N00217.000089
HUNTERS POINT
SSIC NO.5090.3

EMCON ASSOCIATES
Consultants in Wastes Management and Environmental Control

September 23, 1987
Project 365-02.05

Commanding Officer
Western Division
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, California 94066

Attention: Mr. Greg Brown, Code 1146

Re: Verification of Hazardous Waste Contamination at Specified Sites, Hunters Point Naval Shipyard, San Francisco, California

Gentlemen:

We have completed the Verification of Hazardous Waste Contamination at Specified Sites at Hunters Point Naval Shipyard, San Francisco, California. Soil and ground-water samples obtained were selectively tested for volatile organic compounds (VOCs), semivolatile organic compounds (SOCs), polychlorinated biphenyls (PCBs), priority metals, and petroleum hydrocarbons in accordance with the Navy Scope of Work, dated July 1, 1987. This work was performed in accordance with Contract N62474-(85)-C-(5501).

SCOPE OF WORK

In accordance with this contract, environmental sampling was conducted at Sites 4, 7, 13, and 10/11 and in the parking lot behind Dago Mary's restaurant. Prior to sampling, a utility locator service was utilized at each site. Soil cuttings generated during drilling and expended safety equipment were containerized in steel drums. The work was conducted in accordance with the written Health and Safety Plans, Hunters Point Naval Shipyard (Disestablished), San Francisco, California, submitted to the Naval Facilities Engineering Command by EMCON Associates in May 1986 (updated August 3, 1987).

1921 Ringwood Avenue, San Jose, California 95131, (408) 275-1444

California, submitted to the Naval Facilities Engineering Command by EMCON Associates in May 1986 (updated August 3, 1987).

At Sites 4, 7, and 13, soil borings were drilled to approximately 10 feet below ground water. Boring depths ranged from 17.5 to 20.5 feet. Each boring was continuously sampled. From each boring, discrete soil samples were collected from three depths (one shallow, one just above the water table, and one just below the water table) and preserved for subsequent laboratory analysis. Upon completion, each boring was converted to a temporary ground-water monitoring well by installing 2-inch-diameter, polyvinyl chloride (PVC) casing. Prior to sampling the ground water, each well was developed and purged. Development and purge water were containerized in steel drums. Soil and ground-water samples were analyzed for VOCs, SOCs, and priority metals.

At Site 10/11, one discrete surface soil sample was collected from between the ground surface and a depth of 1 foot. This sample was preserved and subsequently analyzed for PCBs.

In the parking lot behind Dago Mary's restaurant, six borings were drilled to a depth of 5 feet. One discrete soil sample was collected from each boring. The samples were preserved and subsequently analyzed for petroleum hydrocarbons.

Analytical data are summarized in Attachment A; Certified Analytical Reports are presented in Attachment B; sample chain-of-custody sheets are given in Attachment C; exploratory boring logs are presented in Attachment D; and boring location maps are provided in Attachment E.

ANALYTICAL RESULTS

The analytical results of soil and ground-water samples from Sites 4, 7, and 13 and soil samples from Site 10/11 and the parking lot behind Dago Mary's restaurant are summarized in Tables 1 through 20 in Attachment A. Certified Analytical Reports are presented in Attachment B.

Soil and ground-water samples from Sites 4, 7, and 13 were analyzed for VOCs, SOCs, and priority metals. VOCs and SOCs are identified by gas chromatography (GC). GC analysis creates a series of peaks on the graph, each of which are characteristic of an organic compound. The computer then attempts to match the peaks generated in the analysis with standard compounds on the EPA Method 624/8240 or 625/8270 analysis list. Often there are additional peaks on the graph that do not match any of the standard compounds for the EPA Method 624/8240 or 625/8270 analyses. These additional unknown peaks are then compared with thousands of other known compound peaks. The computer prints out a list of compound names that reflect the best match of the unknown peak on the graph with a known peak in the computer file. These are reported as tentatively identified compounds on the tables and Certified Analytical Reports (see Attachments A and B).

On the summary tables, for tentatively identified compounds, "ND" indicates that there was no computer match for that compound and no detection limit was reported by the laboratory. When a computer match was made for a tentatively identified compound, but its value could not be quantified, its detection limit is reported. For all other standard compounds, "<" signifies that the compound was not detected at or above the detection limit indicated.

