--	63	ND	1.1	ND	0.86
	MW2	--	--	ND	ND	0.57	ND	0.56
	MW3	--	--	ND	ND	0.50	ND	0.70
	MW4	--	--	ND	ND	0.53	ND	0.60
	MW5	--	--	ND	ND	0.81	ND	0.72

Berkeley Land Company
 "Temescal Plaza"
 51st Street & Telegraph Avenue
 Oakland, California

TABLE 8 (Continued)

SUMMARY OF LABORATORY ANALYSES
 WATER

<u>Date</u>	<u>Sample Number</u>	<u>TPH as Kerosene</u>	<u>TOG</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>Xylen</u>
5/23/95	MW1	--	ND	100♦	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	ND	ND	ND	ND
2/25/95	MW1	--	ND	81♦	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	ND	ND	ND	ND
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 do not appear to be gasoline.

* TPH as diesel and all EPA method 8270 constituents were non-detectable.

** TOG was sampled on September 8, 1995, instead of August 24, 1995. Furthermore, the analytical results of the ground water samples (toluene and xylenes) collected on August 24, 1995, were inconsistent with the previous analytical results for these wells. Therefore, MPDS re-sampled these wells on September 18, 1995.

+ Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a kerosene and non-kerosene mixture.

ND = Non-detectable.

-- Indicates analysis was not performed.

Results are in micrograms per liter (µg/L), except for TOG, which is in milligrams per liter (mg/L).

Berkeley Land Company
 "Temescal Plaza"
 51st Street & Telegraph Avenue
 Oakland, California

TABLE 9

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>	<u>Chloroform</u>
11/25/96	MW1	ND	18	60	ND	2.6
	MW2	ND	16	0.54	ND	2.8
	MW5	ND	ND	ND	ND	0.80
8/30/96	MW1	2.1	ND	4.4	ND	ND
	MW2	ND	10	1.1	ND	ND
	MW4	WELL WAS INACCESSIBLE				
	MW5 ⁶	7.0	12	6.0	ND	ND
5/21/96	MW1 ¹	4.1	ND	4.8	ND	53
	MW2 ²	ND	10	ND	ND	16
	MW3	WELL WAS DESTROYED ON FEBRUARY 29, 1996				
	MW4	WELL WAS INACCESSIBLE				
	MW5 ³	14	15	8.3	ND	13
2/19/96	MW1	ND	8.7	ND	ND	2.9
	MW2	ND	8.0	ND	ND	2.6
	MW3	ND	ND	ND	ND	ND
	MW4	WELL WAS INACCESSIBLE				
	MW5	2.1	9.3	1.9	ND	ND
10/06/95	MW1	1.7	19	3.7	ND	1.3
	MW2	ND	8.9	1.0	ND	5.9
	MW3	5.7	13	6.2	ND	1.1
	MW4	5.4	12	6.1	ND	0.53
	MW5	9.1	8.2	5.3	ND	ND

Berkeley Land Company
 "Temescal Plaza"
 51st Street & Telegraph Avenue
 Oakland, California

TABLE 9 (Continued)

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>	<u>Chloroform</u>
8/24/95	MW1	3.4	240	5.0	ND	3.2
	MW2 ⁴	ND	28	1.1	ND	15
	MW3 ⁵	5.1	50	9	ND	0.78
	MW4	ND	9.7	ND	ND	2.4
	MW5 ⁵	17	49	11	ND	ND
5/23/95	MW1	ND	450	ND	ND	ND
	MW2	ND	45	ND	ND	ND
	MW3	5.1	74	9.1	ND	ND
	MW4	ND	8.8	ND	ND	ND
	MW5	16	58	11	ND	ND
2/25/95	MW1	ND	360	ND	ND	ND
	MW2	ND	41	1.9	ND	ND
	MW3	6.9	52	9.4	ND	ND
	MW4	ND	6.4	ND	ND	ND
	MW5	8.3	25	6.6	ND	ND
6/29/93	MW1	ND	250	ND	ND	ND
	MW2	ND	78	ND	ND	ND
	MW3	5.5	130	11	ND	ND
	MW4	ND	16	0.68	ND	ND
	MW5	24	17	5.9	3.0	ND

Berkeley Land Company
"Temescal Plaza"
51st Street & Telegraph Avenue
Oakland, California

TABLE 9 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

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

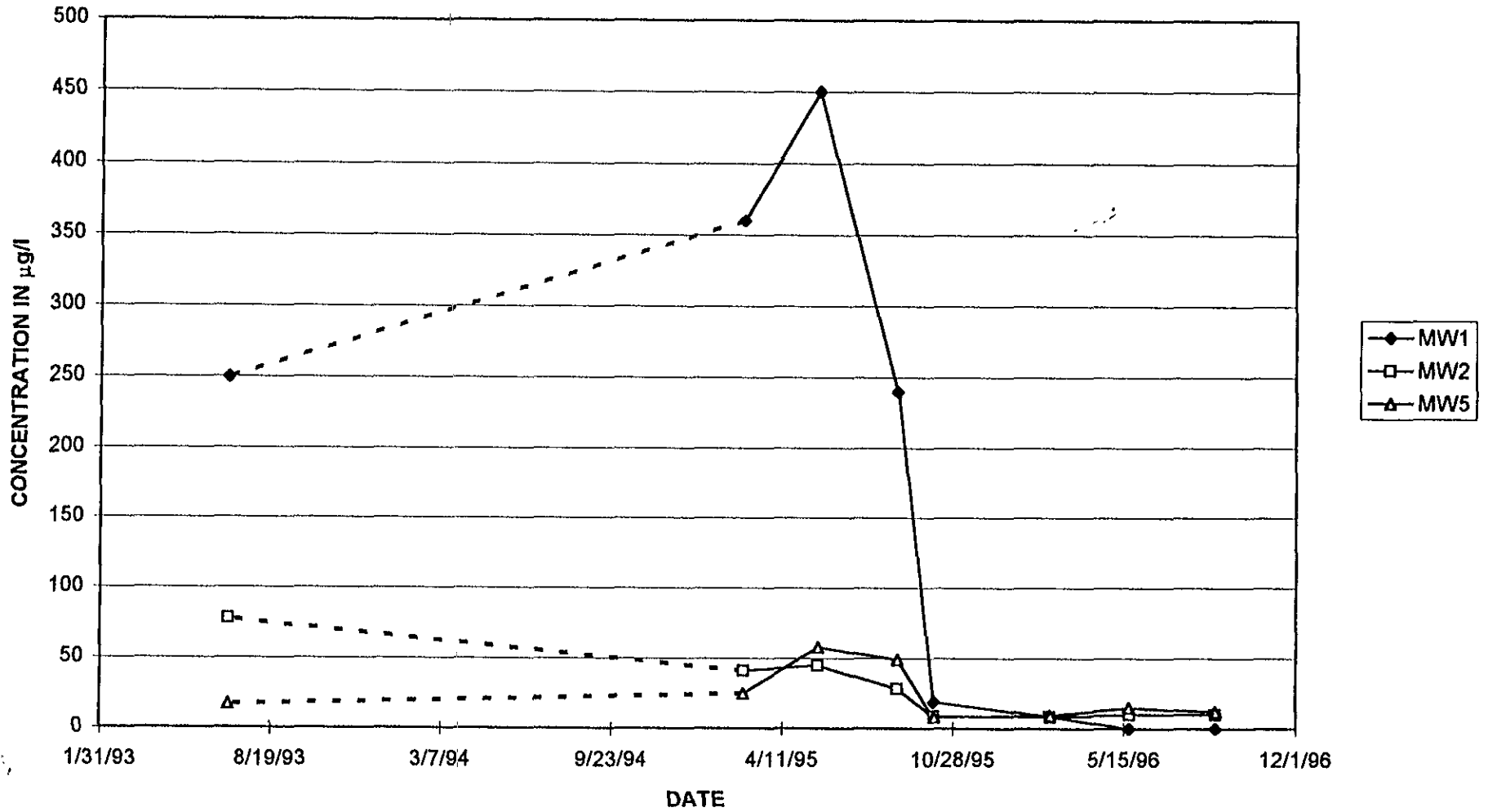
- ¹ Bromodichloromethane was detected at 19 $\mu\text{g/L}$ and Dibromochloromethane at 5.7 $\mu\text{g/L}$.
- ² Bromodichloromethane was detected at 5.8 $\mu\text{g/L}$ and Dibromochloromethane at 3.3 $\mu\text{g/L}$.
- ³ Bromodichloromethane was detected at 5.0 $\mu\text{g/L}$ and Dibromochloromethane at 4.3 $\mu\text{g/L}$.
- ⁴ 1,1,1-Trichlorethane was detected at a concentration of 0.73 $\mu\text{g/L}$.
- ⁵ Trans-1,2-Dichlorethane was detected at concentrations of 0.59 $\mu\text{g/L}$ and 0.76 $\mu\text{g/L}$ in MW3 and MW5, respectively.
- ⁶ Trans-1,2-Dichloroethene was detected at a concentration of 0.60 $\mu\text{g/L}$.

ND = Non-detectable.

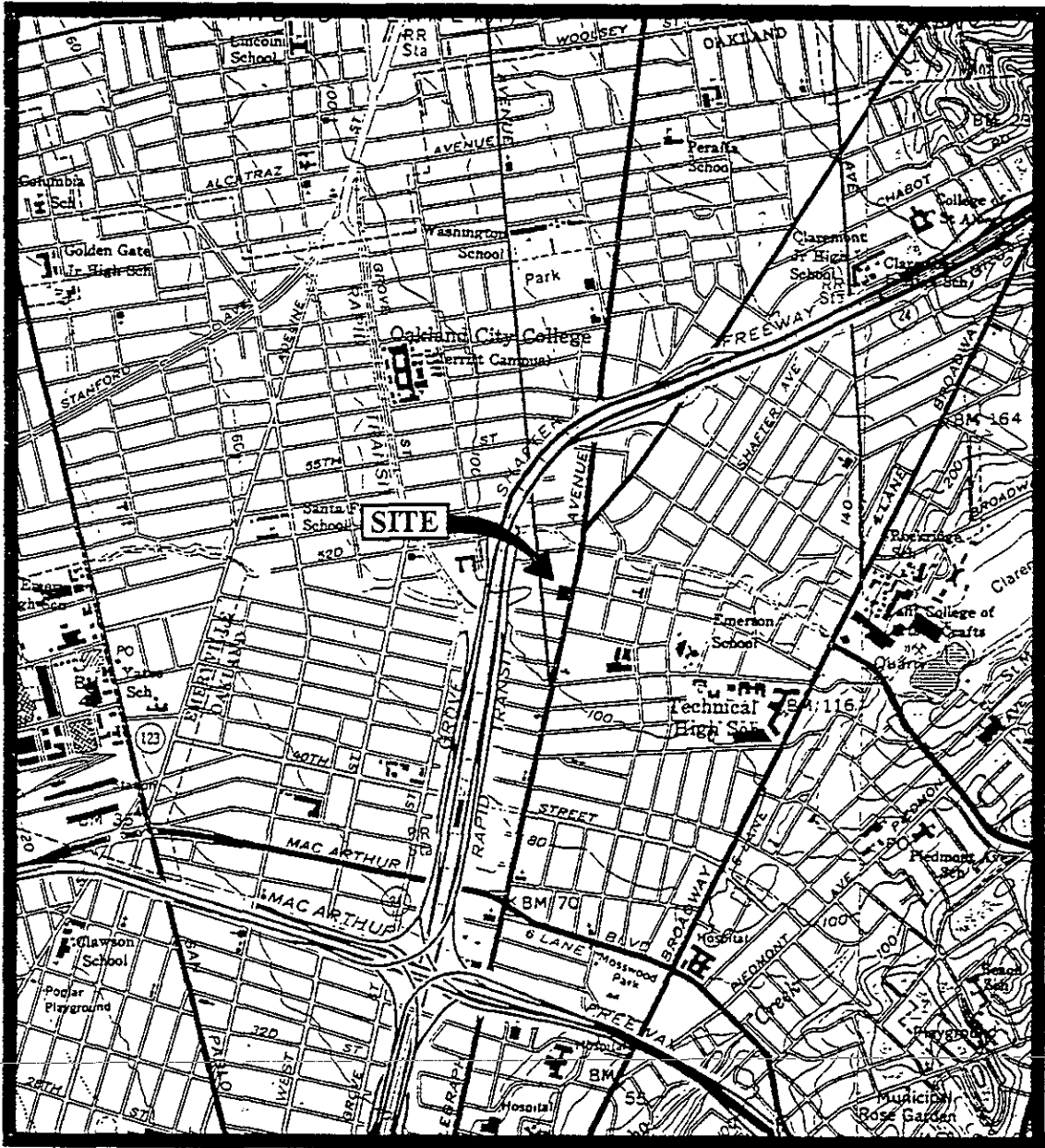
Results are in micrograms per liter ($\mu\text{g/L}$), unless otherwise indicated.

