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November 24, 1995

Mr. John Rutherford
Desert Petroleum
P.O. Box 1601
Oxnard, California 93032
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Dear Mr. Rutherford:

The following report represents our findings during the removal of previously excavated soil from the fuel and waste oil tank areas and the over-excavation of the pump dispenser area at former Desert Petroleum Station 793, located at 4035 Park Blvd., Oakland, Alameda County, California 94602.

INTRODUCTION

Western Geo-Engineers (WEGE) obtained and documented the necessary samples during the underground storage tank (UST) removal/closure (June 23, 1995). Soil contaminated with very low amounts of gasoline range hydrocarbons was found beneath the pump end of the regular leaded gasoline tank (T1A = 2 mg/Kg) and beneath the waste oil tank (WO-1 = 3 mg/Kg. Benzene, Toluene, Ethylbenzene and Xylenes (BTEX) were associated with all samples taken and ranged from detection limits of 0.005 mg/Kg to a high of 0.16 mg/Kg of Xylenes from sample T1A. Figure 5 and Table 1 represent sample locations and laboratory results. The following report documents the activities that have occurred at this site since tank closures, June 23, 1995 through the installation of MW1 and subsequent sampling of all monitoring wells October 4, 1995.

LOCATION

Former Desert Petroleum #793 is an non-active station, located on the northwest corner of the intersection of Park Blvd. and Hampel at 4035 Park Blvd., Oakland, California, see Figure 1. Figure 2 is a portion of the U.S.G.S. Oakland East, photorevised 1980 7.5 minute quadrangle map and shows the site at an approximate elevation of 210 feet above mean sea level in projected section 32; T1S; R3W; MDB&M. Figure 3 represents the station conditions after excavation of gasoline tainted soils and subsequent backfill with clean fill.

LOCAL GEOLOGY, HYDROGEOLOGY AND GEOMORPHOLOGY.

GEOMORPHOLOGY

The site is situated on the western slope of the Berkeley Hills, east of Redwood Peak (elev. 1619 feet amsl) and south of Indian Gulch at an elevation of approximately 230 feet amsl. The Berkeley Hills are a northwest-southeast trending range within the Coastal Range Province of California. Erosion of the Coastal Ranges has filled the valleys within and boardering the Coastal Range with sequences of gravels, silts, sands and clays.

STRATIGRAPHY AND GROUND WATER OCCURRENCE

The native soil that comprised the sidewalls and floor of the UST excavation cavity consists of dark brown silty clay to the thirteen foot depth, overlaying this clay along the sidewall beneath the building is a thin asphalt/tar layer (approximately 1/2 inch thick) which seperates the native subsurface from approximately 1 1/2 to 2 feet of imported fill consisting of gravels and rock of cobble size beneath 4 inches of asphalt. Beneath the dark brown clay is a light brown firm to stiff clay with occasional gravel size pebbles. These pebbles are subrounded to rounded and do not interconnect and appear to be of metavolcanic origin. Observations of the sidewalls of the pump island dispenser excavation area and the excavations performed north of the building at the former waste oil UST area and west of the building adjacent to the restroom area show this fill to extent to the 7 and 8.5 foot depths respectively. The dark brown clay extends to approximately the 16 to 17 foot depth with the brown clay with occasional gravel extending to approximately the 20 foot depth at newly installed MW-1 at the southeast corner of the site and to approximately the 23 foot depth at the northwest corner of the site (RS-5). Beneath this gravely clay is a fine to medium sand, clayey sand and silty sand.

Measurements obtained on October 4, 1995 from the onsite ground water monitor wells indicate that the static water level is found between 12 to 18 feet below the surface.

UST REMOVAL

Manley and Sons excavated and removed three underground fuel storage tanks (UST's) and one waste oil UST on June 23, 1994: These tanks are shown on Figure 5 and are designated T1, T2, T3, and WO1. Tank T1 was a eight thousand gallon capacity single steel wall tank that at one time stored leaded regular fuel. Tank T2 was a ten thousand gallon capacity single steel wall tank that at one time stored unleaded fuel, Tank T3 was a six thousand gallon capacity single wall fiberglass tank that at one time stored unleaded fuel and Tank WO1 was a 500 gallon waste oil storage tank. Tank T3 broke on removal, all fiberglass was removed from the excavation. Also at this time one 200 gallon single wall steel tank that was used for waste oil was removed.

Prior to removal all fluids contained in the tanks (water utilized to conduct the last tank test) were removed by vacuum truck along with the triple rinse solution. WEGE used a GasTech LEL/O_2 meter to test the tanks prior to, and after inerting the tanks with dry ice. The readings were taken under the supervision of Mr. Larry James of the Oakland Fire Department. T1 and T2 tested below 5 % LEL both before and after dry ice, O_2 registered 20.75% before the dry ice and <1% after adding the dry ice. The waste oil tank did not show any vapor detection and the T3 broke apart during the uncovering prior to removal. These two tanks did not need to be inerted prior to removal. These site activities were witnessed by Ms. Jennifer Eberle, Hazardous Materials Specialist, Alameda County Health Agency, see Appendix A. UST's T1 and T2 were transpored by H & H for disposal under manifest #92218289 on June 23, 1994. The broken fiberglass and waste oil UST's and rinseate were transported for disposal by Manley and Sons Trucking on June 24, and June 22, 1994 respectively.

All samples of the native soil beneath the UST's were collected from the backhoe bucket and represents the 14 foot depth in the the fuel tank cavity and the 7.5 foot depth of the waste oil tank cavity. The product line samples (PL-1 and PL-2) were obtained by digging six inches into fresh soil adjacent to the dispenser locations within the product line trench. These samples were obtained at the 2.5 foot depth, see Table 1 and Figure 5. A Western Geo-Engineers (WEGE) geologist working directly under California Registered Geologist #3037 obtained the samples as required in the August 10, 1990 *TRI - REGIONAL BOARD STAFF RECOMMENDATIONS FOR PRELIMINARY EVALUATION AND INVESTIGATION OF UNDERGROUND TANK SITES*.

UST SAMPLING AND RESULTS

Inspection of the T1, T2 and the Waste Oil tanks after removal showed the tanks to be in good condition, ie. then still had tar wraps, with no obvious corrosion. The fiberglass tank broke apart prior to removal; all fiberglass was removed from the excavation. During removal of the waste oil UST staining was noted just below the asphalt near the fill. After removal of the fuel UST's, odorous soil (hydrocarbon) was noted at the 12 foot depth, but became clean at the 13 foot depth. All piping associated with the UST's and product dispensing system were removed. Field screening (UV fluorescence scope, with pentane extraction) was used to determine if over-excavation would be warranted, and to determine if petroleum hydrocarbons existed beneath the UST's. The UV screening favorably exploits petroleum hydrocarbon's fluorescing characteristics under ultraviolet light. A sample obtained with the original soil sample WO-1 (7.5 foot depth), had no fluorescence. Likewise samples obtained at the 14 foot depth beneath the fuel UST's had no fluorescence. Field screening indicated that major over-excavating was not necessary. Minor excavating continued until no (or trace amounts of) visible fluorescence was detected. At that time samples were

obtained from the base of the excavations and from the excavated soil for certified analyses. Sample results showed that the field screening technique worked well for the fuel and oil range hydrocarbons; was verified by the certified laboratory results, see Table 1 for certified laboratory results.

Other than the product line samples (PL-1 and PL-2) all samples were obtained from the bucket of the backhoe. The product line samples were obtained by hand digging 0.5 feet below the trench produced by removal of the product lines and filling a 2" X 6" clean brass sleeve with the native soil, approximately 0.5 feet into the native soil. All soil samples were placed into a 2" X 6" clean brass sleeves. The sleeves were completely filled with the soil (no air space), then the ends were covered with teflon wraps, capped with plastic end caps and sealed with duct tape. Each sleeved sample was then labeled with individual sample ID, time and date sampled and analysis to be performed. The sample was then placed into a zip lock baggie, sealed, placed on ice in a chest and cooled to 4^0C for chain of custody delivery to MATRIX Environmental Laboratories Inc. 3017 Kilgore Road #100, Rancho Cordova, California 95742, (916) 635-3962, (DHS Certified Laboratory #1676), see Appendix B.

The sample obtained beneath the waste oil tank (WO-1) was collected from the 7.5 foot depth and analyzed for Total Petroleum Hydrocarbons as Gasoline and Diesel (TPHg-d) 8015 modified, Oil and Grease 5520E, Benzene-Toluene-Ethylbenzene and Xylenes (BTEX), Volatile Organic Compounds 8240, Semi Volatile Organic Compounds 8270, and CAM Metals TTLC (Cd, Cr, Pb, Ni & Zn).

All compounds of interest for were below detection limits, with the exception of 3 mg/Kg of gasoline range hydrocarbons, trace amounts of BTEX and background amounts of the metals. Diesel range hydrocarbons, PCB's, Volatile Organic Compounds, and Cadmium were below detection limits.

The product line samples (PL-1 and PL-2) along with the fuel UST samples were analyzed for Total Petroleum Hydrocarbons as Gasoline (TPHg) 8020 modified, and Benzene-Toluene-Ethylbenzene and Xylenes (BTEX). Samples T1A and T1B were also tested for CAM Metal TTLC Pb. All samples tested showed trace amounts of BTEX with only T1A testing positive for gasoline range hydrocarbons, at 2 mg/Kg. The lead values from T1A and T1B are most likely representative of background levels for lead, 3 and 7.2 mg/Kg respectively. See Table 1 for complete laboratory results.

