SOIL AND GROUNDWATER CONTAMINATION ASSESSMENT, PHASE 2 98 MH AND EDES AVENUES OAKLAND, CALIFORNIA SCI 272.016

April 10,1990

Prepared for:

Mr. James Abron Construction City of Oakland 7101 Edgewater Drive Oakland, California 94621

By:

William K. Wikander

Geotechnical Engineer 892 (expires 12/31/92)

R. William Rudolph

Geotechnical Engineer 741 (expires 12/31/92)

Subsurface Consultants, Inc. 171 12th Street, Suite 201 Oakland, California 94607 (415) 268-0461

April 10, 1990 >





I INTRODUCTION

This report records results of our Phase 2 soil and groundwater contamination assessment of the 98th and Edes Avenues site in Oakland, California. The site is located at the northeast corner of the intersection of 98th and Edes Avenues, as shown on the Site Plan, Plate 1. We previously performed a preliminary soil contamination assessment of the site, and presented the results in our report dated July 17, 1989.

The City of Oakland is currently widening 98th Avenue. In April 1989, workers encountered contaminated soil while excavating a water line trench at the site. Analytical tests of two soil samples from the trench were reported to have detected up to 350 parts per million (ppm) of total petroleum hydrocarbons (TPH). The source of contamination was unknown at this time.

Subsequent research indicated that 670-98th Avenue was formerly occupied by a Union 76 gasoline service station from about 1947 through 1983. The service station had underground storage tanks in at least 3 separate locations, as shown on the Site Plan. The tanks reportedly stored gasoline and waste oil. The service station and tanks were removed in 1983.

In addition, 692-98th Avenue was formerly occupied by a Richfield service station from about 1949 through 1963. We understand that four, 1000-gallon underground storage tanks were removed from the site in 1970. The former location of these

underground storage tanks is unknown. We anticipate that the tanks stored gasoline; however, it is possible that at least one of the tanks stored diesel or waste oil.

During our preliminary assessment, we obtained soil samples from 14 test borings on the site. Analytical tests indicated that they contained total volatile hydrocarbons (TVH), total extractable hydrocarbons (TEH), total oil and grease (TOG), and benzene, toluene, xylenes and ethylbenzene (BTXE).

In our July 17, 1989 report, we recommended that the most significantly contaminated soil at the site be excavated, treated (if practical) and properly disposed. We judged that it would be impractical to remove all of the contaminated soil and that an acceptable clean-up level should be negotiated with the Alameda County Health Care Services Agency (ACHCSA) and San Francisco Bay Regional Water Quality Control Board (RWQCB).

We understand that the current policy of the ACHCSA and RWQCB is to allow soil with TPH (which includes TVH, TEH and TOG) concentrations between 100 and 1000 ppm to remain in-place if "sufficient evidence is provided which indicates no adverse effects of groundwater will occur". However, the RWQCB and ACHCSA strongly recommend clean up levels of 100 ppm or less. Consequently, it was necessary to develop information regarding: (1) the depth, gradient, flow direction of groundwater, (2) contaminant concentrations in the groundwater, and (3) the extent of soil containing TPH concentrations greater than 100 ppm.

The purpose of this Phase 2 study, as outlined in our proposal dated January 16, 1990, was to evaluate subsurface and groundwater conditions, in order to develop conclusions and recommendations regarding:

- Subsurface conditions,
- 2. Groundwater gradient and flow direction,
- 3. The presence of TPH and BTXE in the samples tested,
- 4. The estimated extent of soil with TPH concentrations greater than 100 ppm at the site,
- 5. The significance of contaminant levels with respect to state and local regulatory criteria, and
- The scope of future investigations/monitoring, if necessary.

II FIELD EXPLORATION

Prior to field exploration, a permit to install six groundwater monitoring wells was obtained from the Alameda County Flood Control and Water Conservation District, Zone 7.

On February 7 through 9, 1989, eleven test borings were drilled at widely spaced locations at the site, as shown on the Site Plan. The groundwater monitoring well locations were chosen such that wells were located both up- and downgradient from the known former tank sites. The six deeper test borings extended to depths of 20 to 29 feet. The five shallower test borings were 11 to 15 feet deep. Upon completion of drilling, groundwater monitoring wells were installed in the deeper boreholes, in

accordance with requirements of the RWQCB. The shallower boreholes were backfilled with cement/bentonite grout using tremie methods.

The boreholes were drilled using truck-mounted, 8-inch-diameter, hollow-stem auger equipment. The drilling and sampling equipment was steam-cleaned prior to each use. Soil cuttings generated during drilling were encapsulated in polyethylene sheets, for later disposal by others.

Our geologist/engineer observed drilling operations and prepared logs of the soils encountered. The Logs of Test Borings are presented on Plates 2 through 19. The boring logs from our previous investigation are included, for completeness. The soils are classified in accordance with the Unified Soil Classification System described on Plate 20. Undisturbed soil samples were obtained from the test borings at 5-foot intervals. The samples were retained in brass liners. Teflon sheets were placed over the liner ends prior to capping, taping and labelling. The samples were refrigerated until delivery to the analytical laboratory. The samples were accompanied by Chain-of-Custody Records, copies of which are presented in the Appendix.

Schematics of the groundwater monitoring wells, as installed, are shown on the Logs of Test Borings. In summary, the monitoring wells consist of 2-inch-diameter, machine-slotted PVC pipe. All of the pipe is joined by threads (no gluing nor riveting). The wells extend about 15 feet below the groundwater

level measured during drilling. The well heads are provided with locks, and are set below grade in utility boxes.

The wells were developed by bailing, until the water became relatively clear. The bailer was cleaned with Alconox and rinsed with distilled water prior to each use. About 55 gallons of water was removed from each well. The removed water was placed in steel drums for later disposal by others. Dedicated. precleaned, Teflon sampling devices were installed in each well. Groundwater samples were obtained using the dedicated samplers. The water samples were placed in pre-cleaned containers and refrigerated until delivery to the analytical laboratory. samples were accompanied by Chain-of-Custody Records, copies of which are presented in the Appendix.

ANALYTICAL TESTING

Soil and groundwater analytical testing was performed by Curtis and Tompkins, Ltd., a State of California Department of Health Services (DHS) certified analytical laboratory for the tests performed. The former underground tanks stored gasoline. oil and (possibly) diesel fuel. Accordingly, the analytical tests of soil and groundwater included:

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TVH, sample preparation and analysis using EPA Methods 5030 (purge and trap) and 8015 modified (gas chromatograph coupled to a flame ionization detector), Total Attachole higher actoms

TEH, sample preparation and analysis using EPA Methods 3550 (sonication) and 8015 modified,

- 3. TOG, sample preparation and analysis using EPA Method 3550 (solvent extraction) and SMWW M503E (gravimetric determination), and
- 4. Purgeable aromatics (including BTXE), sample preparation and analysis using EPA Methods 5030 (purge and trap) and 8020 (gas chromatograph coupled to a photo-ionization detector).

The site vicinity is occupied by a number of industrial facilities, which may involve the use of solvents. In addition, solvents are sometimes stored in waste oil tanks. Accordingly, the analytical tests on groundwater samples also included:

1. Purgeable halocarbons, sample preparation and analysis using EPA Methods 5030 and 8010 (gas chromatograph and electrolytic conductivity detector).

The results of analytical tests for fuel constituents in soil and groundwater samples are summarized in Tables 1 and 2. The results of analytical tests for purgeable halocarbons in the groundwater samples are summarized in Table 3.

Table 1. Summary of Analytical Tests for Fuel Constituents in Soil

Sample	TVH (ppm) ²	TEH1	TOG	Benzene (ppm)	Toluene (ppm)	Total Xylenes (ppm)	Ethyl- Benzene (ppm)
MW1 @ 8' MW1 @ 10. MW1 @ 12'	ND ³ 5 ND ND	732 	 	0.329 1. 690 0.072	0.007 12.8 0.004	0.130 48.3 0.002	0.070 9.47 0.006
MW2 @ 6' MW2 @ 9' MW2 @ 12'	ND ND ND	293 ⁵	278 	ND ND ND	ND 0.355 ND	ND 3.98 3.74	ND 0.81 0.74
MW3 @ 6'	ND 14.4	352 _.	840	ND ND	ND ND	ND 10.2	ND 1.99
MW4 @ 4.5 MW4 @ 10. MW4 @ 13.	5' ND	ND 	ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND
MW5 @ 9' MW5 @ 11'	ND ND	ND 		ND ND	ND 0.003	ND ND	ND ND
1 @ 7' 1 @ 10' 1 @ 13.5'	ND 1,100 ND	ND 	60 	ND ⁶ 8.1 0.025	ND ⁶ 2.6 0.015	ND ⁶ 120 0.230	ND ⁶ 31 0.052
2 @ 5' 2 @ 9' 2 @ 11'	280 1,100 13,000	 	 	3.1 16` 	17 31 	72 130 	12 39
3 @ 4' 3 @ 7' 3 @ 10'	20 ND 260	 	 	0.39 1.7	0.90 6.2	1.7 26	0.33 3.1
4 @ 3' 4 @ 9'	14 150		 	0.83 4.7	1.1 5.9	3.6 4.9	0.71 6.8
5 @ 7' 5 @ 10' 5 @ 12'	130 930 2,600	 	770 tile 21	4.7 11	17 32	58 90	13 20
6 @ 6' 6 @ 9'	ND 45	 ND		ND 1.1	ND 1.2	ND 16	ND 2.2
7 @ 3' 7 @ 9 '	45 200		 	3.7 5.2	6.0 8.3	14 16	2.6 2.9
8 @ 7' 8 @ 10'	ND 120			ND 15	0.018 0.27	ND 	ND 4.7
9 @ 8' 9 @ 11'	ND 100	 		0.017 0.50	ND 0.32	ND 7.3	ND 2.4

Sample	TVH (ppm) ²	TEH ¹	TOG (ppm)	Benzene (ppm)	Toluene (ppm)	Total Xylenes (ppm)	Ethyl- Benzene (ppm)
10 @ 2' 10 @ 8'	ND ND			ND ND	0.048 0.12	0.047 ND	0.012 ND
11 @ 3' 11 @ 8'	16 150			0.94 3.3	1.9 6.3	2.5 15	0.48 3.4
12 @ 4' 12 @ 8' 12 @ 10'	ND 440 310	ND 	 	ND 1.5	0.046	ND 13	ND 2.9
13 @ 8' 13 @ 11' 13 @ 13'	9,600 25,000 28	67 	ND 	23 ⁶ 	270 ⁶ 	1,000 ⁶ 	190 ⁶
14 @ 12.5	730						***
15 @ 6' 15 @ 9.5' 15 @ 10.5	ND 0.737 ' 56.6	16 15 4 0	 	ND 0.75 39.1	0.003 8.32 260	0.006 49.0 519	0.004 9.25 96.2
16 @ 4' 16 @ 7' 16 @ 11.5	ND 0.641 ' 10.2	62 5650	 	ND 0.4 13.1	0.079 2.13 81.9	0.005 8.06 146	ND 1.43 25.3
17 @ 8.5' 17 @ 10' 17 @ 11.5	ND ND ' ND	ND	 	ND ND ND	0.007 0.037 0.007	ND 0.444 0.135	ND 0.108 0.038
18 @ 8' 18 @ 9.5' 18 @ 11.5	ND 0.766 '0.703	138 	ND	ND 0.333 0.122	0.008 1.39 0.236	0.012 11.5 1.53	0.003 2.63 0.552
19 @ 10'	, ND	'.		ND	0.007	ND	ND
20 @ 9'	ND			ND	0.007	0.011	0.003
21 @ 7.5' 21 @ 9.5' 21 @ 11.5 21 @ 13'	ND ND '0.754 ND	16 20	ND 	ND ND ND ND	0.005 0.072 0.860 0.017	0.016 0.970 2.73 0.07	0.007 0.280 0.73 0.024

Gasoline range unless otherwise noted

Parts per million (mg/kg)

Gasoline range: 246 ppm; motor oil range: 47 ppm

None detected, see test data sheets in Appendix for detection limits

Not tested for the material listed

Analytically tested using EPA 8240, all others using EPA 8020 unless noted otherwise

Table 2.
Summary of Analytical Tests for Fuel Constituents in Groundwater

		1-1	11)		Total	Ethyl-	
Sample	TVH (ppb) ²	TEH1	TOG (ppb)	Benzene (ppb)	Toluene (ppb)	Xylenes (ppb)	Benzene (ppb)
MW1	55.1	100	ND ³	60.8	11.9	19.9	ND
MW2	35.1	100	ND	ND	ND	4.0	1.3
MW3	ND	100	ND	ND	ND	2.9	ND
MW4	ND	ND	ND	ND	ND	ND	ND
MW5	ND	ND	ND	ND	ND	ND	ND
18	134,000	17,000	120,000	3,730	8,920	22,500	5,430

Gasoline range

Table 3. Summary of Analytical Tests for Purgeable Halocarbons

Sample	1,1-DCA (ppb) ¹	1,1-DCE (ppb)	Dichloro- methane (ppb)	PCE (ppb)	1,1,1-TCA (ppb)	TCE (ppb)	Other (ppb)
Water:							
MW1 MW2 MW3 MW4 MW5 18 ³	ND ² 4.9 ND ND ND ND ND ND	ND 7.1 5.7 ND ND ND	9.0 7.9 69.2 15.3 ND ND	2.4 8.5 1.6 67.4 1.4 ND	5.1 11.6 17.1 1.8 1.3 ND	11.8 25.1 21.7 2.4 1.0 ND	ND ND ND ND ND
Soil:							
MW2@9'	ND	ND	ND	ND	ND	ND	ND

Parts per billion (ug/kg or ug/L)

Parts per billion (ug/L)

None detected, see test data sheets in Appendix for detection limits

None detected, see test data sheets in Appendix for detection limits

³ High detection limit due to high TVH level

IV SITE CONDITIONS

A. Geology

The site is located on a broad alluvial plain between the Berkeley Hills to the east, and San Leandro Bay to the west. The site is relatively level, situated at an elevation of approximately 20 feet (MSL Datum). San Leandro Creek is located about 4,000 feet to the south. Our main source of information regarding the site geology was "Geohydrology and Groundwater-Quality Overview, of the East Bay Plain Area, Alameda County, California," dated June 1988, by the Alameda County Flood Control and Water Conservation District, Report 205J.

The site is underlain by successively deeper layers of fluvial deposits, younger alluvium, older alluvium and bedrock. The fluvial deposits extend to depths of up to about 15 feet. They were deposited along steams and flood plains and consist of fine grained sands, silts and clayey silts with thin beds of coarse sand. They are generally finer grained than the younger alluvium beneath. The younger alluvium layer is up to about 50 feet thick. It is a typical alluvial fan deposit and consists mostly of clay and silt. The older alluvium layer is up to about 900 feet thick in the area. It is derived of sediments from the hills to the east, and represents successive coalescing alluvial fans. It consists of a heterogeneous mixture of clay, silt, sand and gravel.

B. Site Conditions

For discussion purposes, we will assume that 98th Avenue borders the west side of the site. The relatively level site is bordered by 98th and Edes Avenues to the west and south, vacant land to the east, and a construction equipment rental company storage yard to the north. Located across 98th Avenue from the site are one-story structures housing a liquor store, pizza parlor and grocery store. Vacant land is located across Edes Avenue.

Due to recent construction operations associated with the widening of 98th Avenue, clayey native soils are exposed over much of the groundsurface. Sand backfill is evident where underground tanks and fuel lines previously existed at the former Union 76 station site. An underground water line, including at least 2 laterals, and an underground storm drain lateral, have recently been constructed across the site. A joint trench has been constructed, that terminates at the north and south sides of the site.

C. Subsurface Conditions

Our interpretation of subsurface conditions at the site, based upon data from the test borings, is presented on Plate 21, Cross-Sections. Subsurface conditions at the site consist of successively deeper layers of silty clays (at the groundsurface), clayey sands and gravels, and silty and sandy clays. In areas where previous underground tanks and fuel lines were located, the excavations have been backfilled with sand. The surface layer of

silty clay extends to depths of about 8 to 15 feet. The clayey sands and gravels beneath extend to depths of 22 to 24 feet, except near well MW-2, where they extend to the depths drilled (30 feet). The silty and sandy clays beneath the clayey sands and gravels extend to depths of 25 feet near well MW-1 (where they are underlain by clayey sand) and to the depths drilled elsewhere. This suggests that this silty and sandy clay may be a relatively thin layer within a larger clayey sand and gravel layer.

Groundwater was encountered at depths of about 8 to 10 feet in the monitoring wells. Groundwater levels are more thoroughly discussed in the subsequent Groundwater Level Measurements section of this report. We did not observe free product, nor a sheen, on the groundwater surface in the monitoring wells.

Significant organic vapors were measured, using an organic vapor meter (OVM), in soils from all of the test borings except MW-4, MW-5, 19 and 20. OVM readings are shown on the Logs of Test Borings. The highest readings were generally recorded in soils situated just above the groundwater level.

V GROUNDWATER LEVEL MEASUREMENTS

A level survey, using an assumed elevation reference, was performed to determine the top of casing (TOC) elevation of each of the monitoring wells. The depth to groundwater, below the top of each casing, was periodically measured using a well sounder. The direction and gradient of groundwater flow was determined, based upon this data. The flow direction and contours for the March 6, 1990 reading are shown on the Site Plan. The results of the readings to date are summarized in Table 4.

Table 4. Summary of Groundwater Data

	M	W-1	MW-	-2	MW-3		
	TOC Elev.	99.40 ft.	TOC Elev.	99.72 ft.	TOC Elev.	99.74 ft.	
	Ground	water	Groundwater		Groundwater		
	Depth	Elev.	Depth	Elev.	Depth	Elev.	
<u>Date</u>	<u>(ft.)</u>	<u>(ft.)</u> 1	<u>(ft.)</u>	<u>(ft.)</u>	<u>(ft.)</u>	<u>(ft.)</u>	
3/1/90	8.95	90.45	8.85	90.87	9.17	90.57	
3/6/90	8.55	90.85	8.46	91.26	8.78	90.96	
3/23/90	9.17	90.23	9.02	90.70	9.35	90.39	

		₩ -4		₩-5	18	
		100.93 ft.				99.17 ft.
	Ground	dwater	Groun	dwater	Groundwater	
<u>Date</u>	Depth (ft.)	Elev. (ft.) ¹	Depth (ft.)	Elev. (ft.)	Depth (ft.)	Elev. (ft.)
3/1/90 3/6/90 3/23/90	9.98 9.60) 10.20	90.95 91.33 90.73	9.61 9.23 9.80	90.96 91.34 90.77	8.53 8.11 8.73	90.64 91.06 90.44

Elevation reference: Top of curb at fire hydrant on Edes Avenue (see Site Plan), is assumed to be at elevation 100.00 feet

VI DISCUSSION AND CONCLUSIONS

A. Soil Contamination

Soil samples from the site contained detectable concentrations of TPH and purgeable aromatics (BTXE). The predominant contaminant appears to be old gasoline. This conclusion is based upon: (1) the relatively small amounts of benzene measured in the soil samples, compared to those of the less volatile toluene, xylenes and ethylbenzene, and (2) higher concentrations of gasoline being measured as TEH, than as TVH (which measures the more volatile constituents of gasoline). The gasoline appears to be from at least three sources: (1) the former Union 76 service station tank site next to Edes Avenue (near Boring 13), (2) the former Union 76 station tank site about 80 feet north of Edes Avenue (near Boring 1), and (3) the former Richfield fuel station opposite Walter Avenue (near Well MW-2).

The approximate lateral extent of soil containing TPH concentrations above 100 ppm is shown on the Site Plan. The lateral extent is not well defined in two areas: (1) the west side of 98th Avenue, downgradient from the former tank sites, and (2) opposite Walter Avenue, upgradient from the former Richfield fuel station. We judge that the soil contamination downgradient from the source is likely due to gasoline floating on the groundwater surface.

The vertical extent of soil contamination is shown on the Cross-Sections. Most of the soil contamination appears to be located in a 2- to 4-foot thick layer near the groundwater surface. However, thicker zones of contamination appear to exist within and near to the former tank backfills.

B. Groundwater Contamination

Groundwater samples from the site contained detectable concentrations of petroleum hydrocarbons (including TVH, TEH and TOG), purgeable aromatics (BTXE) and several purgeable halocarbons. BTXE are soluble constituents of gasoline; the halocarbons detected in the water samples are relatively common solvents. The sum of the hydrocarbon constituents, and the sum of the purgeable halocarbon constituents measured in groundwater from each well, are shown on the Site Plan. No detectable concentrations of TPH were encountered in the wells upgradient of the former contaminant sources. However, TPH was encountered in the downgradient wells. Accordingly, we conclude that the former fuel tanks are the likely sources of fuel hydrocarbon contamination in the area.

Water samples from all of the wells except Well 18, contained low concentrations of purgeable halocarbons. At Well 18, the analytical detection limits were greater than the halocarbon concentrations measured in water samples from the other wells. This was due to relatively high TVH concentrations, which affected detection limits. The waste oil tank at the former Union 76 station is a possible source of solvents

(purgeable halocarbons) in portions of the site. However, purgeable halocarbons are present in groundwater samples from upgradient wells, suggesting that they are more likely associated with an off-premises source.

A summary of the highest concentrations of BTXE and purgeable halocarbons detected in groundwater, and their Title 22 Action Levels or DHS recommended action levels, is presented in Table 5.

Recommendations regarding site remediation will be presented in a subsequent report. We recommend that this report be provided to the ACHCSA and RWQCB at the following addresses:

Mr. Ariu Levi Alameda County Health Care Services Agency Hazardous Materials Program 80 Swan Way, Room 200 Oakland, California 94621

Mr. Lester Feldman California Regional Water Quality Control Board San Francisco Bay Region 1111 Jackson Street, Room 6040 Oakland, California 94607

where are the wells slotted?