BERKELEY LAND COMPANY
(TEMISCAL PLAZA)
51ST STREET TELEGRAPH AVENUE
OAKLAND, CA

TETRACHLOROETHENE CONCENTRATION TREND



GRAPH 1



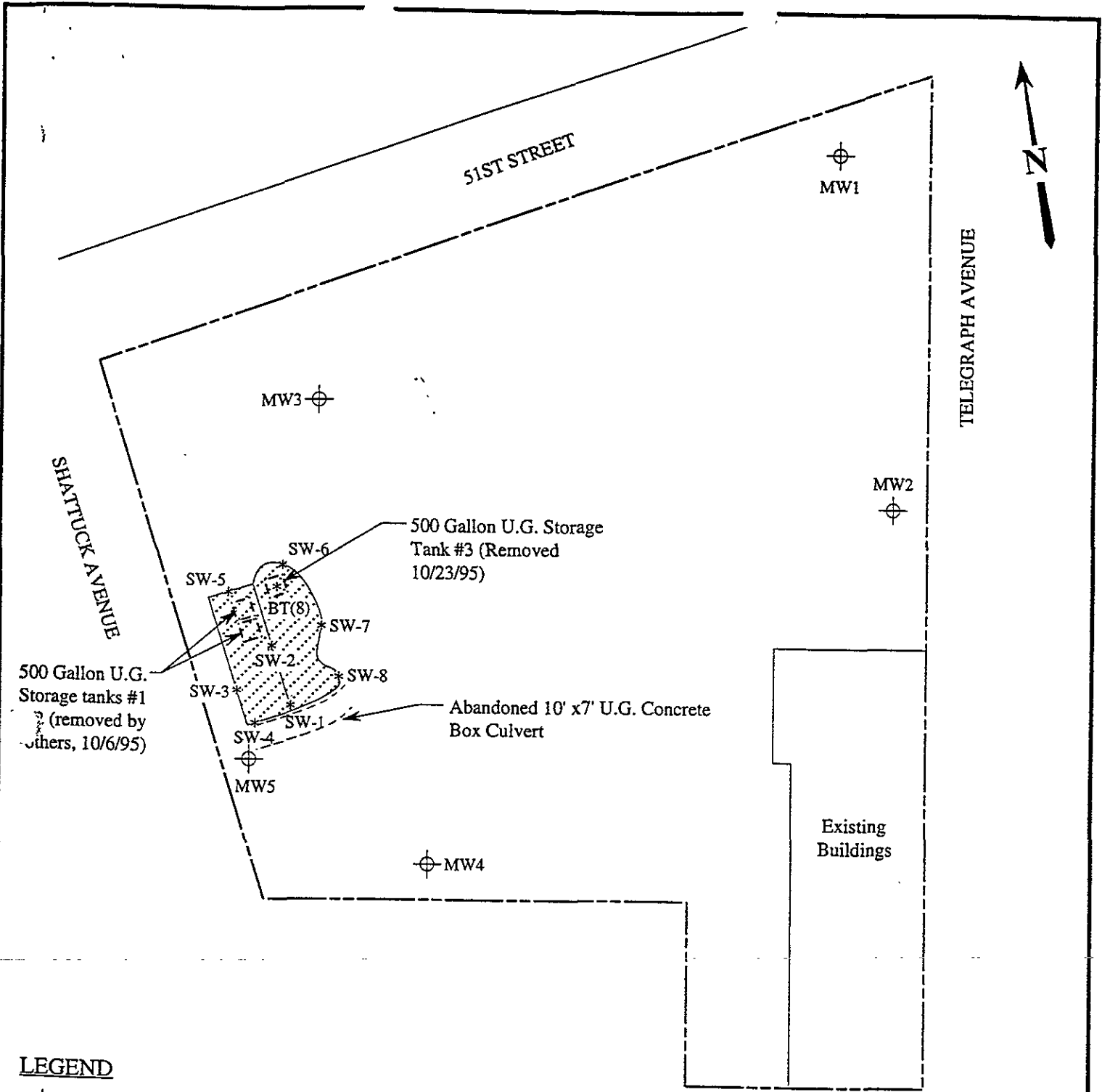
Base modified from 7.5 minute U.S.G.S. Oakland East and West Quadrangles
 (both photorevised 1980)



**KAPREALIAN ENGINEERING
 INCORPORATED**

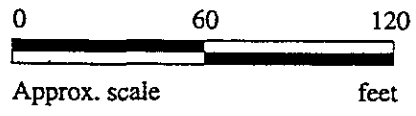
**BERKELEY LAND COMPANY
 51ST STREET & TELEGRAPH AVE.
 OAKLAND, CALIFORNIA**

**LOCATION
 MAP**



LEGEND

- ⊕ Monitoring well (by others)
- * Sample point location
- ▨ Area excavated to a depth of about 17 to 20 feet below grade



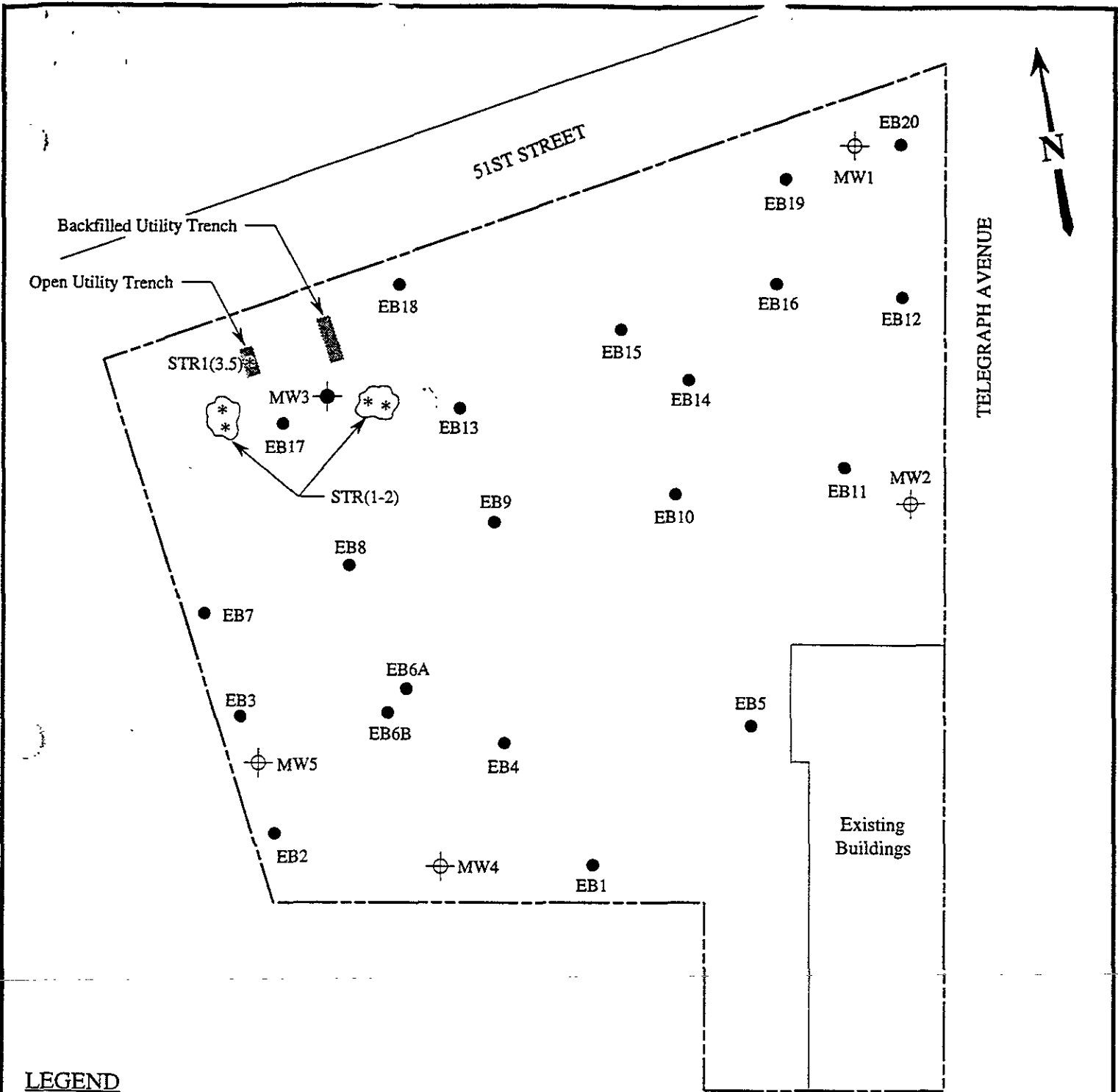
Base map modified from an Advanced Soil Technology Inc. site plan

SOIL SAMPLE POINT AND MONITORING WELL LOCATION MAP

**KAPREALIAN ENGINEERING
INCORPORATED**

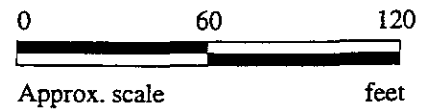
**BERKELEY LAND COMPANY
51ST STREET & TELEGRAPH AVE.
OAKLAND, CALIFORNIA**

**FIGURE
1**



LEGEND

- Exploratory boring (by KEI)
- ⊕ Monitoring well (by others)
- ⊙ Monitoring well (destroyed on February 29, 1996)
- * Sample point location
- ☁ Stockpiled soil (not to scale)



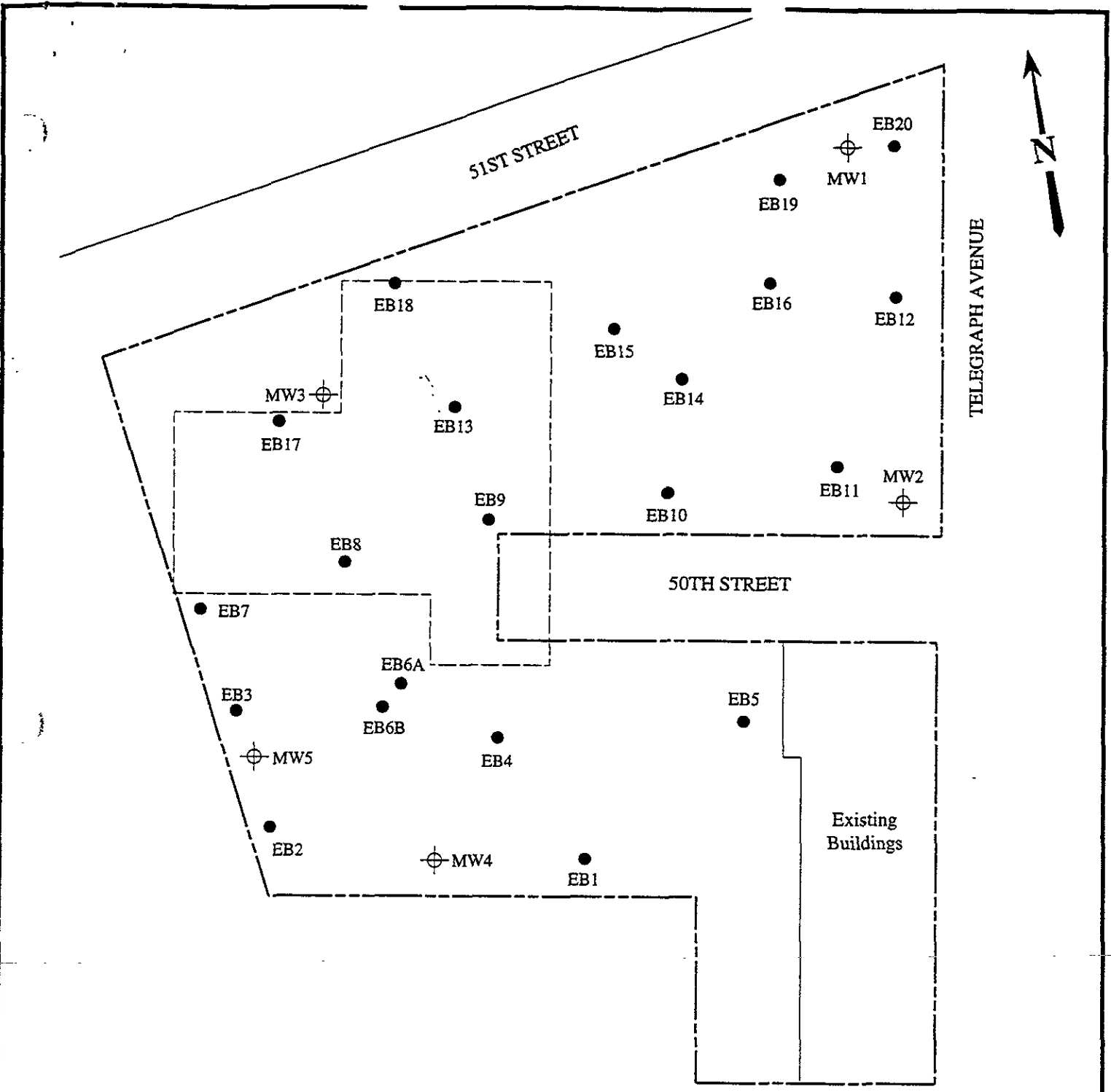
Base map modified from an Advanced Soil Technology Inc. site plan