Site 4

Soil and ground-water samples from Site 4 were analyzed for VOCs, SOCs, and ICAP metals. No VOCs were detected in the soil samples at this site (see Table 1). Results for SOC analysis of soil samples are presented on Table 4. No VOCs or SOCs were detected in the ground-water sample from this site (see Table 7). Results of metals analyses for soil and ground-water samples are presented on Tables 11 and 14, respectively.

Site 7

Results for VOCs, SOCs, and ICAP metals for soil samples from Site 7 are presented on Tables 2, 5, and 12, respectively. No VOCs or SOCs were detected in the ground-water sample from this site (see Table 8). Results of metals analyses for the ground-water sample are presented on Table 14.

Site 13

Results for VOCs, SOCs, and ICAP metals for soil samples from Site 13 are presented in Tables 3, 6, and 13, respectively. No VOCs were detected in the ground-water sample from this site (see Table 9). Results of SOC and metals analyses for the ground-water sample are presented on Tables 10 and 14, respectively.

Site 10/11

At Site 10/11, PCB compound 1254 was detected in the surface soil sample at 0.15 parts per million (ppm), which was 0.05 ppm over the detection limit (see Table 15). The presence of this compound was confirmed by a duplicate analysis.

Parking Lot Behind Dago Mary's Restaurant

Six soil samples from the parking lot behind Dago Mary's restaurant were analyzed for petroleum hydrocarbons. No gasoline compounds were detected by the low boiling point analysis (see Table 16). Diesel and oil compounds, however, were detected by the high boiling point analysis (see Table 17).

Duplicate Samples

In accordance with the contract, and as part of the quality assurance and quality control program, duplicate samples of both soil and ground water were analyzed in the laboratory. Duplicate soil samples were collected and preserved on August 8, 1987. Due to laboratory oversight, the duplicate sample at Site 7 was not analyzed within the required holding period. Subsequently, on September 18, EMCON resampled for a new duplicate immediately adjacent to Boring S7-1. This new field duplicate was analyzed for VOCs and SOCs.

The tests on the Boring S7-1 field duplicate showed elevated amounts of high boiling point hydrocarbons. The presence of these compounds interferes with detection of specific SOCs. Large amounts of the high boiling point hydrocarbons overshadow the peaks of the SOCs, rendering them undetectable. The results of the SOC analyses are summarized on Tables 2 and 5, respectively.

A duplicate water sample from Well S4-1 was analyzed for priority metals, and the results are summarized on Table 14. A duplicate water sample from Well S7-1 was analyzed for VOCs and SOCs. No VOCs or SOCs were detected in this duplicate water sample (see Table 8). Both of these duplicates were split samples from the original sampling event.

Duplicate soil samples from Site 4 and 10/11 and the site behind Dago Mary's restaurant were obtained by splitting the original soil sample obtained during drilling. A duplicate soil sample from Boring S4-1 was analyzed for priority metals, and the results are summarized on Table 11. A duplicate soil sample from Site 10/11 was analyzed for PCBs, and the results confirm the findings of the original analysis (see Table 15). Duplicate soil samples from the site behind Dago Mary's restaurant were analyzed for both low and high boiling point hydrocarbons. No low boiling point hydrocarbons were detected (see Table 16), and the results of the duplicate analyses for high boiling point hydrocarbons are summarized in Table 17.

Ground-Water Analyses of Field and Pump Blanks

In addition to the duplicate analyses of soil and ground-water samples, field blank and a pump blank were also analyzed as part of the quality assurance and quality control program. The field blank was analyzed for VOCs, SOCs, and priority metals. No VOCs or SOCs were detected in the field blank (see Table 18). The results for the metals analyses of the field blank are summarized on Table 19. These results are likely due to naturally occurring metals in the deionized water used for the field blanks.

The pump blank was analyzed for selected volatile organic compounds (i.e., trichloroethene, tetrachloroethene, benzene, toluene, xylenes, and ethylbenzene). None of these compounds were detected in the pump blank (see Table 20).

The following attachments are enclosed and fulfill the reporting requirements of this contract.

Attachments

Attachment A - Summary Tables of Analytical Data
Attachment B - Certified Analytical Reports
Attachment C - Chain-of-Custody Documentation
Attachment D - Exploratory Boring Logs
Attachment E - Boring Location Maps

Please call if you have any questions or if we may be of further assistance.