Table 5. Highest BTXE and Purgeable Halocarbon Concentrations Detected in Groundwater

Compound	Highest On-Site Concentration (ppb)1	Title 22 Action Level (ppb)
Benzene	3,730	1.0
Toluene	8,920	100 ²
Total Xylenes	22,500	1,750
Ethylbenzene	5,430	680
1,1-Dichloroethane (1,1-	DCA) 4.9	5.0 ²
1,2-Dichloroethylene (1,	1-DCE) 7.1	6.0
Dichloromethane	69.2	40.0 ²
Tetrachloroethylene (PCE	67.4	5.0 ²
1,1,1-Trichloroethane (1	,1,1-TCA) 17.1	200
Trichloroethylene (TCE)	25.1	5.0

Parts per billion (ug/L)

DHS recommended action level; others are Title 22 Action Levels unless noted otherwise

List of Plates

Plate 1 Site Plan

Plates 2 thru 6 Logs of Test Borings MW-1 thru MW-5

Plates 7 thru 19 Logs of Test Borings 1-21

Plate 20 Unified Soil Classification System

Plate 21 Cross-Sections

Appendix

Analytical Test Reports Chain-of-Custody Records

Distribution

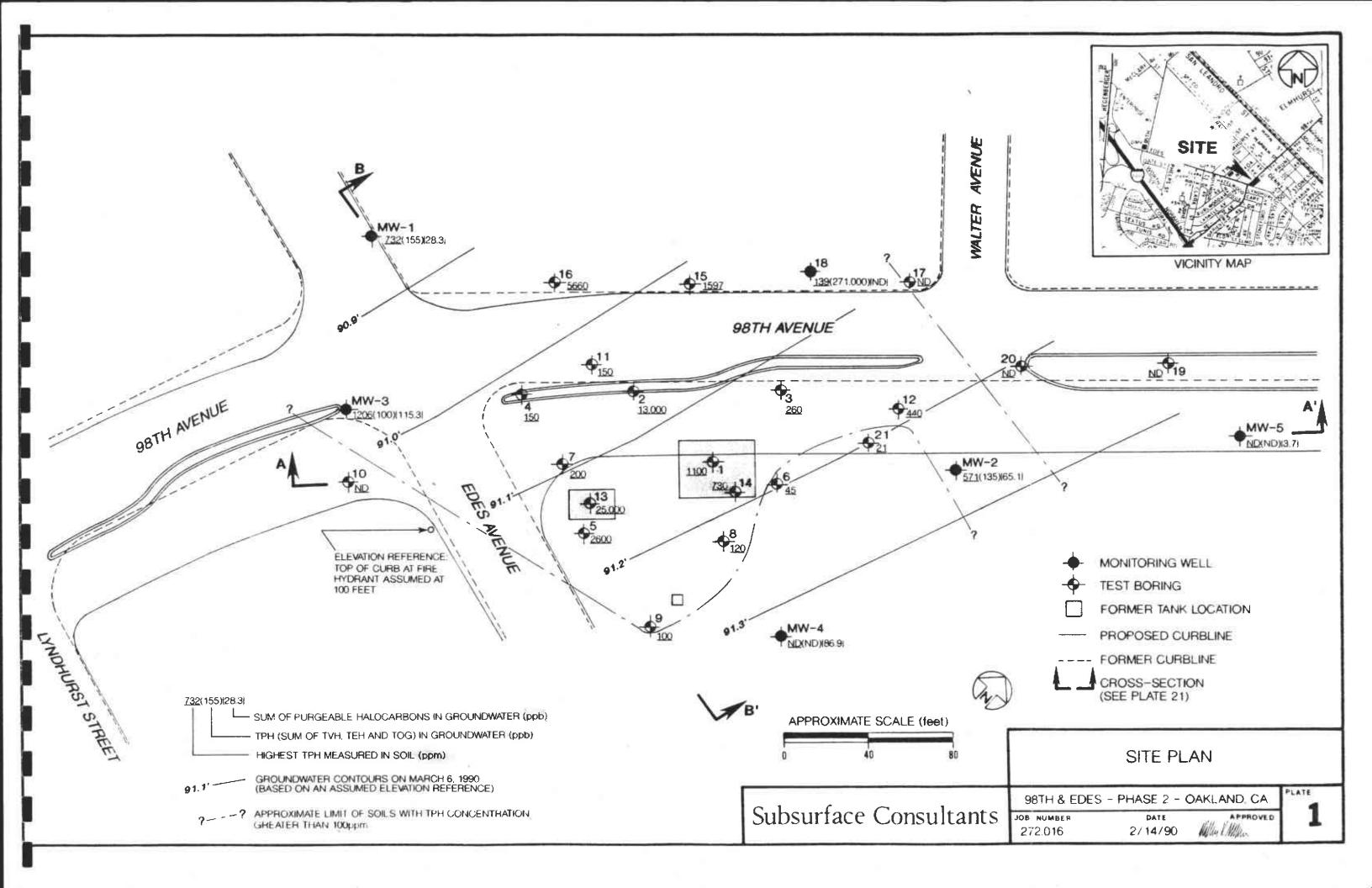
6 copies: Mr. James Abron

Construction

City of Oakland 7101 Edgewater Drive

Oakland, California 94621

WKW:RWR:JPB:mb1



LOG OF TEST BORING MW-1 EQUIPMENT 8" Hollow Stem Auger DATE DRILLED 2/7/90 BLOWS PER FOOT Down (mag cover ELEVATION 99.40 feet** ASPHALTIC CONCRETE - 15" thick valve box locking cap DARK GRAY SILTY CLAY (CL) neat cement grout medium stiff, moist, with coarse B' dia borehole grained sand 2° dia. sch. 40 MOTTLED GRAY AND OLIVE-GREEN PVC blank casing 15 SILTY CLAY (CL) 19 5 bentonite seal medium stiff, moist, with coarse grained sand and gravel #3 Lonestar sand B 329 NOB MOTTLED GRAY AND BROWN SILTY CLAY 15 (CL) 2' dia. sch. 40 medium stiff, moist 1 130 PVC well screen GRAY-GREEN SANDY CLAY (CL) (0.020' slot size) 300 TP H9-10-19 medium stiff, moist, medium grained sand 10 B FPPb 27 0.5 GROUNDWATER LEVEL DURING DRILLING GRAY-GREEN GRAVELLY SAND (SP) 1,490 000 medium dense, wet, medium to 12,800 ppb 9,470 ppb coarse grained sand, gravel to 15-32* 3/4 inch, with clay 48,500 ppb 20-45* 0 bottom cap MOTTLED GRAY AND BROWN CLAY (CL) medium stiff, moist, with coarse bentonite pellets grained sand and gravel 25-22* BROWN CLAYEY SAND (SC) medium dense, wet, medium to 30 1) coarse grained sand, with gravel to 1/2 inch SAMPLER TYPE: 30-In Water: SVING AIMSCRIAMS Dichloromethane - 9,0 pph O.D.: 2.5 inches I.D.: 2.0 inches 2.4 PCE *MODIFIED CALIFORNIA DRIVE TCE. 9.D.: 3.9 inches 11.9 I.D.: 2.5 inches 35-60 9 11.9 HAMMER WEIGHT: 140 bounds 199 HAMMER DROP: 30 inches TPH9 = 0.1ppm OVM: Organic Vapor Meter PPM: Parts Per Million (M9/K9) **Elevation reference shown on Site Plan PLATE 98TH & EDES - PHASE 2 - OAKLAND, CA Subsurface Consultants JOB NUMBER APPROVED 2/15/90 272.016 Miller I MINUS.

LOG OF TEST BORING MW-2 EQUIPMENT 8" Hollow Stem Auger DEPTH (FT) BLOWS PER FOOT DATE DRILLED 2/7/90 **₹**000 locking steel well cover cover ELEVATION 99.72 feet BROWN SANDY CLAY (CL) locking cap medium dense, moist, with grave! valve box 10 12 (fill) neat cement grout DARK BROWN SILTY CLAY (CL) 8' dia borehole medium stiff, moist 2' dia. sch. 40 MOTTLED GRAY AND BROWN SILTY PVC blank casing 20 6 \$ 15TEX CLAY (CL) 15 medium stiff, moist bentonite seal 12 TPHONET 10-#3 Lonestar sand 1900 14 2500 14 GROUNDWATER LEVEL DURING DRILLING 2" dia sch 40 PVC well screen (0.020' slot size) 15-BROWN GRAVELLY SAND (SP) medium dense, wet, fine to coarse grained sand, gravel to 1 inch 28* 0 20-In Water 43* 0 25-1,1 Dichlorothene 4.9 PPb 1,1, Dichloroethylene (Vinylidenecklonde) 7.1 PAD - bottom cap 7.9 Dichloromelhane 23* ŋ 8.5 30-DCE. 1.0 III TEA 25.1 TCE TPH9 351 ppb 35-PLATE 98TH & EDES - PHASE 2 - OAKLAND, CA Subsurface Consultants JOB NUMBER 272 016 2/15/90 APPROVED 272,916

Willer Water

LOG OF TEST BORING MW-3 EQUIPMENT 8" Hollow Stem Augor locking DATE DRILLED 2/8/90 DEPTH (FT) BLOWS PER FOOT steel well (mdd) cover cover ELEVATION 99.74 feet DARK BROWN SILTY CLAY (CL) locking cap medium stiff, moist (fill) valve box neat cement grout BROWN SANDY CLAY (CL) 8' dia borehole medium stiff, moist, with gravel 20 2" dia sch 40 (fill) PVC blank casing with cobbles from 3.5 to 4.5 feet 40 36 & BTEX bentonite seal GRAY GREEN SANDY CLAY (CL) medium stiff, moist, coarse grained sand, with gravel 13 GROUNDWATER LEVEL DURING DRILLING 20 #3 Lonestar sand 1900 11 2° dia sch 40 GRAY-GREEN GRAVELLY SAND (SP) PVC well screen (0.020" slot size) dense, wet, medium to coarse 91 grained sand, gravel to 3/4 inch, with clay 31* BIND 0 T ND 15-€ 1,990,000 X 10,200 ppb 38* 0 20bottom cap BROWN SAMDY CLAY (CL) medium stiff, moist, coarse bentonite pellets grained sand 12* 25-In Water 12 0 (1,1,DCE) FA II Dichloroethylene 5,7 ppl Dichloromethanc 69 Z 30-PCE 1.6 17.1 III TOFI MENTAN TCE 21.7 TAHA 35-NA 98TH & EDES - PHASE 2 - OAKLAND, CA Subsurface Consultants JOB NUMBER DATE 2/15/90 APPROVED

272.016

Willer Wash

LOG OF TEST BORING MW-4 EQUIPMENT 8" Hollow Stem Auger BLOWS PER FOOT DATE DRILLED 2/8/90 MAG DDM cover ELEVATION 100.93 feet ASPHALTIC COMCRETE - 2" thick locking cap 20 BROWN SANDY CLAY (CL) valve box madium stiff, moist (fill) neat cement grout DARK GREEN-GRAY SILTY CLAY (CL) 8' dia. borehole medium stiff, moist, with coarse 2" dia. sch. 40 60 11 grained sand PVC blank casing 5-MOTTLED GRAY AND BROWN SILTY NO BIEX CLAY (CL) bentonite seal TPA medium stiff, moist 30 14 20 12 BROWN SILTY CLAY (CL) 10-#3 Lonestar sand 20 11 medium stiff, moist, with fine grained sand 10 30 2" dia. sch. 40 GROUNDWATER LEVEL DURING DRILLING PVC well screen W 50 (0.020" slot size) 15-BROWN CRAVELLY SAND (SP) medium dense, wet, fine grained sand, gravel to 1 inch, with clay 28* 0 20bottom cap BROWN SANDY CLAY (CL) medium stiff, wet, medium to bentonite pellets coarse grained sand 25-3* 0 5, chloromethane 15.3 30-1,41 TGA ND TPH 35-

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LOG OF TEST BORING MW-5 EQUIPMENT 8" Hollow Stem Auger BLOWS PER FOOT DEPTH (FT) DATE DRILLED 2/9/90 (mod) cover ELEVATION 100.57 feet ASPHALTIC CONCRETE - 18" thick locking cap BASE ROCK - 6" thick valve box DARK GRAY SILTY CLAY (CL) neat cement grout 20 12 modium stiff, moist, with coarse 8' dia borehole grained sand 2" dia, sch. 40 MOTTLED GRAY AND BROWN SILTY CLAY PVC blank casing bentonite seal (CL) 10 13 medium stiff, moist 9' NO BIE II'ND BEX T= 3PPB #3 Lonestar sand 12 10 ND TPHO 10-2" dia. sch. 40 PVC well screen 13 10 (0.020" slot size) BROWN SANDY CLAY (CL) 0 medium stiff, moist, fine grained sand P 15-GROUNDWATER LEYEL DURING DRILLING BROWN GRAVELLY SAND (SP) medium dense, wet, fine to coarse grained sand, gravel to 2 inches 25 (no sample recovered) 20bottom cap 30* BROWN SANDY CLAY (CL) bentonite pellets medium stiff, wet, modium to coarse grained sand 25-13* (no sample recovered) PCE WINT TOA 30 -TCE NDTPH & 35-9CTH & EDES - PHASE 2 - OAKLAND, CA

JOB NUMBER 272.016 6

APPROVED

ALLIAN E MANAL

2/15/90

Subsurface Consultants

EQUIPMENT 8" Hollow Stem Auger DEPTH (FT) DATE DRILLED 5/25/89 ELEVATION --LABORATORY TESTS GRAY-BROWN SANDY GRAVEL (GM) medium dense, moist (fill) OLIVE-BROWN SAND (SP) medium dense, moist (fill) BROWN AND ORANGE CLAYEY SAND (SC) medium dense, moist (fill) 5 OLIVE-BROWN SAND (SP) TOG V₀C TEH TVH medium dense, moist (fill) ND dark brown below 6 feet 60 ND ND TVH В T Χ E GROUNDWATER LEVEL DURING DRILLING 7 3.1 2.6 120 31 dark gray below 9½ feet 1100 10-DARK GRAY SILTY CLAY (CL) medium stiff, wet ND 0.025 0.015 0.23 0.052 15 BROWN SILTY SAND (SM) medium dense, wet, with 15gravel BROWN GRAVELLY SAND (SM) 39 dense, wet, coarse grained (5 feet of heave in auger) NOTES: TEH: TOTAL EXTRACTABLE HYDROCARBONS BOREHOLE BACKFILLED WITH CEMENT/BENTONITE GROUT TOG: TOTAL OIL AND GREASE VOC: VOLATILE ORGANIC COMPOUNDS TVH: TOTAL VOLATILE HYDROCARBONS В: BENZENE 25-T: TOLUENE TOTAL XYLENES Ε: **ETHYLBENZENE** NONE DETECTED ND: See analytical test reports for 30detection limits. All analytical test results reported in ppm (mg/kg). SAMPLER TYPE: CALIFORNIA DRIVE 35-0.D.: 2.5 inches I.D.: 2.0 inches HAMMER WEIGHT: 140 pounds 30 inches HAMMER DROP:

Subsurface Consultants JOB NUMBER

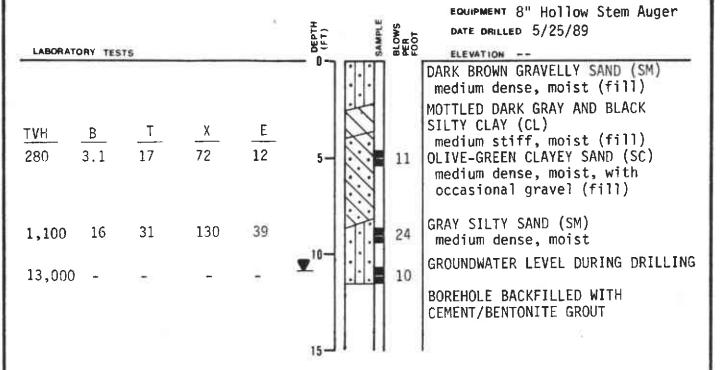
98th and EDES - OAKLAND, CA

0B NUMBER 272.011

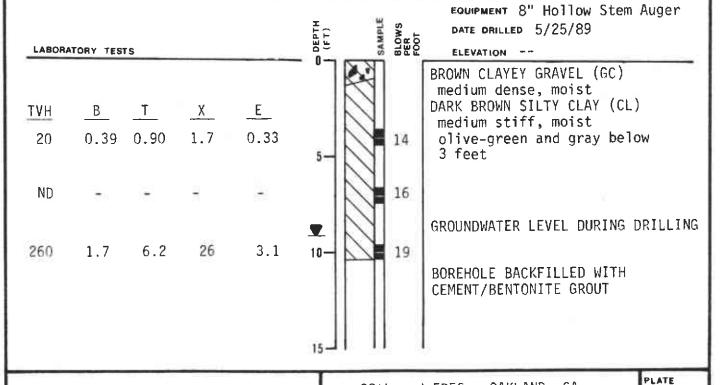
DATE APPROVED
6/2/89

7

PLATE



LOG OF TEST BORING 3



Subsurface Consultants JOB NUMBER

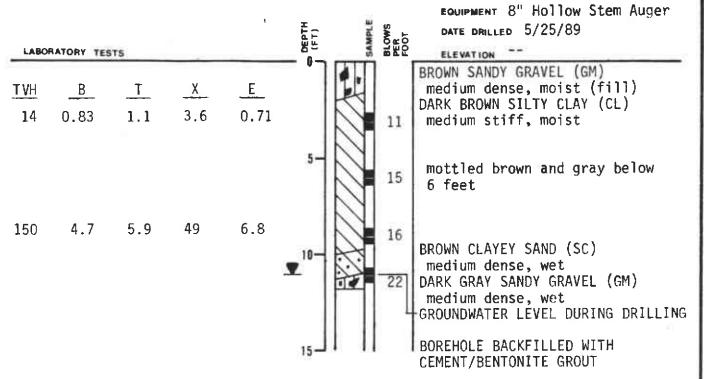
98th and EDES - OAKLAND, CA

DATE

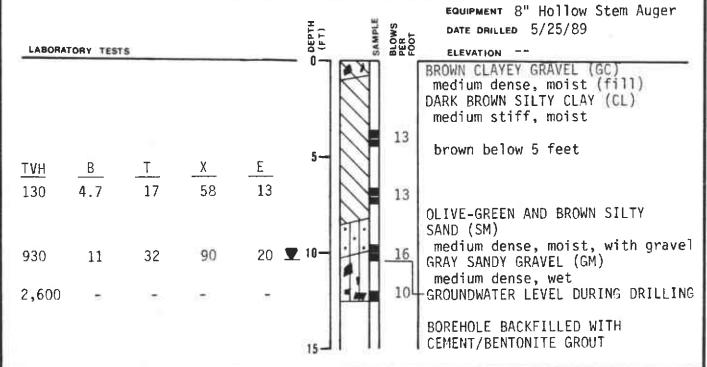
272.011

6/2/89

APPROVED Willy Calley



LOG OF TEST BORING 5



Subsurface Consultants JOB NUMBER

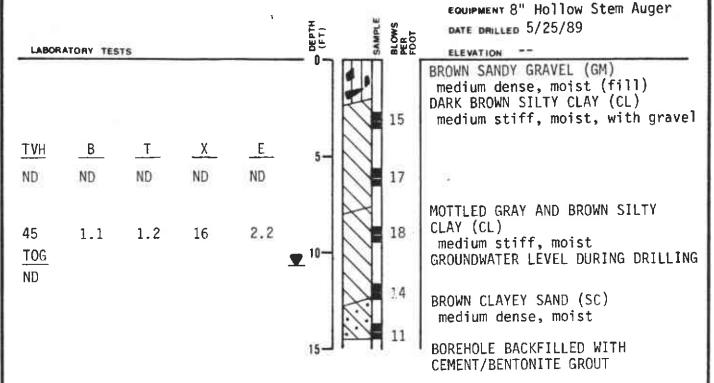
98th and EDES - OAKLAND, CA

272.011

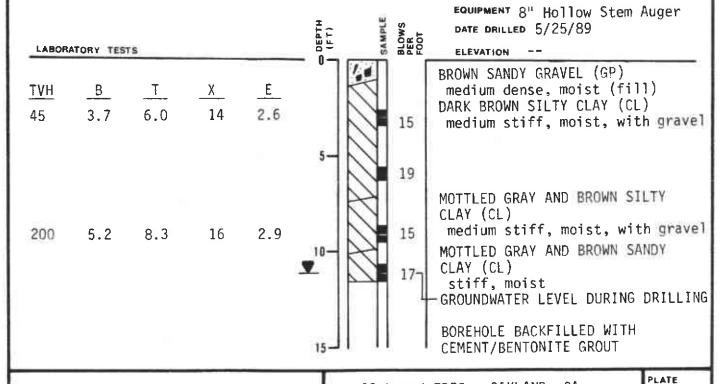
DATE 6/2/89

APPROVED

PLATE



LOG OF TEST BORING



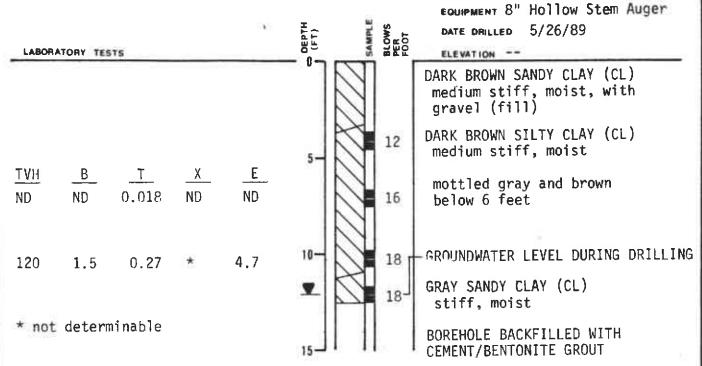
Subsurface Consultants JOB NUMBER

98th and EDES - OAKLAND, CA

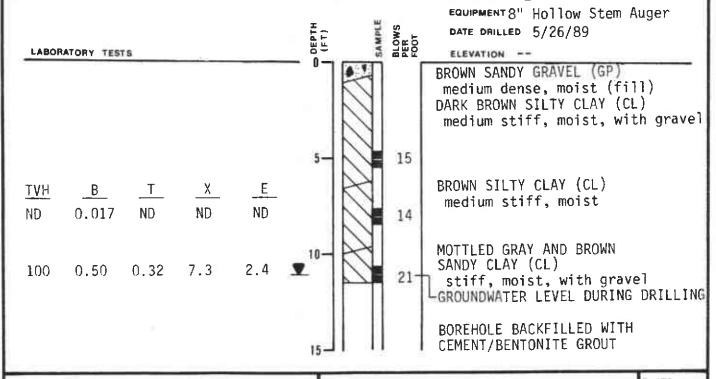
272,011

DATE 6/2/89

APPROVED Wilk I Whi



LOG OF TEST BORING 9



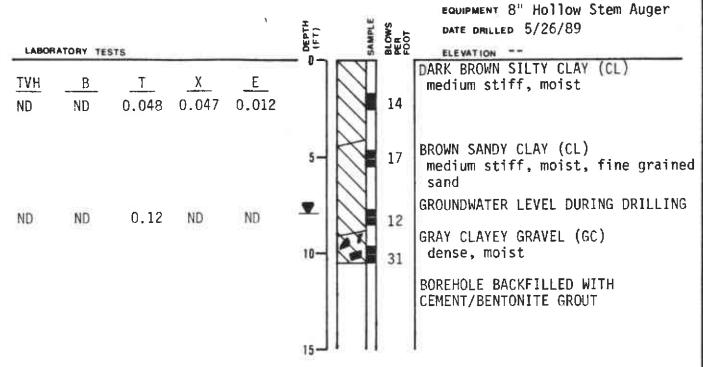
Subsurface Consultants JOB NUMBER

98th and EDES - OAKLAND, CA

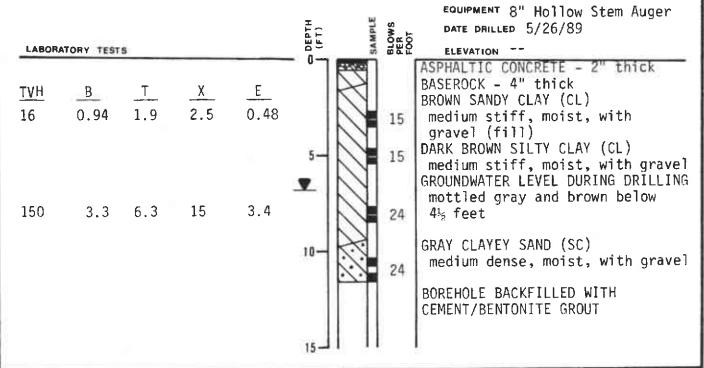
PLATE

272.011

DATE 6/2/89 APPROVED



LOG OF TEST BORING 11



272,011

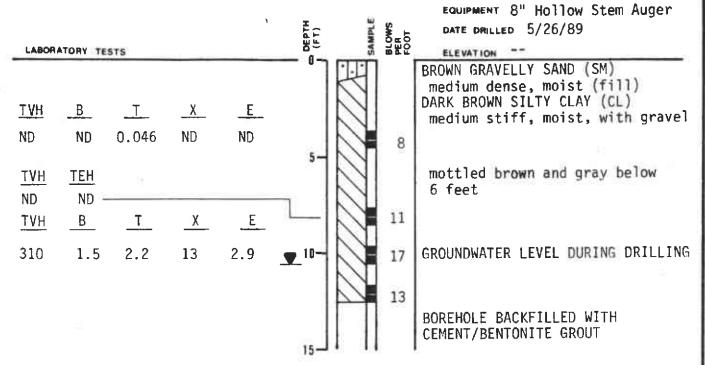
Subsurface Consultants JOB NUMBER

98th and EDES - OAKLAND, CA

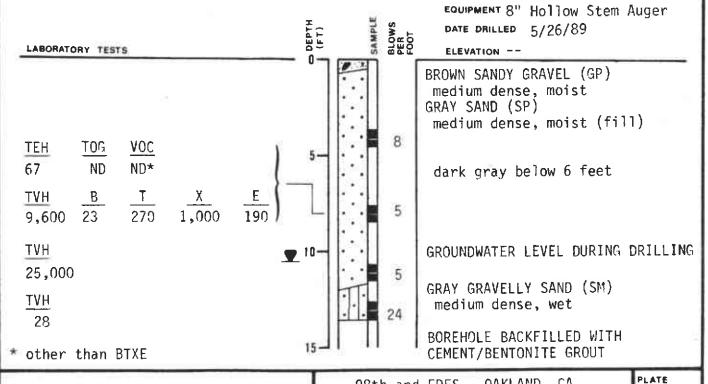
6/2/89 **MUM** L

12

PLATE



LOG OF TEST BORING 13



Subsurface Consultants JOB NUMBER

98th and EDES - OAKLAND, CA

OB NUMBER DATE 272.011 5/26/89

APPROVED

13

LOG OF TEST BORING 14 EQUIPMENT 8" Hollow Stem Auger SAMPLE BLOWS PER FOOT DATE DRILLED 5/26/89 LABORATORY TESTS ELEVATION BROWN SANDY GRAVEL (GP) medium dense, moist (fill) GRAY-BROWN SAND (SP) medium dense, moist (fill) GROUNDWATER LEVEL DURING DRILLING TVH GRAY SANDY CLAY (CL) soft, wet 730 3 BOREHOLE BACKFILLED WITH CEMENT/BENTONITE GROUT