SITE PLAN - EBMUD SOIL SAMPLING



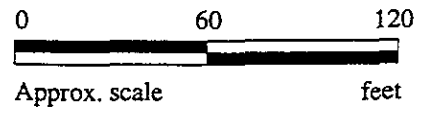
**BERKELEY LAND COMPANY
51ST STREET & TELEGRAPH AVE.
OAKLAND, CALIFORNIA**

**FIGURE
2**



LEGEND

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



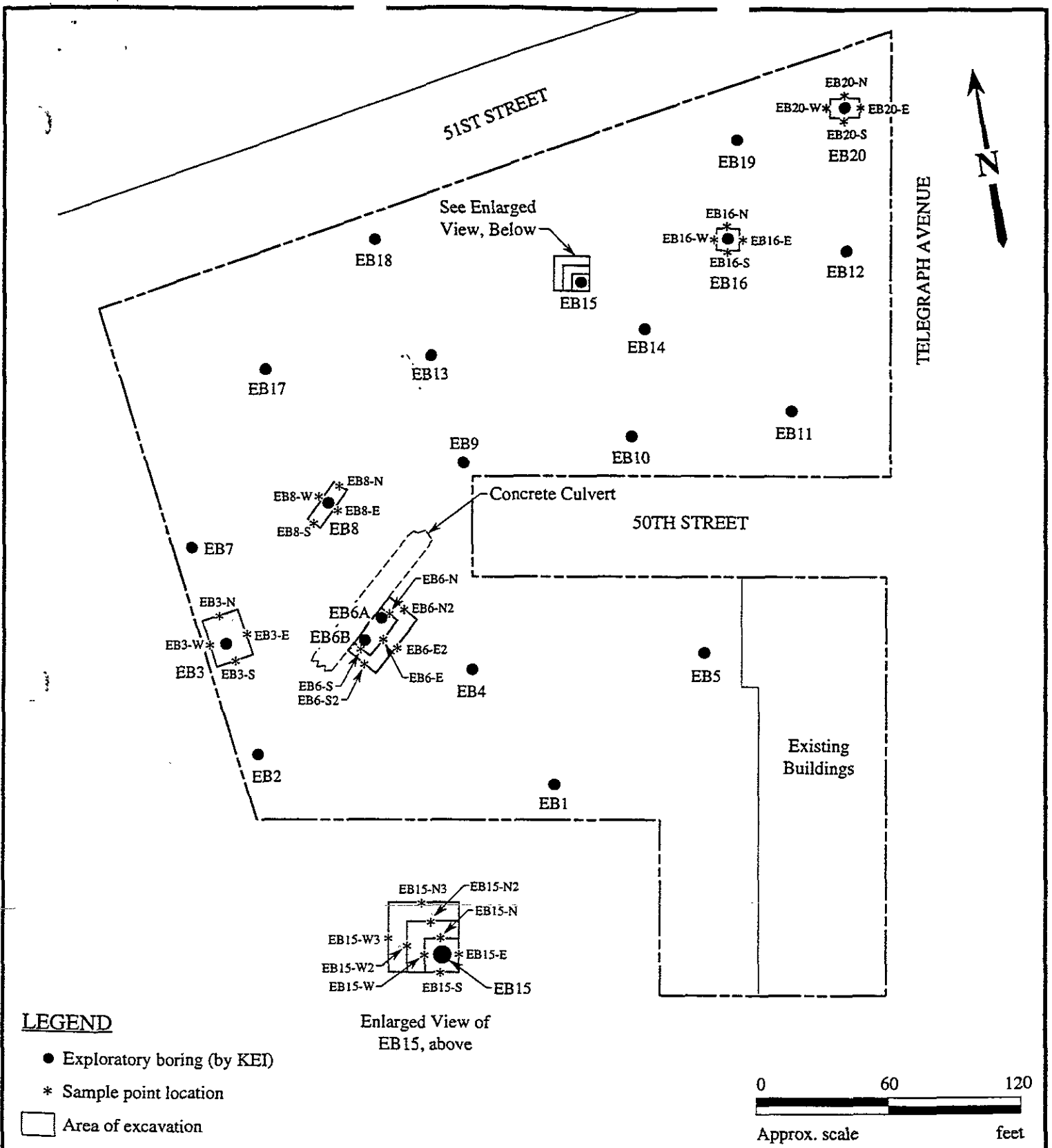
Base map modified from an Advanced Soil Technology Inc. site plan

EXPLORATORY BORING AND MONITORING WELL LOCATION MAP



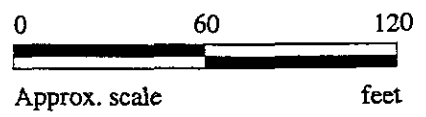
**BERKELEY LAND COMPANY
51ST STREET & TELEGRAPH AVE.
OAKLAND, CALIFORNIA**

**FIGURE
3**



LEGEND

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



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
4**

APPENDIX A

**HARZA ENGINEERING
DATA**

HARZA

Consulting Engineers and Scientists

FAX

November 7, 1995

TO: Paul Smith
COMPANY: Paul B. Smith Company
TEL: 830-4230
FAX: 830-0847

FROM: Mary Anders
TEL: (510) 636-2128
RE: *Analytical Data from Tank Removal at Temescal Plaza*
PAGES: 5 including cover

Mr. Smith,

Medhulla Logan from the Alameda County Health Agency requested the data included in this fax. Sample SS-1 and SS-2 were collected from beneath the first tank removed. Samples SS-3 and SS-4 were collected from beneath the second tank removed, and composited at the laboratory prior to analysis. Please let me know if you would like me to send the information to her. If you want to send the information yourself, the ACHA's fax number is (510) 337-9335. If you have any questions, please don't hesitate to call me or Dennis Laduzinsky.

CHROMALAB, INC.

Environmental Services (SDB)

October 12, 1995

Submission #: 9510150

HARZA-KALDVEER

Atten: Mary Anders

Project: TEMESCAL PLAZA
Received: October 6, 1995

re: 2 samples for Gasoline and BTEX analysis.
Method: EPA 5030/8015M/8020

Sampled: October 6, 1995

Matrix: SOIL
Run: 8858-1

Analyzed: October 11, 1995

Spl #	Sample ID	Gasoline (mg/Kg)	Benzene (ug/Kg)	Toluene (ug/Kg)	Ethyl Benzene (ug/Kg)	Total Xylenes (ug/Kg)
106224	SS-1	N.D.	N.D.	N.D.	N.D.	N.D.

Sampled: October 6, 1995

Matrix: SOIL
Run: 8858-1

Analyzed: October 11, 1995

Spl #	Sample ID	Gasoline (mg/Kg)	Benzene (ug/Kg)	Toluene (ug/Kg)	Ethyl Benzene (ug/Kg)	Total Xylenes (ug/Kg)
106225	SS-2	N.D.	N.D.	N.D.	N.D.	N.D.

Reporting Limits	1.0	5.0	5.0	5.0	5.0
Blank Result	N.D.	N.D.	N.D.	N.D.	N.D.
Blank Spike Result (%)	90	109	105	105	105

Surinder Sidhu
Surinder Sidhu
Analyst

Ali Kharrazi
Organic Manager

CHROMALAB, INC.

Environmental Services (SOB)

October 12, 1995

Submission #: 9510150

HARZA-KALDVEER


Atten: Mary Anders
 Project: TEMESCAL PLAZA
 Received: October 6, 1995
 re: 2 samples for Total Extractable Petroleum Hydrocarbons (TEPH) analysis.
 Method: EPA 3550/8015M
 Sampled: October 6, 1995

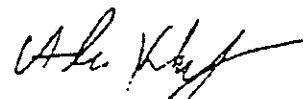
Matrix: SOIL Extracted: October 11, 1995
 Run: 8863-K Analyzed: October 12, 1995

Spl #	Sample ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
106224	SS-1	N.D.	N.D.	81
106225	SS-2	N.D.	N.D.	200

For above sample: Unknown hydrocarbons in the Kerosene range, conc. = 5.8 mg/Kg.

Reporting Limits	1.0	1.0	10
Blank Result	N.D.	N.D.	N.D.
Blank Spike Result (%)	--	98	--


 Kayvan Kimyai
 Chemist


 Ali Kharyazi
 Organic Manager

CHROMALAB, INC.

Environmental Services (SDE)

October 13, 1995

Submission #: 9510172

HARZA-KALDVEER

Atten: Mary Anders

Project: TEMESCAL PLAZA
Received: October 13, 1995

Project#: L157-I

re: 1 sample for Gasoline and BTEX analysis.
Method: EPA 5030/8015M/9020

Sampled: October 11, 1995

Matrix: SOIL

Run: 5881-1

Analyzed: October 13, 1995

Sp#	Sample ID	Gasoline (mg/Kg)	Benzene (ug/Kg)	Toluene (ug/Kg)	Ethyl Benzene (ug/Kg)	Total Xylenes (ug/Kg)
106361	SS-3,4	N.D.	N.D.	N.D.	4200	5800

Reporting Limits

Blank Result

Blank Spike Result (%)

18

N.D.

100

910

N.D.

218

910

N.D.

113

910

N.D.

112

910

N.D.

113

Surinder Sidhu
Surinder Sidhu
Analyst

Ali Kharrazi
Ali Kharrazi
Organic Manager

CHROMALAB, INC.

Environmental Services (SDB)

October 13, 1995

Submission #: 9510172

HARZA-KALDVEER

Atten: Mary Anders
Project: TEMESCAL PLAZA
Received: October 12, 1995

Project#: 1.157-1

re: 1 sample for Total Extractable Petroleum Hydrocarbons (TEPH) analysis.

Method: EPA 3550/8015M

Sampled: October 11, 1995

Matrix: SOIL

Extracted: October 12, 1995

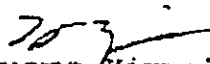
Run: 8880-K

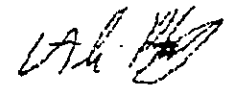
Analyzed: October 13, 1995

Sp#	Sample ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
106261	SS-3,4	N.D.	N.D.	250
For above sample: Reporting Limit raised due to sample interference.				
For above sample: Unknown hydrocarbons in the Kerosene range, conc. is 780 mg/Kg.				

Reporting Limits
Blank result
Blank Spike Result (%)

	Kerosene	Diesel	Motor Oil
Blank result	10	10	100
Blank Spike Result (%)	N.D.	N.D.	N.D.
	--	90	--


Kayvan Kimyai
Chemist


Ali Kharrazi
Organic Manager

FROM : BOGARD CONSTRUCTION

PHONE NO. : 510 595 0682

Oct. 23 1995 03:58PM PJ

SENT BY: HARZA

:10-23-95 :

13:23 : HARZA ENGINEERING -

510 595 0682: = 6/ 9

OCT. -17 95 (TUE) 14:35 CHROMALAB, INC.

TEL:510 484 1096

P 02

CHROMALAB, INC.

Environmental Services (SDB)

October 17, 1995

Submission #: 9510197

HARZA-KALDVEER

Atten: Mary Anders

Project: TEMESCAL PLAZA
Received: October 13, 1995

Project#: L157-I

re: 1 sample for Gasoline and BTEX analysis.
Method: EPA 5030/8015M/8020

Sampled: October 13, 1995

Matrix: SOIL

Run: 8918-2

Analyzed: October 16, 1995

Spl #	Sample ID	Gasoline (ug/Kg)	Benzene (ug/Kg)	Toluene (ug/Kg)	Ethyl Benzene (ug/Kg)	Total Xylenes (ug/Kg)
106560	STR-3	N.D.	N.D.	N.D.	N.D.	N.D.
For above sample:		Detection limit for ET. Benzene=5600ug/L.				

Reporting Limits	190	940	940	940	940
Blank Result	N.D.	N.D.	N.D.	N.D.	N.D.
Blank Spike Result (%)	107	114	112	116	106

Jaspal Singh
Chemist

Ali Kharrazi
Organic Manager

FROM : BOGARD CONSTRUCTION

PHONE NO. : 510 595 0682

Oct. 23 1995 02:57PM P3

SENT BY: HARZA

10-23-95 : 13:24 : HARZA ENGINEERING -

510 595 0682: # 77 9

P. 000

OCT. -17 95 (TUE) 14:36 CHROMALAB, INC.

TEL 510 484 1096

CHROMALAB, INC.

Environmental Services (SDS)

October 17, 1995

Submission #: 9510197

HARZA-KALDVEER

Atten: Mary Anders

Project: TEMESCAL PLAZA

Project#: L157-I

Received: October 13, 1995

re: 1 sample for Total Extractable Petroleum Hydrocarbons (TEPH) analysis.

Method: EPA 3550/8015M

Sampled: October 13, 1995

Matrix: SOIL

Extracted: October 16, 1995

Run: 8926-K

Analyzed: October 16, 1995

Spl #	Sample ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
106560	STK-3	N.D.	N.D.	N.D.
For above sample: Unknown hydrocarbons in the Kerosene range, conc. = 880 mg/Kg.				

Reporting Limits
 Blank Result
 Blank Spike Result (%)

10	10	100
N.D.	N.D.	N.D.
--	72	--

Kayvan Kimyai
 Kayvan Kimyai
 Chemist

Ali Khazrazi
 Ali Khazrazi
 Organic Manager

FROM : BOGHARD CONSTRUCTION

PHONE NO. : 510 595 0682

Oct. 23 1995 02:57PM P2

SENT BY: HARZA

:10-23-95 : 13:24 : HARZA ENGINEERING -

510 595 0682: 8/ 9

OCT. -17 95:TUE: 15:45 CHROMALAB, INC.

TEL:510 484 1096

P 001

CHROMALAB, INC.

Environmental Services (SDS)

October 17, 1995

Submission #: 9510208

HARZA-KALDVEER

Atten: Mary Anders

Project: TEMESCAL PLAZA
Received: October 16, 1995

Project#: L157-I

re: 1 sample for Gasoline and BTEX analysis.
Method: EPA 5030/8015M/8020

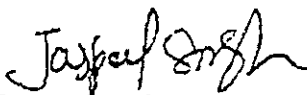
Sampled: October 16, 1995

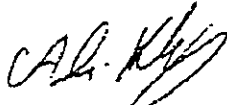
Matrix: SOIL

Run: 8918-2

Analyzed: October 16, 1995

Sp1 #	Sample ID	Gasoline (mg/Kg)	Benzene (ug/Kg)	Toluene (ug/Kg)	Ethyl Benzene (ug/Kg)	Total Xylenes (ug/Kg)
106629	STK-3B	N.D.	N.D.	N.D.	N.D.	N.D.
Reporting Limits		1.0	5.0	5.0	5.0	5.0
Blank Result		N.D.	N.D.	N.D.	N.D.	N.D.
Blank Spike Result (%)		107	114	112	116	106


Jaspal Singh
Chemist


Ali Kharrazi
Organic Manager

FROM : BOGARD CONSTRUCTION

PHONE NO. : 510 595 0682

Oct. 23 1995 02:57PM P1

SENT BY: HARZA

:10-23-95 :

9' 9

NOT -17 95 (TUE) 15:45 CHROMALAB, INC

Post-it® Fax Note	7671	Date	10/23	# of pages	5
To	HAIG KEVORK		From	Rod Perugini	
Co./Dept.			Co.	Bogard	
Phone #			Phone #	595-0796	
Fax #			Fax #	595-0682	

CHROMALAB, INC.

Environmental Services (SOB)

October 17, 1995

Submission #: 9510208

HARZA-KALDVEER

Atten: Mary Anders
 Project: TEMESCAL PLAZA
 Received: October 16, 1995
 re: 1 sample for Total Extractable Petroleum Hydrocarbons (TEPH) analysis.

Project#: L157-I


Method: EPA 3550/8015M
 Sampled: October 16, 1995

Matrix: SOIL
 Run: 8929-K
 Extracted: October 16, 1995
 Analyzed: October 16, 1995

SpI #	Sample ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
106629	STK-3B	N.D.	N.D.	160
For above sample: Unknown hydrocarbons in the Diesel range, conc. = 35 mg/Kg.				