Very truly yours,

EMCON Associates

David A. Cochrane, CEG
Project Manager

Russell J. Scharlin, P.E.
Executive Manager

DAC/RJS:lad

Attachments

Attachment A

SUMMARY TABLES OF ANALYTICAL DATA

Attachment A

SUMMARY TABLES OF ANALYTICAL DATA

Detected concentrations of compounds analyzed at each site are summarized in the tables listed below.

List of Tables		Page
Table 1	- Volatile Organic Compounds, Soil Samples - Site 4	A-3
Table 2	- Volatile Organic Compounds, Soil Samples - Site 7	A-4
Table 3	- Volatile Organic Compounds, Soil Samples - Site 13	A-5
Table 4	- Semivolatile Organic Compounds, Soil Samples - Site 4	A-6
Table 5	- Semivolatile Organic Compounds, Soil Samples - Site 7	A-7
Table 6	- Semivolatile Organic Compounds, Soil Samples - Site 13	A-8
Table 7	- Volatile and Semivolatile Organic Compounds, Water Sample - Site 4	A-8
Table 8	- Volatile and Semivolatile Organic Compounds, Water Sample - Site 7	A-9
Table 9	- Volatile Organic Compounds, Water Sample - Site 13	A-9
Table 10	- Semivolatile Organic Compounds, Water Sample - Site 13	A-9
Table 11	- Metals, Soil Samples - Site 4	A-10
Table 12	- Metals, Soils Samples - Site 7	A-12
Table 13	- Metals, Soil Samples - Site 13	A-14
Table 14	- Metals, Water Samples - Sites 4, 7, and 13	A-16

List of Tables

		Page
Table 15 -	Polychlorinated Biphenyls, Soil Sample - Site 10/11	A-18
Table 16 -	Low Boiling Point Petroleum Hydrocarbons, Soil Samples - Site Behind Dago Mary's Restaurant	A-18
Table 17 -	High Boiling Point Petroleum Hydrocarbons, Soil Samples - Site Behind Dago Mary's Restaurant	A-19
Table 18 -	Volatile and Semivolatile Organic Compounds, Field Blank	A-20
Table 19 -	Metals, Field Blank	A-21
Table 20 -	Selected Volatile Organic Compounds, Pump Blank	A-23

Table 1

VOLATILE ORGANIC COMPOUNDS
SOIL SAMPLES - SITE 4

Compounds	Boring
---------- No Compounds Were Detected ----------	

Table 2

VOLATILE ORGANIC COMPOUNDS

SOIL SAMPLES - SITE 7

Compounds*	Boring S7-1 3-3.5′ (Duplicate)	3.5-4′	6.5-7′	8.5-9′
Benzene[1]	<2	<2	3	<2
Tetrachloroethene[1]	4	<2	<2	<2
1,4-Dichlorobenzene[1]	18	<2	<2	<2
Carbondisulfide[2]	<2	<2	2	2
1,2,4-Trimethylcyclohexane[3]	ND	10	ND	ND
1,7,7-Trimethyl-bicyclo-[.2.2.1]heptane[3]	ND	50	ND	ND
Decahydro-2-methylnaphthalene[3]	70	140	ND	ND
Butylcyclooctane[3]	10	ND	ND	ND
1-Ethyl-2,3-dimethylcyclohexane[3]	20	20	ND	ND
2,6,6-Trimethyl-bicyclo-[.3.1.1]heptane[3]	20	ND	ND	ND
cis-Decahydro-naphthalene[3]	30	ND	ND	ND
(z)-Cyclodecene[3]	ND	ND	<5	ND
1,11-Dodecadiene[3]	ND	ND	<5	ND
4,8-Dimethyl-1,7-nonadiene[3]	ND	ND	<5	ND
1,2,4-Trimethyl-(1.alpha., 2.beta., 4.alpha.)-cyclopentane[3]	ND	ND	<5	ND
Unknown[3]	ND	ND	<5	ND
Unknown[3]	ND	ND	<5	ND

* All concentrations are reported in parts per billion (ppb).