EXCAVATED SOIL HANDLING

Approximately 20 cubic yards of soil was removed from the waste oil tank excavation. And 180 cubic yards form the product line and UST's excavations. Seven soil samples that represented

approximately 25 cubic yard increments were obtained from the excavated soil piles. With the exception of that soil generated from the waste oil cavity, all the soil was then placed back into the respective excavation, with the approval of Alameda County Department of Environmental Health. Safety and site restoration were the driving forces for this procedure. Due to the location of (behind lockable gates, and the minor amount of soil generated (approximately 20 cubic yards) the excavated soil from the waste oil tank cavity was left on the surface. It was agreed that, once excavated soil sample results were obtained a workplan would be developed for any future needs of treating/handling this soil.

Correspondence between Desert Petroleum Inc. and Alameda County Health Care Services agreed that the backfilled soils should be excavated and removed to the appropriate landfill for disposal, see Appendix A. WEGE initiated the profiling of this soil to Forward Landfill, Stockton, California. Along with the already generated sample results, Forward also required the Halogenated Volatile Organics (EPA Method 8010) and the TTLC metals for lead, nickel, zinc, chromium and cadmium on the backfilled soil generated from the waste oil UST area. Forward also needed TTLC lead from the pump island and fuel UST backfilled soil. On July 10, 1995, a WEGE geologist utilizing a hand auger sampling kit, hand augered to the seven foot depth in the waste oil backfilled soil and obtained two samples that would be composited into one (WO A & B), and hand augered and sampled six locations to the twelve foot depth in the fuel UST backfilled area and obtained twelve sample that were composited into six samples. These samples were Chain of Custody delivered to Superior Analytical Laboratory for the requested analysis. These laboratory results along with the earlier results obtained during the tank removals was submitted to Forward Landfill along with the profile form, see Appendix C.

REMOVAL OF BACKFILLED SOIL AND OVER-EXCAVATION OF PETROLEUM HYDROCARBON TAINTED SOIL.

Removal of the backfilled soil commenced on August 8, 1995. A WEGE geologist utilizing a portable gas chromatograph (Photovac 10S50) screened the base of the excavations and sidewalls once the removal of the backfill had been completed. Ms. Jennifer Eberle of the Alameda County, Department of Environmental Health (ACDEH) directed the confirmation sampling each time the field screening, utilized by the WEGE geologist, indicated that no more excavating was necessary in that specific area. The excavating, field screening confirmed through August 31, 1995, see Field Notes Appendix D and Regulatory Correspondence Appendix A. During this time the hydraulic hoists were removed and documentation sampling was performed, the pump island area was excavated to the 17 foot depth towards the building and 2 exploratory pits were dug to the 17 foot depth, north of the building (Former waste oil UST area) and west of the building. This was accomplished to further define the extent of, and to

remove as much as possible, of the degraded gasoline range tainted soils, see Figures 6 and 7, Table 1 and Appendix B - Laboratory Reports.

Prior to backfilling the excavations, 6 inch diameter F480 Schedule 40 PVC monitoring pipe was installed in the pump island and the two exploratory excavations. These three areas were then backfilled with 1/4 inch clean pea gravel from the base of the excavations to approximately the 7 foot depth in the pump island excavation and to the 3 foot depth in the 2 exploratory excavations. Once the pea gravel was in place all excavated areas were brough to grade using clean road base AB fill that was placed in two foot lifts and compacted, see Figure 3. The three six inch PVC slotted pipes can be used for fluid removal and/or injection if additional or further abatement procedures become necessary.

GROUND WATER CONDITIONS

The four existing wells (RS-2, RS-5, RS-6 and RS-7) along with the newly installed well (MW-1) were sampled on October 4, 1995. Prior to this sampling event MW-1 was installed on September 5, 1995 and developed on September 11, 1995. Figure 4 represents the ground water gradient beneath the site on October 4, 1995 and Figure 8 shows the chemical results from the sampling that same day. These figures indicate a ground water flow from the southeast corner of the site (MW-1) to the northwest between RS-5 and RS-6. Figure 7, which deplicts soil sample results, shows a contaminant flow pattern, see Tables 1 and 2.

HEALTH AND SAFETY

This site has been classified as Level D. Common sense and standard construction safety measures are to be maintained at all times. All WEGE personnel involved with this site have a current Certificate for OSHA-SARA Safety Training, as prescribed in 29CFR 1910.120.

SUMMARY

Upon removal of the underground storage tanks, gasoline odors were noted at the twelve foot depth of the excavation. This soil was removed and native soil samples obtained at the fourteen foot depth. UV fluorescent screening of the soil successfully identified the impacted soil. After obtaining the necessary samples the excavations were backfilled with the material that was excavated from them; except for the waste oil excavation which was left open and the excavated soil left on the surface. Certified laboratory results indicate that the contaminated soil does not exceed 14 feet below the surface in the fuel UST cavity, only to the 7.5 foot depth at the waste oil UST cavity and the 2.5 foot depth at the product line cavity. On August 8, 1995,

the backfilled soil was removed and it was discovered that the pump island area soil was impacted to the 15 to 17 foot depths. This area was over-excavated and all generated soil removed to Forward Landfill, Stockton, California. Excavation continued towards the building and was terminated where field screening indicated that the impacted soils had been removed or where/when undermining and possible collapse of the building became a concern. Also during this time the hydraulic hoists were removed and samples were obtained to document the possibility of gasoline range hydrocarbons beneath the building. The 14.5 foot depth sample indicated that the soil beneath the hoists has been impacted. Two exploratory excavations were then dug, one north of the building at the former waste oil UST area and one west of the building. Sample results of these two areas noted as T1 and T2 respectively indicated that gasoline range hydrocarbons exist at the 17 foot depth in T1, with minor contaminants found at 17.5 feet in T2, see Table 1 and Figure 7.

RECOMMENDATIONS

Western Geo-Engineers (WEGE) recommends Desert Petroleum continue quarterly sampling/monitoring of the exisiting ground water monitor wells (MW-1, RS-2, RS-5, RS-6 and RS-7). A workplan to further define the impact that may have occurred offsite to the north northwest (RS-7) should be generated. This workplan will specify methods to perform sampling in the backyards along the sewer lateral and method(s) to determine if remedial actions are necessary.

LIMITATIONS

This report is based upon the following:

A. The observations of field personnel.
B. The results of laboratory analyses performed by a state certified laboratory.
C. Referenced documents.
D. Our understanding of the regulations of the State of California, Alameda County and the City of Oakland.

The services performed by Western Geo-Engineers, a corporation, under California Registered Geologist #3037 and/or Contractors License #513857, have been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the State of California and the Oakland area. Our work and/or supervision of remediation and/or abatement operations, active or preliminary, at this site is in no way meant to imply that we are owners or operators of this site. Please note that known contamination of soil and/or ground water must be reported to the appropriate agencies in a timely manner. No other warranty, expressed or implied, is made.

Sincerely yours,

George L. Converse
Project Geologist

Jack E. Napper
Ca. Reg. Geologist #3037

cc: Ms. Jennifer Eberie, HMS, Alameda County Health
(510)271-4530

TABLE 1

SOIL- CHEMICAL ANALYSIS DATA SUMMARY

DESERT PETROLEUM, INC. SITE #793

4035 PARK BOULEVARD, OAKLAND, CALIFORNIA

(all concentrations in parts per million [mg/Kg, ppm])

SAMPLE LOCTION	SAMPLE ID#	DATE SAMPLED	DEPTH OF SAMPLE BELOW GROUND SURFACE IN FEET	TOTAL PETROLEUM HYDROCARBONS EPA METHODS 8020/5030 GASOLINE	8015/3550 DIESEL	5540 D&F OIL	AROMATIC VOLATILE ORGANICS EPA METHOD 8020 BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES
BORING FOR RS-1	RS-1;5'	12/11/89	5	16	NA	NA	NA	NA	NA	NA
	RS-1;10	12/11/89	10	33	NA	NA	NA	NA	NA	NA
	RS-1;15	12/11/89	15	<1	NA	NA	NA	NA	NA	NA
	RS-1;20	12/11/89	20	<1	NA	NA	<0.003	0.008	<0.003	<0.003
	RS-1;25	12/12/89	25	10	NA	NA	0.056	0.12	0.041	0.13
	RS-1;30	12/12/89	30	<1	NA	NA	<0.003	0.012	<0.003	<0.003
BORING FOR RS-2	RS-2;5	12/11/89	5	<1	NA	NA	NA	NA	NA	NA
	RS-2;10	12/11/89	10	11	NA	NA	NA	NA	NA	NA
	RS-2;15	12/11/89	15	<1	NA	NA	NA	NA	NA	NA
	RS-2;20	12/11/89	20	<1	NA	NA	<0.003	0.017	<0.003	<0.003
BORING FOR RS-3	RS-3;5	12/11/89	5	<1	NA	NA	<0.003	0.043	<0.003	0.008
	RS-3;10	12/11/89	10	<1	NA	NA	<0.003	0.02	<0.003	<0.003
BORING FOR RS-4	RS-4;5	12/12/89	5	50	NA	NA	0.78	3.4	0.74	4.1
	RS-4;10	12/12/89	10	8	NA	NA	0.24	0.94	0.17	0.92
BORING FOR RS-5	RS-5;5	12/12/89	5	<1	NA	NA	NA	NA	NA	NA
	RS-5;10	12/12/89	10	<1	NA	NA	NA	NA	NA	NA
	RS-5;15	12/12/89	15	<1	NA	NA	NA	NA	NA	NA
	[redacted]	12/13/89	20	[redacted]	NA	NA	[redacted]	8.4	3.9	22
	RS-5;25	12/13/89	25	4	NA	NA	0.7	0.42	0.058	0.26
	[redacted]	12/13/89	30	[redacted]	NA	NA	NA	NA	NA	NA
	RS-5;35	12/13/89	35	<1	NA	NA	NA	NA	NA	NA
	RS-5;40	12/13/89	40	1	NA	NA	0.036	0.069	0.009	0.043
BORING FOR RS-6	RS-6;5	12/13/89	5	<1	NA	NA	NA	NA	NA	NA
	RS-6;10	12/13/89	10	<1	NA	NA	NA	NA	NA	NA
	RS-6;15	12/13/89	15	<1	NA	NA	NA	NA	NA	NA
	RS-6;20	12/13/89	20	<1	NA	NA	0.017	0.007	<0.003	0.015
	RS-6;25	12/13/89	25	<1	NA	NA	0.009	0.011	<0.003	<0.003
	RS-6;30	12/13/89	30	<1	NA	NA	NA	NA	NA	NA
	RS-6;35	12/13/89	35	<1	NA	NA	0.005	0.007	<0.003	0.006
BORING FOR MW-1	MW1-5	09/05/95	5	<1	NA	NA	0.005	0.005	<0.005	0.015
	MW1-10	09/05/95	10	<1	NA	NA	<0.005	<0.005	<0.005	<0.005
	MW1-15	09/05/95	15	<1	NA	NA	<0.005	<0.005	<0.005	<0.005
	MW1-20	09/05/95	20	<1	NA	NA	<0.005	<0.005	<0.005	<0.005