Reporting Limits
 Blank Result
 Blank Spike Result (%)

1.0	1.0	10
N.D.	N.D.	N.D.
--	95	--


 Kayvan Kimyai
 Chemist


 Ali Kharrazi
 Organic Manager

APPENDIX B

KLEINFELDER ASSOCIATES

DATA

TABLE 2

Soil Sample Analysis - Metals

Constituent	Sample Location							
	B1 3' & 7'	B1 10' & 15'	B2 4.5' & 7'	B3 3' & 7'	B4 2'	B5 3'	B5 7'	B6 2.5' & 5.5'
Antimony	<1	<1	<1	<1	<1	<1	<1	<1
Arsenic	3	6	6	13	2	4	2	5
Beryllium	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium	<1	<1	<1	<1	<1	<1	<1	<1
Chromium	27	36	36	29	33	34	24	30
Copper	19	24	51	70	66	23	15	21
Lead	8	10	41	104	44	<2	6	6
Mercury	<.1	<.1	0.2	0.6	0.3	<.1	<.1	<.1
Nickel	37	49	44	43	32	34	23	36
Selenium	<1	<1	<1	<1	<1	<1	<1	<1
Silver	<1	<1	<1	<1	<1	<1	<1	<1
Thallium	<1	<1	<1	<1	<1	<1	<1	<1
Zinc	48	47	70	160	109	56	33	54

All results reported in mg/kg

< Symbol meaning not detected at or above the indicated detection limit.

4.3 ANALYTICAL RESULTS - WATER

The analytical results of water sample analysis are attached to this report as Appendix 1 and are presented in the tables below.

TABLE 3
Water Sample Analysis - Organics

<u>Parameter</u>	<u>Sample W-MW-1</u>
Volatiles EPA 624 - 8200	18 ug/l Tetrachloroethene
Semi-Volatiles EPA 625 - 8250	ND
Total Extractable Hydrocarbon	<1

ND - Not Detected

< Symbol meaning not detected at or above the indicated detection limit.

TABLE 4

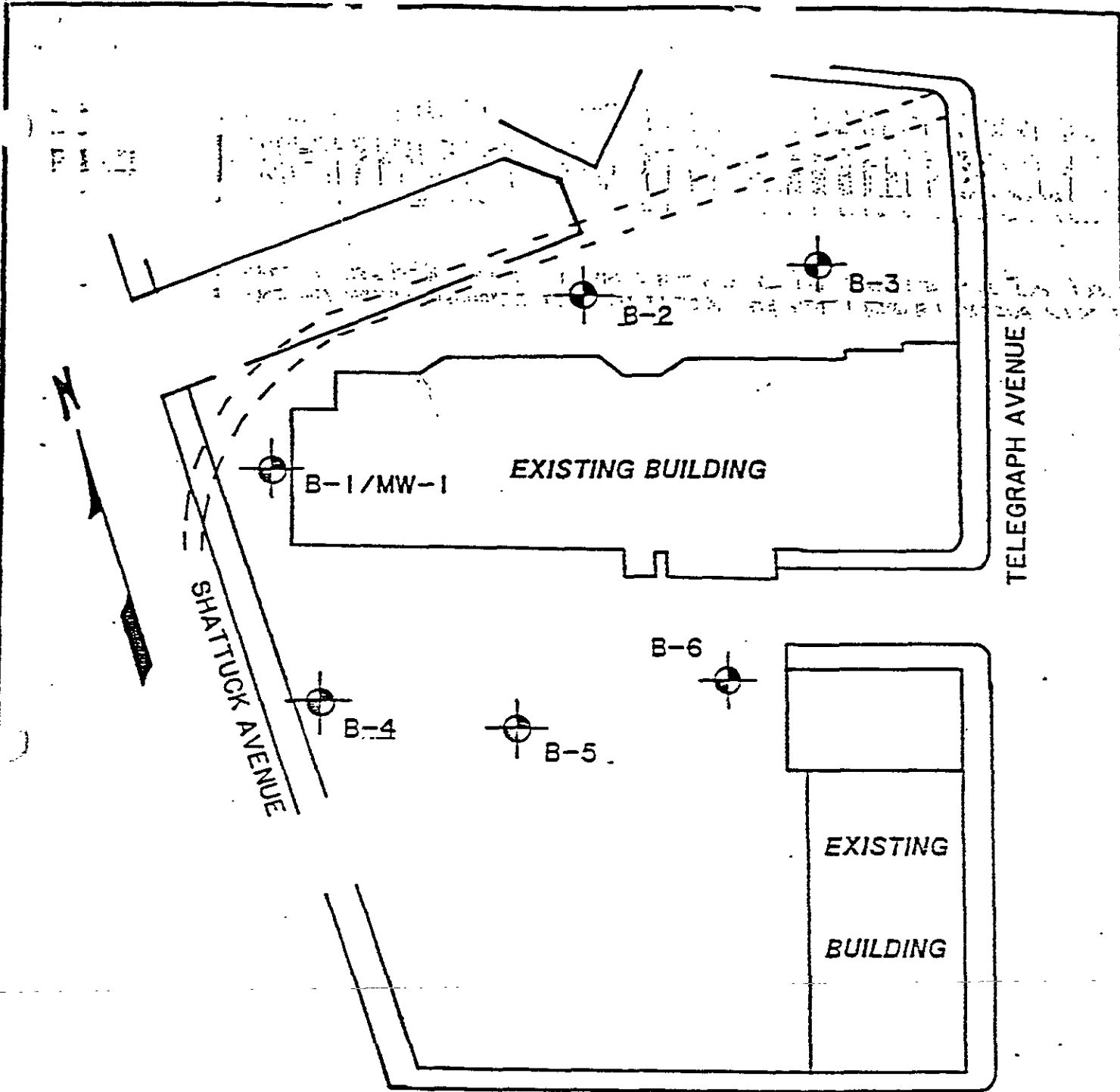
Water Sample Analysis - Metals

<u>Constituent</u>	<u>Sample W-MW-1</u>	<u>Standard (1)</u>
Antimony	<0.01	--
Arsenic	0.02	0.5
Beryllium	<0.01	--
Cadmium	<0.01	0.01
Chromium	0.14	0.05
Copper	0.06	1.0
Lead	<0.02	0.05
Mercury	<0.001	0.002
Nickel	0.11	--
Selenium	<0.01	0.01
Silver	<0.01	0.05
Thallium	<0.01	--
Zinc	0.14	5.0

(1) Primary and Secondary Maximum Contaminant Levels


All results reported in mg/l.

< Symbol meaning not detected at or above the indicated detection limit



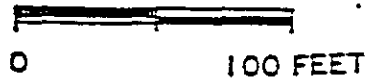
LEGEND

MW-1
 MONITORING WELL

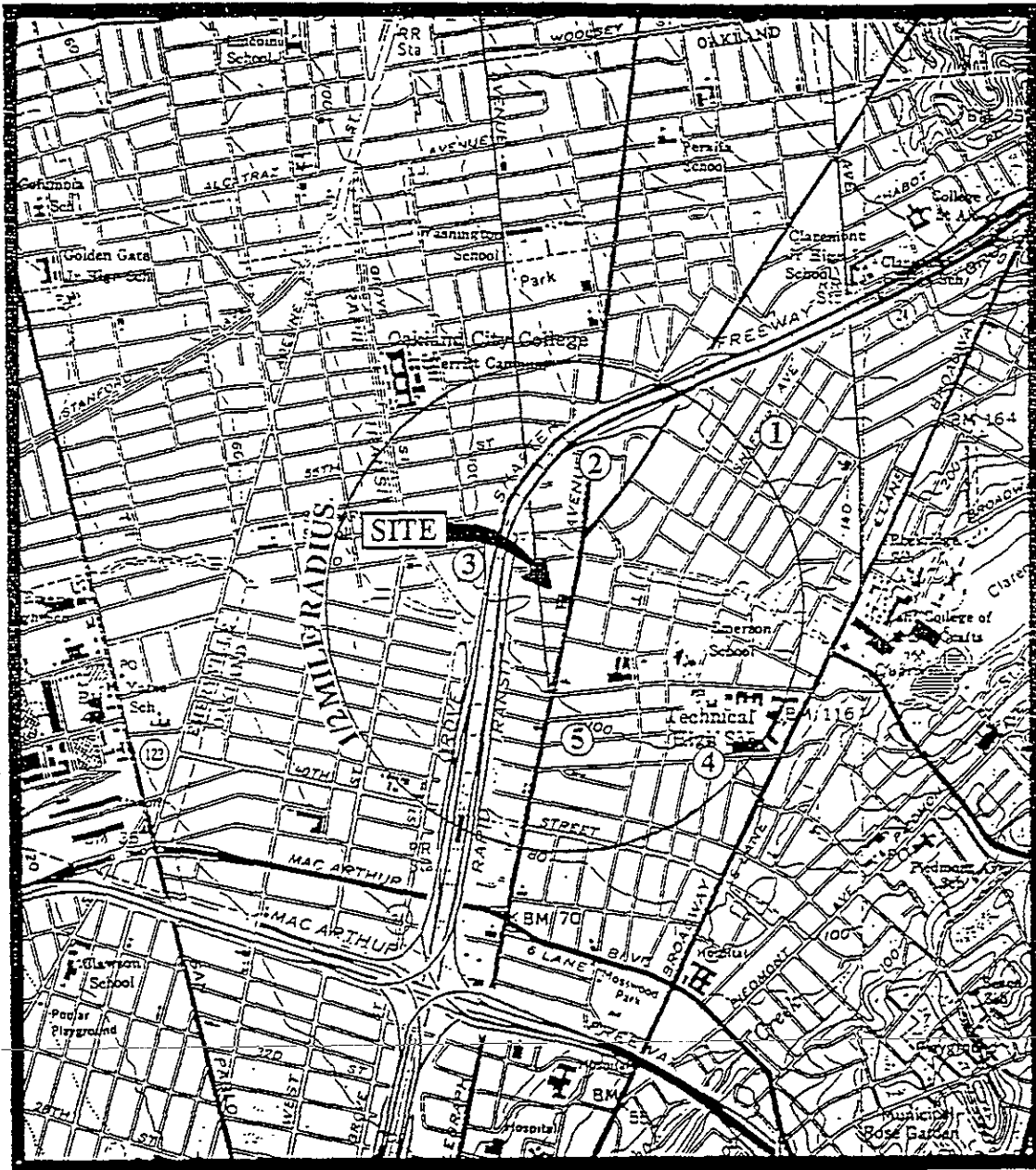
B-2
 SOIL BORING

--- EXISTING CULVERT EASEMENT

APPROXIMATE SCALE



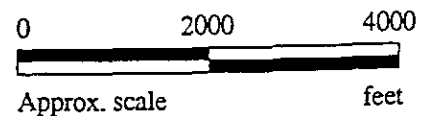
APPENDIX C
WELL SURVEY



LEGEND

⊕ Approximate location of water well and survey number.

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



**KAPREALIAN ENGINEERING
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51ST STREET & TELEGRAPH AVE.
OAKLAND, CALIFORNIA**

**WELL
LOCATION
MAP**

TABLE 8

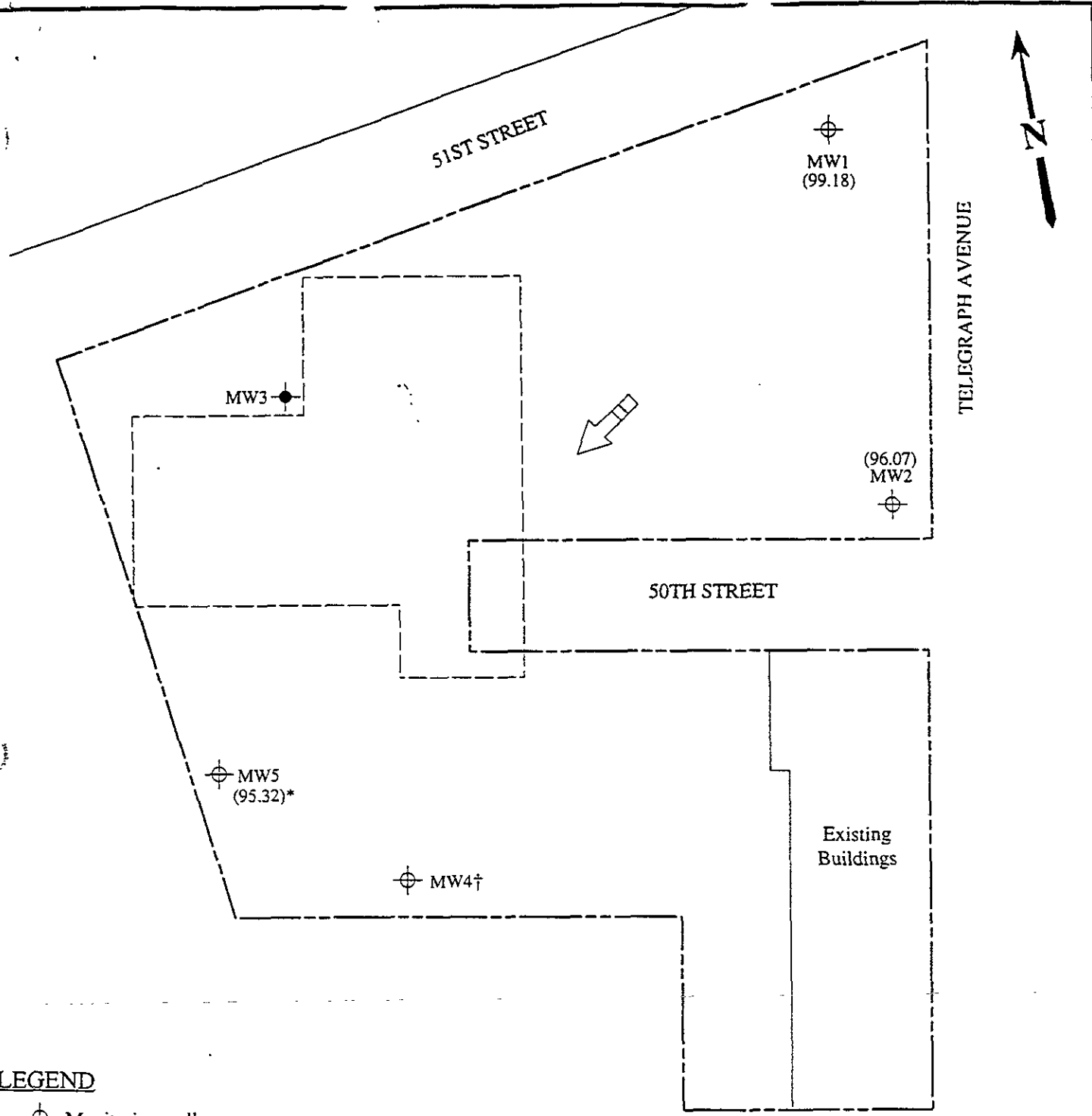
WATER WELLS WITHIN STUDY AREA

<u>Survey No.</u>	<u>State No.</u>	<u>Owner</u>	<u>Location</u>	<u>Well Use</u>	<u>Depth to Ground Water at Site (feet)</u>	<u>Date</u>
#1	1S/4W-13M1	Angela Delucchi	5629 Vincente St.	Domestic	5	NA
#2	1S/4W-14J1	Marshall Steel Co.	5427 Telegraph Ave.	Industrial	NA	NA
#3	1S/4W-14R13	Children's Hospital	747 52nd St.	Irrigation	21	12/91
#4	1S/4W-24E1	Ladies Relief Society	360 42nd St.	Irrigation	9	NA
#5	1S/4W-24E4	Robert Westwood	462 43rd St.	Domestic	NA	9/77

NA = Not available.