1. Priority pollutant
2. EPA Hazardous Substance List compound
3. Tentatively identified compound; for tentatively identified compounds, "ND" indicates that there was no computer match for that compound and no detection limit was reported by the laboratory. When a computer match was made for a tentatively identified compound, but its value could not be quantified, its detection limit is reported.

Note: All other volatile organic compounds were not detected.

Table 3

VOLATILE ORGANIC COMPOUNDS

SOIL SAMPLES - SITE 13

Compounds*	Boring S13-1		
	2-2.5′	4.5-5′	6-6.5′
Trichloroethene[1]	<2	<2	3
Trichlorotrifluoroethane[2]	<2	<2	8

* All concentrations are reported in parts per billion (ppb).

1. Priority pollutant

2. EPA Hazardous Substance List compound

Notes: All other volatile organic compounds were not detected; "<" signifies the compound was not detected at or above the detection limit indicated.

Table 4

SEMIVOLATILE ORGANIC COMPOUNDS

SOIL SAMPLES - SITE 4

Compounds*	Boring S4-1		
	1.5-2′	6-6.5′	8-8.5′
bis(2-Ethylhexyl)phthalate[1]	4,400	1,800	1,300
Phenanthrene[1]	<66	80	<66
2-Methylnaphthalene[2]	<66	71	<66
bis(2-Ethylhexyl)ester hexanedioic acid[3]	790	890	1,000
1,2,3,4-Tetrahydronaphthalene[3]	ND	<330	ND
2,4-Dimethylhexane[3]	ND	<330	ND
1-Methylnaphthalene[3]	ND	<330	ND
2,3-Dimethylnaphthalene[3]	ND	<330	ND

* All concentrations are reported in parts per billion (ppb).
1. Priority pollutant
2. EPA Hazardous Substance List compound
3. Tentatively identified compound; for tentatively identified compounds, "ND" indicates that there was no computer match for that compound and no detection limit was reported by the laboratory. When a computer match was made for a tentatively identified compound, but its value could not be quantified, its detection limit is reported.

Note: All other semivolatile organic compounds were not detected.

Table 5

SEMIVOLATILE ORGANIC COMPOUNDS

SOIL SAMPLES - SITE 7

Compounds*	Boring S7-1 3-3.5′ (Duplicate)	3.5-4′	6.5-7′	8.5-9′
Acenaphthylene[1]	<6,600	79	<66	<66
Fluorene[1]	<6,600	96	<66	<66
Phenanthrene[1]	<6,600	450	160	<66
Fluoranthene[1]	<6,600	69	260	<66
Naphthalene[1]	<6,600	<66	86	<66
Pyrene[1]	<6,600	<66	180	<66
Benzo(a)anthracene[1]	<6,600	<66	76	<66
Chrysene[1]	<6,600	<66	92	<66
Benzo(b)fluoranthene[1]	<6,600	<66	86	<66
2-Methylnaphthalene[2]	<6,600	86	<66	<66
Decahydro-2-methylnaphthalene[3]	ND	770	ND	ND
1-Tridecene[3]	ND	2,500	ND	ND
Heptadecane[3]	ND	1,400	ND	ND
2-Methyldecane[3]	ND	2,200	ND	ND
Molecular sulfur[3]	ND	3,700	ND	ND
2-Methyldecahydronaphthalene[3]	33[4]	ND	ND	ND
2,6-Dimethylundecane[3]	46[4]	ND	ND	ND
7-Methyltridecane[3]	76[4]	ND	ND	ND
2,6,11-Trimethyldodecane[3]	150[4]	ND	ND	ND
2,6,10,14-Tetramethylheptadecane[3]	150[4]	ND	ND	ND
2,6,10,14-Tetramethylpentadecane[3]	210[4]	ND	ND	ND
Unknown[3]	140	ND	ND	ND
Unknown[3]	110	ND	ND	ND
Unknown[3]	100	ND	ND	ND
Unknown[3]	76	ND	ND	ND
Unknown[3]	ND	2,100	ND	ND
Unknown[3]	ND	3,200	ND	ND
Unknown[3]	ND	4,100	ND	ND
Unknown[3]	ND	3,800	ND	ND
Unknown[3]	ND	3,700	ND	ND

* All concentrations are reported in parts per billion (ppb), unless noted otherwise.