* was the cap fringe at the time, but it's no longer (196)

TABLE 1

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DESERT PETROLEUM, INC. SITE #793

4035 PARK BOULEVARD, OAKLAND, CALIFORNIA

(all concentrations in parts per million [mg/Kg, ppm])

SAMPLE LOCTION	SAMPLE ID#	DATE SAMPLED	DEPTH OF SAMPLE BELOW GROUND SURFACE IN FEET	TOTAL PETROLEUM HYDROCARBONS EPA METHODS 8020/5030 GASOLINE	8015/3550 DIESEL	5540 D&F OIL	AROMATIC VOLATILE ORGANICS EPA METHOD 8020 BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES
EXCAVATION	WO-1	06/23/95	7.5	3	<1	<50	0.063	0.34	0.048	0.23
WASTE OIL UST	T1-17	08/31/95	17	940	NA	NA	2.1	3.3	7.9	33
UST REMOVAL	T1A	06/23/95	14	2	NA	NA	0.022	0.075	0.03	0.16
RL 8K	T1B	06/23/95	14	<1	NA	NA	0.027	0.028	0.006	0.026
UST REMOVAL	T2A	06/23/95	14	<1	NA	NA	0.022	0.027	0.005	0.022
UL 10K	T2B	06/23/95	14	<1	NA	NA	0.017	0.025	0.005	0.02
UST REMOVAL	T3A	06/23/95	14	<1	NA	NA	0.013	0.012	<0.005	<0.015
UL 6K	T3B	06/23/95	14	<1	NA	NA	0.013	0.011	<0.005	<0.015
PRODUCT LINES	PL-1	06/23/95	2.5	<1	NA	NA	0.01	<0.005	<0.005	0.02
DISPENSER	PL-2	06/23/95	2.5	<1	NA	NA	0.01	0.031	0.0059	0.032
[redacted]IST	SLP-7	08/16/95	7	NA	NA	<50	NA	NA	NA	NA
	SLP-14.5	08/16/95	14.5	1200	NA	NA	8.8	25	18	92
	NPL-7	08/16/95	7	NA	NA	<50	NA	NA	NA	NA
				OVER-EXCAVATION						
WEST SIDEWALL	SWA-13	08/08/95	13	3	NA	NA	0.005	0.009	0.046	0.36
UST EXCAVATION	SWB-6	08/08/95	6	<1	NA	NA	<0.005	<0.005	<0.005	<0.005
NORTH SIDEWALL	SWC-13	08/08/95	13	3	NA	NA	<0.005	<0.005	<0.005	0.022
UST EXCAVATION	SWD-6	08/08/95	6	<1	NA	NA	<0.005	<0.005	<0.005	<0.005
SOUTH SIDEWALL										
UST EXCAVATION	SWE-11.5	08/08/95	11.5	<1	NA	NA	<0.005	<0.005	<0.005	<0.005
WEST SIDEWALL	F-14	08/08/95	14	3	NA	NA	0.12	0.24	0.053	0.29
PUMP ISLAND AREA	G-17	08/08/95	17	6	NA	NA	0.16	0.31	0.11	0.68
NORTH SIDEWALL	H-SW BOT-16	08/10/95	16	1000	NA	NA	3.6	31	14	77
PUMP ISLAND AREA	I-SW BUILD 8	08/10/95	8	2000	NA	NA	4.5	35	18	130
WEST SIDEWALL	J-BOT WEST	08/11/95	13	<1	NA	NA	<0.005	<0.005	<0.005	<0.005
PUMP ISLAND AREA	K-SW WEST 8	08/11/95	8	<1	NA	NA	<0.005	<0.005	<0.005	0.005

TABLE 1

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4035 PARK BOULEVARD, OAKLAND, CALIFORNIA

(all concentrations in parts per million [mg/Kg, ppm])

SAMPLE LOCTION	SAMPLE ID#	DATE SAMPLED	DEPTH OF SAMPLE BELOW GROUND SURFACE IN FEET	TOTAL PETROLEUM HYDROCARBONS EPA METHODS 8020/5030 GASOLINE	8015/3550 DIESEL	5540 D&F OIL	AROMATIC VOLATILE ORGANICS EPA METHOD 8020 BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES
SOUTH PUMP ISLAND EXCAVATION	PI-1	08/14/95	12	<1	NA	NA	<0.005	<0.005	<0.005	<0.005
	PI-2	08/14/95	7	<1	NA	NA	0.011	<0.005	0.005	0.03
	PI-3	08/14/95	8	<1	NA	NA	<0.005	<0.005	<0.005	<0.005
	PI-4	08/14/95	6	<1	NA	NA	<0.005	<0.005	<0.005	<0.005
EXPLORATORY HOLE NORTH SIDE OF STORE	T1-17	08/31/95	17	940	NA	NA	2.1	3.3	7.9	33
EXPLORATORY HOLE WEST SIDE OF STORE	T2-11.5	08/31/95	11.5	<1	NA	NA	<0.005	<0.005	<0.005	<0.005
	T2-17.5	08/31/95	17.5	4	NA	NA	0.05	0.07	0.062	0.31

WATER

TABLE 2
CHEMICAL ANALYSIS DATA SUMMARY
DESERT PETROLEUM, INC. SITE #793
4035 PARK BOULEVARD, OAKLAND, CALIFORNIA

(all concentrations in parts per billion [ug/L, ppb])
(FBMSL = feet above mean sea level)

WELL ID#	DATE SAMPLED	WELL CASING ELEVATION FBMSL	DEPTH TO GROUND WATER FBMSL	GROUND WATER ELEVATION FBMSL	TPH EPA METHODS 8020/5030 GASOLINE	AROMATIC VOLATILE ORGANICS EPA METHOD 8020 BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES
RS-1	12/14/89	240	24.25	215.75	19000	2600	2700	200	1200
	12/90				15000	3500	330	170	760
	2/91				6900	910	200	39	540
	6/91				1600	56	180.000	12	26
	9/91				4100	730	7.6	5.1	24
	12/91				8300	950	160	71	190
	11/09/92	100.18	17.05	83.13	1700	730	9.6	16	14
	04/07/94	100.18	13	87.18	860	84	12	16	110
	06/19/94	228.15	13.37	214.78	1400	150	12	52	87
	09/17/94	228.15	16.33	211.82	310	30	1.8	2.8	3.9
	03/12/95	228.15	4.66	223.49	ND	ND	ND	ND	ND
	DESTROYED BY OVER-EXCAVATION OF UST-DISPENSER AREAS (8/14/95 REPLACED WITH MW-1 9/5/95.								
MW-1	10/04/95	232.57	12.38	220.19	ND	ND	ND	ND	ND
RS-2	06/19/94	227.19	10.89	216.3	140	9.2	34	4.3	24.0
	03/12/95	227.19	5.26	221.93	ND	ND	ND	ND	ND
	10/04/95	230.43	15.05	215.38	ND	ND	ND	ND	ND
RS-5	12/14/89	241.26	25.97	215.29	57000	3100	4300	670	3400
	2/91				FLOATING PRODUCT				
	6/91				FLOATING PRODUCT				
	9/91				FLOATING PRODUCT				
	12/91				FLOATING PRODUCT				
	11/09/92	98.99	20.73	78.26	50000	650	4800	1100	15000
	04/07/94	98.99	18.16	80.83	27000	5000	8700	550	2800
	06/19/94	227.65	18.11	209.54	20000	2100	5300	470	2500
	09/17/94	227.65	19.63	208.02	9300	230	340	110	700
	03/12/95	227.65	14.54	213.11	93000	6400	2000	19000	10000
	10/04/95	230.64	17.53	213.11	16000	420	2100	320	1800
RS-6	12/14/89	240.23	22.52	217.71	11000	1400	1700	160	860
	2/91				FLOATING PRODUCT				
	6/91				95000	4200	4200	650	3700
	9/91				FLOATING PRODUCT				
	12/91				64000	3700	2300	730	4100
	11/09/92	99.27	19.43	79.84	19000	1600	710	500	1600

TABLE 2

WATER CHEMICAL ANALYSIS DATA SUMMARY

DESERT PETROLEUM, INC. SITE #793

4035 PARK BOULEVARD, OAKLAND, CALIFORNIA

(all concentrations in parts per billion [ug/L, ppb])