APPENDIX D

**HISTORICAL
POTENTIOMETRIC SURFACE
MAPS**



LEGEND

⊕ Monitoring well

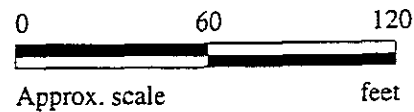
● Monitoring well (destroyed)

() Ground water elevation in feet above Mean Sea Level

➔ Historical ground water flow direction

* Top of well casing bent. Ground water elevation is approximate.

† Well was inaccessible.



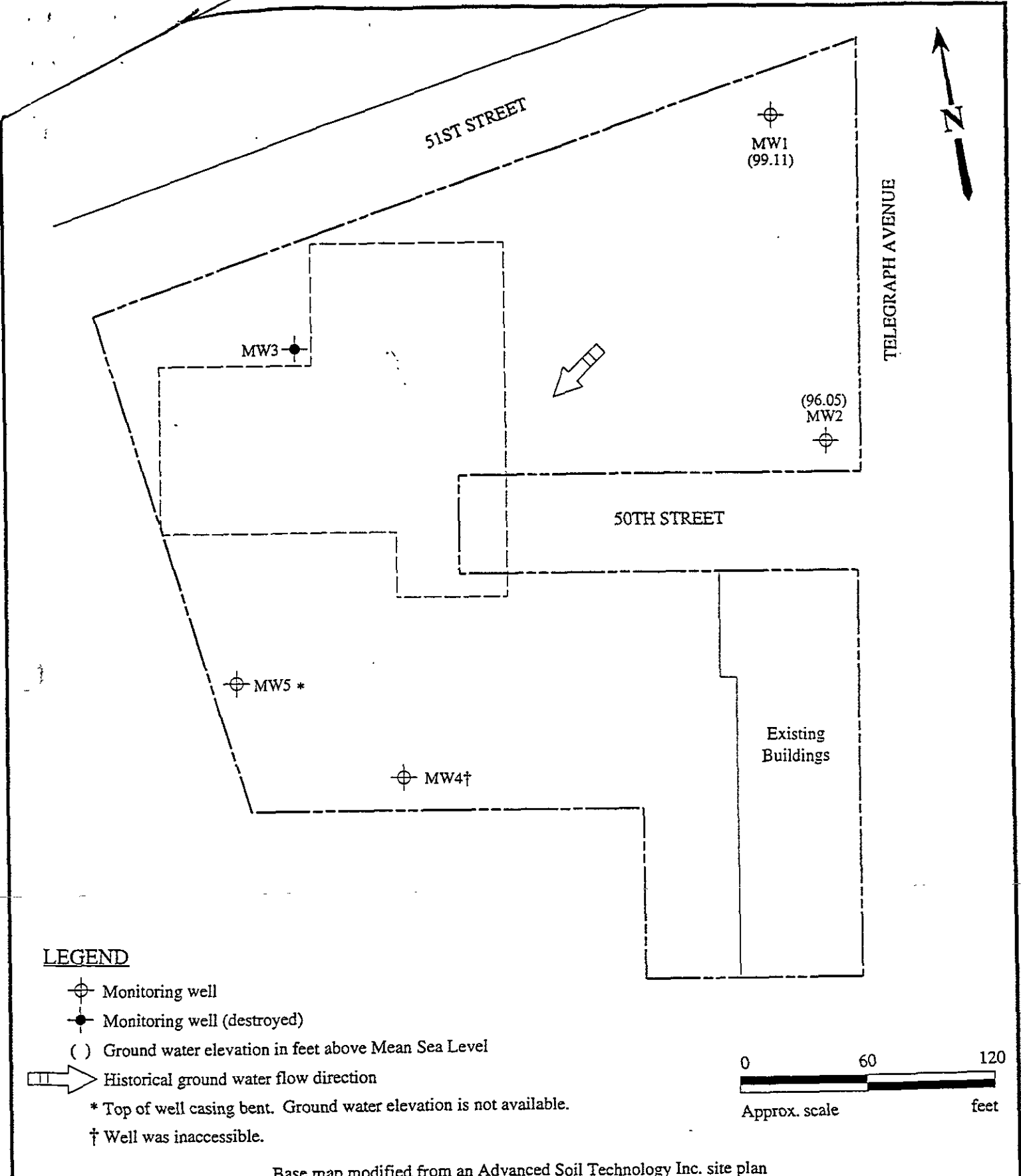
Base map modified from an Advanced Soil Technology Inc. site plan

GROUND WATER ELEVATION MAP FOR THE NOVEMBER 25, 1996 MONITORING EVENT



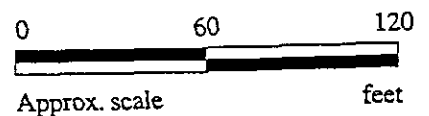
**BERKELEY LAND COMPANY
51ST STREET & TELEGRAPH AVE.
OAKLAND, CALIFORNIA**

**FIGURE
1**



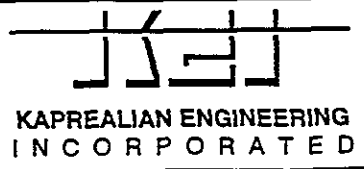
LEGEND

- ⊕ Monitoring well
- Monitoring well (destroyed)
- () Ground water elevation in feet above Mean Sea Level
- ➡ Historical ground water flow direction
- * Top of well casing bent. Ground water elevation is not available.
- † Well was inaccessible.



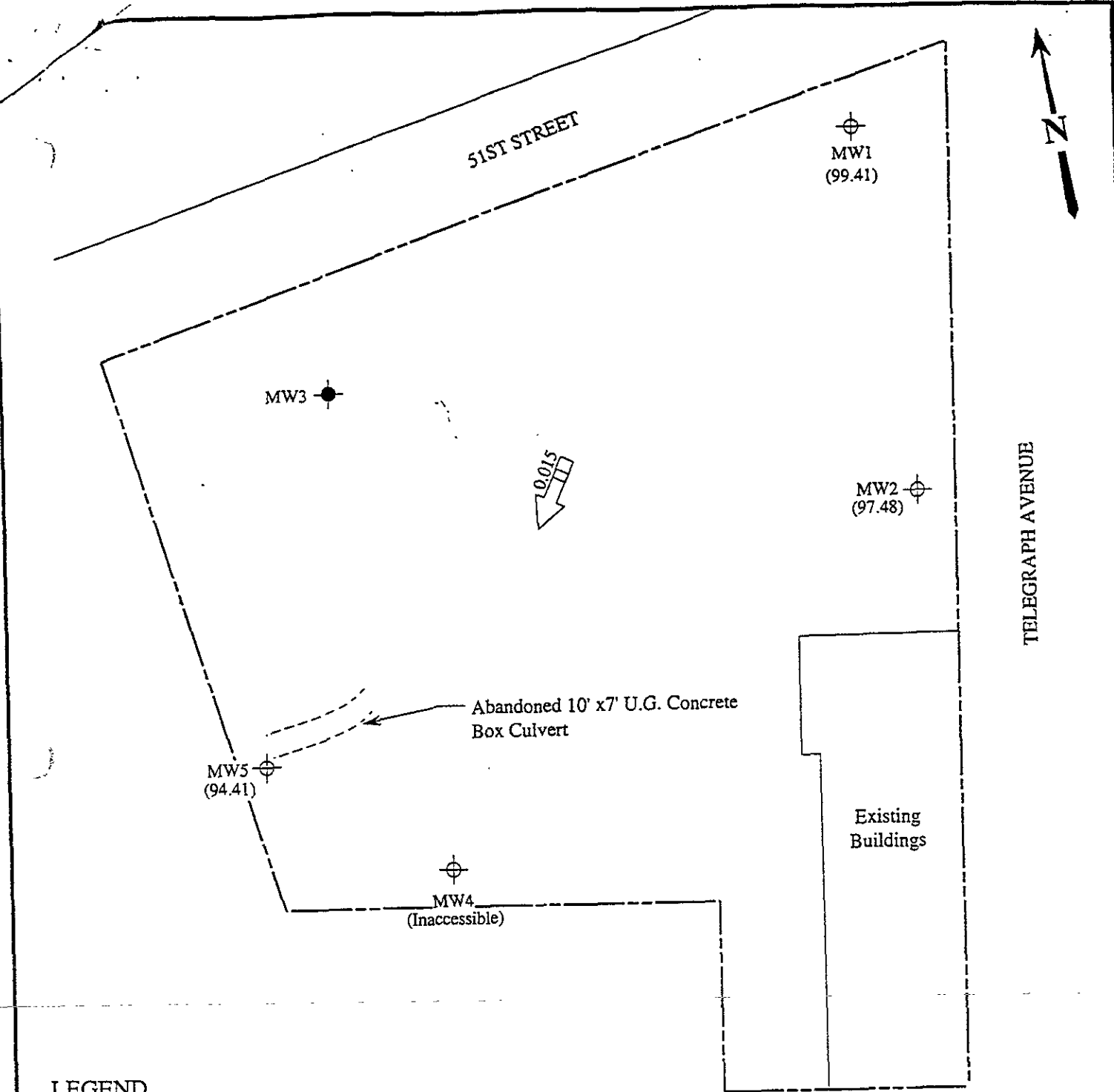
Base map modified from an Advanced Soil Technology Inc. site plan

GROUND WATER ELEVATION MAP FOR THE AUGUST 30, 1996 MONITORING EVENT



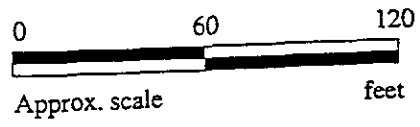
**BERKELEY LAND COMPANY
51ST STREET & TELEGRAPH AVE.
OAKLAND, CALIFORNIA**

**FIGURE
1**



LEGEND

- ⊕ Monitoring well (existing)
- Monitoring well (destroyed on February 29, 1996)
- () Ground water elevation in feet above Mean Sea Level
- ### → Direction of ground water flow with approximate hydraulic gradient



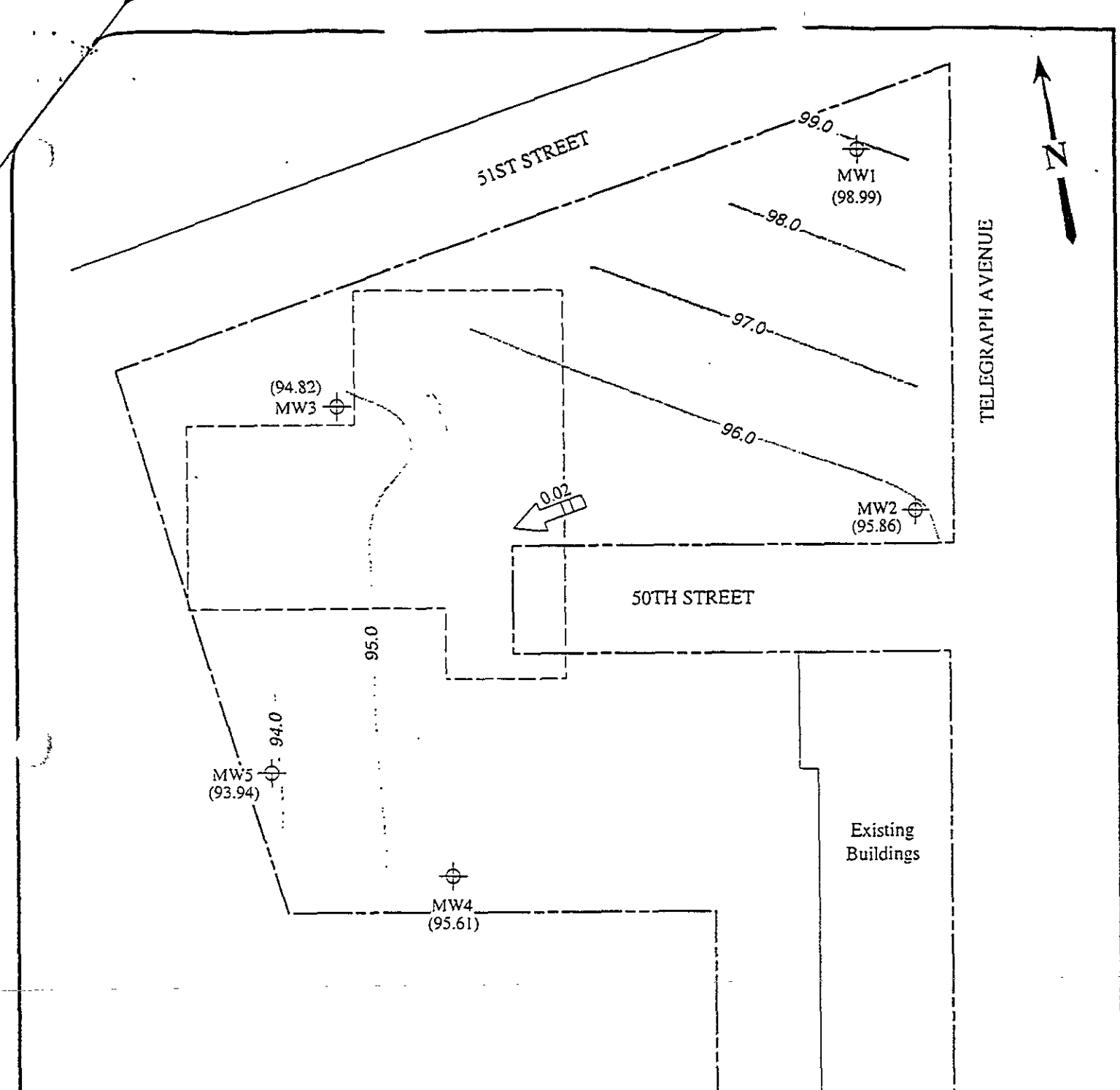
Base map modified from an Advanced Soil Technology Inc. site plan