1. Priority pollutant
2. EPA Hazardous Substance List compound
3. Tentatively identified compound; for tentatively identified compounds, "ND" indicates that there was no computer match for that compound and no detection limit was reported by the laboratory. When a computer match was made for a tentatively identified compound, but its value could not be quantified, its detection limit is reported.
4. Concentration reported in parts per million (ppm).

Note: All other semivolatile organic compounds were not detected.

Table 6

SEMIVOLATILE ORGANIC COMPOUNDS

SOIL SAMPLES - SITE 13

Compounds*	Boring S13-1		
	2-2.5′	4.5-5′	6-6.5′
Phenanthrene[1]	<66	110	76
Fluoranthene[1]	<66	80	<66
Heneicosane[2]	ND	ND	560
Eicosane[2]	ND	ND	<330
2,6,10,14-Tetramethylpentadecane[2]	ND	ND	<330
2,6,10,14-Tetramethylheptadecane[2]	ND	ND	<330

* All concentrations are reported in parts per billion (ppb).

1. Priority pollutant
2. Tentatively identified compound; for tentatively identified compounds, "ND" indicates that there was no computer match for that compound and no detection limit was reported by the laboratory. When a computer match was made for a tentatively identified compound, but its value could not be quantified, its detection limit is reported.

Note: All other semivolatile organic compounds were not detected.

Table 7

VOLATILE AND SEMIVOLATILE ORGANIC COMPOUNDS

WATER SAMPLE - SITE 4

Compounds	Boring
---------- No Compounds Were Detected ----------	

Table 8

VOLATILE AND SEMIVOLATILE COMPOUNDS
WATER SAMPLE - SITE 7

Compounds	Boring
---------- No Compounds Were Detected ----------	

Table 9

VOLATILE AND SEMIVOLATILE COMPOUNDS
WATER SAMPLE - SITE 7

Compounds	Boring
---------- No Compounds Were Detected ----------	

Table 10

SEMIVOLATILE ORGANIC COMPOUNDS
WATER SAMPLE - SITE 13

Compounds*	Boring S13-1
2-(2-Ethoxyethoxy)ethanol[1]	20

* All concentrations are reported in parts per billion (ppb).

1. Tentatively identified compound; see text for discussion.

Note: All other semivolatile organic compounds were not detected.

Table 11

METALS

SOIL SAMPLES - SITE 4

Parameter*	Boring S4-1 2-2.5′	6.5-7′	6.5-7′ (Duplicate)	8.5-9′
EPA Metals[1]				
Antimony	94	220	170	160
Arsenic	16	37	39	28
Beryllium	<10	<10	<10	<10
Cadmium	8.7	13	13	11
Chromium	780	350	340	310
Copper	800	620	580	510
Lead	180	120	140	110
Mercury	<0.1	<0.1	<0.1	<0.1
Nickel	550	530	520	650
Selenium	<0.5	<0.5	<0.5	<0.5
Silver	<10	<10	<10	<10
Thallium	<30	<30	<30	<30
Zinc	300	83	82	57
DHS Metals[2]				
Barium	74	190	190	100
Cobalt	79	37	38	42
Molybdenum	<30	<30	<30	<30
Vanadium	41	130	130	75

Table 11

METALS

SOIL SAMPLES - SITE 4

(Continued)

Parameter*	Boring S4-1 2-2.5′	6.5-7′	6.5-7′ (Duplicate)	8.5-9′
ICAP Metals[3]				
Aluminum	2,800	36,000	44,000	20,000
Boron	100	110	110	89
Calcium	3,200	19,000	19,000	17,000
Iron	36,000	46,000	46,000	32,000
Lithium	900	500	600	600
Magnesium	160,000	69,000	69,000	69,000
Manganese	650	930	860	580
Potassium	200	400	400	900
Sodium	<500	<500	<500	<500
Tin	<10	<10	<10	<10

* All concentrations are reported in parts per million (ppm).

1. EPA Priority Pollutant Metals; see text for discussion.
2. Includes Department of Health Services′ (DHS) Inorganic Persistent and Bioaccumulative Substances (Title 22, California Administrative Code) and EPA Priority Pollutant Metals; see text for discussion.
3. Includes metals detected by the Inductively Coupled Argon Plasma (ICAP) method and EPA and DHS metals; see text for discussion.