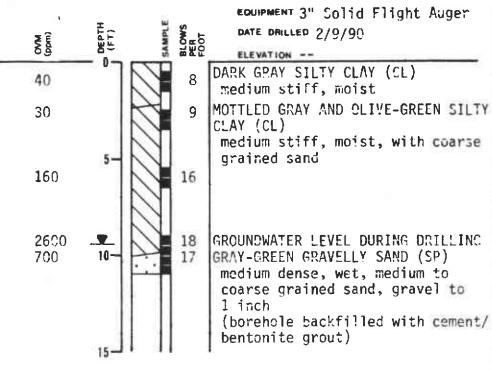
Subsurface Consultants JOB NUMBER

98th and EDES - OAKLAND, CA DATE

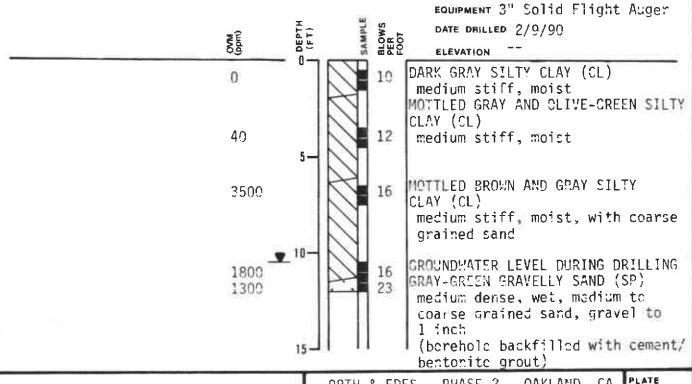
272.011

6/2/89

PLATE

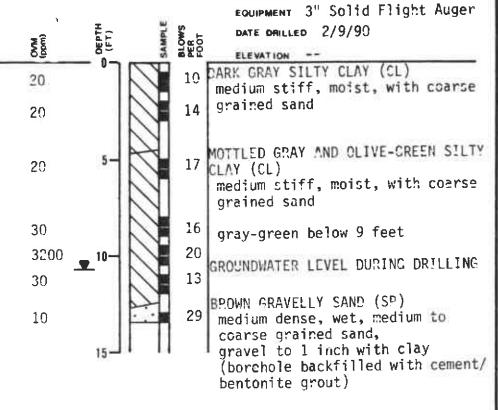


LOG OF TEST BORING 16



Subsurface Consultants JOB NUMBER 272.016

98TH & EDES - PHASE 2 - OAKLAND, CA



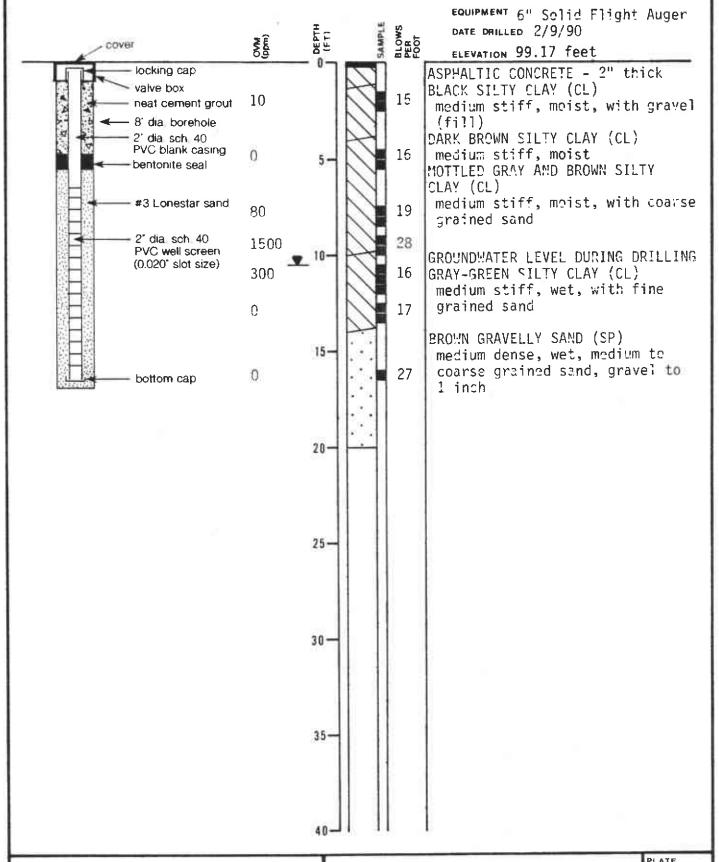
Ç	38TH	8	EDES	-	PHASE	2	-	CAKLAND,	CA
ОВ	NUMB	ER			DATE			APP	ROVED

272.016 2/

2/15/90

MANN MANNE

16



Subsurface Consultants

38TH & EDES - PHASE 2 - OAKLAND, CA
JOB NUMBER DATE APPROVE

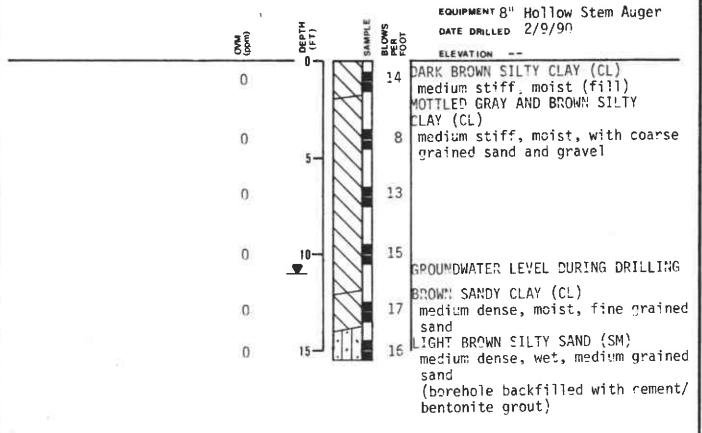
272.016

2/15/00

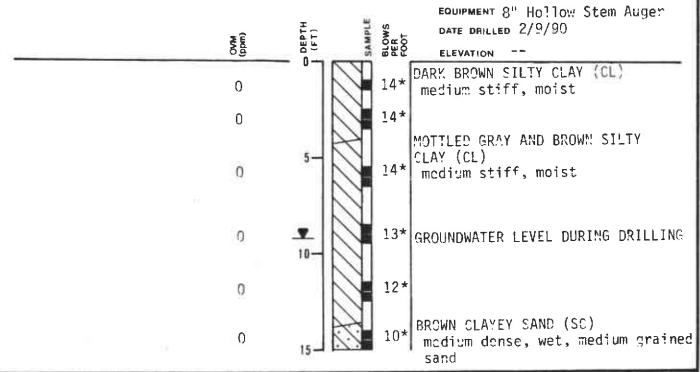
Willia V HIGHL

17

LOG OF TEST BORING 19



LOG OF TEST BORING 20



Subsurface Consultants JOB NUMBER 272 016

98TH & EDES - PHASE 2 - OAKLAND, CA

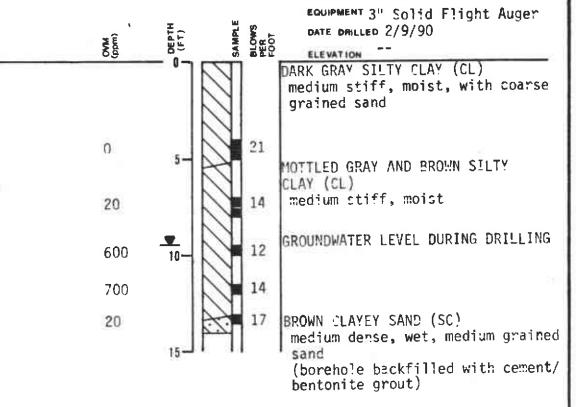
272.016 2/15/90



18

PLATE

LOG OF TEST BORING 21



98TH & EDES - PHASE 2 - OAKLAND, CA

2/15/90

272,016

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GENERAL SOIL CATEGORIES		SYMB	ols	TYPICAL SOIL TYPES		
		Clean Gravel with	GW Well Graded Gravel. Gravel-Sand Mixt		Well Graded Gravel. Gravel-Sand Mixtures	
Seve	GRAVEL More than half	little or no fines	GP	•	Poorly Graded Gravel, Gravel-Sand Mixtures	
SOILS la. 200 siev	coarse fraction is larger than No. 4 sieve size	Gravel with more	GM	*	Silty Gravel, Poorly Graded Gravel-Sand-Silt Mixtures	
GRAINED s larger than No		than 12% fines	GC	N	Clayey Gravel Poorly Graded Gravel-Sand-Clay Mixtures	
E GR		Clean sand with little	sw		Well Graded Sand, Gravelly Sand Poorly Graded Sand, Gravelly Sand	
COARSE GRAINED SOILS More than half is larger than No. 200 sieve	SAND More than half coarse fraction is smaller than No. 4 sieve size	or no fines	SP		Poorly Graded Sand, Gravelly Sand	
More		Sand with more than 12% lines	SM		Silty Sand, Poorly Graded Sand-Silt Mixtures	
			sc		Clayey Sand, Poorly Graded Sand-Clay Mixtures	
ieve			ML		Inorganic Silt and Very Fine Sand, Rock Flour, Silty or Clayey Fine Sand, or Clayey Silt with Slight Plasticity	
SOILS 1 No. 200 s	=	AND CLAY it Less than 50%	CL		Inorganic Clay of Low to Medium Plasticity. Gravelly Clay. Sandy Clay Silty Clay. Lean Clay Organic Clay and Organic Silty Clay of Low Plasticity	
IED S			OL			
GRAINED If is smaller tha			мн		Inorganic Silt Micaceous or Diatomaceous Fine Sandy or Silty Soils, Elastic Silt	
FINE GRAINED SOILS More than half is smaller than No. 200 sieve		AND CLAY t Greater than 50%	сн	Inorganic Clay of High Plasticity, Fat Clay		
			он		Organic Clay of Medium to High Plasticity Organic Silf	
	HIGHLY ORG	ANIC SOILS	РТ		Peat and Other Highly Organic Soils	

272.016

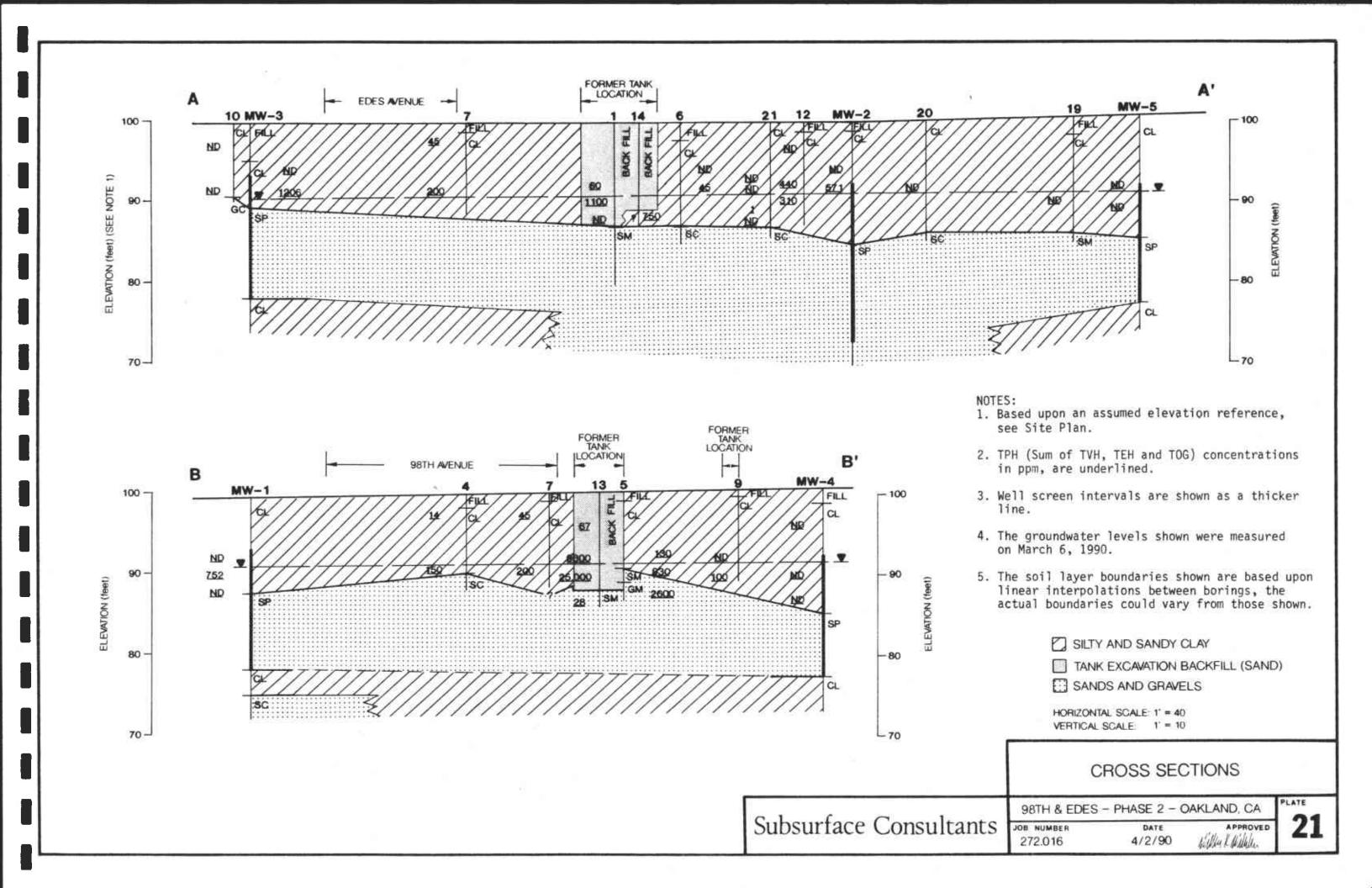
UNIFIED SOIL CLASSIFICATION SYSTEM

Subsurface Consultants

98TH & EDES - PHASE 2 - OAKLAND, CA

DB NUMBER DATE APPROVED

272.016 2/15/90 APPROVED JOB NUMBER





EUREKA LABORATORIES, INC.

Corporate Office: 6790 FLORIN PERKINS ROAD SACRAMENTO, CA 95828 TEL. (916) 381-7953 FAX: (916) 381-4013 Branch Office: 12121 NORTHUP WAY, SUITE 212: BELLEVUE, WA 98005 TEL: (206) 885-0284 FAX: (206) 885-6162 March 5, 1990 Air Pollution Chemical Analysis, Research & Testing Environmental Studies Robotics Toxicology

Mr. Bill Wikander SUBSURFACE CONSULTANTS 171 12th Street Oakland, CA 94607

Dear Mr. Wikander:

Reference: ELI Order No: 90-02-109

Project Name: 98th & EDES, Phase 2

Job #: 272.016

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MAR 09 1990 AM PM 7|8|9|10|11|12|1|2|3|4|5|6

Eureka Laboratories, Inc. is pleased to submit a laboratory report for the subject task. This report presents analytical results for six (6) water samples and thirty-one (31) soil samples for the following analyses:

ANALYSIS	METHOD	SAMPLE ID.
Non-Halogenated Volatile Organics	Purging Trap 8015	MW1, MW2, MW3, MW4, MW5, 18, 17 @ 10', 17 @ 11.5', 18 @ 8', 18 @ 9.5', 18 @ 11.5', 19 @ 10', 20 @ 9',21 @ 7.5', 21 @ 9.5', 21 @ 13', MW4 @ 13.5', MW5 @ 9', MW5 @ 11', 15 @ 6', 15 @ 9.5', 15 @ 10.5', 16 @ 4', MW1 @ 10.5', 16 @ 7',16 @ 11.5', 17 @ 8.5', MW1 @ 8', MW1 @ 12', MW2 @ 6', MW2 @ 9', MW2 @ 12', MW3 @ 6', MW3 @ 9', MW4 @ 4.5', MW4 @ 10.5'.
Halogenated Volatile Organics	EPA 601	MW1, MW2, MW3, 18, MW4, MW5,
Aromatic Volatile Organics	EPA 602	MW4, MW5, MW1, MW2, MW3, 18
Halogenated Volatile Organics	EPA 8010	MW2 @ 9

SUBSURFACE CONSULTANTS 03/05/1990 PAGE 2

ANALYSIS	METHOD	SAMPLE ID.
Aromatic Volatile Organics	EPA 8020	17 @ 11.5, 18 @ 8', 19 @ 10', 20 @ 9', 21 @ 7.5', 21 @ 13', MW4 @ 13.4, MW5 @ 9', MW2 @ 9 MW5 @ 11', 15 @ 6', 16 @ 4', 17 @ 8.5', MW1 @ 8', MW1 @ 12', MW2 @ 6', MW3 @ 6', MW4 @ 4.5', MW4 @ 10.5', 17 @ 10', MW2 @ 12, 18 @ 9.5', 18 @ 11.5', 21 @ 9.5', 21 @ 11.5', 15 @ 9.5', 15 @ 10.5', 16 @ 7', 16 @ 11.5', MW1 @ 10.5', MW3 @ 9'.
Total Petroleum Hydrocarbons	EPA 8015 (MODIFIED)	18 @ 9.5', 21 @ 9.5', MW5 @ 9', MW1 @ 10.5, MW2 @ 9', MW3 @ 9', MW4 @ 10.5', MW1, MW2, MW3, MW4, MW5, 18
Total Recoverable Hydrocarbons	EPA 418.1	MW1, MW2, MW3, MW4, MW5, 18. 18 @ 9.5, 21 @ 9.5, MW5 @ 9', MW1 @ 10.5', MW2 @ 9', MW3 @ 9', MW4 @ 10.5'.

Sincerely, EUREKA LABORATORIES, INC.

By: Shao-Pin Yo, Ph.D.
Laboratory Director

SPY/da

Attachment

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953 Order No: 90-02-109
Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID: WATER BLANK

COMP. NO.	COMPOUND	mg/L (ppm)	DETECTION LIMIT mg/L (ppm)
V1	Acrylamide	<6	6
٧2	Diethyl ether *	<2	2
٧3	Ethanol *	<2	2
٧4	Methyl ethyl ketone (MEK)	< 0.4	0.4
٧5	Methyl isobutyl ketone (MIBK)	<0.4	0.4
٧6	Paraldehyde	< 0 . 4	0.4

* These two compounds co-eluted.

Mark Shih, Ph.D.

March 5, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED: 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016 SAMPLE ID: MW1

COMP. NO.	COMPOUND	mg/L (ppm)	DETECTION LIMIT
V2 V3 V4 V5	Acrylamide Diethyl ether * Ethanol * Methyl ethyl ketone (MEK) Methyl isobutyl ketone (MIBK)	•	mg/L (ppm) 6 2 2 0.4 0.4
V 6 .	Paraldehyde	<0.4	0.4

* These two compounds co-eluted.

Mark Shih, Ph.D.

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

(916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016 SAMPLE ID: MW2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

COMP.	COMPOUND	mg/L	DETECTION
NO.		(ppm)	LIMIT
			mg/L (ppm)
V 1	Acrylamide	<6	6
٧2	Diethyl ether *	<2	2
٧3	Ethanol *	 <2	2
٧4	Methyl ethyl ketone (MEK)	<0.4	0.4
٧5	Methyl isobutyl ketone (MIBK)	<0.4	0.4
٧6	Paraldehyde	<0.4	0.4

* These two compounds co-eluted.

Mark Shih, Ph.D.

Chemist

March 5, 1990

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016 SAMPLE ID: MW3

COMP.	COMPOUND	mg/L	DETECTION
NO.		(ppm)	LIMIT
V1	Acrylamide	- 	mg/L (ppm) 6
٧2	Diethyl ether *	i <2	2
٧3	Ethanol *	 <2	j 2
V4	[Methyl ethyl ketone (MEK)	<0.4	0.4
٧5	Methyl isobutyl ketone (MIBK)	<0.4	0.4
٧6	Paraldehyde	<0.4	0.4

* These two compounds co-eluted.

Mark Shih, Ph.D.

March 5, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016 SAMPLE ID: MW4

COMP.	COMPOUND	mg/L	DETECTION
NO.		(ppm)	LIMIT
V1	Acrylamide		mg/L (ppm)
V2	Diethyl ether *		6
V3	Ethanol *	<2	2
V4	Methyl ethyl ketone (MEK)	<0.4	
V5	Methyl isobutyl ketone (MIBK)	<0.4	0.4
V6	Paraldehyde	<0.4	

* These two compounds co-eluted.

Mark Shih, Ph.D.

March 5, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

(916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016 SAMPLE ID: MW5 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

COMP.	COMPOUND	mg/L	DETECTION
NO.		(ppm)	LIMIT mg/L (ppm)
<u>V1</u>	Acrylamide	<6	6 (ppiii)
V2	Diethyl ether *	<2	2
٧3	Ethanol *	<2	2
٧4	Methyl ethyl ketone (MEK)	<0.4	0.4
V 5	Methyl isobutyl ketone (MIBK)	<0.4	0.4
V6	Paraldehyde	<0.4	0.4

* These two compounds co-eluted.

Mark Shih, Ph.D.

Chemist

<u>March 5, 1990</u>

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016 SAMPLE ID: 18

COMP. NO.	COMPOUND	mg/L (ppm)	DETECTION LIMIT mg/L (ppm)
V1	Acrylamide	<1500	1500
٧2	Diethyl ether *	<500	500
٧3	Ethanol *	i<500	500
٧4	Methyl ethyl ketone (MEK)	<100	100
V5	Methyl isobutyl ketone (MIBK)	<100	100
٧6	Paraldehyde	<100	100

* These two compounds co-eluted High Detection Limit due to matrix interference.

Mark Shih, Ph.D.

Chemist

March 5, 1990

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID: SOIL BLANK

COMP. NO.	COMPOUND	mg/Kg (ppm)	DETECTION LIMIT mg/Kg(ppm)
V1	Acrylamide	NA i	NA
٧2	Diethyl ether *	<0.12	0.12
	Ethanol *	<0.12	0.12
٧4	Methyl ethyl ketone (MEK)	<0.20	0.20
٧5	[Methyl isobutyl ketone (MIBK)	<0.10	0.10
٧6	Paraldehyde	į NA į	NA ·

^{*} These two compounds co-eluted.

Mark Shih, Ph.D.

Chemist

March 5, 1990

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing Certification: 108

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID: 17 @ 10'

COMP. NO.	COMPOUND	mg/Kg (ppm)	DETECTION LIMIT mg/Kg(ppm)
	Acrylamide	NA	NA
	Diethyl ether *	<0.12	0.12
٧3	Ethanol *	<0.12	0.12
V 4	Methyl ethyl ketone (MEK)	<0.20	0.20
٧5	Methyl isobutyl ketone (MIBK)	<0.10	0.10
٧6	Paraldehyde	į NA į	NA

^{*} These two compounds co-eluted.

Mark Shih, Ph.D.

Chemist

March 5, 1990

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

Order No: 90-02-109 Hazardous Waste Testing

(916) 381-7953

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID: 17 @ 11.5'

COMP. NO.	COMPOUND	mg/Kg (ppm)	DETECTION LIMIT
			mg/Kg(ppm)
V1	Acrylamide	<na< td=""><td>NA</td></na<>	NA
٧2	Diethyl ether *	<0.12	0.12
٧3	Ethanol *	<0.12	0.12
٧4	Methyl ethyl ketone (MEK)	<0.20	0.20
٧5	Methyl isobutyl ketone (MIBK)	<0.10	0.10
V6	Paraldehyde	j na j	NA

* These two compounds co-eluted.

March 5, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

(916) 381-7953

Order No: 90-02-109
Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016 SAMPLE ID: 18 @ 8' DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

COMP.	COMPOUND	mg/Kg (ppm)	DETECTION LIMIT
<u>V1</u>	Acrylamide	- - - - - - - - - -	mg/Kg(ppm) NA
V2	Diethyl ether *	<0.12	0.12
٧3 -	Ethanol *	2.10	0.12
V4	Methyl ethyl ketone (MEK)	8.07	0.20
V5	Methyl isobutyl ketone (MIBK)	<0.10	0.10
٧6	Paraldehyde	NA	NA

* These two compounds co-eluted.

Mark Shih, Ph.D.