GROUND WATER FLOW DIRECTION MAP FOR THE MAY 21, 1996 MONITORING EVENT



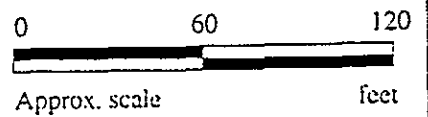
**BERKELEY LAND COMPANY
 51ST STREET & TELEGRAPH AVE.
 OAKLAND, CALIFORNIA**

**FIGURE
 1**



LEGEND

- ⊕ Monitoring well
- () Ground water elevation in feet above Mean Sea Level
- ### → Direction of ground water flow with approximate hydraulic gradient
- - - Contours of ground water elevation



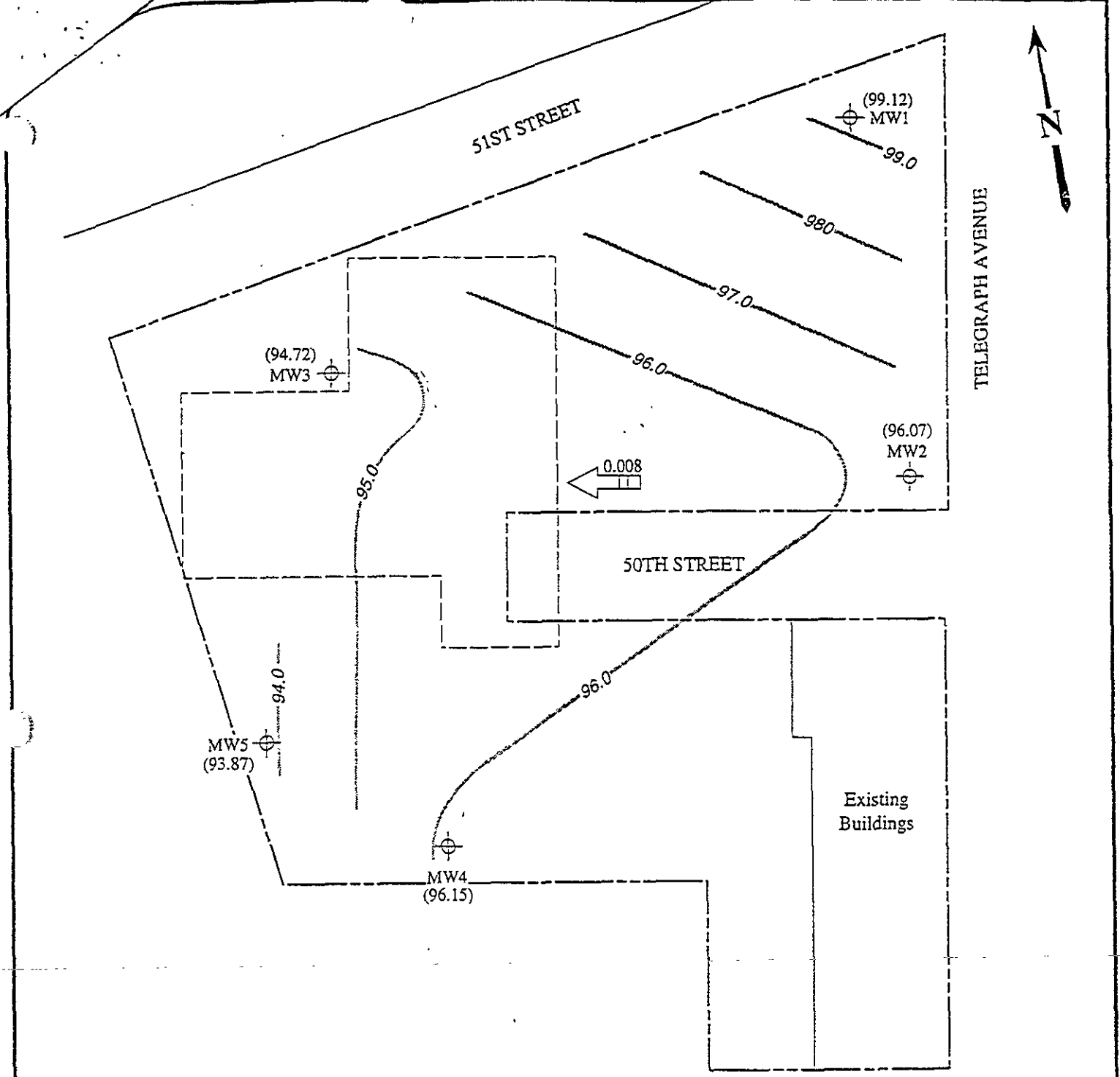
Base map modified from an Advanced Soil Technology Inc. site plan

POTENTIOMETRIC SURFACE MAP FOR THE OCTOBER 6, 1995 MONITORING EVENT



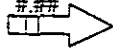



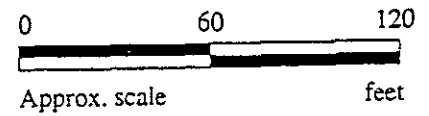
**BERKELEY LAND COMPANY
 51ST STREET & TELEGRAPH AVE.
 OAKLAND, CALIFORNIA**

**FIGURE
 1**



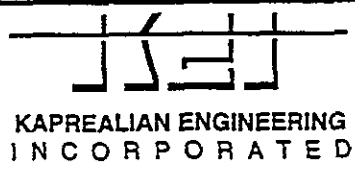
LEGEND

-  Monitoring well
-  () Ground water elevation in feet above Mean Sea Level
-  ### → Direction of ground water flow with approximate hydraulic gradient
-  — Contours of ground water elevation



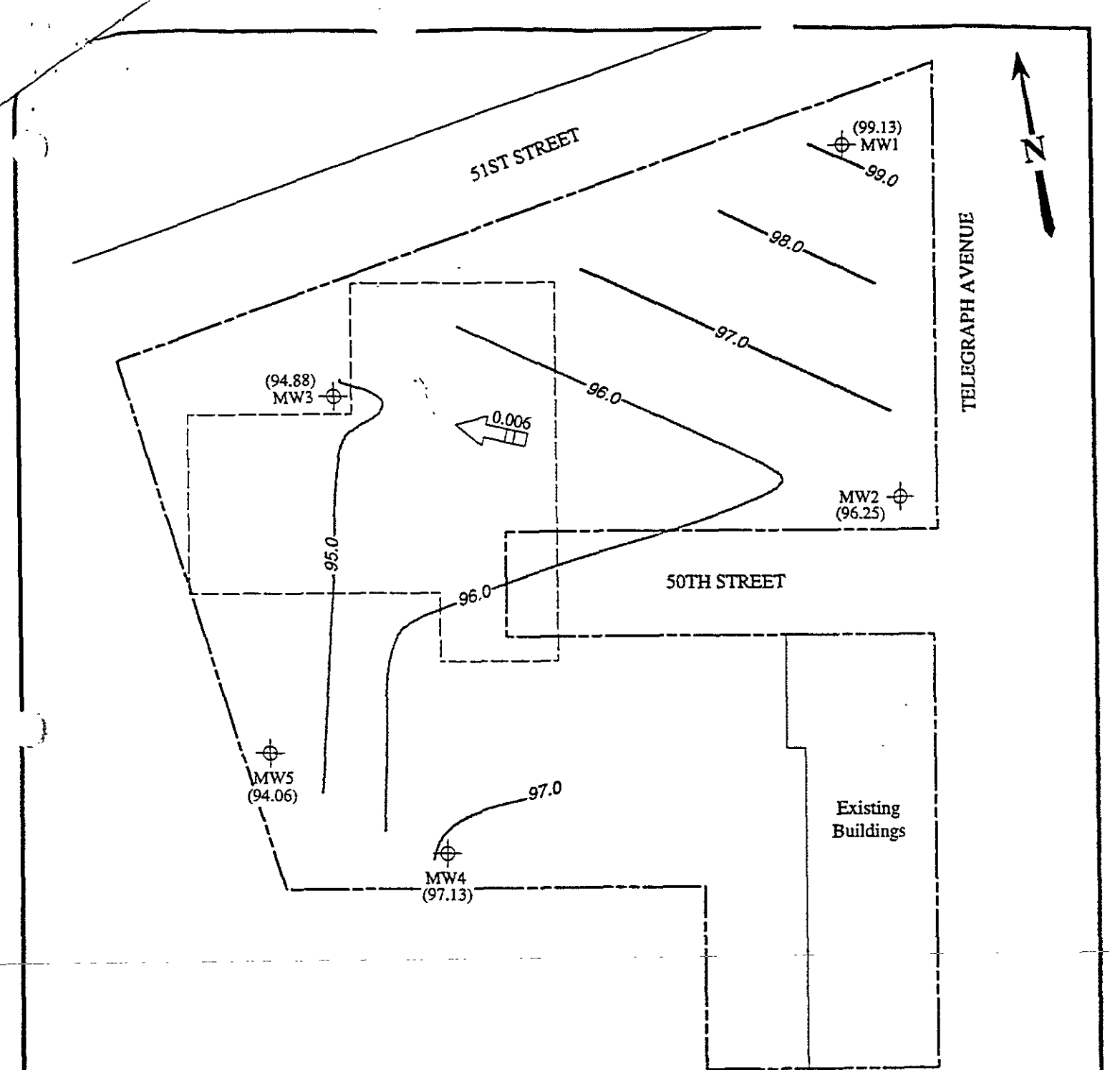
Base map modified from an Advanced Soil Technology Inc. site plan

POTENTIOMETRIC SURFACE MAP FOR THE SEPTEMBER 18, 1995 MONITORING EVENT



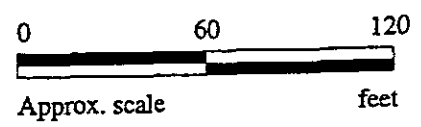
**BERKELEY LAND COMPANY
 51ST STREET & TELEGRAPH AVE.
 OAKLAND, CALIFORNIA**

**FIGURE
 1**



LEGEND

- ⊕ Monitoring well
- () Ground water elevation in feet above Mean Sea Level
- ### → Direction of ground water flow with approximate hydraulic gradient
- Contours of ground water elevation



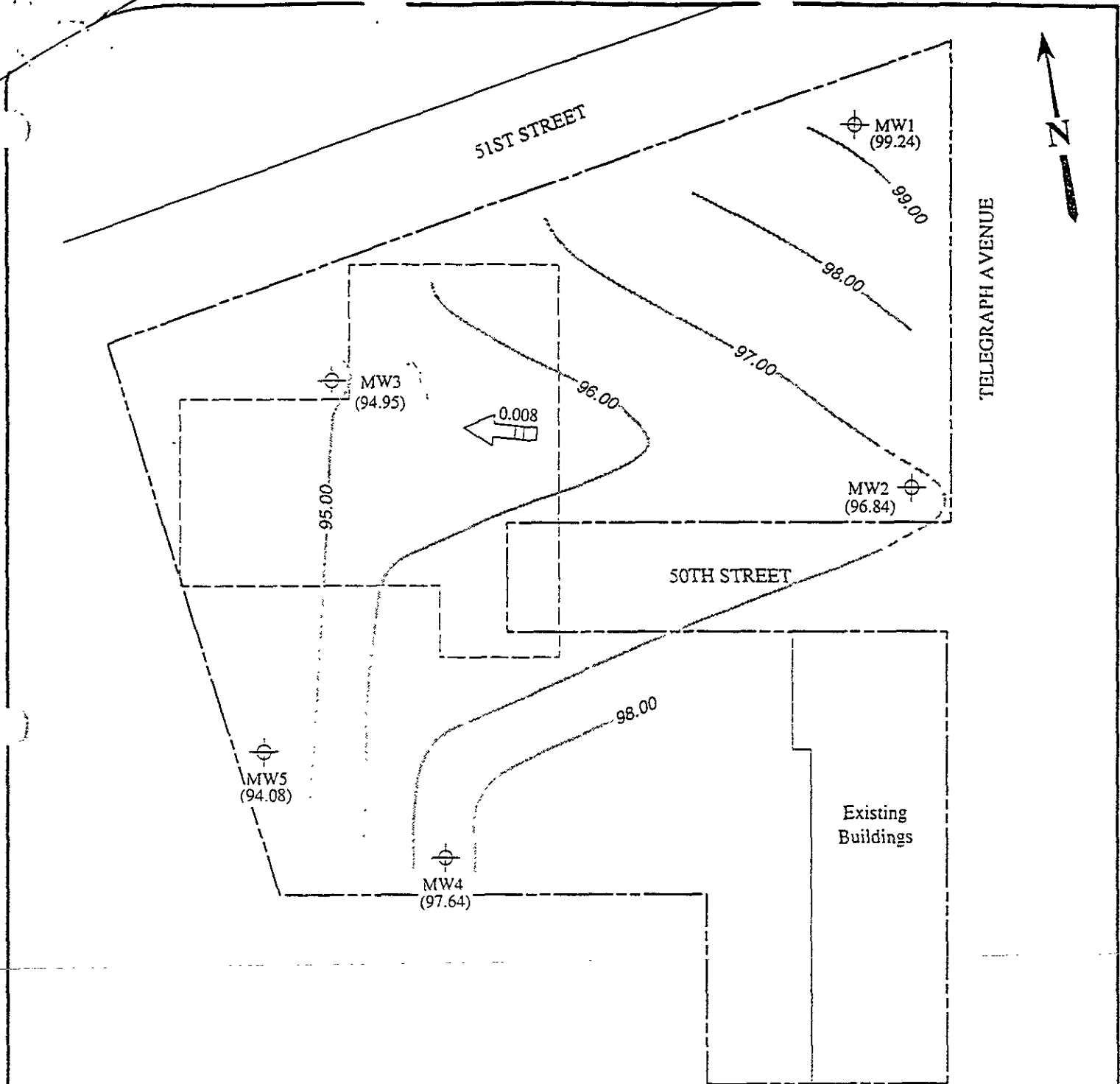
Base map modified from an Advanced Soil Technology Inc. site plan