Table 12

METALS

SOIL SAMPLES - SITE 7

Parameter*	Boring S7-1 4-4.5′	7-7.5′	9-9.5′
EPA Metals[1]			
Antimony	71	71	120
Arsenic	0.28	0.31	0.055
Beryllium	<1	<1	<1
Cadmium	6	5	10
Chromium	230	280	100
Copper	1,000	290	36
Lead	110	62	140
Mercury	<0.1	<0.1	<0.1
Nickel	350	450	140
Selenium	<0.5	<0.5	<0.5
Silver	<10	<10	<10
Thallium	<200	<200	<200
Zinc	440	120	29
DHS Metals[2]			
Barium	170	300	140
Cobalt	33	39	8
Molybdenum	<50	<50	<50
Vanadium	75	83	55

Table 12

METALS

SOIL SAMPLES - SITE 7

(Continued)

Parameter*	Boring S7-1 4-4.5′	7-7.5′	9-9.5′
ICAP Metals[3]			
Aluminum	23,000	29,000	6,500
Boron	110	110	32
Calcium	13,000	15,000	5,500
Iron	40,000	39,000	13,000
Lithium	500	700	400
Magnesium	50,000	59,000	11,000
Manganese	1,100	960	180
Potassium	790	790	590
Sodium	700	700	<500
Tin	<20	<20	<20

* All concentrations are reported in parts per million (ppm).

1. EPA Priority Pollutant Metals; see text for discussion.
2. Includes Department of Health Services' (DHS) Inorganic Persistent and Bioaccumulative Substances (Title 22, California Administrative Code) and EPA Priority Pollutant Metals; see text for discussion.
3. Includes metals detected by the Inductively Coupled Argon Plasma (ICAP) method and EPA and DHS metals; see text for discussion.

Table 13

METALS

SOIL SAMPLES - SITE 13

Parameter*	Boring S13-1 2.5-3′	5-5.5′	6.5-7′
EPA Metals[1]			
Antimony	<50	150	230
Arsenic	0.088	0.26	0.23
Beryllium	<1	<1	<1
Cadmium	3	13	23
Chromium	110	310	150
Copper	76	59	68
Lead	190	160	260
Mercury	<0.1	<0.1	<0.1
Nickel	120	480	220
Selenium	<0.5	<0.5	<0.5
Silver	<10	<10	<10
Thallium	<200	<200	<200
Zinc	290	84	55
DHS Metals[2]			
Barium	41	170	170
Cobalt	18	43	18
Molybdenum	<50	<50	<50
Vanadium	58	110	110

Table 13

METALS

SOIL SAMPLES - SITE 13

(Continued)

Parameter*	Boring S13-1 2.5-3′	5-5.5′	6.5-7′
ICAP Metals[3]			
Aluminum	13,000	30,000	19,000
Boron	60	110	64
Calcium	9,900	20,000	13,000
Iron	28,000	43,000	30,000
Lithium	<400	<400	500
Magnesium	13,000	52,000	21,000
Manganese	750	1,000	540
Potassium	850	800	1,500
Sodium	900	<500	1,800
Tin	<20	<20	<20

* All concentrations are reported in parts per million (ppm).

1. EPA Priority Pollutant Metals; see text for discussion.
2. Includes Department of Health Services' (DHS) Inorganic Persistent and Bioaccumulative Substances (Title 22, California Administrative Code) and EPA Priority Pollutant Metals; see text for discussion.
3. Includes metals detected by the Inductively Coupled Argon Plasma (ICAP) method and EPA and DHS metals; see text for discussion.

Table 14

METALS

WATER SAMPLES - SITES 4, 7, AND 13

Parameter*	Temporary Monitoring Wells			
	S4-1	S4-1 (Duplicate)**	S7-1	S13-1
EPA Metals[1]				
Antimony	0.70	0.42	0.93	0.55
Arsenic	0.004	0.003	0.005	0.004
Beryllium	0.005	0.006	0.009	<0.005
Cadmium	0.051	0.037	0.095	0.054
Chromium	0.11	0.15	0.17	0.11
Copper	0.14	0.090	0.19	0.12
Lead	0.62	0.55	0.56	0.24
Mercury	<0.0005	<0.0005	<0.0005	<0.0005
Nickel	0.23	0.25	0.28	0.17
Selenium	<0.001	<0.001	<0.001	<0.001
Silver	<0.02	<0.02	<0.02	<0.02
Thallium	<0.3	<0.3	<0.3	<0.3
Zinc	0.05	0.03	0.05	0.05
DHS Metals[2]				
Barium	0.73	0.83	0.32	0.094
Cobalt	<0.05	<0.05	<0.05	<0.05
Molybdenum	0.19	<0.02	0.059	<0.02
Vanadium	0.090	0.095	<0.05	<0.05