(FBMSL = feet above mean sea level)

WELL ID#	DATE SAMPLED	WELL CASING ELEVATION FBMSL	DEPTH TO GROUND WATER FBMSL	GROUND WATER ELEVATION FBMSL	TPH EPA METHODS 8020/5030 GASOLINE	AROMATIC VOLATILE ORGANICS EPA METHOD 8020 BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES
	04/07/94	99.27	14.42	84.85	16000	1200	1300	290	1100
	06/19/94	227.22	14.45	212.77	23000	1300	2200	590	2200
	09/17/94	227.22	19.52	207.7	24000	630	790	250	1100
	03/12/95	227.22	8.9	218.32	3200	450	13	82	230
	10/04/95	230.22	17.78	212.44	3700	170	250	38	290
RS-7	7/90				5600000	24000	210000	50000	740000
	2/91					FLOATING PRODUCT			
	6/91					FLOATING PRODUCT			
	9/91					FLOATING PRODUCT			
	12/91				270000	11000	22000	2000	13000
	11/09/92	67.88	4.62	63.26	81000	12000	16000	1900	13000
	04/07/94	67.88	4.03	63.85	74000	16000	16000	1400	8500
	06/19/94	195.92	4.07	191.85	83000	22000	19000	1500	9500
	09/17/94	195.92	4.05	191.87	270000	13000	15000	2100	1100
	03/12/95	195.92	3.72	192.2	35000	5100	560	6300	3600
	10/04/95	199.35	4.03	195.32	96000	14000	14000	1300	7000

ND BELOW LABORATORY DETECTION LIMITS

WEGE-
WESTERN
GEO-ENGINEERS

DESERT STATION #793
4035 Park Blvd.
Oakland, California

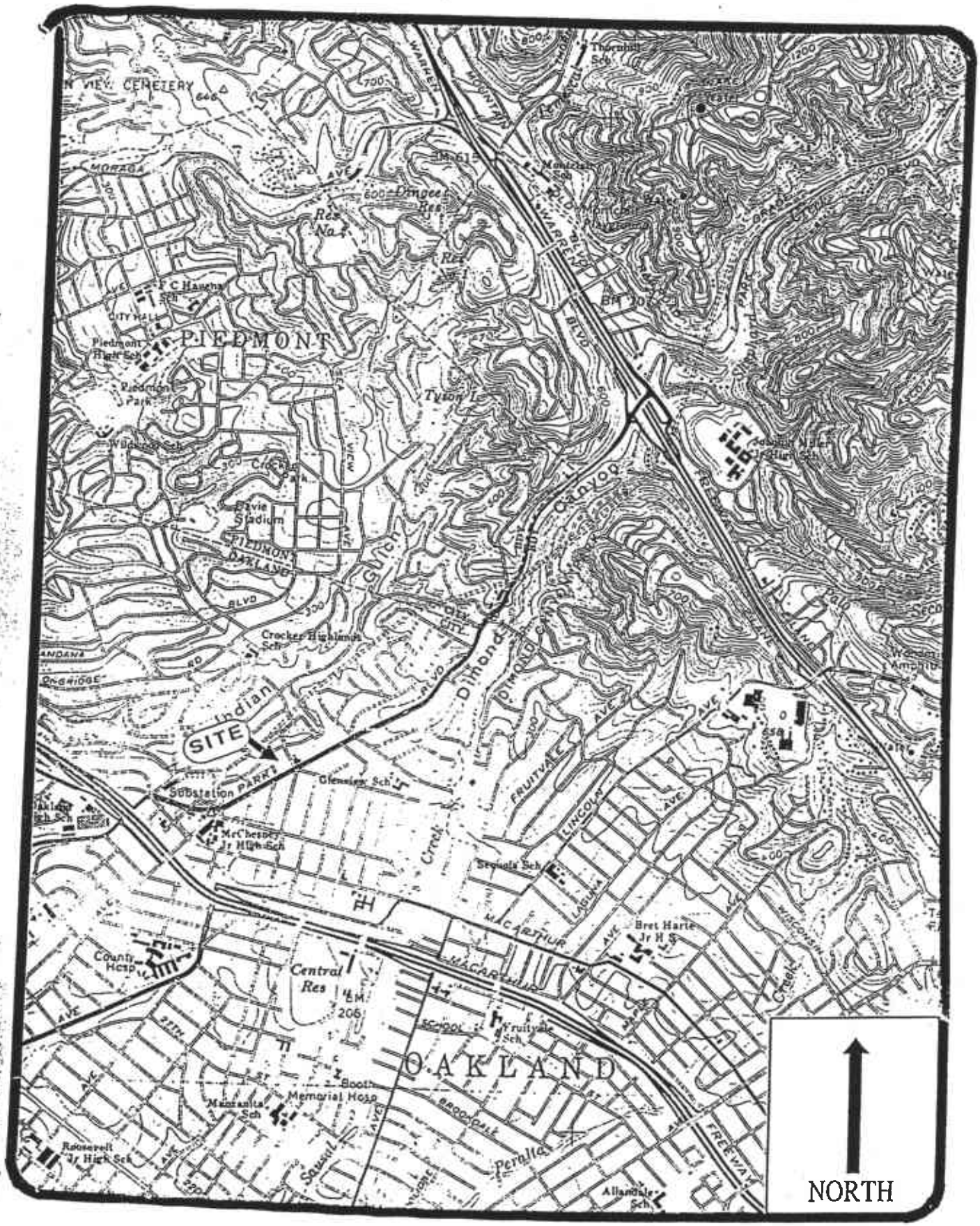
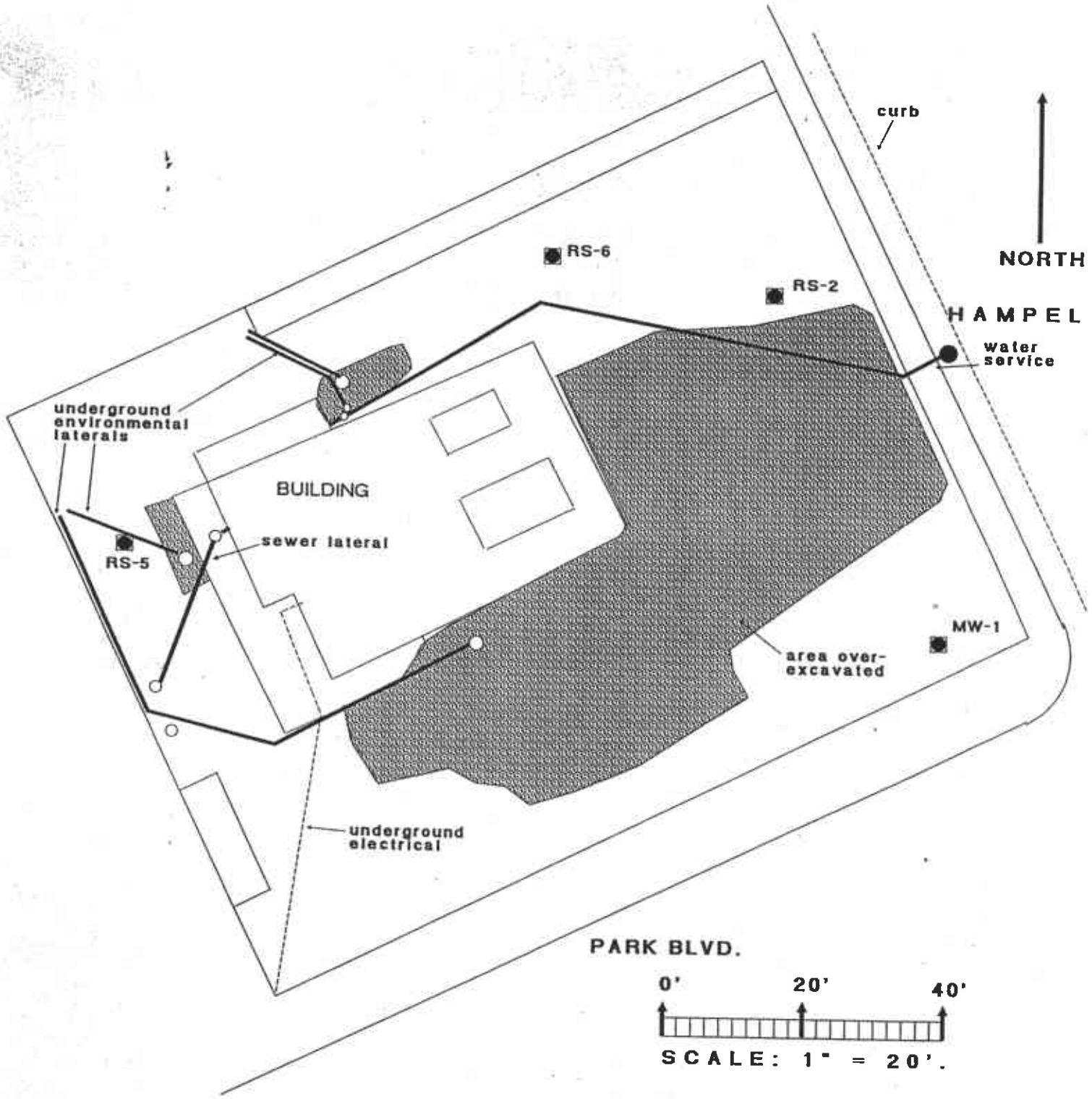