POTENTIOMETRIC SURFACE MAP FOR THE MAY 23, 1995 MONITORING EVENT






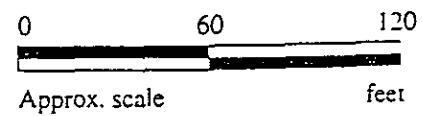
**BERKELEY LAND COMPANY
51ST STREET & TELEGRAPH AVE.
OAKLAND, CALIFORNIA**

**FIGURE
1**




LEGEND

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



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

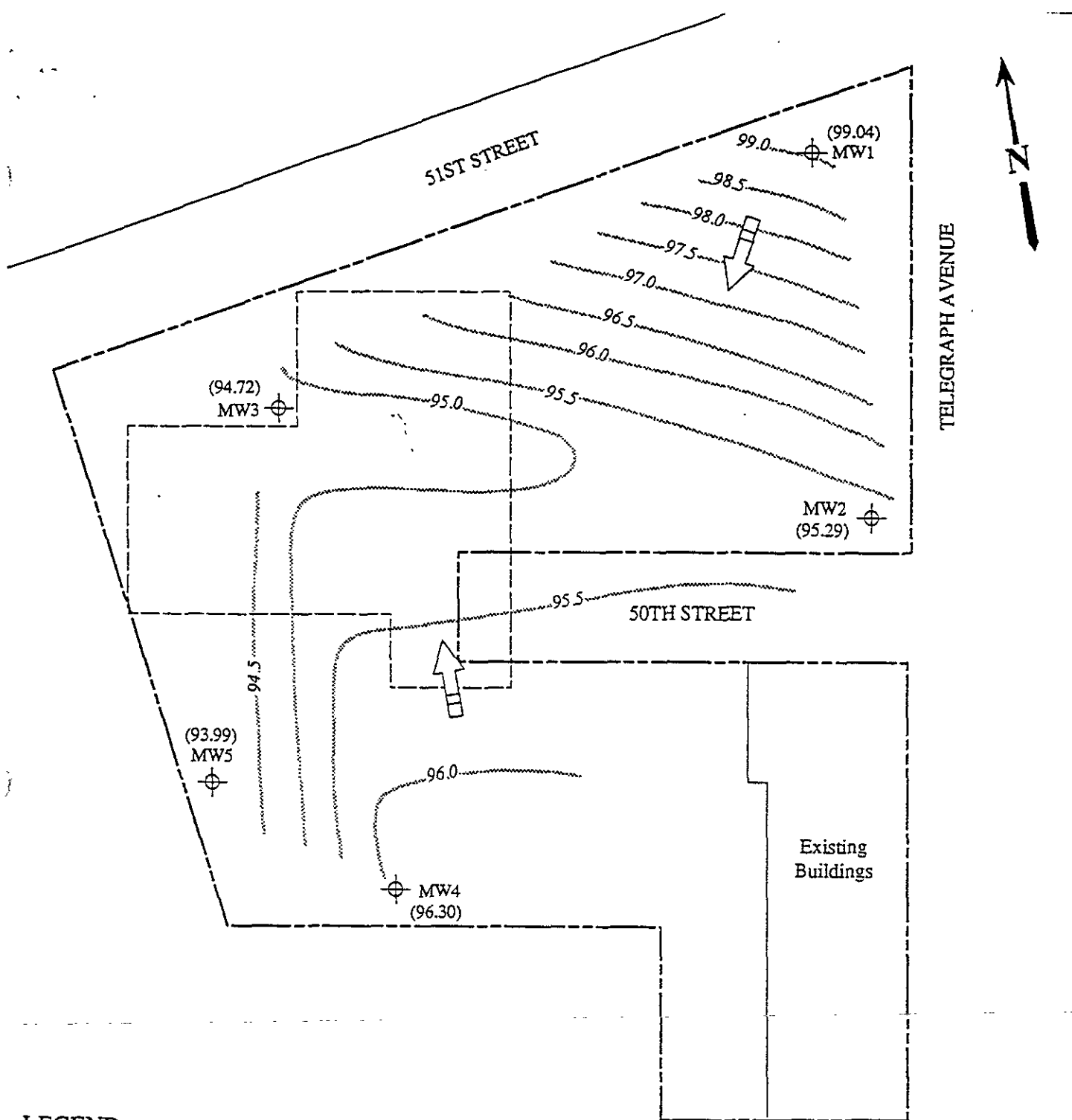
POTENTIOMETRIC SURFACE MAP FOR THE FEBRUARY 25, 1995 MONITORING EVENT



**KAPREALIAN ENGINEERING
INCORPORATED**

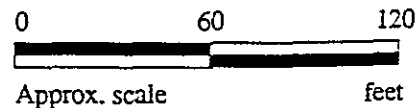
**BERKELEY LAND COMPANY
51ST STREET & TELEGRAPH AVE.
OAKLAND, CALIFORNIA**

**FIGURE
1**



LEGEND

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



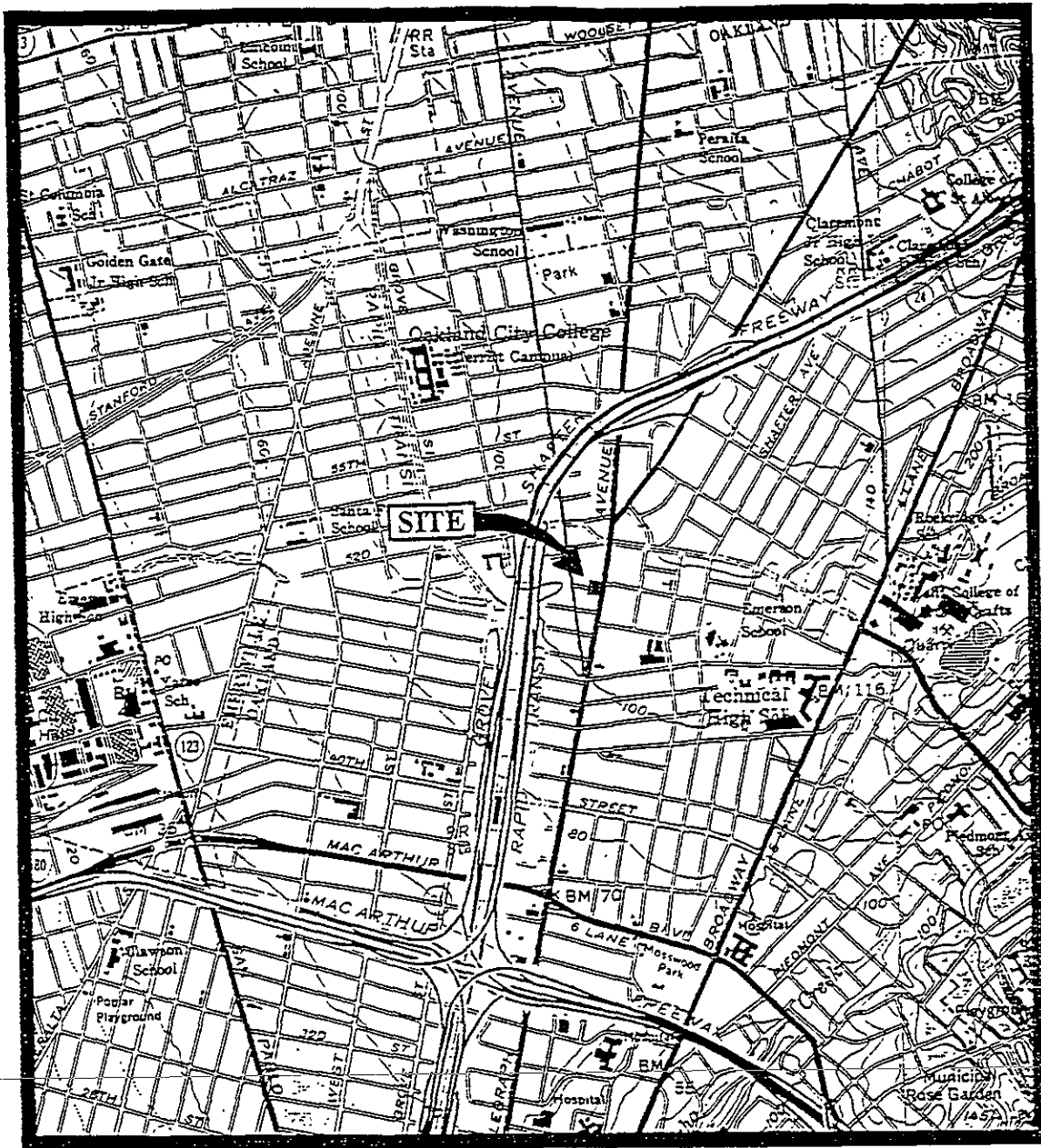
Base map modified from an Advanced Soil Technology Inc. site plan

POTENTIOMETRIC SURFACE MAP FOR THE JUNE 29, 1993 MONITORING EVENT

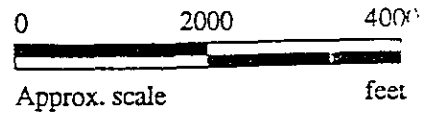


BERKELEY LAND COMPANY
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OAKLAND, CALIFORNIA

FIGURE
3



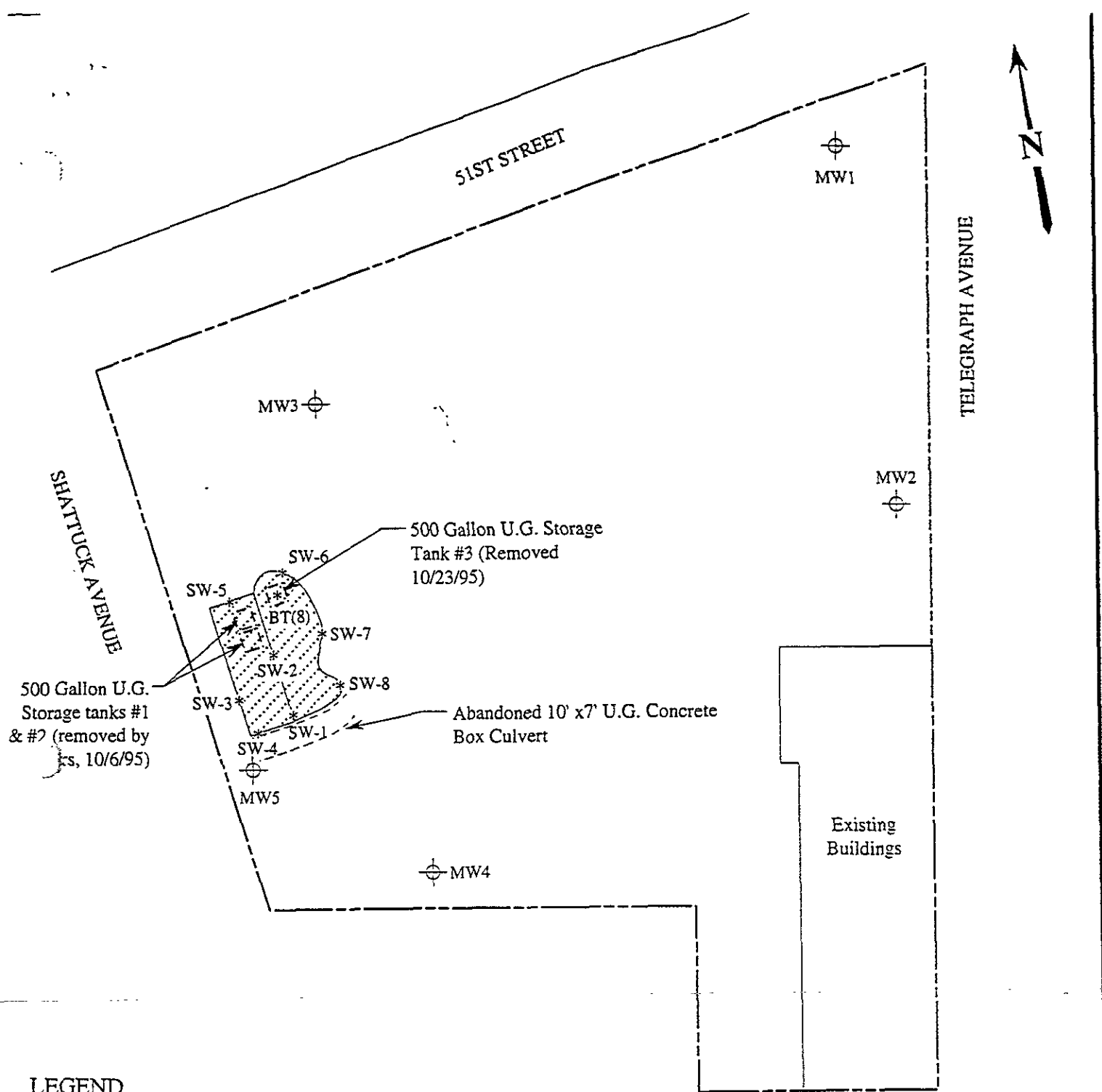
Base modified from 7.5 minute U.S.G.S. Oakland East and West Quadrangles
 (both photorevised 1980)