Chemist

March 5, 1990

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

(916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

SAMPLE ID: 18 @ 9.5'

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990

DATE COMPLETED: 03/02/1990

COMP.	COMPOUND	mg/Kg	DETECTION
NO.		(ppm)	LIMIT
			mg/Kg(ppm)
V 1	Acrylamide) < NA	NA
V2	Diethyl ether *	<0.12	0.12
· V3	Ethanol *.	0.22	0.12
٧4	Methyl ethyl ketone (MEK)	3.81	0.20
٧5	[Methyl isobutyl ketone (MIBK)	<0.10	0.10
V6	Paraldehyde	NA	NA

^{*} These two compounds co-eluted.

Mark Shih, Ph.D.

Chemist

March 5, 1990

l NA

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

(916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

COMP. I

NO.

V1

٧2

٧3

V4

٧5

۷6

SAMPLE ID: 18 @ 11.5'

Acrylamide

|Paraldehyde

Ethanol

|Diethyl ether

COMPOUND

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

mg/Kg | DETECTION | LIMIT | mg/Kg(ppm) | NA | NA | | 0.12 | 0.3 | 0.12 | 0.20 | 0.20

0.10

NA

* These two compounds co-eluted.

[Methyl ethyl ketone (MEK)

|Methyl isobutyl ketone (MIBK) |<0.10

Mark Shih, Ph.D.

Chemist

March 5, 1990

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID: 19 @ 10'

COMP. NO.	COMPOUND	mg/Kg (ppm)	DETECTION LIMIT mg/Kq(ppm)
V1	Acrylamide	⟨NA	NA NA
٧2	Diethyl ether *	<0.12	0.12
٧3	Ethanol *	1.86	0.12
٧4	Methyl ethyl ketone (MEK)	7.23	. 20
V5	Methyl isobutyl ketone (MIBK)	[<0.10	0.10
٧6	Paraldehyde	NA	NA

* These two compounds co-eluted.

Mark Shih, Ph.D.

March 5, 1990 Date

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Order No: 90-02-109
Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016 SAMPLE ID: 20 @ 9' DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

COMP.	COMPOUND	mg/Kg (ppm)	DETECTION LIMIT
	 Acrylamide		mg/Kg(ppm) NA
V2	Diethyl ether *	<0.12	0.12
٧3	Ethanol *	<0.12	0.12
٧4	Methyl ethyl ketone (MEK)	<0.20	0.20
٧5	Methyl isobutyl ketone (MIBK)	< 0.10	0.10
٧6	Paraldehyde	NA I	NA

* These two compounds co-eluted.

Mark Shih, Ph.D.

Chemist

March 5, 1990

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID: 21 @ 7.5'

COMP. NO.	COMPOUND 	mg/Kg (ppm)	DETECTION LIMIT mg/Kg(ppm)
Vl	Acrylamide	<na< td=""><td>NA</td></na<>	NA
٧2	Diethyl ether *	<0.12	0.12
٧3	Ethanol *	<0.12	0.12
V4	Methyl ethyl ketone (MEK)	5.40	0.20
V5	[Methyl isobutyl ketone (MIBK)	<0.10	0.10
٧6	Paraldehyde	NA ·	NA NA

* These two compunds co-eluted.

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March 5, 1990

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

SAMPLE ID: 21 @ 9.5'

DATE RECEIVED : 02/15/1990
DATE EXTRACTED: 02/23/1990

DATE COMPLETED: 03/02/1990

COMP.	COMPOUND	mg/Kg	DETECTION
		(ppm)	mg/Kg(ppm)
٧1	Acrylamide	<na< td=""><td>NA</td></na<>	NA
٧2	Diethyl ether *	<0.12	0.12
٧3	Ethanol *	<0.12	0.12
٧4	Methyl ethyl ketone (MEK)	1.45	0.20
V5	Methyl isobutyl ketone (MIBK)	<0.10	0.10
٧6	Paraldehyde	NA I	NA

* These two compounds co-eluted.

Mark Shih, Ph.D.

Chemist

<u>March 5, 1990</u>

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990

JOB #: 272.016

DATE COMPLETED: 03/02/1990

SAMPLE ID: 21 @ 11.5'

COMP	COMPOUND	mg/Kg	DETECTION
NO.		(ppm)	LIMIT
			mg/Kg(ppm)
V1	Acrylamide	I < NA	NA NA
٧2	Diethyl ether *	<0.12	0.12
٧3	Ethanol *	<0.12	0.12
٧4	Methyl ethyl ketone (MEK)	5.96	0.20
٧5	[Methyl isobutyl ketone (MIBK)	<0.10	0.10
٧6	Paraldehyde	į NA	NA

^{*} These two compounds co-eluted.

Mark Shih, Ph.D.

March 5, 1990 Date

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Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID: 21 @ 13'

COMP. NO.	COMPOUND 	mg/Kg (ppm)	DETECTION LIMIT mg/Kg(ppm)
<u> V1</u>	Acrylamide	<na< td=""><td>I NA</td></na<>	I NA
٧2	Diethyl ether *	i<0.12	0.12
· V3	Ethanol *	1.66	0.12
V 4	Methyl ethyl ketone (MEK)	5.16	0.20
٧5	Methyl isobutyl ketone (MIBK)	<0.10	0.10
٧6	Paraldehyde	NA	İ NA

* These two compounds co-eluted.

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March 5, 1990

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID: MW4 @ 13.5'

COMP. NO.	COMPOUND 	mg/Kg (ppm)	DETECTION LIMIT mg/Kg(ppm)
<u>V1</u>	Acrylamide	NA	NA SALATA
٧2	Diethyl ether *	<0.12	0.12
٧3	Ethanol *	<0.12	0.12
V4	Methyl ethyl ketone (MEK)	<0.20	0.20
٧5	Methyl isobutyl ketone (MIBK)	<0.10	0.10
٧6	Paraldehyde	NA .	NA

* These two compounds co-eluted.

Mark Shih, Ph.D.

Chemist

March 5, 1990

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016 SAMPLE ID: MW5 @ 9'

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990

DATE COMPLETED: 03/02/1990

COMP	. COMPOUND	mg/Kg	DETECTION
NO.		(ppm)	LIMIT
	_1		mg/Kg(ppm)
٧1	Acrylamide	NA NA	NA NA
٧2	Diethyl ether *	<0.12	0.12
٧3	Ethanol *	<0.12	0.12
٧4	Methyl ethyl ketone (MEK)	<0.20	0.20
٧5	[Methyl isobutyl ketone (MIBK)	<0.10	0.10
٧6	Paraldehyde	NA	j NA

* These two compounds co-eluted.

Mark Shih, Ph.D.

Chemist

March 5, 1990 Date

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CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID: MW5 @ 11'

COMP.	COMPOUND	mg/Kg	DETECTION LIMIT
		(ppm) 	mg/Kg(ppm)
V1	Acrylamide	NA I	NA SA
٧2	Diethyl ether *	<0.12	0.12
٧3	Ethanol *	<0.12	0.12
٧4	Methyl ethyl ketone (MEK)	< 0.20	0.20
٧5	Methyl isobutyl ketone (MIBK)	< 0.10	0.10
٧6	Paraldehyde	NA	NA

^{*} These two compounds co-eluted.

Mach Mark Shih, Ph.D.

March 5, 1990 Date

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016 SAMPLE ID: 15 @ 6'

COMP. NO.	COMPOUND	mg/Kg (ppm)	DETECTION LIMIT mg/Kg(ppm)
<u>V1</u>	Acrylamide	NA	NA NA
V2	Diethyl ether *	<0.12	0.12
٧3	Ethanol *	2.82	0.12
	Methyl ethyl ketone (MEK)	7.83	0.20
V 5	Methyl isobutyl ketone (MIBK)	<0.10	0.10
٧6	Paraldehyde	NA	NA

^{*} These two compounds co-eluted.

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Certification: 108

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CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID: 15 @ 9.5'

COMP. NO.	COMPOUND 	mg/Kg (ppm)	DETECTION LIMIT mg/Kg(ppm)
	Acrylamide	NA I	NA NA
V2	Diethyl ether *	<0.12	0.12
٧3	Ethanol *	0.28	0.12
٧4	Methyl ethyl ketone (MEK)	0.66	0.20
٧5	Methyl isobutyl ketone (MIBK)	<0.10	0.10
٧6	Paraldehyde	l NA	NA

^{*} These two compounds co-eluted.

Mark Shih, Ph.D.

Chemist

March 5, 1990 Date

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

SAMPLE ID: 15 @ 10.5'

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

COMP. NO.	COMPOUND	mg/Kg (ppm)		DETECTION LIMIT mg/Kg(ppm)
V1	Acrylamide	<15	15	
٧2	Diethyl ether *	<5	5	
. V 3	Ethanol *	4.65	5	
٧4	Methyl ethyl ketone (MEK)	<1	1	
٧5	[Methyl isobutyl ketone (MIBK)	7.21	1	
V 6	Paraldehyde	<1	1	

^{*} These two compounds co-eluted.

Mark Shih, Ph.D.

Chemist

March 5, 1990

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Certification: 108

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CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

SAMPLE ID: 16 @ 4'

COMP.	COMPOUND	mg/Kg (ppm)	DETECTION LIMIT
		11	mg/Kg(ppm)
V 1	Acrylamide	NA	NA
٧2	Diethyl ether *	<0.12	0.12
٧3	Ethanol *	3.0	0.12
٧4	Methyl ethyl ketone (MEK)	11.01	0.20
٧5	Methyl isobutyl ketone (MIBK)	<0.10	0.10
٧6	Paraldehyde	NA I	NA

^{*} These two compounds co-eluted.

Mark Shih, Ph.D.

Chemist

March 5, 1990

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Certification: 108

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID: MW1 @ 10.5?

COMP.	COMPOUND	mg/Kg	DETECTION
NO.		(ppm)	LIMIT
V1 V2	Acrylamide Diethyl ether *	NA <0.12	mg/Kg(ppm) NA 0.12
V3 V4	Ethanol * Methyl ethyl ketone (MEK)	<0.12 <0.12 2.42	0.12 0.12 0.20
V5	Methyl isobutyl ketone (MIBK)	<0.10	0.10
V6	Paraldehyde	NA	NA

^{*} These two compounds co-eluted.

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Chemist

March 5, 1990

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Order No: 90-02-109 Hazardous Waste Testing

Certification: <u>108</u>

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016 SAMPLE ID: 16 @ 7' DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

COMP. NO.	COMPOUND 	mg/Kg (ppm)	DETECTION LIMIT mg/Kg(ppm)
<u> V1</u>	Acrylamide	NA	NA
V2	Diethyl ether *	<0.12	0.12
٧3	Ethanol *	1.26	0.12
V4	Methyl ethyl ketone (MEK)	4.30	0.20
٧5	Methyl isobutyl ketone (MIBK)	< 0.10	0.10
V 6	Paraldehyde	NA I	NA

^{*} These two compounds co-eluted.

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID: 16 @ 11.5'

COMP. NO.	COMPOUND 	mg/Kg (ppm)	DETECTION LIMIT mg/Kg(ppm)
<u> V1</u>	Acrylamide	<15	15
٧2	Diethyl ether *	 <5] 5
٧3	Ethanol *	 <5	5
٧4	Methyl ethyl ketone (MEK)	<1	1
٧5	Methyl isobutyl ketone (MIBK)	40.71	1
٧6	Paraldehyde	<1	1

^{*} These two compounds co-eluted.

Mark Shih, Ph.D.

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March 5, 1990

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID: 17 @ 8.5'

COMP. NO.	COMPOUND	mg/Kg (ppm)	DETECTION LIMIT mg/Kg(ppm)
V1	Acrylamide	NA I	NA NA
V2	Diethyl ether *	<0.12	0.12
٧3	Ethanol *	<0.12	0.12
٧4	Methyl ethyl ketone (MEK)	<0.20	0.20
٧5	Methyl isobutyl ketone (MIBK)	< 0.10	0.10
٧6	Paraldehyde	NA	NA

* These two compounds co-eluted.

Mark Shih, Ph.D.

March 5, 1990 Date

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

SAMPLE ID: MW1 @ 8'

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

COMP. NO.	COMPOUND .	mg/Kg (ppm)	DETECTION LIMIT mg/Kg(ppm)
V1	Acrylamide	<na< td=""><td>NA S</td></na<>	NA S
٧2	Diethyl ether *	<0.12	0.12
٧3	Ethanol *	1.62	0.12
٧4	Methyl ethyl ketone (MEK)	4.22	0.20
٧5	Methyl isobutyl ketone (MIBK)	<0.10	0.10
V 6	Paraldehyde	NA	NA

^{*} These two compounds co-eluted.

Mark Shih, Ph.D.

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Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

SAMPLE ID: MW1 @ 12'

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

COMP. NO.	COMPOUND	mg/Kg (ppm)	DETECTION LIMIT mg/Kg(ppm)
<u> V1</u>	Acrylamide	NA I	NA NA
V2	Diethyl ether *	<0.12	0.12
٧3	Ethanol *	2.12	0.12
٧4	Methyl ethyl ketone (MEK)	<0.20	0.20
٧5	[Methyl isobutyl ketone (MIBK)	<0.10	0.10
٧6	Paraldehyde	j na j	NA

^{*} These two compounds co-eluted.

Chemist

March 5, 1990

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Order No: 90-02-109 Hazardous Waste Testing

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CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID: MW2 @ 6'

COMP. NO.	COMPOUND 	mg/Kg (ppm)	DETECTION LIMIT mg/Kg(ppm)
V1	Acrylamide	<na td="" <=""><td>NA</td></na>	NA
٧2	Diethyl ether *	<0.12	0.12
V3	Ethanol *	3.48	0.12
٧4	Methyl ethyl ketone (MEK)	12.90	0.20
V5	Methyl isobutyl ketone (MIBK)	<0.10	0.10
٧6	Paraldehyde	NA	NA

^{*} These two compounds co-eluted.

Mark Shih, Ph.D.

Chemist

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CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016 SAMPLE ID: MW2 @ 9'

COM	P. COMPOUND	mg/Kg	DETECTION
NO.		(ppm)	LIMIT mg/Kq(ppm)
V1	Acrylamide	<na< td=""><td>NA MA</td></na<>	NA MA
V2	Diethyl ether *	<0.12	0.12
٧3	Ethanol *	2.50	0.12
V4	Methyl ethyl ketone (MEK)	7.71	0.20
٧5	Methyl isobutyl ketone (MIBK)	<0.10	0.10
٧6	Paraldehyde	NA I	NA

^{*} These two compounds co-eluted.

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CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID: MW2 @ 12'

COMP. NO.	COMPOUND	mg/Kg (ppm)	DETECTION LIMIT mg/Kg(ppm)
$\overline{V1}$	Acrylamide	NA	NA NA
٧2	Diethyl ether *	<0.12	0.12
٧3	Ethanol *	2.76	0.12
٧4	Methyl ethyl ketone (MEK)	12.56	0.20
V5	Methyl isobutyl ketone (MIBK)	<0.10	0.10
V 6	Paraldehyde	NA	į NA

^{*} These two compounds co-eluted.

Mark Shih, Ph.D.

Chemist

March 5, 1990 Date

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CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2
JOB #: 272.016

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

SAMPLE ID: MW3 @ 6'

COMP. NO.	COMPOUND	mg/Kg (ppm)	DETECTION LIMIT mg/Kg(ppm)
V1	Acrylamide	i NA	NA NA
٧2	Diethyl ether *	<0.12	0.12
٧3	Ethanol *	3.40	0.12
٧4	Methyl ethyl ketone (MEK)	11.35	0.20
V 5	Methyl isobutyl ketone (MIBK)	<0.10	0.10
٧6	Paraldehyde	NA	NA

^{*} These two compounds co-eluted.

Mark Shih, Ph.D.

March 5, 1990 Date

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Order No: 90-02-109 Hazardous Waste Testing Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 JOB #: 272.016

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

SAMPLE ID: MW3 @ 9'

COMP.	COMPOUND	mg/Kg ppm)	DETECTION LIMIT mg/Kg(ppm)
V1 V2	 Acrylamide Diethyl ether *	<15 <5	15 5
٧3	Ethanol *	54.4	5
V4 V5	Methyl ethyl ketone (MEK) Methyl isobutyl ketone (MIBK)	8.15 <1	1
٧6	Paraldehyde	<1	1

* These two compounds co-eluted.

Mark Shih, Ph.D.

March 5, 1990 Date

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Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

SAMPLE ID: MW4 @ 4.5'

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990

DATE COMPLETED: 03/02/1990

COMP. NO.	COMPOUND 	mg/Kg (ppm)	DETECTION LIMIT mg/Kg(ppm)
V1	Acrylamide	NA I	NA
٧2	Diethyl ether *	<0.12	0.12
٧3	Ethanol *	<0.12	0.12
٧4	Methyl ethyl ketone (MEK)	3.67	0.20
٧5	Methyl isobutyl ketone (MIBK)	< 0.10	0.10
٧6	Paraldehyde) NA	NA

^{*} These two compounds co-eluted.

Mark Shih, Ph.D.

Chemist

March 5, 1990

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 Order No: 90-02-109 Hazardous Waste Testing Certification: <u>108</u>

(916) 381-7953

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2
JOB #: 272.016

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

SAMPLE ID: MW4 @ 10.5'

COMP. NO.	COMPOUND 	mg/Kg (ppm)	DETECTION LIMIT mg/Kg(ppm)
	Acrylamide	NA	NA NA
٧2	Diethyl ether *	<0.12	0.12
٧3	Ethanol *	1.62	0.12
٧4	Methyl ethyl ketone (MEK)	7.87	0.20
٧5	Methyl isobutyl ketone (MIBK)	<0.10	0.10
٧6	Paraldehyde	NA .	NA

^{*} These two compounds co-eluted.

Mark Shih, Ph.D.

Chemist

March 5, 1990

EUREKA LABORATORIES, INC. 6790 Florin-Perkins Road Sacramento, CA 95828

Hazardous Waste Testing Certification: <u>108</u>

Order No: 90-02-109

(916) 381-7953

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

SAMPLE ID: REAGENT SPIKE RECOVERY

DATE RECEIVED: 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

SPIKE RECOVERY

٧1	Acrylamide	_
٧2	Diethyl ether	100%
٧3	Ethanol	100%
٧4	Methyl ethyl ketone (MEK)	104%
V 5	Methyl isobutyl ketone (MIBK)	102%
٧6	Paraldehyde	-

Mark Shih, Ph.D.

Chemist

March 5, 1990

EUREKA LABORATORIES, INC. 6790 Florin-Perkins Road Sacramento, CA 95828 (916) 381-7953 Order No: 90-02-109 Hazardous Waste Testing Certification: 108

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2
JOB #: 272.016

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

SAMPLE ID: REAGENT SPIKE RECOVERY

DUPLICATE

SPIKE RECOVERY

٧1	Acrylamide	-
٧2	Diethyl ether	100%
٧3	Ethanol	100%
٧4	Methyl ethyl ketone (MEK)	97%
٧5	Methyl isobutyl ketone (MIBK)	98%
٧6	Paraldehyde	-

Mark Shih, Ph.D.

Chemist

March 5, 1990

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing Certification: <u>108</u>

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 JOB #: 272.016 SAMPLE ID: BLANK

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

COMP. No.	COMPOUND	ug/L (ppb)	DETECTION LIMIT ug/L (ppb)	
V2345678901123456 78901 VVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVV	Bromodichloromethane Bromoform Bromomethane Carbon tetrachloride Chlorobenzene Chloroethane Chloroform Chloromethane Dibromochloromethane Dibromochloromethane Dibromochlorobenzene 1,2-Dichlorobenzene 1,4-Dichlorobenzene 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane (Vinylidene chloride) trans-1,2-Dichloropropylene trans-1,3-Dichloropropylene 1,2-Dichloropropylene 1,1,2-Tetrachloroethane 1,1,1-Z-Tetrachloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane	55555555555555555555555555555555555555	55555555555555555555555555555555555555	

March 5, 1990

Huey-Chen Chow Chemist

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 JOB #: 272.016 SAMPLE ID: MW1

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

COMP.	COMPOUND	ug/L	DETECTION
No.		(ppb)	LIMIT ug/L (ppb)
V27 V28 V29	Bromodichloromethane Bromoform Bromomethane Carbon tetrachloride Chlorobenzene Chloroethane Chloromethane Chloromethane Dibromomethane Dibromomethane Dibromomethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,1-Dichloroethylene (Vinylidene chloride) trans-1,2-Dichloropropylene trans-1,3-Dichloropropylene trans-1,3-Dichloropropylene trans-1,3-Dichloropropylene 1,1,2-Tetrachloroethane 1,1,2-Tetrachloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane Trichlorodifluoromethane Trichlorodifluoromethane Trichlorofluoromethane Trichlorofluoromethane 2-chloro-ethyl-vinyl-ether	<pre><1.2 <1.2 <1.2 <1.2 <1.2 <1.2 <1.2 <1.2</pre>	1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2

March 5, 1990

Huey-Chen Chow Chemist

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 JOB #: 272.016 SAMPLE ID: MW2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

COMP.	COMPOUND	ug/L	DETECTION
No.		(ppb)	LIMIT ug/L (ppb)
V20 V21 V22 V23 V24 V26 V27 V29 V29	Bromodichloromethane Bromoform Bromomethane Carbon tetrachloride Chlorobenzene Chloroethane Chloromethane Chloromethane Dibromomethane Dibromomethane Dibromomethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethylene (Vinylidene chloride) trans-1,2-Dichloropropylene trans-1,3-Dichloropropylene trans-1,3-Dichloropropylene trans-1,3-Dichloropropylene 1,1,2-Tetrachloroethane 1,1,2-Tetrachloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,2-Tetrachloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,1,1-Trichloroethane	<pre></pre>	1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2 1.2

Huey-Chen Chow Chemist

March 5, 1990

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing Certification: <u>108</u>

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 JOB #: 272.016 SAMPLE ID: MW3

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

COMP. No.	COMPOUND	ug/L (ppb)	DETECTION	ug/L (ppb)	
V26 V27 V28 V29	Bromodichloromethane Bromoform Bromomethane Carbon tetrachloride Chlorobenzene Chloroethane Chloromethane Chloromethane Dibromochloromethane Dibromomethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethylene (Vinylidene chloride) trans-1,2-Dichloropropylene trans-1,3-Dichloropropylene trans-1,3-Dichloropropylene 1,2-Dichloroethane 1,2-Tetrachloroethane 1,1,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,1,1-Trichloroethane 1,1,2-Trichloroethane	<pre><1.2 <1.2 <1.2 <1.2 <1.2 <1.2 <1.2 <1.2</pre>	1.22.22.22.22.22.22.22.22.22.22.22.22.22		

Huey-Chen Chow Chemist

March 5, 1990

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing Certification: <u>108</u>

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 JOB #: 272.016 SAMPLE ID: 18

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

COMP. No.	COMPOUND	ug/L (ppb)	DETECTION LIMIT ug/L (ppb)
V12 V3 V4 V5 V7 V9 V112 V114 V116 V17	Bromodichloromethane Bromoform Bromomethane Carbon tetrachloride Chlorobenzene Chloroethane Chloroform Chloromethane Dibromochloromethane Dibromomethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichloroethane 1,2-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethylene (Vinylidene chloride) trans-1,2-Dichloromethane 1,2-Dichloromethane	<500 <5000 <5000 <5000 <5000 <5000 <5000 <55000 <55000 <55000 <55000 <55000 <55000 <55000 <55000	500 500 500 500 500 500 500 500 500 500
V17 V18 V19 V20 V22 V23 V24 V26 V27 V29 V31	Dichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropylene trans-1,3-Dichloropropylene 1,1,2,2-Tetrachloroethane 1,1,1,2-Tetrachloroethane Tetrachloroethylene 1,1,1-Trichloroethane 1,1,2-Trichloroethane Trichloroethylene Vinyl chloride Dichlorodifluoromethane Trichloroethyl-vinyl-ether	1 .EAA	500 500 500 500 500 500 500 500 500 500

Huey-Chén Chow

March 5, 1990

Chemist

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing Certification: <u>108</u>

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 JOB #: 272.016 SAMPLE ID: MW4

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

COMP. No.	COMPOUND	ug/L (ppb)	DETECTION LIMIT ug/L (ppb)
V12 V23 V5 V7 V7 V1123 V1123 V1189 V1222 V1222	Bromodichloromethane Bromoform Bromomethane Carbon tetrachloride Chlorobenzene Chloroethane Chloroform Chloromethane Dibromochloromethane Dibromomethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethylene (Vinylidene chloride) trans-1,2-Dichloropropylene Dichloromethane 1,2-Dichloropropylene trans-1,3-Dichloropropylene trans-1,3-Dichloropropylene trans-1,1,2-Tetrachloroethane 1,1,2-Tetrachloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane	5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.	555555555555555555555555555555555555555
V18 V190 V221 V223 V224 V226 V227 V231 V331	1,1,2-letrachloroethane Tetrachloroethylene 1,1,1-Trichloroethane 1,1,2-Trichloroethane Trichloroethylene Vinyl chloride Dichlorodifluoromethane Trichlorofluoromethane 2-chloro-ethyl-vinyl-ether	<pre><0.5 3 <0.5 5 5 6</pre>	5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.