Table 14

METALS

WATER SAMPLES - SITES 4, 7, AND 13

Continued)

Parameter*	Temporary Monitoring Wells S4-1	S4-1 (Duplicate)**	S7-1	S13-1
ICAP Metals[3]				
Aluminum	1.0	5.0	1.7	1.0
Boron	0.64	0.66	1.8	2.1
Calcium	29	32	120	400
Iron	<0.05	7.2	0.18	0.42
Lithium	<5	<5	<5	<5
Magnesium	30	45	220	500
Manganese	0.045	0.16	1.9	1.5
Potassium	5.0	5.5	72	190
Sodium	350	350	2,300	5,100
Tin	<0.1	<0.1	<0.1	<0.1

* All concentrations are reported in parts per million (ppm).

** Designated XDUP on Certified Analytical Report.

1. EPA Priority Pollutant Metals; see text for discussion.

2. Includes Department of Health Services' (DHS) Inorganic Persistent and Bioaccumulative Substances (Title 22, California Administrative Code) and EPA Priority Pollutant Metals; see text for discussion.

3. Includes metals detected by the Inductively Coupled Argon Plasma (ICAP) method and EPA and DHS metals; see text for discussion.

Table 15

POLYCHLORINATED BIPHENYLS

SOIL SAMPLE - SITE 10/11

Compounds*	Sample S10/11 1/4-1/2'	Sample S10/11 1/4-1/2' (Duplicate)	Detection Limit
PCB Compound 1254	0.15	0.17	0.1

* All concentrations are reported in parts per million (ppm).

Note: All other PCB compounds were not detected.

Table 16

LOW BOILING POINT PETROLEUM HYDROCARBONS

SOIL SAMPLES - SITE BEHIND DAGO MARY'S RESTAURANT

Boring	Sample Depth (feet)	Low Boiling Hydrocarbons[1]	Calculated As
---------- No Compounds Were Detected ----------			

Table 17

HIGH BOILING POINT PETROLEUM HYDROCARBONS
SOIL SAMPLES - SITE BEHIND DAGO MARY'S RESTAURANT

Boring	Sample Depth (feet)	High Boiling Hydrocarbons[1]	Calculated As
SDM-A	3-3.5	190[2]	Diesel
SDM-A	3-3.5	400	Oil
SDM-B	3-3.5	<20	--
SDM-B	3-3.5	280	Oil
SDM-C	1.5-2	<10	--
SDM-C	1.5-2	30	Oil
SDM-D	1.5-2	10[3]	Diesel
SDM-D	1.5-2	30	Oil
SDM-E	1-1.5	<10	--
SDM-E	1-1.5	<10	--
SDM-F	4.5-5	130[3]	Diesel
SDM-F	4.5-5	150	Oil
SDM-F (Duplicate)	4.5-5	100[3]	Diesel
SDM-F (Duplicate)	4.5-5	120	Oil

1. All concentrations are reported in parts per million (ppm).
2. Identified as weathered diesel.
3. Unidentified hydrocarbons.

Table 18

VOLATILE AND SEMIVOLATILE ORGANIC COMPOUNDS
FIELD BLANK

Compounds	Boring*
---------- No Compounds Were Detected ----------	

* Designated FB01 on Certified Analytical Reports.

Table 19

METALS
FIELD BLANK

Parameter*	Field Blank**
EPA Metals[1]	
Antimony	0.23
Arsenic	0.001
Beryllium	0.011
Cadmium	0.019
Chromium	0.063
Copper	0.049
Lead	0.44
Mercury	<0.0005
Nickel	<0.02
Selenium	<0.001
Silver	<0.02
Thallium	<0.3
Zinc	0.04
DHS Metals[2]	
Barium	<0.02
Cobalt	<0.05
Molybdenum	<0.02
Vanadium	0.052

Table 19

METALS
FIELD BLANK
(Continued)

Parameter*	Field Blank**
ICAP Metals[3]	
Aluminum	0.31
Boron	0.13
Calcium	<0.1
Iron	<0.05
Lithium	<5
Magnesium	<0.1
Manganese	<0.02
Potassium	<0.5
Sodium	<1
Tin	<0.1

* All concentrations are reported in parts per million (ppm).