KEE
 KAPREALIAN ENGINEERING
 INCORPORATED

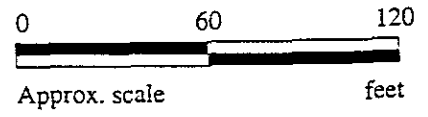
BERKELEY LAND COMPANY
 51ST STREET & TELEGRAPH AVE.
 OAKLAND, CALIFORNIA

LOCATION
 MAP



LEGEND

-  Monitoring well (by others)
- * Sample point location
-  Area excavated to a depth of about 17 to 20 feet below grade



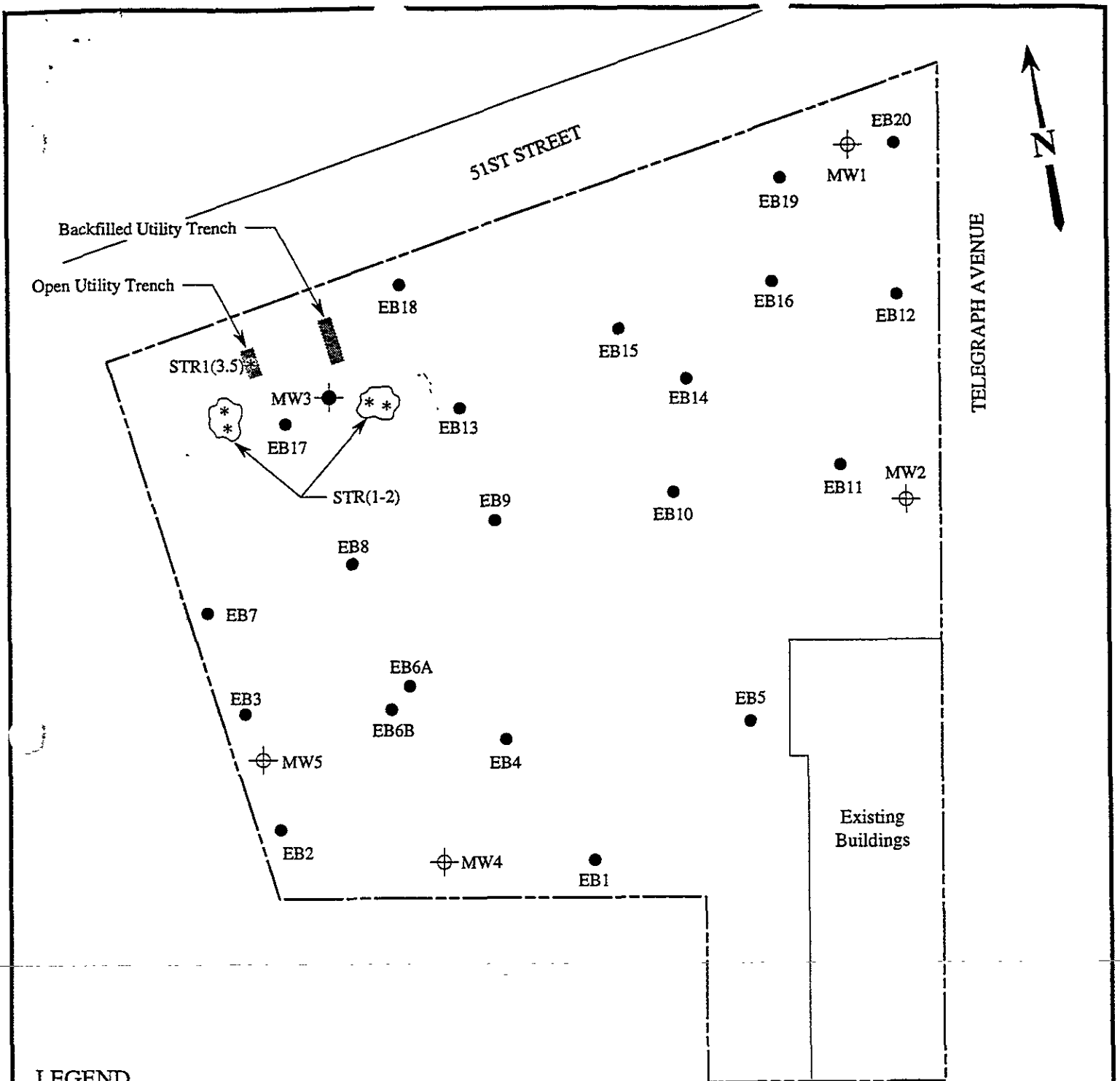
Base map modified from an Advanced Soil Technology Inc. site plan

SOIL SAMPLE POINT AND MONITORING WELL LOCATION MAP



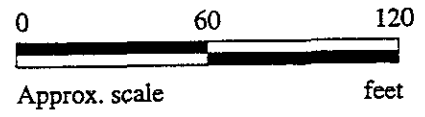
**BERKELEY LAND COMPANY
51ST STREET & TELEGRAPH AVE.
OAKLAND, CALIFORNIA**

**FIGURE
1**



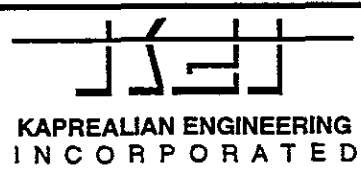
LEGEND

- Exploratory boring (by KEI)
- ⊕ Monitoring well (by others)
- ⊙ Monitoring well (destroyed on February 29, 1996)
- * Sample point location
- ☁ Stockpiled soil (not to scale)



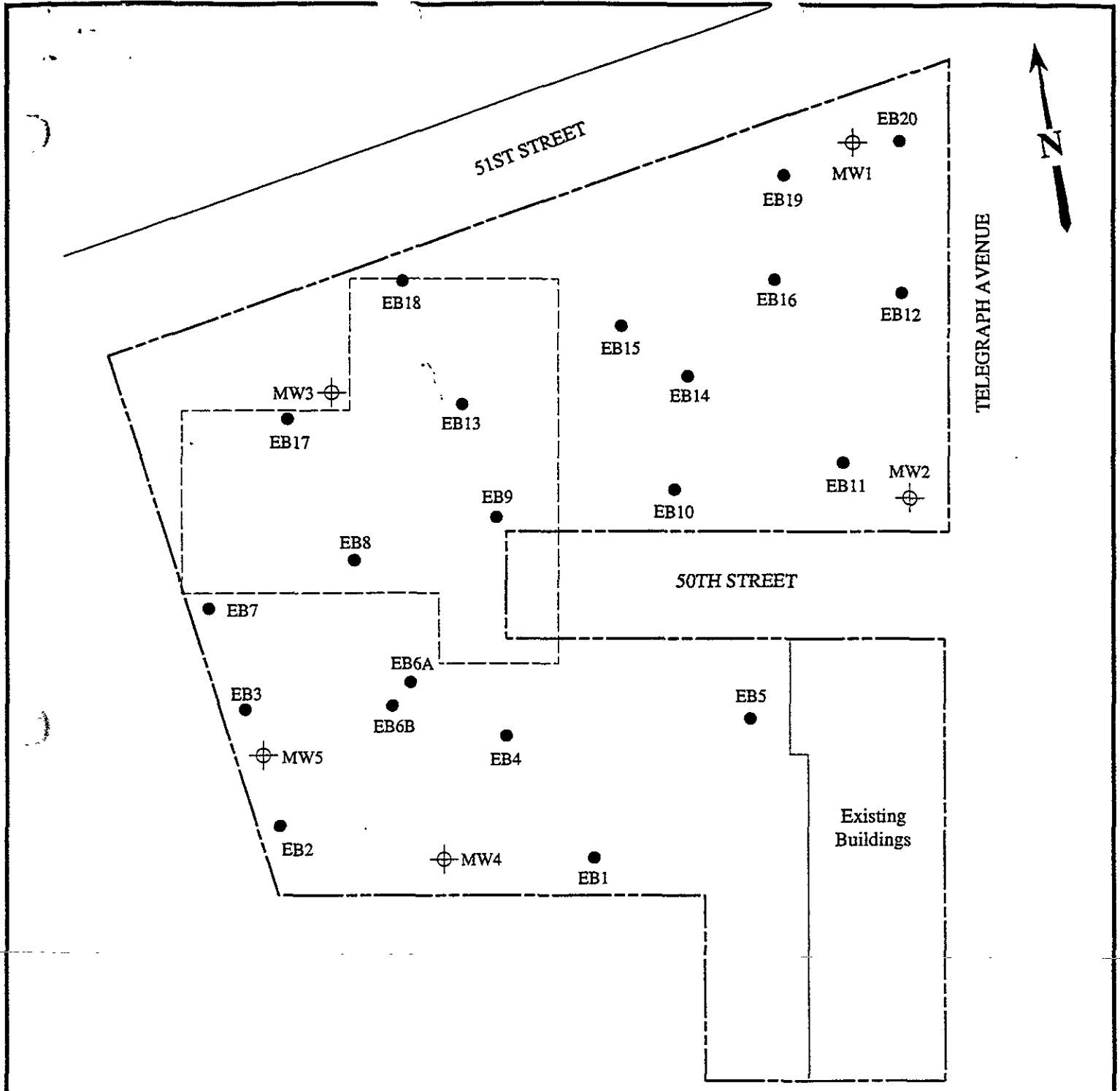
Base map modified from an Advanced Soil Technology Inc. site plan

SITE PLAN - EBMUD SOIL SAMPLING



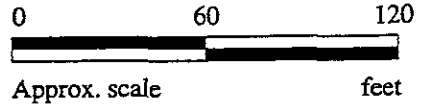
**BERKELEY LAND COMPANY
51ST STREET & TELEGRAPH AVE.
OAKLAND, CALIFORNIA**

**FIGURE
2**



LEGEND

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



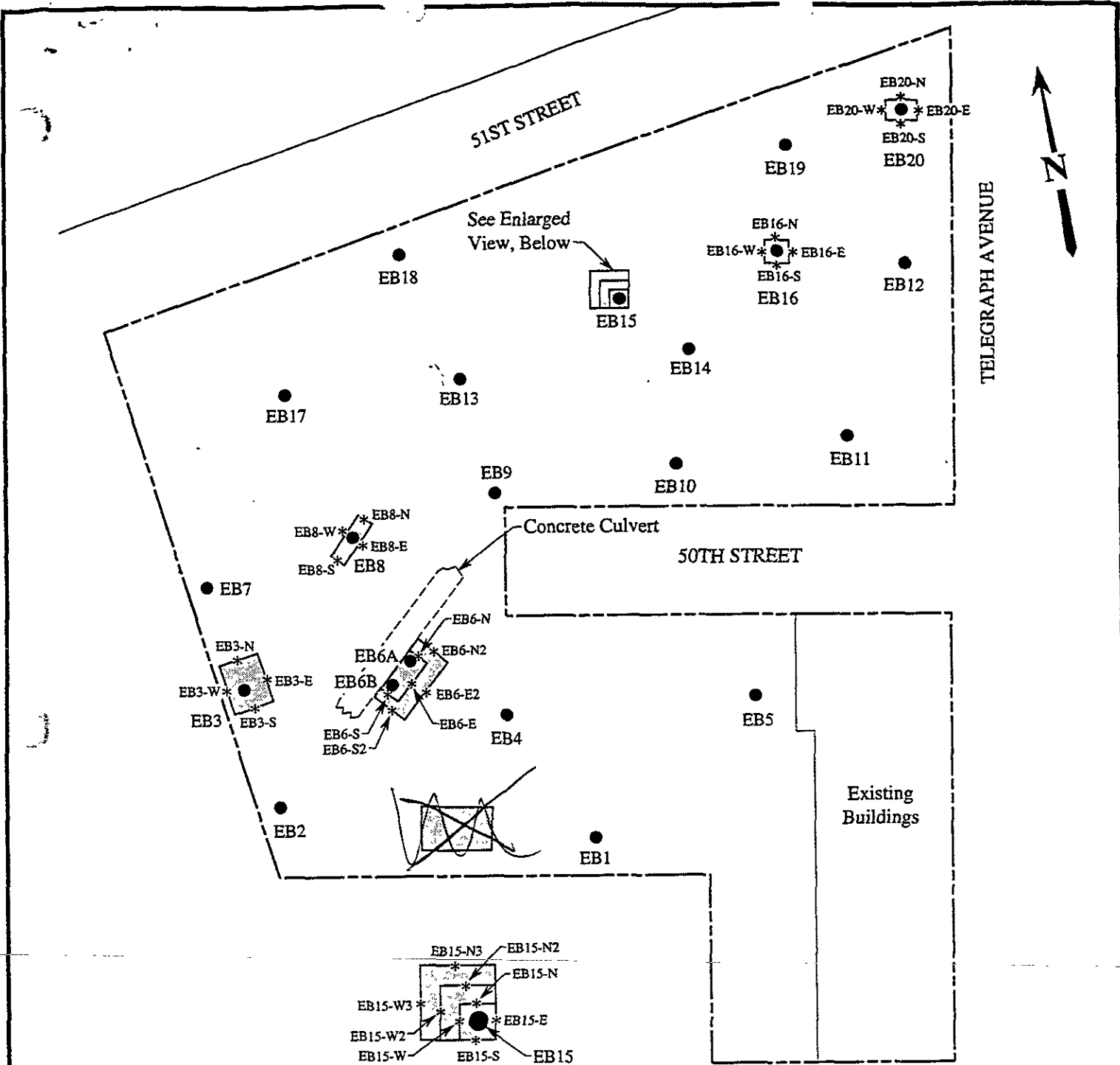
Base map modified from an Advanced Soil Technology Inc. site plan

EXPLORATORY BORING AND MONITORING WELL LOCATION MAP



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

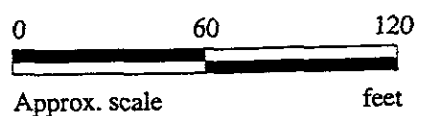
**FIGURE
 3**



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
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