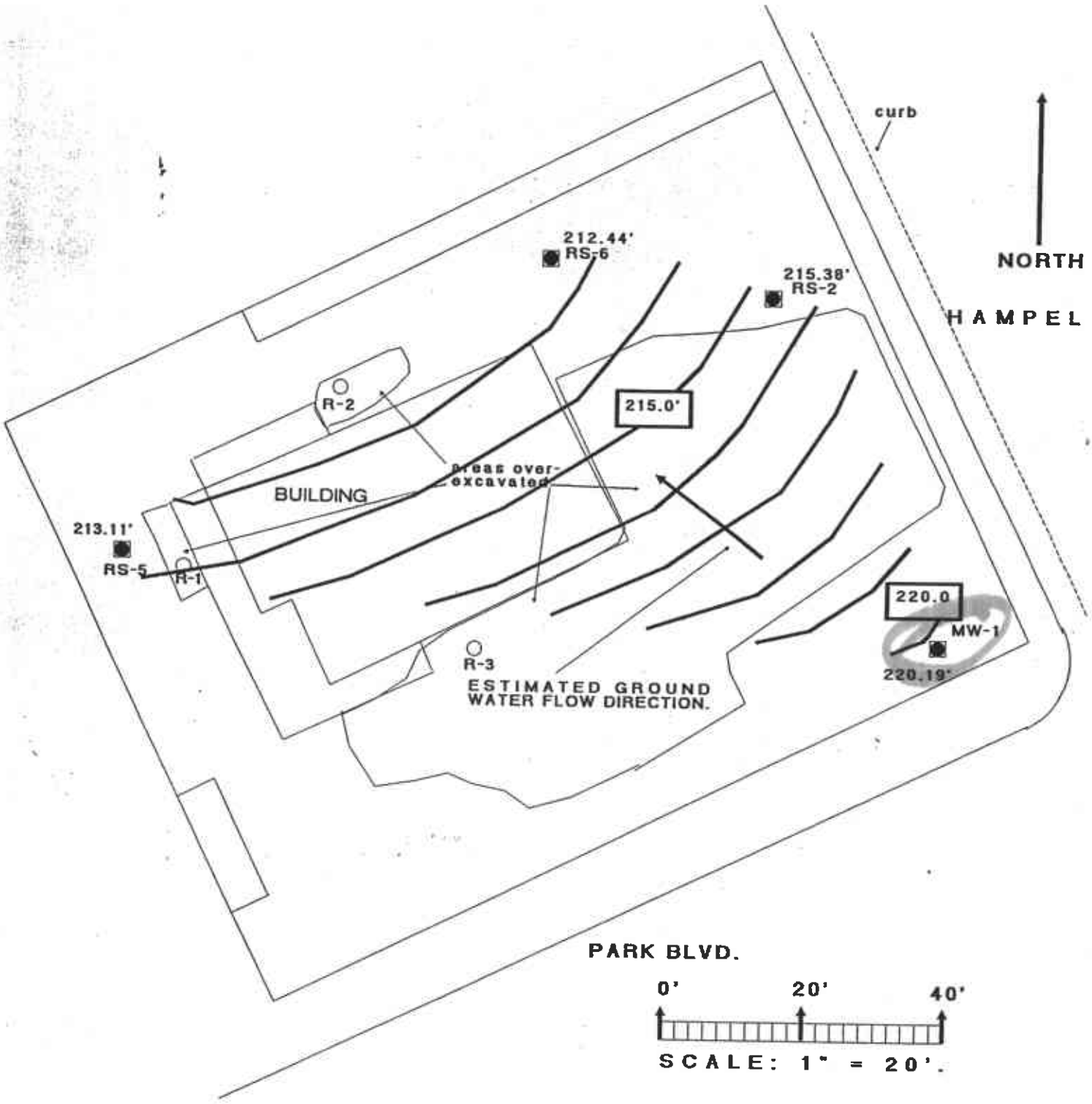
FIGURE 2,, USGS TOPOGRAPHIC MAP



DESERT PETROLEUM STATION #793
4035 PARK BLVD.,
OAKLAND, CALIFORNIA 94602

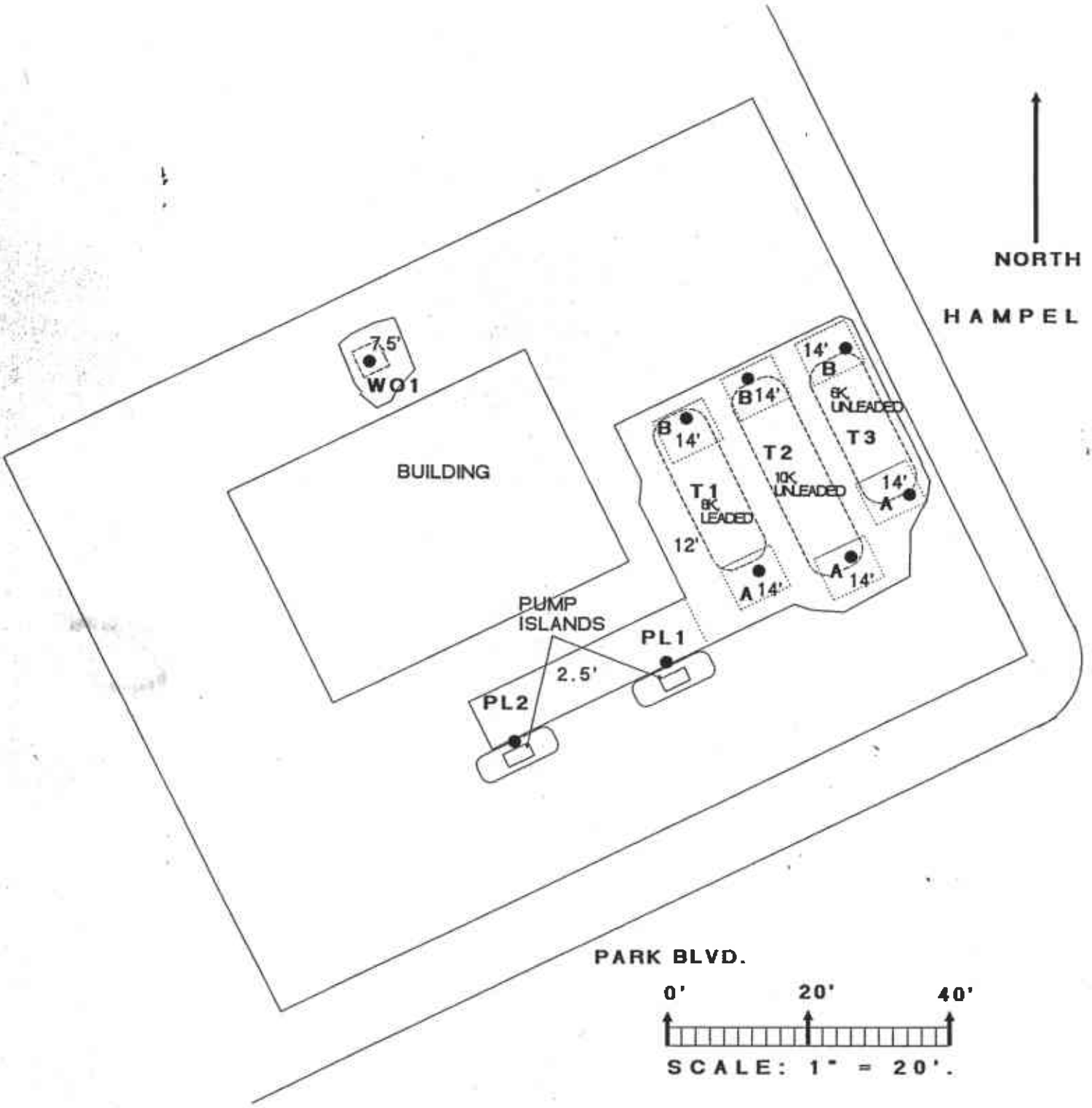
FIGURE 3
SITE BASE MAP

SEPTEMBER 8, 1995



DESERT PETROLEUM STATION #793
4035 PARK BLVD..
OAKLAND, CALIFORNIA 94602

FIGURE 4
GROUND WATER
GRADIENT MAP
OCTOBER 4, 1995



DESERT PETROLEUM STATION #793
4035 PARK BLVD..
OAKLAND, CALIFORNIA 94602

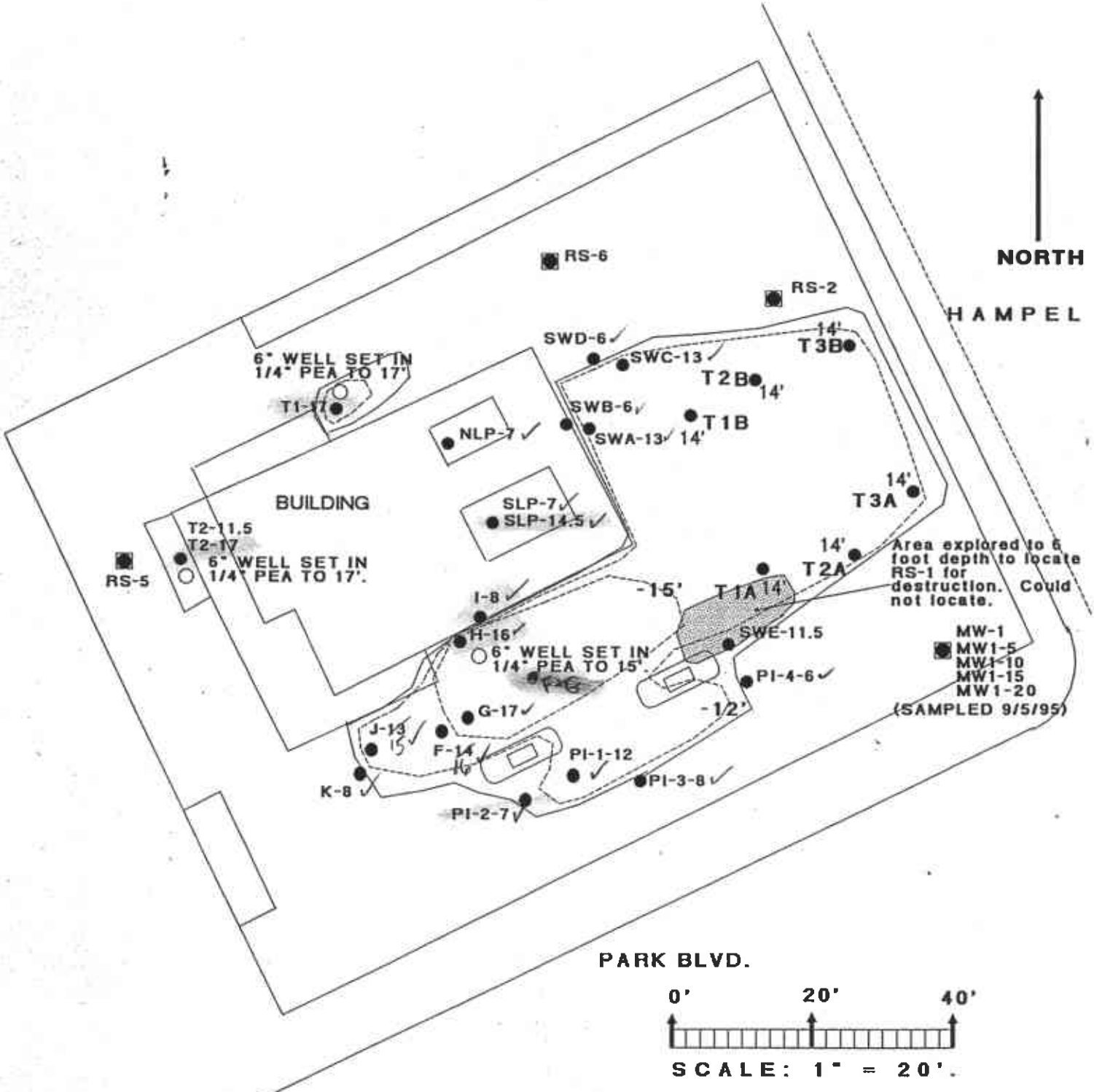
EXPLANATION:

2.5' 7.5' 12' 14'	EXCAVATION AND/OR SAMPLE DEPTH BELOW SURFACE.
T1	REMOVED TANK DESIGNATION.