March 5, 1990

Huey-Chen Chow Chemist

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 JOB #: 272.016 SAMPLE ID: MW5

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

COMP. No.	COMPOUND	ug/L (ppb)	DETECTION LIMIT ug/L (ppb)
V12 V34 V56 V78 V1123 V1123 V114 V1156 V117	Bromodichloromethane Bromoform Bromomethane Carbon tetrachloride Chlorobenzene Chloroethane Chloroform Chloromethane Dibromochloromethane Dibromomethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,1-Dichloroethane 1,2-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethylene (Vinylidene chloride) trans-1,2-Dichloroethylene	5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5.	0.55 0.55 0.55 0.00 0.00 0.00 0.00 0.00
V 2 9	Dibromomethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,1-Dichloroethane 1,2-Dichloroethylene (Vinylidene chloride) trans-1,2-Dichloroethylene Dichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropylene trans-1,3-Dichloropropylene trans-1,3-Dichloropropylene 1,1,2-Tetrachloroethane 1,1,1,2-Tetrachloroethane 1,1,1-Trichloroethane 1,1,1-Trichloroethane Trichloroethylene Vinyl chloride Dichlorodifluoromethane Trichloroethylene Vinyl chloride Dichlorodifluoromethane Trichloroethylene Vinyl chloride Dichlorodifluoromethane Trichloroethylene	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5

March 5, 1990

Huey-Chen Chow Chemist

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

SAMPLE ID: REAGENT SPIKE RECOVERY

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

COMP.	COMPOUND	<u></u>	COMP	COMPOUND	
No.		Ì	No.	İ	
			l		
V 1	Bromodichloromethane	-	V16	1,1-Dichloroethylene	107%
V2	Bromoform	94%	1	(Vinylidene chloride)	
٧3	Bromomethane	-	V17	trans-1,2-Dichloroethylene	8 8%
٧4	Carbon tetrachloride	98%	V18	Dichloromethane	-
V5	Chlorobenzene	96%	V19	1,2-Dichloropropane	93%
٧6	Chloroethane	-	V20	cis-1,3-Dichloropropylene	99%
٧7	Chloroform	99%	V21	trans-1,3-Dichloropropylene	107%
٧8	Chloromethane	<u> </u>	V22	1,1,2,2-Tetrachloroethane	104%
٧9	Dibromochloromethane	91%	V23	1,1,1,2-Tetrachloroethane	-
V10	Dibromomethane	-	V24	Tetrachloroethylene	84%
V11	1,2-Dichlorobenzene	102%	V25	1,1,1-Trichloroethane	99%
V12	1,3-Dichlorobenzene	103%	V26	1,1,2-Trichloroethane	95%
V13	1,4-Dichlorobenzene	96%	V27	Trichloroethylene	95%
V14	1,1-Dichloroethane	98%	V28	Vinyl chloride	-
V15	1,2-Dichloroethane	85%	V29	Dichlorodifluoromethane	-
			V30	Trichlorofluoromethane	88%

Huey-Chen Chow

March 5, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016 SAMPLE ID: REAGENT SPIKE RECOVERY

DUPLICATE

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

COMP.	COMPOUND		COMP	COMPOUND	
No.		'	No.		
			l		
V1	Bromodichloromethane	-	V16	1,1-Dichloroethylene	101%
٧2	Bromoform	101%		(Vinylidene chloride)	
V 3	Bromomethane	-	V17	trans-1,2-Dichloroethylene	100%
٧4	Carbon tetrachloride	101%	V18	Dichloromethane	-
٧5	Chlorobenzene	101%	V19	1,2-Dichloropropane	100%
٧6	Chloroethane	-	V20	cis-1,3-Dichloropropylene	101%
٧7	Chloroform	101%	V21	trans-1,3-Dichloropropylene	101%
٧8	Chloromethane	-	V22	[1,1,2,2-Tetrachloroethane	101%
V 9	Dibromochloromethane	101%	V23	1,1,1,2-Tetrachloroethane	-
V10	Dibromomethane	-	V24	Tetrachloroethylene	100%
V11	1,2-Dichlorobenzene	100%	V25	[1,1,1-Trichloroethane	100%
V12	1,3-Dichlorobenzene	101%	V26	1,1,2-Trichloroethane	101%
V13	1,4-Dichlorobenzene	100%	V27	Trichloroethylene	100%
V14	1,1-Dichloroethane	100%	V28	Vinyl chloride	_
V15	1,2-Dichloroethane	100%	V29	Dichlorodifluoromethane	-
	İ	j	V30	Trichlorofluoromethane	101%

Huey-Chen Chow

March 5, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

(916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016 SAMPLE ID: BLANK

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

COMP. NO.	COMPOUND	ug/L (ppb)	DETECTION LIMIT
-V1	Benzene	-\ - <0.5	ug/L (ppb) 0.5
V2	Chlorobenzene	1<0.5	0.5
٧3	1,2-Dichlorobenzene	<0.5	0.5
٧4	1,3-Dichlorobenzene	j<0.5	0.5
٧5	1,4-Dichlorobenzene	<0.5	0.5
٧6	Ethyl benzene	[<0.5	0.5
٧7	Toluene	j<0.5	0.5
8V	Xylenes (Dimethyl benzenes)	<0.5	0.5

Huey-Chen Chow

March 5, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

(916) 381-7953

Order No: 90-02-109

Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016 SAMPLE ID: MW4

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990

DATE COMPLETED: 03/05/1990

COMP.	COMPOUND	ug/L	DETECTION
NO.		(ppb)	LIMIT
			ug/L (ppb)
V1	Benzene	{<0.5	0.5
٧2	Chlorobenzene	<0.5	0.5
٧3	1,2-Dichlorobenzene	<0.5	0.5
٧4	1,3-Dichlorobenzene	<0.5	0.5
٧5	1,4-Dichlorobenzene	İ<0.5	0.5
٧6	[Ethyl benzene	i<0.5	0.5
٧7	Toluene	<0.5	j 0.5 ·
٧8	Xylenes (Dimethyl benzenes)	<0.5	0.5

March 5, 1990 Huey-Chen Chow Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

(916) 381-7953

Order No: 90-02-109

Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016 SAMPLE ID: MW5

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

March 5, 1990

COMP.	COMPOUND	ug/L	DETECTION
NO.		(ppb)	LIMIT
		1	ug/L (ppb)
V 1	Benzene	<0.5	0.5
٧2	Chlorobenzene	<0.5	0.5
٧3	1,2-Dichlorobenzene	<0.5	i 0.5
٧4	1,3-Dichlorobenzene	<0.5	0.5
٧5	1,4-Dichlorobenzene	İ<0.5	i 0.5
٧6	Ethyl benzene	i<0.5	i 0.5
٧7	Toluene	İ<0.5	0.5
87	Xylenes (Dimethyl benzenes)	<0.5	0.5

Huey-Chen Chow

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953 Order No: 90-02-109 Hazardous Waste Testing Certification: 108

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

JOB #: 272.016 SAMPLE ID: MW1

COMP.	COMPOUND	ug/L	DETECTION
NO.		(ppb)	LIMIT
			ug/L (ppb)
V 1	Benzene	60.8	1.2
٧2	Chlorobenzene	<1.2	1.2
٧3	11,2-Dichlorobenzene	(<1.2	1.2
٧4	1,3-Dichlorobenzene	<1.2	1.2
٧5	1,4-Dichlorobenzene	<1.2	1.2
٧6	Ethyl benzene	<1.2	1.2
٧7	Toluene	11.9	1.2
8V	Xylenes (Dimethyl benzenes)	19.9	1.2

Huey-Chen Chow Date Chemist

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

(916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016 SAMPLE ID: MW2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

COMP.	COMPOUND	ug/L	DETECTION
NO.		(ppb)	LIMIT
			ug/L (ppb)
V1	Benzene	<1.2	1.2
٧2	Chlorobenzene	<1.2	1.2
٧3	1,2-Dichlorobenzene	<1.2	1.2
٧4	1,3-Dichlorobenzene	<1.2	1.2
V5	1,4-Dichlorobenzene	<1.2	1.2
٧6	[Ethyl benzene	1.3	1.2
٧7	Toluene	j<1.2	1.2
٧8	(Numer (Numer Line 1) Xvlenes (Dimethyl benzenes)	i 4.0	1.2

Huey-Chen Chow

March 5, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

(916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016 SAMPLE ID: MW3 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

COMP. NO.	COMPOUND	ug/L (ppb)	DETECTION LIMIT ug/L (ppb)
V1	Benzene	<1.2	1.2
V2	Chlorobenzene	<1.2	1.2
٧3	1,2-Dichlorobenzene	<1.2	1.2
٧4	1,3-Dichlorobenzene	<1.2	1.2
٧5	1,4-Dichlorobenzene	<1.2	1.2
V 6	Ethyl benzene	<1.2	1.2
٧7	Toluene	<1.2	1.2
٧8	Xylenes (Dimethyl benzenes)	[2.9	1.2

Huey-Chen Chow

March 5, 1990

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

(916) 381-7953

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

JOB #: 272.016 SAMPLE ID: 18

COMP.	COMPOUND	ug/L	DETECTION LIMIT
NO.		(ppb)	ug/L (ppb)
V1	Benzene	3730	500
٧2	Chlorobenzene	i<500	500
٧3	1,2-Dichlorobenzene	 <500	500
٧4	1,3-Dichlorobenzene	<500	j 500
٧5	1,4-Dichlorobenzene	<500	500
٧6	Ethyl benzene	5430	j 500
٧7	Toluene	8920	500
8V	Xylenes (Dimethyl benzenes)	22500	500

Huey-Ghen Chow Date
Chemist

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

JOB #: 272.016

SAMPLE ID: REAGENT SPIKE RECOVERY

DUPLICATE

COMP. NO.	COMPOUND	SPIKE RECOVERY	,,
V3 1,2-0 V4 1,3-0 V5 1,4-0 V6 Ethyl	robenzene Dichlorobenzene Dichlorobenzene Dichlorobenzene benzene	93% 95% 95% 93% 95% 95%	
V7 Tolue V8 Xylen	ene les (Dimethyl benzenes)	95% 95%	

Huey-Chen Chow

Chemist

March 5, 1990

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Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

JOB #: 272.016 SAMPLE ID: BLANK

COMP. No.	COMPOUND -	ug/Kg (ppb) 	DETECTION LIMIT 	ug/Kg	(ppb)
V 1	Bromodichloromethane	 <1	1		
V2	Bromoform	 <1	1		
V 3	Bromomethane	<1	1		
٧4	Carbon tetrachloride	 <1	1		
V 5	Chlorobenzene	 <1	1		
V 6	Chloroethane	 <1	1		•
٧7	Chloroform	<1	1		
V 8	Chloromethane	 <1	1		
V 9	Dibromochloromethane	 <1	1		
V10	Dibromomethane	 <1	1		•
V11	1,2-Dichlorobenzene	<1	1		
V12	1,3-Dichlorobenzene	<1	1		
V13	1,4-Dichlorobenzene	<1	1		
V14	1,1-Dichloroethane	<1	1		
	1,2-Dichloroethane	<1	1		•
V16	1,1-Dichloroethylene	 <1	1		
	(Vinylidene chloride)				
V17	trans-1,2-Dichloroethylene	<1	1		
V18	Dichloromethane	<1	1		
V19	1,2-Dichloropropane	<1	1		
V20	cis-1,3-Dichloropropylene	<1	j 1		
V21	trans-1,3-Dichloropropylene	<1	1		
V22	1,1,2,2-Tetrachloroethane	<1	1		
V23	1,1,1,2-Tetrachloroethane	<1	1		
	Tetrachloroethylene	<1	1		
	1,1,1-Trichloroethane	<1	1		
	1,1,2-Trichloroethane	<1	1		· ·
V27	Trichloroethylene	<1	1		•
V28	Vinyl chloride	<1	1		
V29	Dichlorodifluoromethane	<1	1		
V30	Trichlorofluoromethane	 < 1	j 1		

Huey-Chen Chow Chemist

March 5, 1990 Date

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

JOB #: 272.016 SAMPLE ID: MW2 @ 9'

COMP. No.	COMPOUND	ug/Kg (ppb)	DETECTION LIMIT ug/Kg (ppb)
V1	Bromodichloromethane	<10	10
V2	Bromoform	< 10 < 10	10
V3	Bromomethane	<10 <10	10
V4	Carbon tetrachloride	<10	10
V5	Chlorobenzene	<10	10
٧6	Chloroethane	<10	10
V7	Chloroform	<10	10
٧8 .	Chloromethane	<10	10
٧9	Dibromochloromethane	<10	10
V10	Dibromomethane	<10	10
V11	1,2-Dichlorobenzene	<10	10
V12	1,3-Dichlorobenzene	<10	10
	1,4-Dichlorobenzene	<10	10
V14	1,1-Dichloroethane	<10	10
V15	1,2-Dichloroethane	<10	10
V16	1,1-Dichloroethylene	<10	10
	(Vinylidene chloride)	•	`
V17	trans-1,2-Dichloroethylene	<10	10
V18	Dichloromethane	<10	10
V19	11,2-Dichloropropane	<10	10
V20	cis-1,3-Dichloropropylene	<10	10
V21	trans-1,3-Dichloropropylene	<10	10
V22	1,1,2,2-Tetrachloroethane	<10	10
V23	1,1,1,2-Tetrachloroethane	<10	10
V24	Tetrachloroethylene	<10	10
V25	1,1,1-Trichloroethane	<10	10
V26	1,1,2-Trichloroethane	<10	10
V27	Trichloroethylene	<10	10
V28	Vinyl chloride	<10	10
V 29	Dichlorodifluoromethane	<10	10
٧30	Trichlorofluoromethane	<10	10

Huey-Chen Chow

March 5, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953 Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

SAMPLE ID: REAGENT SPIKE RECOVERY

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

COMP.	COMPOUND	1	COMP	COMPOUND	
No.		į	No.		
V1	Bromodichloromethane	104%	V16	 I,l-Dichloroethylene	111%
V2	Bromoform	108%		(Vinylidene chloride)	
٧3	Bromomethane	-	V17	trans-1,2-Dichloroethylene	102%
V4	Carbon tetrachloride	-	V18	Dichloromethane	99%
V 5	Chlorobenzene	-	V19	1,2-Dichloropropane	100%
٧6	Chloroethane	j -	V20	cis-1,3-Dichloropropylene	105%
٧7	Chloroform	107%	V21	trans-1,3-Dichloropropylene	115%
٧8	Chloromethane	-	V22	1,1,2,2-Tetrachloroethane	110%
V ,9	Dibromochloromethane	107%	V23	1,1,1,2-Tetrachloroethane	_
V10	Dibromomethane	-	V24	Tétrachloroethylene	102%
V11	1,2-Dichlorobenzene	104%	V25	1,1,1-Trichloroethane	104%
V12	1,3-Dichlorobenzene	107%	V26	1,1,2-Trichloroethane	107%
V13	1,4-Dichlorobenzene	105%	V27	Trichloroethylene	102%
V14	1,1-Dichloroethane	105%	V28	Vinyl chloride	_
V15	1,2-Dichloroethane	98%	V29	Dichlorodifluoromethane	_
	į	į	i v 30	Trichlorofluoromethane	105%

Huey-Chen Chow Chemist March 5, 1990

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Order No: 90-02-109 Hazardous Waste Testing

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CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 JOB #: 272.016

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990

DATE COMPLETED: 03/05/1990

SAMPLE ID: REAGENT SPIKE RECOVERY

DUPLICATE

COMP.	COMPOUND	1	LCOMP	COMPOUND	
No.			No.	į	
<u>v</u>	 Bromodichloromethane	97%	V16		0.20/
V2	Bromoform	94%	1410	1,1-Dichloroethylene (Vinylidene chloride)	92%
V3	Bromomethane		V17	trans-1,2-Dichloroethylene	99%
V4	Carbon tetrachloride	i -	V18	Dichloromethane	100%
V 5	Chlorobenzene	-	V19	1,2-Dichloropropane	100%
٧6	Chloroethane	<u> </u>	V20	cis-1,3-Dichloropropylene	96%
	Chloroform	95%	V21	trans-1,3-Dichloropropylene	91%
	Chloromethane	-		1,1,2,2-Tetrachloroethane	93%
	Dibromochloromethane	95%	V23	1,1,1,2-Tetrachloroethane	-
	Dibromomethane	-	V24	Tetrachloroethylene	98%
	1,2-Dichlorobenzene	97%		1,1,1-Trichloroethane	97%
	1,3-Dichlorobenzene	95%		1,1,2-Trichloroethane	95%
V13	1,4-Dichlorobenzene	97%		Trichloroethylene	99%
	1,1-Dichloroethane	97%	V28	Vinyl chloride	-
V15	1,2-Dichloroethane	101%		Dichlorodifluoromethane	-
			V30	Trichlorofluoromethane	96%

Huey-Chen Chow Chemist

March 5, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

Order No: 90-02-109 Hazardous Waste Testing

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(916) 381-7953

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2 JOB #: 272.016

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

SAMPLE ID: BLANK

COMP. NO.	COMPOUND	ug/Kg (ppb)	DETECTION LIMIT ug/Kg (ppb)
<u> V1</u>	Benzene	<1	1
٧2	Chlorobenzene	 <1	11
٧3	1,2-Dichlorobenzene	<1	1
٧4	1,3-Dichlorobenzene	<1	1
V5	1,4-Dichlorobenzene	<1	. 1
٧6	Ethyl Benzene	<1	1
٧7	Toluene	<1	1
V8	Xylenes (Dimethyl benzenes)	<1	1

Huey-Chen Chow

March 5, 1990 Date

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Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

JOB #: 272.016

SAMPLE ID: 17 @ 11.5'

COMP. NO.	COMPOUND 	ug/k l (ppt	7	DETECTION LIMIT ug/Kg (ppb)
V1	Benzene	<1	<u> </u>	1
V2	[Ch]orobenzene	 < 1	Ì	1
٧3	1,2-Dichlorobenzene	 < 1	İ	1
٧4	1,3-Dichlorobenzene	 < 1	Ì	1 -
V5	1,4-Dichlorobenzene	i<1	į	1
V 6	Ethyl Benzene	j 38	İ	1
٧7	Toluene	j 7	j	1
8V	Xylenes (Dimethyl benzenes)	135	j	1

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Chemist

March 5, 1990

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DATE RECEIVED: 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

JOB #: 272.016

SAMPLE ID: 18 @ 8'

COMP. NO.	COMPOUND	ug/Kg (ppb) 	DETECTION LIMIT ug/Kg (ppb)
V1	Benzene	i<1	1
٧2	Chlorobenzene	j<1	1
٧3	1,2-Dichlorobenzene	 <1	1
٧4	1,3-Dichlorobenzene	<1	1
٧5	1,4-Dichlorobenzene	 <1	1
٧6	Ethyl Benzene	j 3	1
٧7	Toluene	j 8	 1
8V	Xylenes (Dimethyl benzenes)	12	1

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March 5, 1990 Date

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DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

JOB #: 272.016

SAMPLE ID: 19 @ 10'

COMP.	COMPOUND 	ug/Kg (ppb) 	DETECTION LIMIT ug/Kg (ppb)
<u>V1</u>	Benzene	<1	1
V2	Chlorobenzene	j<1	1
٧3	1,2-Dichlorobenzene	j<1	j 1
٧4	1,3-Dichlorobenzene	i<1	i 1
٧5	1,4-Dichlorobenzene	i<1	[1
٧6	Ethyl Benzene	i<1	į 1
٧7	Toluene	i 7	i 1
8V	Xylenes (Dimethyl benzenes)	<1	. 1

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Chemist

March 5, 1990

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DATE RECEIVED: 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

JOB #: 272.016 SAMPLE ID: 20 @ 9'

COMP. NO.	COMPOUND	ug/Kg (ppb)	DETECTION LIMIT ug/Kg (ppb)
V1	Benzene	<1	1
٧2	Chlorobenzene	j<1	j 1
٧3	1,2-Dichlorobenzene	i <1	1
٧4	1,3-Dichlorobenzene	<1	1
٧5	1,4-Dichlorobenzene	j<1	j 1
٧6	Ethyl Benzene	j 3	11
· V7	Toluene	j 7	1
8V	Xylenes (Dimethyl benzenes)	11	1

Huey-Chen Chow

March 5, 1990 Date

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CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

JOB #: 272.016

SAMPLE ID: 21 @ 7.5'

COMP.	COMPOUND 	- 	ug/Kg (ppb)	DETECTION LIMIT ug/Kq (ppb)
V1	Benzene	_¦ <u><1</u>	·	1
٧2	Chlorobenzene	< <u>1</u>		$\bar{1}$
٧3	1,2-Dichlorobenzene	<1		11
٧4	1,3-Dichlorobenzene	i<1		i 1
V5	1,4-Dichlorobenzene	 <1	•	j 1
٧6	Ethyl Benzene	7		11
٧7	Toluene	j 5		j 1
8V	Xylenes (Dimethyl benzenes)	16		1

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March 5, 1990

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Certification: $\underline{108}$

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 JOB #: 272.016

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

SAMPLE ID: 21 @ 13'

COMP.	COMPOUND		ug/Kg (ppb)	DETECTION LIMIT
	<u> </u>	i	(11)	ug/Kg (ppb)
V 1	Benzene	 <1		1
V2	Chlorobenzene	 <1		1
٧3	1,2-Dichlorobenzene	j<1		1
٧4	1,3-Dichlorobenzene	<1		1
٧5	1,4-Dichlorobenzene	j<1		1
٧6	Ethyl Benzene	24		1
٧7	Toluene	j 17		1
V 8	Xylenes (Dimethyl benzenes)	j 79		 1

Huey-Chen Chow

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Chemist

March 5, 1990

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

JOB #: 272.016

SAMPLE ID: MW4 @ 13.5'

COMP. NO.	COMPOUND	ug/Kg (ppb)	DETECTION LIMIT ug/Kg (ppb)
<u>V1</u>	Benzene	<1	1
٧2	Chlorobenzene	 <1	1
٧3	1,2-Dichlorobenzene	<1	1
٧4	1,3-Dichlorobenzene	 <1	1
٧5	[1,4-Dichlorobenzene	<1	1
٧6	[Ethyl Benzene	<1	1
٧7	Toluene	<1	1
٧8	Xylenes (Dimethyl benzenes)	 <1	1

Huey-Chen Chow Chemist

March 5, 1990

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953 Order No: 90-02-109
Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

JOB #: 272.016 SAMPLE ID: MW5 @ 9'

COMP. NO.	COMPOUND 		ug/Kg (ppb)	DETECTION LIMIT ug/Kg (ppb)
<u>V1</u>	Benzene	<u> < 1 </u>		
٧2	Chlorobenzene	j<1		11
٧3	1,2-Dichlorobenzene	<1		1
٧4	11,3-Dichlorobenzene	<1		1
٧5	1,4-Dichlorobenzene	<1		<u> </u>
. V6	[Ethyl Benzene	<1		1
٧7	Toluene	 <1	•	1
8V	Xylenes (Dimethyl benzenes)	<1		1

Huey-Chen Chow

March 5, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

SAMPLE ID: MW2 @ 9'

COMP.	COMPOUND	ug/Kg	DETECTION
NO.		(ppb)	LIMIT
			_ug/Kg (ppb)
V1	Benzene	<10	10
٧2	Chlorobenzene	<10	10
٧3	1,2-Dichlorobenzene	<10	10
٧4	1,3-Dichlorobenzene	<10	10
٧5	1,4-Dichlorobenzene	<10	10
٧6	Ethyl Benzene	810	10
٧7	Toluene	j 355	10
8	Xylenes (Dimethyl benzenes)	3980	10

Huey-Chen Chow

Chemist

March 5, 1990

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

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CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990

JOB #: 272.016

DATE COMPLETED: 03/05/1990

SAMPLE ID: MW5 @ 11'

COMP. NO.	COMPOUND	ug/Kg (ppb)	DETECTION LIMIT ug/Kg (ppb)
V1	Benzene	<1	1
٧2	Chlorobenzene	i <1	j 1
٧3	1,2-Dichlorobenzene	<1	1
V4	1,3-Dichlorobenzene	i <1	j 1
V5	1,4-Dichlorobenzene	 <1	j 1
٧6	Ethyl Benzene	<1	j 1
٧7	Toluene	j 3	j 1
٧8	Xylenes (Dimethyl benzenes)	<1	j 1

Huey-Chen Chow

March 5, 1990

Chemist

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Certification: 108

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

JOB #: 272.016 SAMPLE ID: 15 @ 6'

COMP. NO.	COMPOUND	 	ug/Kg (ppb)	DETECTION LIMIT ug/Kg (ppb)
<u> V1</u>	Benzene	- < 1		1
٧2	Chlorobenzene	j<1		i 1
٧3	11,2-Dichlorobenzene	[<1		j 1
٧4	1,3-Dichlorobenzene	[<1		1
٧5	1,4-Dichlorobenzene	<1		1
٧6	Ethyl Benzene	j 4		1
٧7	Toluene	3		1
8	Xylenes (Dimethyl benzenes)	6		1

Huey-Chen Chow

March 5, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953 Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

JOB #: 272.016 SAMPLE ID: 16 @ 4'

COMP.	COMPOUND	ug/Kg	DETECTION
NO.		(ppb)	LIMIT
167		_	ug/Kg (ppb)
V1	Benzene	[<1	1
٧2	Chlorobenzene	[<1	11
٧3	1,2-Dichlorobenzene	i<1	1
٧4	1,3-Dichlorobenzene	 <1	1
V5	1,4-Dichlorobenzene	<1	1
V6	Ethyl Benzene	 <1	1
٧7	Toluene	j 79	1
8V	Xylenes (Dimethyl benzenes)	5	1

Huey-Chen Chow

March 5, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990

JOB #: 272.016

DATE COMPLETED: 03/05/1990

SAMPLE ID: 17 @ 8.5'

COMP.	COMPOUND	ug/Kg	DETECTION
NO.		(ppb)	LIMIT
			ug/Kg (ppb)
٧1	Benzene	<1	1
V2	Chlorobenzene	<1	1
٧3	1,2-Dichlorobenzene	<1	1
٧4	1,3-Dichlorobenzene	 <1	1
V5	1,4-Dichlorobenzene	<1	1
٧6	Ethyl Benzene	 <1	1
٧7	Toluene	j 7	1
8V	Xylenes (Dimethyl benzenes)	<1	1

Huey-Chen Chow

Chemist

March 5, 1990

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

JOB #: 272.016 SAMPLE ID: MW1 @ 8'

COMP. NO.	COMPOUND	ug/Kg (ppb)	DETECTION LIMIT ug/Kg (ppb)
<u> V1</u>	Benzene	329	$\frac{1}{1}$
٧2	Chlorobenzene	 <1	i 1
٧3	1,2-Dichlorobenzene	<1	j 1
V 4	1,3-Dichlorobenzene	 <1	11
V5	1,4-Dichlorobenzene	i<1	i1 ·
٧6	Ethyl Benzene	70	j 1
٧7	Toluene	7	<u> </u>
V8	Xylenes (Dimethyl benzenes)	130	 1

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Chemist

March 5, 1990

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

(916) 381-7953

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990

JOB #: 272.016

DATE COMPLETED: 03/05/1990

SAMPLE ID: MW1 @ 12'

COMP. NO.	COMPOUND 	ug/Kg (ppb)	DETECTION LIMIT ug/Kq (ppb)
<u>V1</u>	Benzene		
٧2	Chlorobenzene	İ<1	<u> </u>
٧3	11,2-Dichlorobenzene	j<1	1
٧4	1,3-Dichlorobenzene	<1	1
٧5	1,4-Dichlorobenzene	j<1	11
٧6	Ethyl Benzene	j 6	1
٧7	Toluene	j 4] 1
V 8	Xylenes (Dimethyl benzenes)	2	j 1

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March 5, 1990 Date

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

JOB #: 272.016 SAMPLE ID: MW2 @ 6'

COMP.	COMPOUND	l ug/Kg	DETECTION
NO.		(ppb)	LIMIT
	<u></u>	{	ug/Kg (ppb)
V1	Benzene	<1	1
٧2	Chlorobenzene	<1	1
٧3	1,2-Dichlorobenzene	 <1	1
٧4	1,3-Dichlorobenzene	j<1	1
٧5	1,4-Dichlorobenzene	j<1	1
٧6	Ethyl Benzene	j<1	1
٧7	Toluene	<1	į 1
8V	Xylenes (Dimethyl benzenes)	j<1	1

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March 5, 1990

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Certification: 108

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

JOB #: 272.016 SAMPLE ID: MW3 @ 6'

COMP. NO.	COMPOUND	ug/Kg (ppb)	DETECTION LIMIT ug/Kg (ppb)
<u> V1</u>	Benzene	- 	1
٧2	Chlorobenzene	i<1	1
٧3	1,2-Dichlorobenzene	i<1	1
٧4	1,3-Dichlorobenzene	i<1	11
V 5	1,4-Dichlorobenzene	j<1	1
٧6	Ethyl Benzene	 <1	1
٧7	Toluene	<1	1
8V	Xylenes (Dimethyl benzenes)	j<1	1

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March 5, 1990

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

(916) 381-7953

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990

JOB #: 272.016

DATE COMPLETED: 03/05/1990

SAMPLE ID: MW4 @ 4.5'

COMP. NO.	COMPOUND	ug/Kg (ppb)	DETECTION LIMIT ug/Kg (ppb)
V1	Benzene		11
٧2	Chlorobenzene	i<1	i 1
٧3	1,2-Dichlorobenzene	<1	j 1
V4	1,3-Dichlorobenzene	 <1	1
V5	1,4-Dichlorobenzene	ļ<1	 1
V 6	Ethyl Benzene	i<1	1
٧7	Toluene	<1	j 1
V8	Xylenes (Dimethyl benzenes)	<1	1

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March 5, 1990 Date

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

(916) 381-7953

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 JOB #: 272.016

SAMPLE ID: MW4 @ 10.5'

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

COMP.	COMPOUND		ug/Kg	DETECTION
NO.			(ppb)	LIMIT
		j		ug/Kg (ppb)
۷l	Benzene	<1		1
٧2	Chlorobenzene	<1		1
٧3	1,2-Dichlorobenzene	 <1		1
٧4	[1,3-Dichlorobenzene	 <1		1
٧5	1,4-Dichlorobenzene	 <1		1
٧6	Ethyl Benzene	 <1		1
٧7	Toluene	[<1		1
87	Xylenes (Dimethyl benzenes)	<1		1

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March 5, 1990

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS

PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

SAMPLE ID: 17 @ 10'

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990

DATE COMPLETED: 03/05/1990

COMP.	COMPOUND	ug/Kg (ppb)	DETECTION LIMIT
110.		(\$707	ug/Kg (ppb)
٧1	Benzene	<2.5	2.5
٧2	Chlorobenzene	1<2.5	12.5
٧3	1,2-Dichlorobenzene	j<2.5	12.5
٧4	1,3-Dichlorobenzene	<2.5	į2,5
V5	1,4-Dichlorobenzene	j<2.5	[2.5
٧6	Ethyl Benzene	108	2.5
٧7	Toluene	j 37	2.5
87	Xylenes (Dimethyl benzenes)	444	2.5

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March 5, 1990

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

JOB #: 272.016 SAMPLE ID: MW2 @ 12'

COMP. NO.	COMPOUND	ug/Kg (ppb)	DETECTION LIMIT ug/Kg (ppb)
<u> V1</u>	Benzene	< 5	
V2	Chlorobenzene	i<5	į 5
٧3	1,2-Dichlorobenzene	j<5	į 5
٧4	1,3-Dichlorobenzene	 <5	į 5
V5	1,4-Dichlorobenzene	 <5	[5]
V6	Ethyl Benzene	740	[5 ·
V 7	Toluene	 <5	[5
V 8	Xylenes (Dimethyl benzenes)	3740	5

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March 5, 1990

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953 Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

JOB #: 272.016

SAMPLE ID: 18 @ 9.5'

COMP. NO.	COMPOUND	ug/Kg (ppb)	DETECTION LIMIT ug/Kg (ppb)
<u> V1</u>	Benzene	333	25
V2	Chlorobenzene	<25	25
٧3	1,2-Dichlorobenzene	<25	25
٧4	1,3-Dichlorobenzene	i<25	125
V5	1,4-Dichlorobenzene	<25	125
V6	Ethyl Benzene	2630	25
٧7	Toluene	1390	125
V8	Xylenes (Dimethyl benzenes)	11500	25

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March 5, 1990 Date

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990

JOB #: 272.016

DATE COMPLETED: 03/05/1990

SAMPLE ID: 18 @ 11.5'

COMP. NO.	COMPOUND	ug/Kg (ppb)	DETECTION LIMIT ug/Kg (ppb)
	Benzene	122	
V 2	Chlorobenzene	< 5	15
٧3	1,2-Dichlorobenzene	Í<5	5
V4	1,3-Dichlorobenzene	<5	5
٧5	1,4-Dichlorobenzene	İ<5	İ5
٧6	Ethyl Benzene	552	5
٧7	Toluene	236	5
٧8	Xylenes (Dimethyl benzenes)	1530	5

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March 5, 1990 Date

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Order No: 90-02-109

Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016 SAMPLE ID: 21 @ 9.5'

DATE RECEIVED : 02/15/1990

DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

COMP. NO.	COMPOUND	ug/Kg (ppb)	DETECTION LIMIT ug/Kg (ppb)
V1	Benzene	<10	10 10
V2	Chlorobenzene	<10	10
٧3	1,2-Dichlorobenzene	<10	10
٧4	1,3-Dichlorobenzene	<10	10
٧5	1,4-Dichlorobenzene	<10	10
٧6	Ethyl Benzene	280	j 10
· V7	Toluene	72	10
8V	Xylenes (Dimethyl benzenes)	970	<u> </u> 10

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March 5, 1990

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Order No: 90-02-109

Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

SAMPLE ID: 21 @ 11.5'

DATE RECEIVED : 02/15/1990

DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

COMP. NO.	COMPOUND	ug/Kg (ppb)	DETECTION LIMIT ug/Kg (ppb)
<u> V1</u>	Benzene	<10	10
V 2	Chlorobenzene	<10	110
٧3	1,2-Dichlorobenzene	<10	10
٧4	1,3-Dichlorobenzene	<10	110
٧5	1,4-Dichlorobenzene	<10	110
٧6	Ethyl Benzene	730	10
٧7	Toluene	860	10
8V	Xylenes (Dimethyl benzenes)	2370	10

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Date

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Order No: 90-02-109

Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

SAMPLE ID: 15 @ 9.5'

DATE RECEIVED: 02/15/1990

DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

COMP.	COMPOUND	l ug/Kg	DETECTION
NO.		(ppb)	LIMIT
			ug/Kg (ppb)_
٧1	Benzene	750	50
٧2	Chlorobenzene	 <50	50
٧3	1,2-Dichlorobenzene	<50	50
٧4	1,3-Dichlorobenzene	 <50	50
٧5	1,4-Dichlorobenzene	<50	j50
٧6	Ethyl Benzene	9250	Ì50
٧7	Toluene	8320	j50
8V	Xylenes (Dimethyl benzenes)	49000	j 50

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Chemist

March 5, 1990

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(916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

SAMPLE ID: 15 @ 10.5'

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990

DATE COMPLETED: 03/05/1990

COMP.	COMPOUND	ug/Kg	DETECTION
NO.		(ppb)	LIMIT
			ug/Kg (ppb)
٧1	Benzene	39100	125
٧2	Chlorobenzene	 <125	125
٧3	1,2-Dichlorobenzene	 <125	1125
٧4	1,3-Dichlorobenzene	<125	125
٧5	1,4-Dichlorobenzene	 <125	125
V6	Ethyl Benzene	j 96200	125
٧7	Toluene	260000	125
8V	Xylenes (Dimethyl benzenes)	519000	125

Huey-Chen Chow

March 5, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953 Order No: 90-02-109
Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

JOB #: 272.016 SAMPLE ID: 16 @ 7'

COMP.	COMPOUND	uq/Kq	DETECTION
NO.		(ppb)	į LIMIT
		_ {	_ ug/Kg (ppb)_
V1	Benzene	400	10
٧2	Chlorobenzene	<10	10
٧3	1,2-Dichlorobenzene	<10	110
٧4	1,3-Dichlorobenzene	1 <10	110
V5	1,4-Dichlorobenzene	<10	110
V 6	Ethyl Benzene	1430	j 10
٧7	Toluene	2130	110
8V	Xylenes (Dimethyl benzenes)	8060	10

Huey-Chen Chow

March 5, 1990 Date

-Craen Chow

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

JOB #: 272.016

SAMPLE ID: 16 @ 11.5'

COMP.	COMPOUND	ug/Kg] DETECTION
NO.		(ppb)	LIMIT
			ug/Kg (ppb)
٧1	Benzene	13100	50
٧2	Chlorobenzene	<50	50
٧3	1,2-Dichlorobenzene	 <50	į 50
٧4	1,3-Dichlorobenzene	<50	į 50
V 5	[1,4-Dichlorobenzene	<50	İ 50
٧6	Ethyl Benzene	25300	İ50
٧7	Toluene	81900	İ50
٧8	Xylenes (Dimethyl benzenes)	146000	50

Huey-Chen Chow

Chemist

March 5, 1990

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Order No: 90-02-109

Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS

PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

SAMPLE ID: MW1 @ 10.5'

DATE RECEIVED : 02/15/1990

DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

COMP. NO.	COMPOUND	ug/Kg (ppb)	DETECTION LIMIT ug/Kg (ppb)
V1	Benzene	1690	50
٧2	Chlorobenzene	I<50	50
٧3	1,2-Dichlorobenzene	İ<50	50
٧4	1,3-Dichlorobenzene	i<50	50
٧5	1,4-Dichlorobenzene	<50	50
٧6	Ethyl Benzene	9470	50
٧7	Toluene	12800	50
8V	Xylenes (Dimethyl benzenes)	48300	50

Huey-Chen Chow

Chemist

March 5, 1990

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016 SAMPLE ID: MW3 @ 9' DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

COMP. NO.	COMPOUND	ug/Kg (ppb)	DETECTION LIMIT
<u></u>	Benzene	_ <u>-</u> -	<u>ug/Kg (ppb)</u> 50
V2	Chlorobenzene	<50	50
V 3	1,2-Dichlorobenzene	<50	50
٧4	1,3-Dichlorobenzene	<50	50
V 5	1,4-Dichlorobenzene	(<50	50
V 6	Ethyl Benzene	1990	50
V 7	Toluene	<50	İ50
V 8	Xylenes (Dimethyl benzenes)	10200	50

Huey-Chen Chow

March 5, 1990

Date

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

SAMPLE ID: MATRIX SPIKE RECOVERY

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990

DATE COMPLETED: 03/05/1990

COMPOUND NO.	SPIKE RECOVERY
V1 Benzene	110%
V2 Chlorobenzene	117%
V3 1,2-Dichlorobenzene	_
V4 [1,3-Dichlorobenzene	122%
V5 1,4-Dichlorobenzene	126%
V6 Ethyl benzene	123%
V7 Toluene	134%
V8 Xylenes (Dimethyl benzenes)	127%

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March 5, 1990 Date

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Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990

JOB #: 272.016

DATE COMPLETED: 03/05/1990

SAMPLE ID: MATRIX SPIKE RECOVERY

DUPLICATE

COMP	. <u>COMPOUND</u>	SPIKE RECOVERY	
NO.			
	Benzene	95%	
V2	Chlorobenzene	98%	
٧3	1,2-Dichlorobenzene	-	
٧4	1,3-Dichlorobenzene	104%	
٧5	1,4-Dichlorobenzene	108%	
٧6	Ethyl benzene	103%	
٧7	Toluene	101%	
8V	Xylenes (Dimethyl benzenes)	106%	

Huey-Chen Chow

March 5, 1990 Date

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990

JOB #: 272.016

DATE COMPLETED: 03/05/1990

SAMPLE ID: REAGENT SPIKE RECOVERY

COMP NO.	. <u>COMPOUND</u>	SPIKE RECOVERY	
	Benzene	94%	
	Chlorobenzene 1,2-Dichlorobenzene	98% 112%	
	1,3-Dichlorobenzene 1,4-Dichlorobenzene	107% 109%	
V6 V7	Ethyl benzene Toluene	100% 101%	
V8	Xylenes (Dimethyl benzenes)	104%	

March 5, 1990 Huey-Chen Chow Date Chemist

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Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/22/1990 DATE COMPLETED: 03/05/1990

JOB #: 272.016

SAMPLE ID: REAGENT SPIKE RECOVERY

DUPLICATE

COMPOUND NO.	SPIKE RECOVERY
V1 Benzene	97%
V2 Chlorobenzene	102%
V3 1,2-Dichlorobenzene	119%
V4 1,3-Dichlorobenzene	106%
V5 1,4-Dichlorobenzene	119%
V6 Ethyl benzene	102%
V7 Toluene	102%
<pre>V8 Xylenes (Dimethyl benzenes)</pre>	105%

Huey, Chen Chow

March 5, 1990

TOTAL PÈTROLEUM HYDROCARBONS MODIFIED EPA METHOD 8015

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/20/1990 DATE COMPLETED: 02/27/1990

March 5, 1990

JOB #: 272.016 SAMPLE ID: BLANK

PETROLEUM HYDROCARBONS	CONCENTRATION [mg/kg(ppm)]	<pre>DETECTION LIMIT [mg/kg(ppm)]</pre>
Gasoline Range Diesel Range Motor Oil Range Total Petroleum Hydrocarbons	<5 <10 <25	5 10 25
CARBON NO. RANGE		
Gasoline Range Diesel Range Motor Oil Range	- - -	- - - -
PEAK CARBON NO		
Gasoline Range Diesel Range Motor Oil Range	- - -	- · · · · · · · · · · · · · · · · · · ·

Mark Shih Ph.D.

. Date

TOTAL PÈTROLEUM HYDROCARBONS MODIFIED EPA METHOD 8015

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/20/1990 DATE COMPLETED: 02/27/1990

JOB #: 272.016

SAMPLE ID: 18 @ 9.5'

PETROLEUM HYDROCARBONS	CONCENTRATION [mg/kg(ppm)]	DETECTION LIMIT [mg/kg(ppm)]
Gasoline Range Diesel Range Motor Oil Range Total Petroleum Hydrocarbons	138 <10 <25 138	5 10 25
CARBON NO. RANGE		
Gasoline Range Diesel Range Motor Oil Range	C9-C12 - -	- - -
PEAK CARBON NO		
Gasoline Range Diesel Range Motor Oil Range	C10 -	- - -

Mark Shih Ph.D.

March 5, 1990 Date

TOTAL PÈTROLEUM HYDROCARBONS MODIFIED EPA METHOD 8015

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing Certification: 108

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/20/1990 DATE COMPLETED: 02/27/1990

JOB #: 272.016

SAMPLE ID: 21 @ 9.5'

PETROLEUM HYDROCARBONS	CONCENTRATION [mg/kg(ppm)]	<pre>DETECTION LIMIT [mg/kg(ppm)]</pre>
Gasoline Range Diesel Range Motor Oil Range Total Petroleum Hydrocarbons	16 <10 <25 16	5 10 25
CARBON NO. RANGE		
Gasoline Range Diesel Range Motor Oil Range	C9-C12 - -	- - -
PEAK CARBON NO		
Gasoline Range Diesel Range Motor Oil Range	C10.	- - -

Mark Shih Ph.D.

March 5, 1990 Date

TOTAL PETROLEUM HYDROCARBONS MODIFIED EPA METHOD 8015

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/20/1990 DATE COMPLETED: 02/27/1990

JOB #: 272.016 SAMPLE ID: MW5 @ 9'

PETROLEUM HYDROCARBONS	<pre>CONCENTRATION [mg/kg(ppm)]</pre>	<pre>DETECTION LIMIT [mg/kg(ppm)]</pre>
Gasoline Range Diesel Range Motor Oil Range Total Petroleum Hydrocarbons	<5 <10 <25	5 10 25
CARBON NO. RANGE		
Gasoline Range Diesel Range Motor Oil Range	- - -	- - - ·
PEAK CARBON NO		
Gasoline Range Diesel Range Motor Oil Range	- - -	- - -

Mark Shih Ph.D.

March 5, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/20/1990 DATE COMPLETED: 02/27/1990

JOB #: 272.016

SAMPLE ID: MW1 @ 10.5

PETROLEUM HYDROCARBONS	<pre>CONCENTRATION [mg/kg(ppm)]</pre>	<pre>DETECTION LIMIT [mg/kg(ppm)]</pre>
Gasoline Range Diesel Range Motor Oil Range Total Petroleum Hydrocarbons	732 <10 <25 732	5 10 25
CARBON NO. RANGE		
Gasoline Range Diesel Range Motor Oil Range	C9-C12	- - - -
PEAK CARBON NO		
Gasoline Range Diesel Range Motor Oil Range	C10 - -	- - -

May Da. Mark Shih Ph.D.

March 5, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing Certification: 108

CLIENT: SUBSURFACE CONSULTANTS

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/20/1990 DATE COMPLETED: 02/27/1990

PROJECT NAME: 98TH & EDES, PHASE 2 JOB #: 272.016

SAMPLE ID: MW2 @ 9'

PETROLEUM HYDROCARBONS	<pre>CONCENTRATION [mg/kg(ppm)]</pre>	DETECTION LIMIT [mg/kg(ppm)]
Gasoline Range Diesel Range Motor Oil Range Total Petroleum Hydrocarbons	246 * <10 47 293	5 10 25
CARBON NO. RANGE		
Gasoline Range Diesel Range Motor Oil Range	C9-C12 - C18-C28	- - -
PEAK CARBON NO		
Gasoline Range Diesel Range Motor Oil Range	C10 - C24	- - -

^{*} Gasoline range hydrocarbons present but their pattern is different from our gasoline standard.

Mark Shih Ph.D.

March 5, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953 Order No: 90-02-109 Hazardous Waste Testing Certification: 108

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/20/1990 DATE COMPLETED: 02/27/1990

JOB #: 272.016

SAMPLE ID: MW3 @ 9'

PETROLEUM HYDROCARBONS	CONCENTRATION [mg/kg(ppm)]	<pre>DETECTION LIMIT [mg/kg(ppm)]</pre>
Gasoline Range Diesel Range Motor Oil Range Total Petroleum Hydrocarbons	352 <10 <25 352	5 10 25
CARBON NO. RANGE		
Gasoline Range Diesel Range Motor Oil Range	C9-C12	- · · · · · · · · · · · · · · · · · · ·
PEAK CARBON NO		
Gasoline Range Diesel Range Motor Oil Range	C10 - -	- - -

Mark Shih Ph.D.

March 5, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

SAMPLE ID: MW4 @ 10.5'

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/20/1990 DATE COMPLETED: 02/27/1990

PETROLEUM HYDROCARBONS	CONCENTRATION [mg/kg(ppm)]	DETECTION LIMIT [mg/kg(ppm)]
Gasoline Range Diesel Range Motor Oil Range Total Petroleum Hydrocarbons	<5 <10 <25	5 10 25
CARBON NO. RANGE	•	
Gasoline Range Diesel Range Motor Oil Range	 -	 - -
PEAK CARBON NO		
Gasoline Range Diesel Range Motor Oil Range	- - 	- - -

Mark Shih Ph.D. Chemist

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953 Order No: 90-02-109 Hazardous Waste Testing Certification: 108

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

SAMPLE ID: MATRIX SPIKE RECOVERY

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/20/1990 DATE COMPLETED: 02/27/1990

PETROLEUM HYDROCARBONS

PETROLEUM HYDROCARBONS	<u>SPIKE</u> <u>RECOVERY</u>
Gasoline Range Diesel Range Motor Oil Range Total Petroleum Hydrocarbons	97% - -
CARBON NO. RANGE	
Gasoline Range Diesel Range Motor Oil Range	- - -

PEAK CARBON NO

Gasoline Range Diesel Range Motor Oil Range

> March 5, 1990 Date

Mark Shih Ph.D.

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing Certification: 108

SPIKE RECOVERY

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

SAMPLE ID: MATRIX SPIKE RECOVERY

DUPLICATE

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/20/1990

DATE COMPLETED: 02/27/1990

PETROLEUM	HYDROCARBONS	

Gasoline Range Diesel Range 90% Motor Oil Range Total Petroleum Hydrocarbons

CARBON NO. RANGE

Gasoline Range Diesel Range Motor Oil Range

PEAK CARBON NO

Gasoline Range Diesel Range Motor Oil Range

> March 5, 1990 Date

Mark Shih Ph.D.