● A 14'	SAMPLE POINT AND ID #.

FIGURE 5

UST AND PRODUCT LINE REMOVAL SAMPLING LOCATIONS

JUNE 23, 1994



EXPLANATION:

2.5' 7.5' 12' 14'	EXCAVATION AND/OR SAMPLE DEPTH BELOW SURFACE.
T1	REMOVED TANK DESIGNATION.
● A 14'	SAMPLE POINT AND ID #.
-1.2'	BELOW GRADE CONTOUR IN FEET BELOW SURFACE.

DESERT PETROLEUM STATION #793
4035 PARK BLVD..
OAKLAND, CALIFORNIA 94602

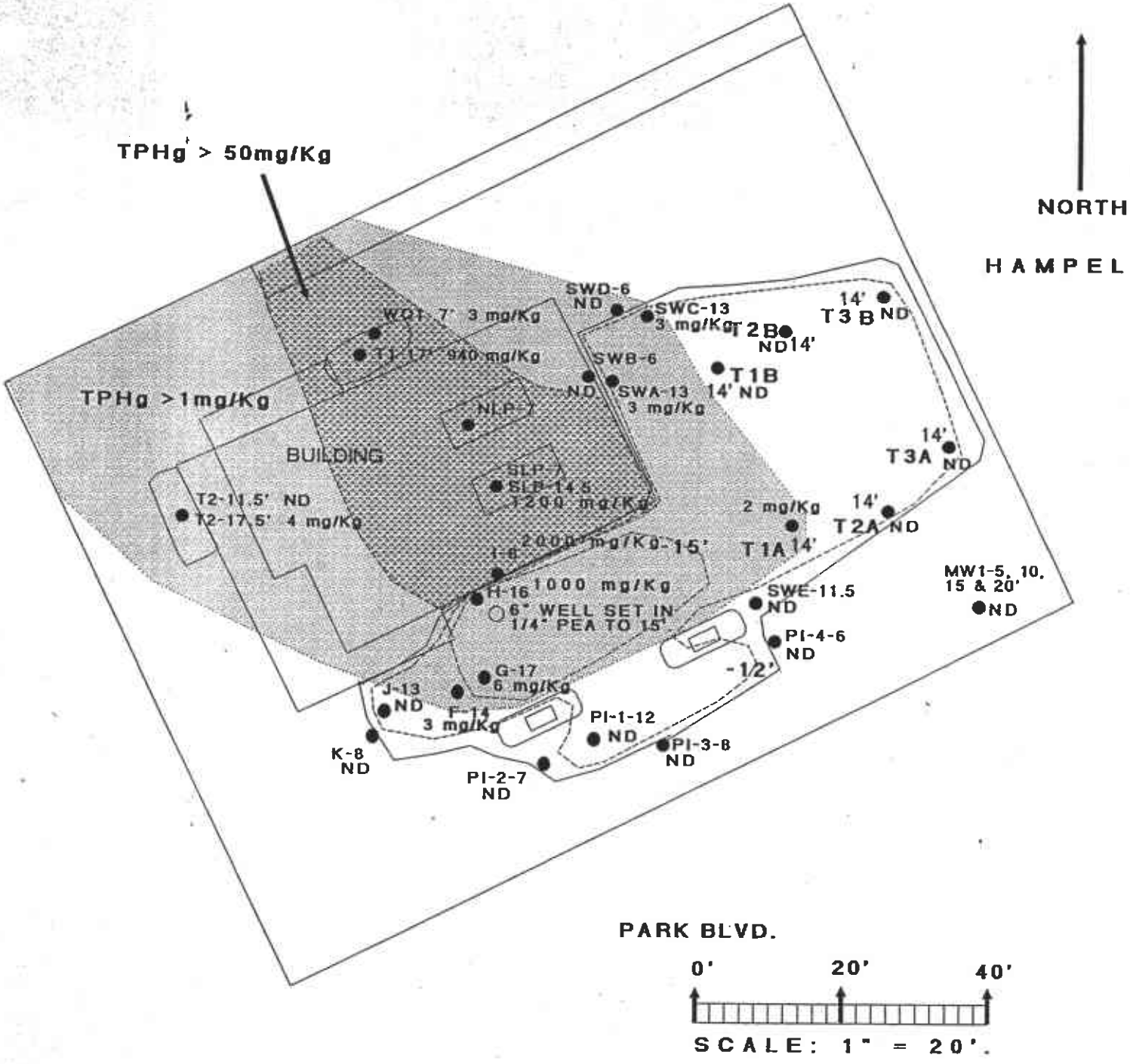
hot spots (see Table 1)

FIGURE 6

OVER-EXCAVATION SAMPLING LOCATIONS

AUGUST 8, 10, 11, 14, 16, AND 31, 1995

JE not there



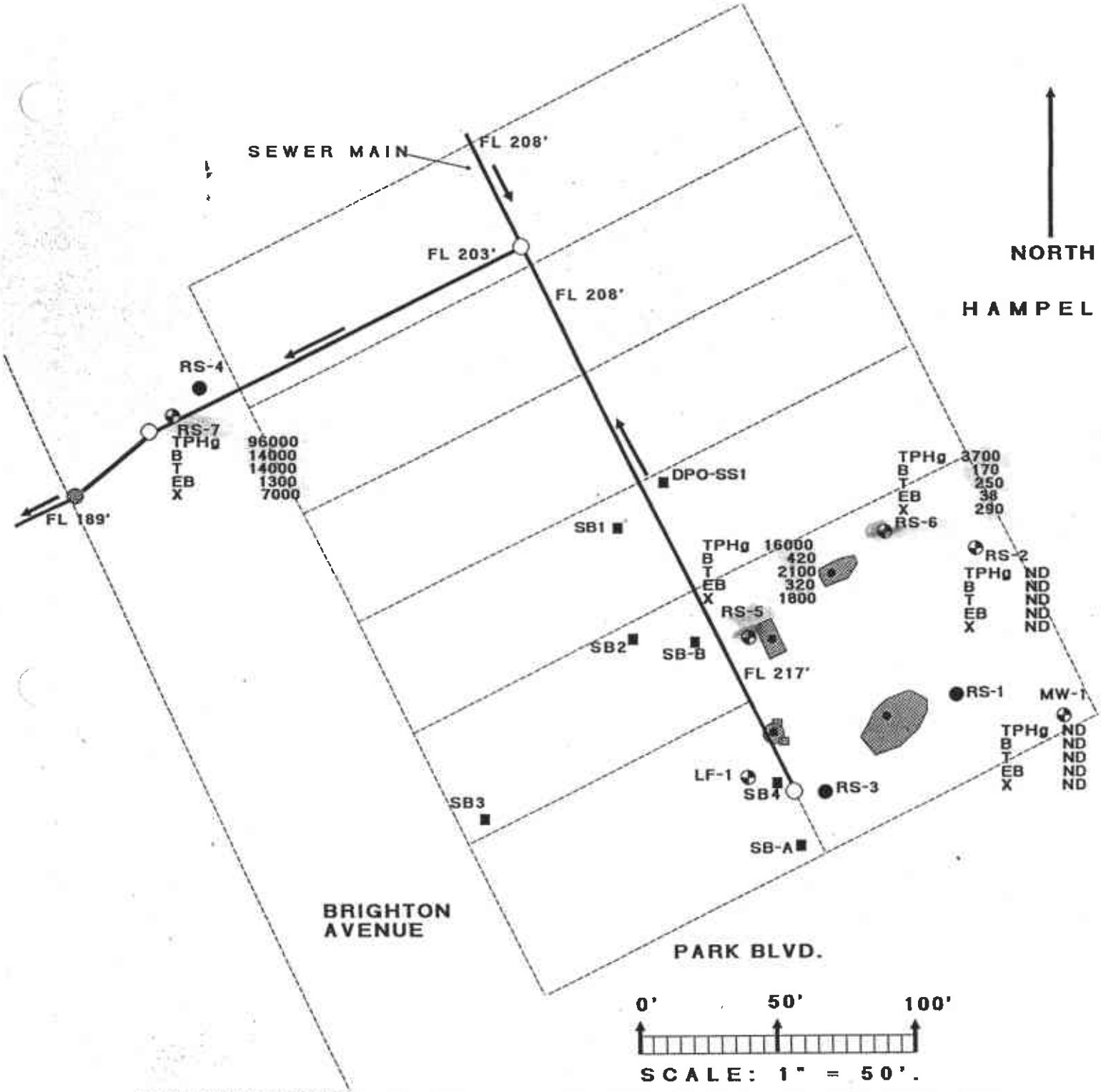
EXPLANATION:

2.5' 7.5' 12' 14'	EXCAVATION AND/OR SAMPLE DEPTH BELOW SURFACE.
T1	REMOVED TANK DESIGNATION.
● A 14'	SAMPLE POINT AND ID #.
-1-2'	BELOW GRADE CONTOUR IN FEET BELOW SURFACE.

DESERT PETROLEUM STATION #793
4035 PARK BLVD..
OAKLAND, CALIFORNIA 94602

FIGURE 7

TOTAL PETROLEUM HYDROCARBONS AS GASOLINE LEFT IN SOIL AFTER EXCAVATING ON AUGUST 31, 1995.



CONCENTRATIONS ARE IN UG/L, PPB DISSOLVED IN WATER.

RS-4 ● DESTROYED WELLS.

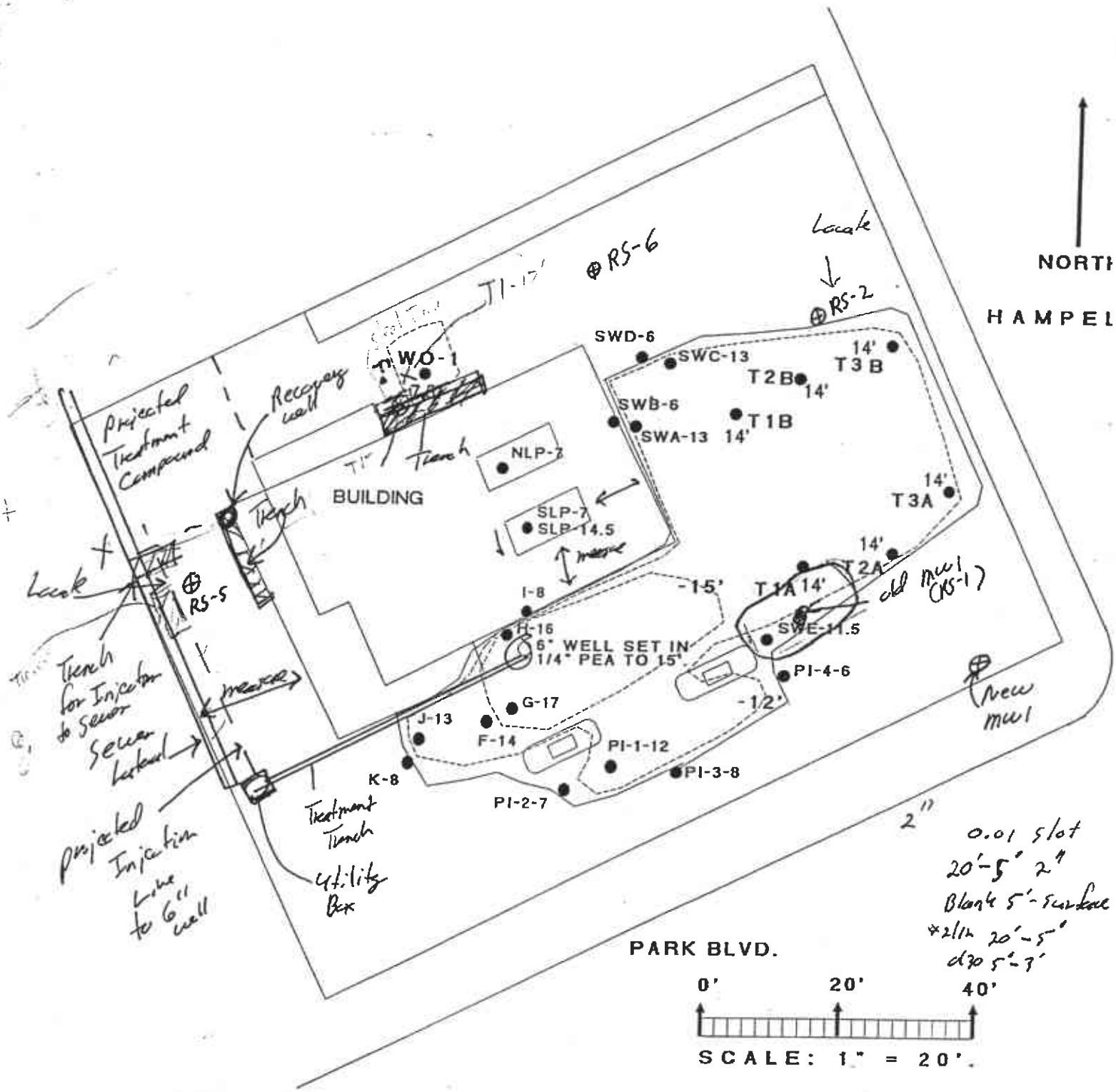
SB-A■ GRAB SOIL/WATER SAMPLE LOCATIONS.

MW-1 ◉ MONITOR WELL LOCATION WITH ID# AND GROUND WATER ANALYTICAL RESULTS:
TPHg = TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
B = BENZENE
T = TOLUENE
EB = ETHYLBENZENE
X = XYLENES

INJECTION/RECOVERY TRENCHES.

DESERT PETROLEUM STATION #793
4035 PARK BLVD..
OAKLAND, CALIFORNIA 94602

FIGURE 8
GROUND WATER
ANALYTICAL RESULTS
OCTOBER 4, 1995



EXPLANATION:

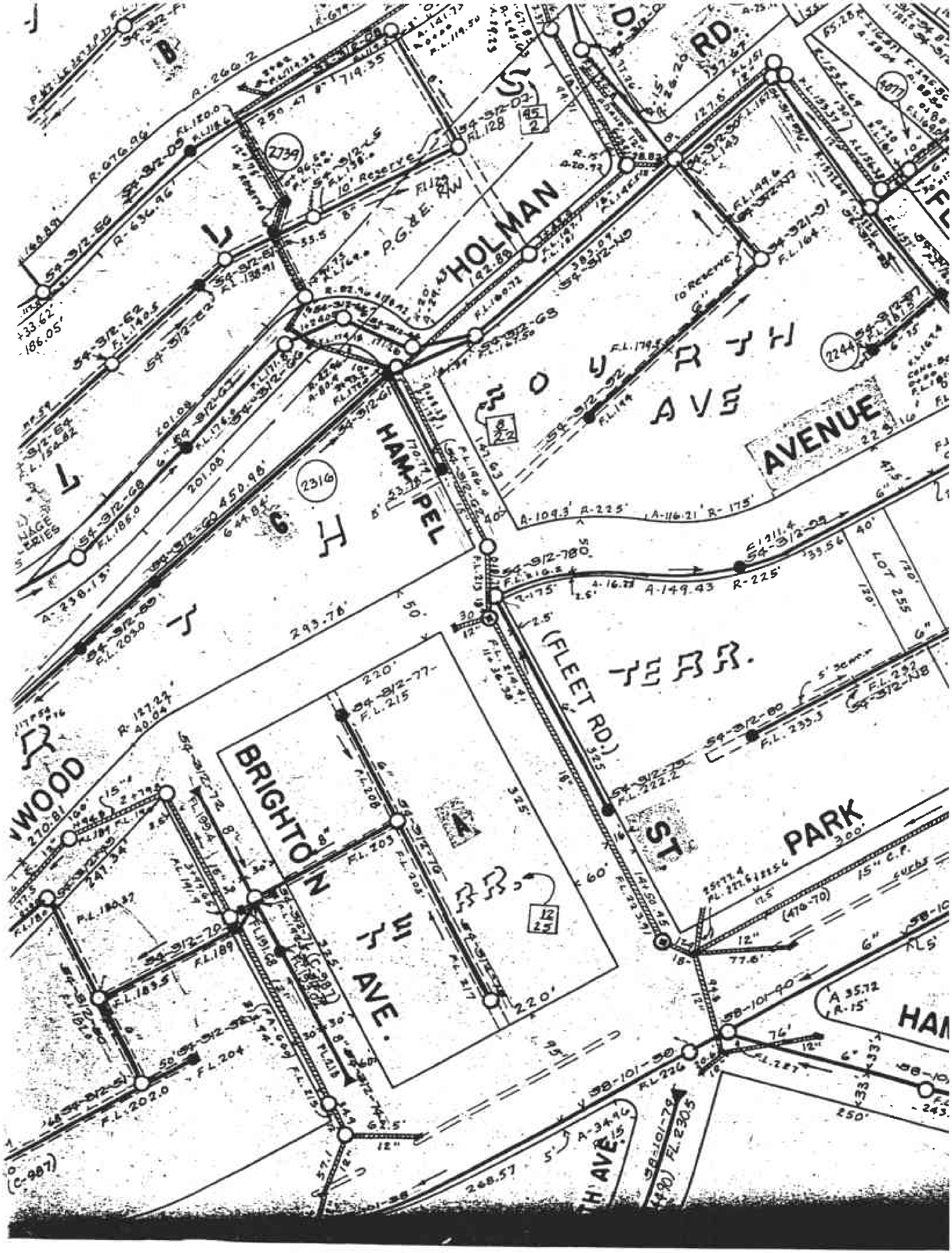
2.5' 7.5' 12' 14'	EXCAVATION AND/OR SAMPLE DEPTH BELOW SURFACE.
T1	REMOVED TANK DESIGNATION.
● A 14'	SAMPLE POINT AND ID #.
-1.2'	BELOW GRADE CONTOUR IN FEET BELOW SURFACE.