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

SAMPLE ID: REAGENT SPIKE RECOVERY

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/20/1990 DATE COMPLETED: 02/27/1990

PETROLEUM HYDROCARBONS	SPIKE RECOVERY
Gasoline Range	-
Diesel Range	87%
Motor Oil Range	-
Total Petroleum Hydrocarbons	-
CARBON NO. RANGE	
Gasoline Range	-
Diesel Range	-
Motor Oil Range	-
PEAK CARBON NO	
Gasoline Range	-
Diesel Range	-
Motor Oil Range	-

That Sin Mark Shih Ph.D.

Chemist

March 5, 1990

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 JOB #: 272.016

SAMPLE ID: REAGENT SPIKE RECOVERY

DUPLICATE

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/20/1990 DATE COMPLETED: 02/27/1990

PETROLEUM	HYDROCARBONS

SPIKE RECOVERY

Gasoline Range Diesel Range Motor Oil Range Total Petroleum Hydrocarbons	88% - -
CARBON NO. RANGE	
Gasoline Range Diesel Range Motor Oil Range	- - -
PEAK CARBON NO	
Gasoline Range Diesel Range Motor Oil Range	- -

Mark Shih Ph.D.

Chemist

March 5, 1990

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/20/1990 DATE COMPLETED: 02/27/1990

JOB #: 272.016 SAMPLE ID: BLANK

PETROLEUM HYDROCARBONS	CONCENTRATION [mg/L (ppm)]	DETECTION LIMIT [mg/L (ppm)]
Gasoline Range Diesel Range Motor Oil Range Total Petroleum Hydrocarbons	<0.1 <0.2 <0.5	0.1 0.2 0.5
CARBON NO. RANGE		
Gasoline Range Diesel Range Motor Oil Range	- - 	- - -
PEAK CARBON NO		
Gasoline Range Diesel Range Motor Oil Range	- - -	- - -

Sandia Kao Senior Chemist, Organic Group

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

(916) 381-7953

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/20/1990 DATE COMPLETED: 02/27/1990

JOB #: 272.016

SAMPLE ID: MW1

_	PETROLEUM HYDROCARBONS	CONCENTRATION [mg/L (ppm)]	DETECTION LIMIT [mg/L (ppm)]
	Gasoline Range Diesel Range Motor Oil Range Total Petroleum Hydrocarbons	0.1 <0.2 <0.5 0.1	0.1 0.2 0.5
(CARBON NO. RANGE		
1	Gasoline Range Diesel Range Motor Oil Range	C9-C12 - -	- - -
	PEAK CARBON NO		
	Gasoline Range Diesel Range Motor Oil Range	C10 -	- -
•			

Sandia Kao Senior Chemist, Organic Group

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

Order No: 90-02-109 Hazardous Waste Testing Certification: 108

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CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016 SAMPLE ID: MW2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/20/1990 DATE COMPLETED: 02/27/1990

PETROLEUM HYD	ROCARBONS	<pre>CONCENTRATION [mg/L (ppm)]</pre>	DETECTION LIMIT [mg/L (ppm)]
Gasoline Rang Diesel Range Motor Oil Ran Total Petrole		0.1 <0.2 <0.5 0.1	0.1 0.2 0.5
CARBON NO. RA	<u>NGE</u>		
Gasoline Rang Diesel Range Motor Oil Ran		C9-C12 - -	- - - -
PEAK CARBON N	0		
Gasoline Rang Diesel Range Motor Oil Ran		C10 - -	- - -
	リー		

Sandia Kao Senior Chemist, Organic Group

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/20/1990 DATE COMPLETED: 02/27/1990

JOB #: 272.016 SAMPLE ID: MW5

PETROLEUM HYDROCARBONS	<pre>CONCENTRATION [mg/L (ppm)]</pre>	DETECTION LIMIT [mg/L (ppm)]
Gasoline Range Diesel Range Motor Oil Range Total Petroleum Hydrocarbons	<0.1 <0.2 <0.5	0.1 0.2 0.5
CARBON NO. RANGE		
Gasoline Range Diesel Range Motor Oil Range	- -	· · · · · · · · · · · · · · · · · · ·
PEAK CARBON NO		
Gasoline Range Diesel Range Motor Oil Range	- - -	·

Sandia Kao Senior Chemist, Organic Group

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953 Order No: 90-02-109
Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED: 02/15/1990 DATE EXTRACTED: 02/20/1990 DATE COMPLETED: 02/27/1990

JOB #: 272.016 SAMPLE ID: MW4

PETROLEUM HYDROCARBONS	<pre>CONCENTRATION [mg/L (ppm)]</pre>	DETECTION LIMIT [mg/L (ppm)]
Gasoline Range Diesel Range Motor Oil Range Total Petroleum Hydrocarbons	<0.1 <0.2 <0.5	0.1 0.2 0.5
CARBON NO. RANGE		
Gasoline Range Diesel Range Motor Oil Range	- - -	- - -
PEAK CARBON NO		
Gasoline Range Diesel Range Motor Oil Range	- - -	

Sandia Kao Senior Chemist, Organic Group

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

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CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016 SAMPLE ID: MW3 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/20/1990

DATE COMPLETED: 02/27/1990

PETROLEUM HYDROCARBONS	<pre>CONCENTRATION [mg/L (ppm)]</pre>	DETECTION LIMIT [mg/L (ppm)]
Gasoline Range Diesel Range Motor Oil Range Total Petroleum Hydrocarbons	0.1 <0.2 <0.5 0.1	0.1 0.2 0.5
CARBON NO. RANGE		
Gasoline Range Diesel Range Motor Oil Range	C9-C12 - -	- - -
PEAK CARBON NO		
Gasoline Range Diesel Range Motor Oil Range	C10 - -	- - - -

Sandia Kao Senior Chemist, Organic Group

Total Recoverable Hydrocarbons EPA METHOD 418.1

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

(916) 381-7953

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/20/1990

JOB #: 272.016

DATE COMPLETED: 02/21/1990

SAMPLE ID.	CONCENTRATION [mg/L (p)	pm)] D/L
MW1 MW2 MW3 MW4 MW5	<0.5 <0.5 <0.5 <0.5 <0.5	0.5 0.5 0.5 0.5 0.5 10
Method Blank REAGENT SPIKE RECOVERY REAGENT SPIKE RECOVERY DUPLICATE	<0.5 103% 106%	0.5

Abdon Hoke /200.
Abdou Mekebri

March 5, 1990 Date

Total Recoverable Hydrocarbons EPA METHOD 418.1

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

Hazardous Waste Testing

Certification: 108

Order No: 90-02-109

(916) 381-7953

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/20/1990

JOB #: 272.016

DATE COMPLETED: 02/21/1990

SAMPLE ID.	CONCENTRATION	<pre>[mg/Kg(ppm)]</pre>	<u>D/L</u>
18 @ 9.5' 21 @ 9.5' MW5 @ 9' MW1 @ 10.5' MW2 @ 9' MW3 @ 9' MW4 @ 10.5'		<4 <4 <4 <4 278 840 <4	4 4 4 4 4 40 4
Method Blank MW5 @ 9' MATRIX SPIKE RECOVERY MW5 @ 9' MATRIX SPIKE RECOVERY DUPLICATE		<4 100% 103%	4

Miles lead Abdou Mekebri

March 5, 1990 Date



EUREKA LABORATORIES, INC.

Corporate Office: 6790 FLORIN PERKINS, ROAD SACRAMENTO, CA 95828 TEL: (916) 381-7953 FAX: (916) 381-4013 Branch Office:
12121 NORTHUP WAY, SUITE 212
BELLEVUE, WA 98005
TEL: (206) 885-0284
FAX: (206) 885-6162
March 12, 1990

Air Pollution Chemical Analysis, Research & Testing Environmental Studies Robotics Toxicology

RECEIVED

Mr. Bill Wikander SUBSURFACE CONSULTANTS 171 12th Street Oakland, CA 94607

MAR 15 1990 AM PM 7|8|9|10|11|12|1|2|3|4|5|6

Reference: ELI Order No: 90-02-109 Amended

Project Name: 98th & EDES, Phase 2

Job #: 272.016

Dear Mr. Wikander:

Eureka Laboratories, Inc. is pleased to submit a laboratory report for the subject task. This report presents analytical results for six (6) water samples and thirty-one (31) soil samples for the following analyses:

ANALYSIS

Total Petroleum Hydrocarbons **METHOD**

Purg and Trap 5030 SAMPLE ID.

MW1, MW2, MW3, MW4, MW5, 18, 17 @ 10', 17 @ 11.5', 18 @ 8', 18 @ 9.5', 18 @ 11.5', 19 @ 10', 20 @ 9',21 @ 7.5'. 21 @ 9.5', 21 @ 11.5', 21 @ 13', MW4 @ 13.5', MW5 @ 9', MW5 @ 11', 15 @ 6', 15 @ 9.5', 15 @ 10.5', 16 @ 4', MW1 @ 10.5', 16 @ 7',16 @ 11.5', 17 @ 8.5', MW1 @ 8', MW1 @ 12', MW2 @ 6', MW2 @ 9', MW2 @ 12', MW3 @ 6', MW3 @ 9', MW4 @ 4.5', MW4 @ 10.5'.

Sincerely, EUREKA LABORATORIES, INC.

Shao-Pin Yo, Ph.D. Laboratory Director

SPY/da

Attachment

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing Certification: <u>108</u>

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016 SAMPLE ID : BLANK DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

PETROLEUM HYDROCARBONS	CONCENTRATION [ug/L (ppb)]	DETECTION LIMIT [ug/L (ppb)]	
Gasoline Range Total Petroleum Hydrocarbons	<20 -	20 -	
CARBON NO. RANGE			
Gasoline Range	-	-	
PEAK CARBON NO			
Gasoline Range	-	-	

Mark Shih, Ph.D.

March 12, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

(916) 381-7953

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED: 02/15/1990 DATE EXTRACTED: 02/23/1990

DATE COMPLETED: 03/02/1990

JOB #: 272.016 SAMPLE ID : MW1

PETROLEUM HYDROCARBONS	CONCENTRATION [ug/L (ppb)]	DETECTION LIMIT [ug/L (ppb)]
Gasoline Range Total Petroleum Hydrocarbons	55.1 55.1	20
CARBON NO. RANGE		
Gasoline Range	C9-C13	•
PEAK CARBON NO		
Gasoline Range	C10	-

Mark Shih, Ph.D.

March 12, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing Certification: <u>108</u>

CLIENT: SUBSURFACE CONSULTANTS

DATE RECEIVED : 02/15/1990

PROJECT NAME: 98TH & EDES, PHASE 2

DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016 SAMPLE ID : MW2

PETROLEUM HYDROCARBONS	CONCENTRATION [ug/L (ppb)]	DETECTION LIMIT [ug/L (ppb)]
Gasoline Range Total Petroleum Hydrocarbons	35.1 35.1	20
CARBON NO. RANGE		
Gasoline Range	C9-C13	-
PEAK CARBON NO		
Gasoline Range	C10	-

Mark Shih, Ph.D.

March 12, 1990 Date

JIIII, FII.D.

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016 SAMPLE ID : MW3

PETROLEUM HYDROCARBONS

CONCENTRATION [ug/L (ppb)] DETECTION LIMIT [ug/L (ppb)]

Gasoline Range

<20

20

Total Petroleum Hydrocarbons

CARBON NO. RANGE

Gasoline Range

PEAK CARBON NO

Gasoline Range

Mark Shih.

March 12, 1990

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016 SAMPLE ID : MW4

Gasoline Range <20 20 Total Petroleum Hydrocarbons -	PETROLEUM HYDROCARBONS	CONCENTRATION [ug/L (ppb)]	DETECTION LIMIT [ug/L (ppb)]
	Gasoline Range Total Petroleum Hydrocarbons		

CARBON NO. RANGE

Gasoline Range

PEAK CARBON NO

Gasoline Range

March 12, 1990

Mark Shih, Ph.D.

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016 SAMPLE ID : MW5

PETROLEUM HYDROCARBONS	CONCENTRATION [ug/L (ppb)]	<u>DETECTION LIMIT</u> [ug/L (ppb)]
Gasoline Range Total Petroleum Hydrocarbons	<20	20 -
CARBON NO. RANGE		
Gasoline Range	-	-
PEAK CARBON NO		
Gasoline Range	-	· -

March 12, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

(916) 381-7953

Order No: 90-02-109

Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016 SAMPLE ID: 18 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990

DATE COMPLETED: 03/02/1990

PETROLEUM HYDROCARBONS CONCENTRATION DETECTION LIMIT [ug/L (ppb)] [ug/L (ppb)]

Gasoline Range Total Petroleum Hydrocarbons

134,000 134,000 20

CARBON NO. RANGE

Gasoline Range

C9-13

PEAK CARBON NO

Gasoline Range

010

Chemist

March 12, 1990

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Order No: 90-02-109 Hazardous Waste Testing Certification: 108

(916) 381-7953

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016 SAMPLE ID : BLANK DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

PETROLEUM HYDROCARBONS

CONCENTRATION [ug/Kg

DETECTION LIMIT [ug/Kg (ppb)]

Gasoline Range Total Petroleum Hydrocarbons <200

200

CARBON NO. RANGE

Gasoline Range

PEAK CARBON NO

Gasoline Range

//Confliction

March 12, 1990

. Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID : 17 @ 10'

PETROLEUM HYDROCARBONS CONCENTRATION DETECTION LIMIT [ug/Kg [ug/Kg (ppb)]

Gasoline Range Total Petroleum Hydrocarbons <200

200

CARBON NO. RANGE

Gasoline Range

PEAK CARBON NO

Gasoline Range

Mark Shih, Ph.D.

March 12, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

(916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

SAMPLE ID : 17 @ 11.5

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990

DATE COMPLETED: 03/02/1990

PETROLEUM HYDROCARBONS

CONCENTRATION [ug/Kg

DETECTION LIMIT [ug/Kg (ppb)]

Gasoline Range

Total Petroleum Hydrocarbons

<200

200

CARBON NO. RANGE

Gasoline Range

PEAK CARBON NO

Gasoline Range

March 12, 1990

Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID : 18 @ 8'

PETROLEUM HYDROCARBONS

CONCENTRATION [ug/Kg

DETECTION LIMIT [ug/Kg (ppb)]

Gasoline Range

<200

200

Total Petroleum Hydrocarbons

CARBON NO. RANGE

Gasoline Range

PEAK CARBON NO

Gasoline Range

Mark Shih, Ph.D. Chemist

March 12, 1990

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

(916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

SAMPLE ID: 18 @ 9.5'

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990

DATE COMPLETED: 03/02/1990

PETROLEUM HYDROCARBONS	CONCENTRATION [ug/Kg	<u>DETECTION</u> LIMIT [ug/Kg (ppb)]
Gasoline Range Total Petroleum Hydrocarbons	766 766	200
CARBON NO. RANGE		
Gasoline Range	C9-C13	-
PEAK CARBON NO		
Gasoline Range	C10	. ~

Mark Shih, Ph.D.

March 12, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

(916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

Gasoline Range

JOB #: 272.016 SAMPLE ID : 18 @ 11.5'

DATE RECEIVED : 02/15/1990

DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

PETROLEUM HYDROCARBONS	CONCENTRATION [ug/Kg	DETECTION LIMIT [ug/Kg (ppb)]
Gasoline Range Total Petroleum Hydrocarbons	703 703	200
CARBON NO. RANGE		
Gasoline Range	C9-C13	-
PEAK CARBON NO		

C10

Mark Shih, Ph.D.

March 12, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

(916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

SAMPLE ID : 19 @ 10

DATE RECEIVED : 02/15/1990

DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

PETROLEUM HYDROCARBONS	CONCENTRATION [ug/Kg	DETECTION LIMIT [ug/Kg (ppb)]
Gasoline Range Total Petroleum Hydrocarbons	<200 -	200 -
CARBON NO. RANGE	·	
Gasoline Range	-	-
PEAK CARBON NO		
Gasoline Range	-	-

Chemist

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990

PROJECT NAME: 98TH & EDES, PHASE 2

DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID : 20 @ 9'

PETROLEUM HYDROCARBONS CONCENTRATION **DETECTION LIMIT** [ug/Kg [ug/Kg (ppb)]

Gasoline Range Total Petroleum Hydrocarbons <200 200

CARBON NO. RANGE

Gasoline Range

PEAK CARBON NO

Gasoline Range

March 12, 1990

Mark Shih, Ph.D. Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990

JOB #: 272.016

DATE COMPLETED: 03/02/1990

SAMPLE ID : 21 @ 7.5'

PETROLEUM HYDROCARBONS

CONCENTRATION [ug/Kg

DETECTION LIMIT [ug/Kg (ppb)]

Gasoline Range

<200

200

Total Petroleum Hydrocarbons

CARBON NO. RANGE

Gasoline Range

PEAK CARBON NO

Gasoline Range

Chemist

March 12, 1990

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990

JOB #: 272.016

SAMPLE ID : 21 @ 9.5'

DATE COMPLETED: 03/02/1990

PETROLEUM HYDROCARBONS

CONCENTRATION [ug/Kg

DETECTION LIMIT [ug/Kg (ppb)]

Gasoline Range Total Petroleum Hydrocarbons <200

200

CARBON NO. RANGE

Gasoline Range

PEAK CARBON NO

Gasoline Range

Chemist

March 12, 1990

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID : 21 @ 11.5'

PETROLEUM HYDROCARBONS	CONCENTRATION [ug/Kg	DETECTION LIMIT [ug/Kg (ppb)]
Gasoline Range Total Petroleum Hydrocarbons	754 754	200
CARBON NO. RANGE		
Gasoline Range	C9-C13	· -
PEAK CARBON NO		
Gasoline Range	C10	-

Mark Shih, Ph.D. Chemist

March 12, 1990

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED: 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID : 21 @ 13'

PETROLEUM HYDROCARBONS

CONCENTRATION [ug/Kg

DETECTION LIMIT [ug/Kg (ppb)]

Gasoline Range

<200

200

Total Petroleum Hydrocarbons

CARBON NO. RANGE

Gasoline Range

PEAK CARBON NO

Gasoline Range

Mark Shih, Ph.D.

Chemist

March 12, 1990

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID : MW4 @ 13.5'

Total Petroleum Hydrocarbons

PETROLEUM HYDROCARBONS	CONCENTRATION Lug/Kg	DETECTION LIMIT [ug/Kg (ppb)]
Gasoline Range	<200	200

CARBON NO. RANGE

Gasoline Range

PEAK CARBON NO

Gasoline Range

March 12, 1990 Date

Mark Shih, Ph.D.

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID : MW5 @ 9'

PETROLEUM HYDROCARBONS CONCENTRATION DETECTION LIMIT [ug/Kg (ppb)] [ug/Kg

Gasoline Range Total Petroleum Hydrocarbons <200

200

CARBON NO. RANGE

Gasoline Range

PEAK CARBON NO

Gasoline Range

May Sten Mark Shih, Ph.D.

March 12, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID : MW5 @ 11'

DETECTION LIMIT PETROLEUM HYDROCARBONS CONCENTRATION [ug/Kg [ug/Kg (ppb)]

200 Gasoline Range <200 Total Petroleum Hydrocarbons

CARBON NO. RANGE

Gasoline Range

PEAK CARBON NO

Gasoline Range

March 12, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953 Order No: 90-02-109
Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990

PROJECT NAME: 98TH & EDES, PHASE 2

DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID : 15 @ 6'

PETROLEUM HYDROCARBONS

CONCENTRATION [ug/Kg

DETECTION LIMIT [ug/Kg (ppb)]

Gasoline Range

<200

200

Total Petroleum Hydrocarbons

CARBON NO. RANGE

Gasoline Range

PEAK CARBON NO

Gasoline Range

Mark Shih, Ph.D.

March 12, 1990

Snin, Ph.D. L

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing Certification: <u>108</u>

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID : 15 @ 9.5'

PETROLEUM HYDROCARBONS	CONCENTRATION [ug/Kg	DETECTION LIMIT [ug/Kg (ppb)]
Gasoline Range Total Petroleum Hydrocarbons	737 737	200
CARBON NO. RANGE		
Gasoline Range	C9-C13	-
PEAK CARBON NO		•
Gasoline Range	C10	-

Mark Shih, Ph.D.

March 12, 1990 Date

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990

JOB #: 272.016

SAMPLE ID : 15 @ 10.5'

DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

PETROLEUM HYDROCARBONS	CONCENTRATION [ug/Kg	<u>DETECTION LIMIT</u> [ug/Kg (ppb)]
Gasoline Range Total Petroleum Hydrocarbons	56,600 56,600	200 -
CARBON NO. RANGE		
Gasoline Range	C9-C13	-
PEAK CARBON NO		
Gasoline Range	C10	- -

Mark Shih, Ph.D.

March 12, 1990 Date

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID : 16 @ 4'

CONCENTRATION PETROLEUM HYDROCARBONS DETECTION LIMIT [ug/Kg [ug/Kg (ppb)]

Gasoline Range Total Petroleum Hydrocarbons <200 200

CARBON NO. RANGE

Gasoline Range

PEAK CARBON NO

Gasoline Range

Mark Shih, Chemist

March 12, 1990

Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990

JOB #: 272.016

SAMPLE ID : MW1 @ 10.5'

DATE COMPLETED: 03/02/1990

PETROLEUM HYDROCARBONS

CONCENTRATION [ug/Kg

DETECTION LIMIT [ug/Kg (ppb)]

Gasoline Range

<200

200

Total Petroleum Hydrocarbons

CARBON NO. RANGE

Gasoline Range

PEAK CARBON NO

Gasoline Range

Chemist

March 12, 1990

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

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CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990

JOB #: 272.016 SAMPLE ID : 16 @ 7'

DATE COMPLETED: 03/02/1990

PETROLEUM HYDROCARBONS	CONCENTRATION [ug/Kg	DETECTION LIMIT [ug/Kg (ppb)]
Gasoline Range Total Petroleum Hydrocarbons	641 641	200
CARBON NO. RANGE		-
Gasoline Range	C9-C13	- 1
PEAK CARBON NO		
Gasoline Range	C10	-

Mark Shih, Ph.D. Chemist

March 12, 1990

Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

(916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS

PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

SAMPLE ID : 16 @ 11.5'

DATE RECEIVED : 02/15/1990

DATE EXTRACTED: 02/23/1990

DATE COMPLETED: 03/02/1990

PETROLEUM HYDROCARBONS	CONCENTRATION [ug/Kg	DETECTION LIMIT [ug/Kg (ppb)]
Gasoline Range Total Petroleum Hydrocarbons	10,200 10,200	200
CARBON NO. RANGE		
Gasoline Range	C9-C13	-
PEAK CARBON NO		
Gasoline Range	C10	-

Mark Shih,

Chemist

March 12, 1990

Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

(916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

JOB #: 272.016

SAMPLE ID : 17 @ 8.5'

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990

DATE COMPLETED: 03/02/1990

PETROLEUM	HYDROCARBONS

CONCENTRATION [ug/Kg

DETECTION LIMIT [ug/Kg (ppb)]

Gasoline Range Total Petroleum Hydrocarbons <200

200

CARBON NO. RANGE

Gasoline Range

PEAK CARBON NO

Gasoline Range

March 12, 1990

Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990

JOB #: 272.016

SAMPLE ID : MW1 @ 8'

DATE COMPLETED: 03/02/1990

PETROLEUM HYDROCARBONS

CONCENTRATION [ug/Kg

DETECTION LIMIT [ug/Kg (ppb)]

Gasoline Range Total Petroleum Hydrocarbons <200

200

CARBON NO. RANGE

Gasoline Range

PEAK CARBON NO

Gasoline Range

March 12, 1990 Date

Mark Shih, Ph.D.

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

Gasoline Range

JOB #: 272.016 SAMPLE ID : MW1 @ 12'

PETROLEUM HYDROCARBONS	CONCENTRATION [ug/Kg	<pre>DETECTION LIMIT [ug/Kg (ppb)]</pre>
Gasoline Range	<200	200
Total Petroleum Hydrocarbons	<200	-
CARBON NO. RANGE		
Gasoline Range	-	-
PEAK CARBON NO		
Total Petroleum Hydrocarbons CARBON NO. RANGE Gasoline Range		

Mark Shih,

March 12, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953 Order No: 90-02-109 Hazardous Waste Testing Certification: 108

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID : MW2 @ 6'

Mark Shih, Ph.D.

<u>March 12, 1990</u> Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828

Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

(916) 381-7953

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990

JOB #: 272.016

DATE COMPLETED: 03/02/1990

SAMPLE ID : MW2 @ 9'

CONCENTRATION PETROLEUM HYDROCARBONS DETECTION LIMIT [ug/Kg [ug/Kg (ppb)]

Gasoline Range Total Petroleum Hydrocarbons <200

200

CARBON NO. RANGE

Gasoline Range

PEAK CARBON NO

Gasoline Range

Mark Shih, Ph.D.

March 12, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 Order No: 90-02-109 Hazardous Waste Testing Certification: 108

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CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID : MW2 @ 12'

PETROLEUM HYDROCARBONS

CONCENTRATION
[ug/Kg | DETECTION LIMIT [ug/Kg (ppb)]

Gasoline Range Total Petroleum Hydrocarbons <200

200

CARBON NO. RANGE

Gasoline Range

PEAK CARBON NO

Gasoline Range

Mark Shih, Ph.D. Chemist March 12, 1990

Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing Certification: 108

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

PEAK CARBON NO

Gasoline Range

SAMPLE ID : MW3 @ 6'

PETROLEUM HYDROCARBONS

CONCENTRATION
[ug/Kg]

Gasoline Range
Total Petroleum Hydrocarbons

CARBON NO. RANGE

Gasoline Range

- - -

Mark Shih, Ph.D.

March 12, 1990 Date

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Order No: 90-02-109 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2 DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016 SAMPLE ID : MW3 @ 9'

PETROLEUM HYDROCARBONS	CONCENTRATION [ug/Kg	DETECTION LIMIT [ug/Kg (ppb)]
Gasoline Range Total Petroleum Hydrocarbons	14,400 14,400	200
CARBON NO. RANGE		
Gasoline Range	C9-C13	-
PEAK CARBON NO		
Gasoline Range	C10	•

Mark Shih, Ph.D.

March 12, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing Certification: 108

CLIENT: SUBSURFACE CONSULTANTS
PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED: 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016

SAMPLE ID : MW4 @ 4.5'

PETROLEUM HYDROCARBONS	CONCENTRATION [ug/Kg	DETECTION LIMIT [ug/Kg (ppb)]
Gasoline Range Total Petroleum Hydrocarbons	<200	200
CARBON NO. RANGE		
Gasoline Range	-	-
PEAK CARBON NO		
Gasoline Range	-	<u>-</u>

Mark Shih, Ph.D.

Chemist

March 12, 1990

Date

EUREKA LABORATORIES, INC. 6790 Florin Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-02-109 Hazardous Waste Testing Certification: 108

CLIENT: SUBSURFACE CONSULTANTS PROJECT NAME: 98TH & EDES, PHASE 2

DATE RECEIVED : 02/15/1990 DATE EXTRACTED: 02/23/1990 DATE COMPLETED: 03/02/1990

JOB #: 272.016 SAMPLE ID : MW4 @ 10.5'

PETROLEUM HYDROCARBONS	CONCENTRATION [ug/Kg	DETECTION LIMIT [ug/Kg (ppb)]
Gasoline Range Total Petroleum Hydrocarbons	<200 <200	200 -
CARBON NO. RANGE		
Gasoline Range	-	-
PEAK CARBON NO		
Gasoline Range	-	-

Mark Shih, Ph.D.

March 12, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin-Perkins Road Sacramento, CA 95828 (916) 381-7953 Order No: 90-03-145 Hazardous Waste Testing Certification: <u>108</u>

CLIENT: SUBSURFACE
REORDER OF: 90-02-109
REORDER DATE: 03/20/1990
SAMPLE ID: BLANK

DATE RECEIVED: 02/15/1990 DATE EXTRACTED: 03/22/1990 DATE COMPLETED: 03/27/1990

PETROLEUM HYDROCARBONS	CONCENTRATION [mg/Kg(ppm)]	DETECTION LIMIT [mg/Kg(ppm)]
Gasoline Range Diesel Range Motor Oil Range Total Petroleum Hydrocarbons	<5 <10 <25	5 10 25
CARBON NO. RANGE		
Gasoline Range Diesel Range Motor Oil Range	- - -	- - -
PEAK CARBON NO		
Gasoline Range Diesel Range Motor Oil Range	- - -	- - -

Sandia Kao Senior Chemist, Organic Group

<u>March</u> 27, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin-Perkins Road Sacramento, CA 95828 (916) 381-7953 Order No: 90-03-145 Hazardous Waste Testing Certification: 108

CLIENT: SUBSURFACE
REORDER OF: 90-02-109
REORDER DATE: 03/20/1990

DATE RECEIVED: 02/15/1990 DATE EXTRACTED: 03/22/1990 DATE COMPLETED: 03/27/1990

SAMPLE ID: 17010

PETROLEUM HYDROCARBONS	CONCENTRATION [mg/Kg(ppm)]	DETECTION LIMIT [mg/Kg(ppm)]
Gasoline Range Diesel Range Motor Oil Range Total Petroleum Hydrocarbons	<5 <10 <25	5 10 25
CARBON NO. RANGE		
Gasoline Range Diesel Range Motor Oil Range	- - -	- - -
PEAK CARBON NO		
Gasoline Range Diesel Range Motor Oil Range	- - -	- - -

Sandia Kao Senior Chemist, Organic Group March 27, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin-Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-03-145 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE REORDER OF: 90-02-109 REORDER DATE: 03/20/1990 SAMPLE ID: 1509.5

DATE RECEIVED: 02/15/1990 DATE EXTRACTED: 03/22/1990 DATE COMPLETED: 03/27/1990

PETROLEUM HYDROCARBONS	CONCENTRATION [mg/Kg(ppm)]	DETECTION LIMIT [mg/Kg(ppm)]
Gasoline Range Diesel Range Motor Oil Range Total Petroleum Hydrocarbons	16 <10 <25 16	5 10 25
CARBON NO. RANGE		
Gasoline Range Diesel Range Motor Oil Range	C9-C12 - -	- · - -
PEAK CARBON NO		
Gasoline Range Diesel Range Motor Oil Range	C10 - -	

Sandia Kao Senior Chemist, Organic Group

March 27, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin-Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-03-145 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE REORDER OF: 90-02-109 REORDER DATE: 03/20/1990 DATE RECEIVED: 02/15/1990 DATE EXTRACTED: 03/22/1990 DATE COMPLETED: 03/27/1990

March 27, 1990

Date

SAMPLE ID: 15@10.5

PETROLEUM HYDROCARBONS	CONCENTRATION [mg/Kg(ppm)]	DETECTION LIMIT [mg/Kg(ppm)]
Gasoline Range Diesel Range Motor Oil Range Total Petroleum Hydrocarbons	1540 <10 <25 1540	5 10 25 -
CARBON NO. RANGE		
Gasoline Range Diesel Range Motor Oil Range	C9-C12 - -	- - -
PEAK CARBON NO		
Gasoline Range Diesel Range Motor Oil Range	C10 - -	- · · · · · · · · · · · · · · · · · · ·

Sandia Kao Senior Chemist, Organic Group

EUREKA LABORATORIES, INC. 6790 Florin-Perkins Road Sacramento, CA 95828

Order No: 90-03-145 Hazardous Waste Testing Certification: 108

(916) 381-7953

CLIENT: SUBSURFACE REORDER OF: 90-02-109 REORDER DATE: 03/20/1990

DATE RECEIVED: 02/15/1990 DATE EXTRACTED: 03/22/1990 DATE COMPLETED: 03/27/1990

SAMPLE ID: 1607

PETROLEUM HYDROCARBONS	CONCENTRATION [mg/Kg(ppm)]	DETECTION LIMIT [mg/Kg(ppm)]
Gasoline Range Diesel Range Motor Oil Range Total Petroleum Hydrocarbons	62 <10 <25 62	5 10 25
CARBON NO. RANGE		
Gasoline Range Diesel Range Motor Oil Range	C9-C12 - -	- -
PEAK CARBON NO		
Gasoline Range Diesel Range Motor Oil Range	C10 - -	- - -

Sandia Kao Senior Chemist, Organic Group March 27, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin-Perkins Road Sacramento, CA 95828

(916) 381-7953

Order No: 90-03-145 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE REORDER OF: 90-02-109 REORDER DATE: 03/20/1990

SAMPLE ID: 16011.5

DATE RECEIVED: 02/15/1990 DATE EXTRACTED: 03/22/1990 DATE COMPLETED: 03/27/1990

PETROLEUM HYDROCARBONS	CONCENTRATION [mg/Kg(ppm)]	DETECTION LIMIT [mg/Kg(ppm)]
Gasoline Range Diesel Range Motor Oil Range Total Petroleum Hydrocarbons	5650 <10 <25 5650	5 10 25 -
CARBON NO. RANGE		
Gasoline Range Diesel Range Motor Oil Range	C9-C12 -	- -
PEAK CARBON NO		
Gasoline Range Diesel Range Motor Oil Range	C10 -	- - -

Senior Chemist, Organic Group

March 27, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin-Perkins Road Sacramento, CA 95828 (916) 381-7953 Order No: 90-03-145 Hazardous Waste Testing Certification: 108

CLIENT: SUBSURFACE REORDER OF: 90-02-109 REORDER DATE: 03/20/1990 SAMPLE ID: 21011.5 DATE RECEIVED: 02/15/1990 DATE EXTRACTED: 03/22/1990 DATE COMPLETED: 03/27/1990

PETROLEUM HYDROCARBONS	CONCENTRATION [mg/Kg(ppm)]	DETECTION LIMIT [mg/Kg(ppm)]
Gasoline Range Diesel Range Motor Oil Range Total Petroleum Hydrocarbons	20 <10 <25 20	5 10 25
CARBON NO. RANGE		
Gasoline Range Diesel Range Motor Oil Range	C9-C12 - -	- - -
PEAK CARBON NO		
Gasoline Range Diesel Range Motor Oil Range	C10 - -	- - -

Sandia Kao March 27, 1990
Senior Chemist, Organic Group

EUREKA LABORATORIES, INC. 6790 Florin-Perkins Road Sacramento, CA 95828 (916) 381-7953 Order No: 90-03-145 Hazardous Waste Testing Certification: <u>108</u>

CLIENT: SUBSURFACE REORDER OF: 90-02-109 REORDER DATE: 03/20/1990 DATE RECEIVED: 02/15/1990 DATE EXTRACTED: 03/22/1990 DATE COMPLETED: 03/27/1990

SAMPLE ID: MATRIX SPIKE RECOVERY

PETROLEUM HYDROCARBONS	SPIKE RECOVERY
Gasoline Range Diesel Range Motor Oil Range Total Petroleum Hydrocarbons	- 91% -
CARBON NO. RANGE	
Gasoline Range Diesel Range Motor Oil Range	- - -
PEAK CARBON NO	
Gasoline Range Diesel Range Motor Oil Range	- - -

Sandia Kao Senior Chemist, Organic Group March 27, 1990 Date

EUREKA LABORATORIES, INC. 6790 Florin-Perkins Road Sacramento, CA 95828 (916) 381-7953

Order No: 90-03-145 Hazardous Waste Testing

Certification: 108

CLIENT: SUBSURFACE REORDER OF: 90-02-109 REORDER DATE: 03/20/1990

DATE RECEIVED: 02/15/1990 DATE EXTRACTED: 03/22/1990 DATE COMPLETED: 03/27/1990

SAMPLE ID: MATRIX SPIKE RECOVERY DUP.

PETROLEUM	HYDROCARBONS

SPIKE RECOVERY

Gasoline Range 93% Diesel Range Motor Oil Range Total Petroleum Hydrocarbons

CARBON NO. RANGE

Gasoline Range Diesel Range Motor Oil Range

PEAK CARBON NO

Gasoline Range Diesel Range Motor Oil Kange

> Sandia Kao Senior Chemist, Organic Group

March 27, 1990 Date

CHAIN OF CUSTODY RECORD & ANALYTICAL TEST REQUEST

Project Name	: <u>98</u>	H ; EDES	, PHASE ;	2		
SCI Job Numb						
Project Conf	tact at S	ci: BILL	WIKANDER	ζ		
Sampled By:	JOHN	WOLFE				
Analytical I	Laborator	y: EURE	KA LAB	OPATOR	1ES, INC.	
Analytical 7	Turnaroun	d:10 1	DAY			
Sample ID MW 8 8' MW 0105'	Sample Type ¹	Container Type ² BRASTUBE	Sampling Date 2790 2790	Hold	Analysis TUH/BXE TUH/BXE TOH/TOG	Analytical Method 805/8020 80(5/8020 80(5/8020
MWI 012'	<u> </u>		2/7/90		TUH / BIXE	8015/8020
MW206' MWZ09'			2/7/90 2/7/90		TIH BIXE TUH BIXE PARS. TEH TOG	8015/8020 8015/8020/8010 8015/400./418.(
MWZ012'			2/7/90		TVH/BIXE	8015/8020
MW30 6'			2/8/90 2/8/90		TVH BIXE TVH BIXE TEH HOG	8015/8020 8015/8020 8015 mas./418.1
MW4045' MW40105'			2/8/90		TVH/BIXE TVH/BIXE TEH/TOG	8015 8020 8015 8020 8015 Had. 418.1
*		*	*	*	*	*
Released by:	: / / / /	L. B.			Date:	7-14-90
Released by					Date:	
Received by	Laborato	ory: 5/h	12 10		Date:	2-14-90
Relinquished	d by Labo	oratory:	· · · · · · · · · · · · · · · · · · ·		Date:	
Received by	•				Date:	
	Type: V	water, S = 9 7 = VOA, P = 0 = other (sp	plastic, G			tube,

Notes to Laboratory:

⁻Notify SCI if there are any anomalous peaks on GC or other scans -{chestions/clarifications...contact SCI at (4)5) 268-0461

CHAIN OF CUSTODY RECORD & ANALYTICAL TEST REQUEST

Project Name: 98 1 EDES	PHASE :	2		
SCI Job Number: 272.016	•			
Project Contact at SCI: BILL	WIKANDER	ζ		
Sampled By: JOHN WOLFE			·	
Analytical Laboratory: EUR	EKA LAB	OZATOR	TES, INC.	
Analytical Turnaround: 10	DAY			
Sample Container Sample ID Type ¹ Type ²	Sampling 	Hold	Analysis	Analytical Method
MW4 0135' SOIL BOXES TUBE	2/8/90		TUHIBIXE	8015/8020
MW509'	2/9/90		THI BYE	8015/8020 8015/100/418.1
1165011'	2/9/90	-	THI BIXE	8015/8020
15 06'	2/9/90			
15 09.5	2/9/90			
15 010.5	2990			
1604	2/9/90			
16 07	2990	-		
16011.5	2/9/90			
17 0 8.5	2/9/90			
*	*	*	*	
Released by:	b de		Date:	
Released by Courier:	1 1 7 7	- i - ·		
Received by Laboratory:	har-P-	10	Date:	3-18-90
Relinquished by Laboratory:	· · · · · · · · · · · · · · · · · · ·		Date:	
Received by:			Date:	
<pre>Sample Type: W = water, S = Container Type: V = VOA, P = O = other (s</pre>	plastic, G	ther (sp = glass	pecify) s, T = brass	tube,
N-4 4- 1-b4				

Notes to Laboratory:
-Notify SCI if there are any anomalous peaks on GC or other scans

⁻Questions/clarifications...contact SCI at (415) 268-0461

CHAIN OF CUSTODY RECORD & ANALYTICAL TEST REQUEST

Project Name: 98th EDES	, PHASE :	2		
SCI Job Number: 272.016				
Project Contact at SCI: BILL	WIKANDER	۲		
Sampled By: JOHN WOLFE				
Analytical Laboratory: EURE	EKA LAB	OZATOR	71ES, INC.	
	DAY	- 1 :- 2 -		
<u> </u>			·•	
Sample Container Sample ID Type ¹ Type ²	Sampling Date	Hold	Analysis	Analytical Method
17010' SOIL BRASSTURE	z 9 90		TVH/BIXE	8015/8020
17011.5	2/9/90			
18 08'	2/9/90			
18 09.5	2/9/90		TUH BIXE TEH TOG	8015 8020 8015HOD 41\$.1
18011.5	z/9/90		TUH BIXE	<u>6015</u> 6070
19010'	2/9/90			
20 09'	2/9/90			
2/075	2/9/90		TVH /BIXE	8015/8020
2 09.5	2/9/90		TVH / BTXE TEH / TOG	8015 / 8020 8015 Map. / 418.1
21011.5	2/9/90		TVH BTYE	805/8020
21013'	2/9/90	-	TUH / BIXE	8015/8020
* * *	*	*	*	*
Released by:	<u> </u>		Date:	
Released by Courier:	/	· · · · · · · · · · · · · · · · · · ·	Date:	
Received by Laboratory:	100-P- 6	10	Date:	2-18-90
Relinquished by Laboratory:	<u> </u>		Date:	
Received by:				
Sample Type: W = water, S = S Container Type: V = VOA, P = O = other (sp	soil, O = o plastic, G	ther (s	pecify) s, T = brass	s tube,

Notes to Laboratory:

⁻Notify SCI if there are any anomalous peaks on GC or other scans

⁻Quentions/clarifications...contact SCI at (415) 268-0461

CHAIN OF CUSTODY RECORD & ANALYTICAL TEST REQUEST

Project Name: 98th EDES, PHASE 2
SC1 Job Number: 272.016
Project Contact at SCI: BILL WIKANDER
Sampled By: JOHN WOLFE
Analytical Laboratory: EUREKA LABORATORIES, INC.
Analytical Turnaround: 10 DAY
Sample Container Sampling Analytical Sample ID Type ¹ Type ² Date Hold Analysis Method
MWI WATER VOA 2/12/90 TVH BOIS
ILCLASS JAR TEH 8015 mcD.
ILGLAKS SAR TOG 418.1
VOA BIXE 60Z
VOA V RUBG. HALO. GOI
*
$\mathcal{L}_{\mathcal{L}}$
Released by: Date:
Released by Courier:Date:
Received by Laboratory: 5/10 2 Date: -14-90
Relinquished by Laboratory:Date:
Received by:Date:
<pre>Sample Type: W = water, S = soil, O = other (specify) Container Type: V = VOA, P = plastic, G = glass, T = brass tube, O = other (specify)</pre> Notes to Laboratory:

-Prinify CCL if there are any anomalour peaks on GC or other scans -(pertions clarifications...cratart 5/1 at (41%) 26%-0461

CHAIN OF CUSTODY RECORD ANALYTICAL TEST REQUEST

SCI Job Number: 272.016				
Project Contact at SCI: BIL	LWIKANDER	<u> </u>		
Sampled By: JOHN WOLFE				
Analytical Laboratory: <u>E</u> O	REKA LAB	DIZATOR	TES, INC.	
Analytical Turnaround: 10	DAY			
Sample Containe Sample ID Type ¹ Type ²	er Sampling Date	Hold	Analysis	Analytical Method
MWZ WATER VOA	2/13/90		TVH	8015
IL CLASS JAT			TEH	8015 map.
IL GLAKE SAR	_		70G	418.1
VOA			BIXE	60Z
VOA			PURG. HALD.	601
			·	
,				
* * * <i> </i>	*	*	*	*
Released by:	0-6		Date:	
Released by Courier:			Date:	
Received by Laboratory:	har P- Uj	U.	Date:	2-18-90
Relinguished by Laboratory:	V.		Date:	
Received by:			Date:	
<pre>Sample Type: W = water, S Container Type: V = VOA, F O = other</pre>	e plastic, G			s tube, · ·

⁻Notify SCI if there are any anomalous peaks on GC or other scans -[andinomiclarify catuens...contact for at (415) 208-0461

CHAIN OF CUSTODY RECORD & ANALYTICAL TEST REQUEST

Project Name: 987	# 1 EDES	PHASE :	2	<u> </u>	
SCI Job Number: 272.016					
Project Contact at SCI: BILL WIKANDER					
Sampled By: JOHN	WOLFE				
Analytical Laboratory	: EURE	KA LAB	OZATOR	IES, INC.	
Analytical Turnaround: 10 DAY					
Sample Sample ID Type ¹	Container Type ²	Sampling 	Hold	Analysis	Analytical Method
MW3 WATER	VOA	2/13/90		TVH	8015
	IL CLUSS JAR			TEH	8015 map.
	ILGLAKE SAR			70G	418.1
	VOA			BIXE	602
	VOA			PUBG. HALO.	601
			·		
		 			
★	*	*	*	*	*
Released by:					
Released by Courier:				Date:	
Released by Courier: Received by Laboratory: 5/4. /- 1/10			10	Date:	3-18-90
Relinquished by Laboratory:				Date:	
Received by:				Date:	
<pre>Sample Type: W = water, S = soil, O = other (specify) Container Type: V = VOA, P = plastic, G = glass, T = brass tube, O = other (specify)</pre>					
Notes to Laboratory:					

⁻Notify CCI if there are any amomalous peaks on GC or other scans — -1 without Clarifications...comtast CCI at (415) 265-0461

CHAIN OF CUSTODY RECORD & ANALYTICAL TEST REQUEST

Project Name: 98th EDES, PHASE 2					
SCI Job Number: 272.016	·				
Project Contact at SCI: BILL	WIKAUDER	<u> </u>			
Sampled By: JOHN WOLFE					
Analytical Laboratory: EURE	KA LAB	OZATORI	ES, INC.		
Analytical Turnaround: 10	DAY				
Sample Container Type? Type? NWH WATER VOA LGUKS SAR VOA VOA VOA	Sampling Date 2 3 90	Hold	Analysis TVH TEH TOG BIXE RUG, HALO.	Analytical Method 8015 8015 8015 Mup. 418.1 602 601	
		,			
* ★	*	*	*	*	
Released by:	12-1		Date:		
Released by Courier:	/ /	/ ^ :	Date:		
Received by Laboratory:	100-1-	Ju-	Date:	2-8-35	
Relinquished by Laboratory:Date:					
Received by:	,		Date:		
<pre>Sample Type: W = water, S = soil, O = other (specify) Container Type: V = VOA, P = plastic, G = glass, T = brass tube, O = other (specify)</pre>					
Notes to Laboratory: -Notify CCl if there are any anomalous peaks on GC or other scans(withing clarificationscontact CCl at (415) 26%-0461					

CHAIN OF CUSTODY RECORD & ANALYTICAL TEST REQUEST

Project Name: <u>98</u>	" ; EDES	, PHASE :	2		
SCI Job Number: 27	12.016	:			
Project Contact at S	ici: BILL	WIKANDER	ζ		
Sampled By: JOHN	WOLFE	· · · · · · · · · · · · · · · · · · ·			
Analytical Laboratory: EUREKA LABORATORIES, INC.					
Analytical Turnarour	nd:	DAY			
Sample Sample ID Type ¹ MW 5 WATER	Container Type ²	Sampling Date 2/3/90	<u>Hold</u>	Analysis TVH	Analytical Method
1103	IL CLUSS JAR	2 15 10	<u>-</u>	TEH	8015 mcD.
	ILGLASS SAR			70G	418.1
	VOA			BIXE	602
	VOA			RUZG. HALO.	601
-					
					
	M · · · · · · · ·				
					
*	★	*	*	*	*
		in first			
Released by:	1 174 h				
Released by Courier: Date: Received by Laboratory: 5/00-1-00 Date: 2-18-90					3-18-61
Relinquished by Laboratory:Date:					
Received by:Date:					
<pre>Sample Type: W = water, S = soil, O = other (specify) Container Type: V = VOA, P = plastic, G = glass, T = brass tube, O = other (specify)</pre>					

Notes to Laboratory:

⁻Notify CCL if there are any anomalous peaks on GC or other scans -presticus Clarifications...contact CCL at (415) 268-6461

CHAIN OF CUSTODY RECORD & ANALYTICAL TEST REQUEST

Project Name: 98	H ; EDES	, PHASE :	2		
SCI Job Number: 272.016					
Project Contact at SCI: BILL WIKANDER					
Sampled By: JOHL	WOLFE				
Analytical Laborator	ry: EURE	EKA LAB	OZATOR	1ES, INC.	· · · · · · · · · · · · · · · · · · ·
Analytical Turnarous	nd: 10	DAY		·	
Sample ID Type 1	Container Type? VOA ILCLASS JAR ILGLASS JAR VOA	Sampling Date 2 4 90	<u>Hold</u>	Analysis TVH TEH TOG BIXE RUEG. HALO.	Analytical Method 8015 8015 McD. 418.1 602
	· · · · · · · · · · · · · · · · · · ·				
*	*	1	*	*	*
Released by:	<u> </u>			Date:	
Received by Laboratory:				2-18-90	
Relinquished by Laboratory:					
Received by:					
<pre>Sample Type: W = water, S = soil, O = other (specify) Container Type: V = VOA, P = plastic, G = glass, T = brass tube, O = other (specify)</pre>					

Notes to Laboratory:

-Notify SC1 if there are any absorbloss peaks on GC fi other reads parentishs clarifications...contest (31 at (415) 263-646)