DESERT PETROLEUM STATION #793
4035 PARK BLVD..
OAKLAND, CALIFORNIA 94602

FIGURE 2

OVER-EXCAVATION SAMPLING LOCATIONS

AUGUST 8, 10, 11, 14, AND 16, 1995


HOLMAN
RD.
AVE
AVENUE
HAMPEL
(FLEET RD.)
TERR.
PARK
ST
BRIGHTON
AVE.
HAM
P.G.&E. RW
10' Reserve
2739
2316
2244
4077
54-312-60
54-312-61
54-312-62
54-312-63
54-312-68
54-312-77
54-312-78
54-312-80
54-312-70
58-101-40
58-101-50
F.L. 215
F.L. 202.0
F.L. 204
F.L. 189
F.L. 203
F.L. 233.3
F.L. 222.2
A-109.3' R-225'
A-116.21' R-175'
A-149.43
R-225'
293.78'
644.84'
201.08'
325'
220'
300'
250'
(476-70)
(C-987)
15" C.P.

-WEGE-

WESTERN GEO-ENGINEERS

PAGE 1 OF 1

BORING: MW-1

DATE DRILLED: 9/5/95

BORE HOLE LOG

DESERT PETROLEUM, INC.

▌ SAMPLE INTERVAL

▼ WATER

PROJECT: D.P. STATION #793	GEOLOGIST: G. CONVERSE	SURFACE ELEVATION:
LOCATION: 4035 PARK BLVD. Oakland, California	DRILLER: E. Forsstrom	TOTAL DEPTH: 20'
DRILLING CONTRACTOR: WOODWARD DRILLING	DEPTH TO WATER: 18'	CASING: 2" PVC TO 20'.

REMARKS: 8" hollow stem auger powered by Mobile drill rig used to drill well. HNU PID WITH 10.2 EV BULB USED TO SCREEN SAMPLES AND DRILLING.

DEPTH (FT)	SAMPLE No.	BLOWS/.5 FT	PPM TVO VAPOR	CORE DESCRPTION	GRAPHIC LOG	REMARKS
			0	3" ASPHALT SURFACE		
5'	MW1-5	2/1/2	0/0/0	CLAY, DARK BROWN, SILTY, MOIST, NO ODOR. (CL-ML) DRILL STIFF AT 8 FEET.		BORING CONVERTED INTO GROUND WATER MONITORING WELL MW-1.
10'	MW1-10	2/4/10	0/0/0	CLAY, BROWN, STIFF, DECREASE IN SILT, NO ODOR. (CL-ML)		
15'	MW1-15	6/11/17	0/0/0	CLAY, LT BROWN, STIFF, MOIST, NO ODOR, WITH OCC. GRAVEL, SBANG-ANG, QTZ & MET VOLC. (CL-GP)		
▼ 20'	MW1-20	10/17/24	0/0/0	SAND, BROWN, WET, FINE-MEDIUM, QUARTZ, SUBROUND, W/VARIG. MET VOLC/IGN. OCC PEBBLES, SUBRD, WHT. QTZ. NO ODOR. (SP-SC)		FIRST WATER @ 18' BGS.
25'						
30'						
35'						
40'						
45'						NOTE: PID CALIBRATED WITH ISOBUTYLENE AS 100 PPM VAPOR

WEGE WELL CONSTRUCTION LOG

PROJECT NAME DESERT PETROLEUM, INC — MONITOR WELL NUMBER MW-1

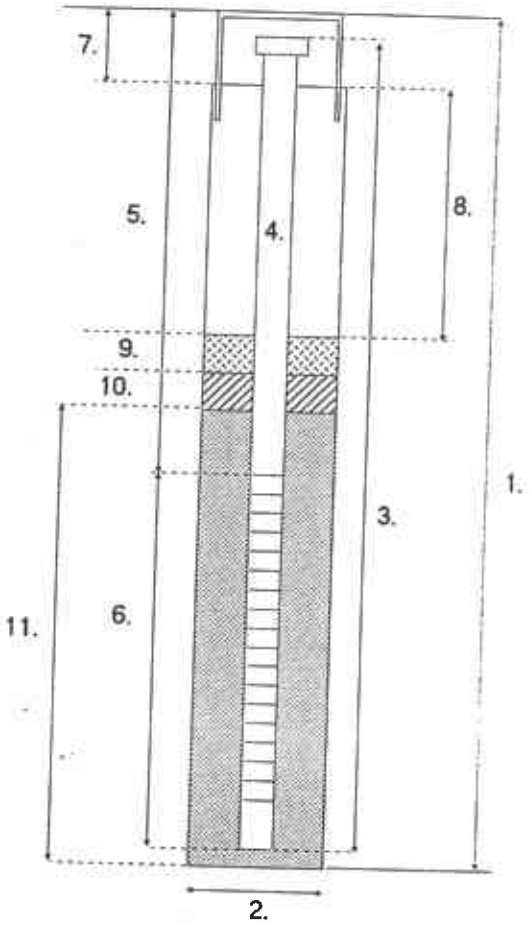
4035 PARK BLVD., OAKLAND, CA. — TOP OF CASING ELEVATION

PROJECT NUMBER DP #793 — DATE COMPLETED 9/5/95

WELL TYPE 2" PVC GROUND WATER MONITORING WELL

REMARKS: UPGRADIENT REPLACEMENT GROUND WATER MONITORING WELL. REPLACES RS-1, DESTROYED DURING OVER-EXCAVATION OF UST AND PUMP ISLAND AREAS.

TYPICAL MONITORING WELL



WELL CONSTRUCTION

1. Total Depth of hole 20.0'
2. Diameter of boring 8"
3. Casing length 20'
4. Casing diameter 2"
5. Depth to top of screen 10'
6. Length of screen 10'
   screen interval 10'-20'
   screen type sch 40 PVC F480
   screen size 0.010"
7. Surface seal surface - 1'
   seal material TB w/concrete
8. Backfill 1' - 6'
   seal material neat cement.
9. Upper seal 6'-7.8'
   seal material 1/4" hydrated bentonite pellets.
10. Lower seal 7.8"-10'
    seal material #030 Sand
11. Annulus 10' - 20'
    material #2/12 sand

NOTE EACH WELL CONSTRUCTED WITH POLY-VINYL CHLORIDE (PVC) CASING WITH TREADED BOTTOM CAPS AND WATER TIGHT LOCABLE TOP CAPS. ALL PVC STEAM CLEANED PRIOR TO CONSTRUCTION OF WELL.

DESERT PETROLEUM STATION #793
Oakland, CA
Date: 12-11-89
Time Started/Finished: 9:00/1:00 (12-12-89)
Sampling Method: Mod Cal
Rig Type: MOBILE B-61 HSA
Drilling Contractor: Datum

well to destroy
BORING/MONITORING WELL: RS-1
Logged By: BJM
Casing Size & Type: 4" PVC
Screen Size & Type: 4" PVC; 0.020" Slots
Filter Pack: #3 Sand
Traffic Cover Elevation:
Datum/Reference:

DEPTH (FEET)	SAMPLE INT.	PID ppm	BLOWS PER HALF FOOT	WELL DETAILS	USCS	SOIL DESCRIPTION AND NOTES
0						
5	X	110	2, 3, 3		CL	SILTY CLAY, BLACK, VERY DAMP, SLIGHT HYDROCARBON ODOR.
10	X	52	7, 10, 13		CL	CLAY, BLACK, VERY MOIST, "STICKY", SLIGHT HYDROCARBON ODOR.
15	X	105	17, 22, 28			CLAY, BROWN, DAMP, MALLEABLE, NO HYDROCARBON ODOR.
20	X	102	14, 17, 21		SC	CLAYEY SAND WITH SOME GRAVEL, GREY-TAN, FINE-MEDIUM GRAIN, DAMP, NO HYDROCARBON ODOR.
						12-11-89
						12-12-89
25	X	50	11, 13, 18		CL	SANDY CLAY WITH GRAVEL, TAN, FINE GRAIN, SAMPLER WET BUT SAMPLE IS NOT SATURATED, SLIGHT HYDROCARBON ODOR.
30	X	5	21, 37, 50		SC	CLAYEY SAND WITH SOME GRAVEL, TAN, MEDIUM-COARSE GRAIN, SAMPLER WET BUT SAMPLE IS NOT SATURATED, NO HYDROCARBON ODOR.
						TD AT 31 FEET.
						CSG AT 30 FEET.
35						
40						
45						

RCI