** Designated FB01 on Certified Analytical Reports.

1. EPA Priority Pollutant Metals; see text for discussion.

2. Includes Department of Health Services' (DHS) Inorganic Persistent and Bioaccumulative Substances (Title 22, California Administrative Code) and EPA Priority Pollutant Metals; see text for discussion.

3. Includes metals detected by the Inductively Coupled Argon Plasma (ICAP) method and EPA and DHS metals; see text for discussion.

Table 20

SELECTED VOLATILE ORGANIC COMPOUNDS

PUMP BLANK

Compound	Pump Blank
Trichloroethene	
Tetrachloroethene	
Benzene	-- No Compounds Were Detected --
Toluene	
Xylenes	
Ethylbenzene	

Attachment B

CERTIFIED ANALYTICAL REPORTS

ANAMETRIX, INC.
LABORATORY SERVICES
ENVIRONMENTAL • ANALYTICAL CHEMISTRY
2754 AIELLO DRIVE • SAN JOSE, CA 95111 • (408) 629-1132

EMCON
AUG 1 0 1987

August 13, 1987
Work Order Number 8708028
Date Received 8/11/87
PO No. 15190

Keoni Murphy
Emcon Associates
1921 Ringwood Avenue
San Jose, CA 95131

Three soil samples were received for analysis of priority pollutants by GC/MS, using the following EPA method(s):

ANAMETRIX I.D.	SAMPLE I.D.	METHOD(S)
8708028-01	365-02.05 S4-1 1.5-2'	8240/8270
-02	" S4-1 6-6.5'	"
-03	" S4-1 8-8.5'	"

RESULTS

See enclosed data sheets, Forms 1-1 thru 2-3b.

EXTRA COMPOUNDS

See enclosed data sheets, Forms 4-1 thru 4-3.

QUALITY ASSURANCE REPORTS

See enclosed data sheet, Form 5-2.

If there is any more that we can do, please give us a call. Thank you for using ANAMETRIX, INC.

Sincerely,

BURT SUTHERLAND

Burt Sutherland
Laboratory Manager

BWS/qp

ORGANICS ANALYSIS DATA SHEET - VOLATILE COMPOUNDS

Sample I.D. : 365-02.05 S4-1 1.5-2'
Matrix : SOIL
Date sampled : 8-10-87
Date analyzed : 8-12-87
Dilution : NONE

Anametrix I.D. : 8708028-01
Analyst : ARL
Supervisor : BWS
Date released : 8-13-87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
74-87-3	* Chloromethane	7		U
74-83-9	* Bromomethane	7		U
75-01-4	* Vinyl Chloride	7		U
75-00-3	* Chloroethane	7		U
75-09-2	* Methylene Chloride	2		U
67-64-1	**Acetone	10		U
79-69-4	* Trichlorofluoromethane	2		U
75-15-0	**Carbondisulfide	2		U
75-35-4	* 1,1-Dichloroethene	2		U
75-34-3	* 1,1-Dichloroethane	2		U
156-60-5	* Trans-1,2-Dichloroethene	2		U
156-59-2	* Cis-1,2-Dichloroethene	2		U
67-66-3	* Chloroform	2		U
76-13-1	# Trichlorotrifluoroethane	2		U
107-06-2	* 1,2-Dichloroethane	2		U
78-93-3	**2-Butanone	10		U
71-55-6	* 1,1,1-Trichloroethane	2		U
56-23-5	* Carbon Tetrachloride	2		U
108-05-4	**Vinyl Acetate	10		U
75-27-4	* Bromodichloromethane	2		U
78-87-5	* 1,2-Dichloropropane	2		U
10061-02-6	* Trans-1,3-Dichloropropene	2		U
79-01-6	* Trichloroethene	2		U
124-48-1	* Dibromochloromethane	2		U
79-00-5	* 1,1,2-Trichloroethane	2		U
71-43-2	* Benzene	2		U
10061-01-5	* cis-1,3-Dichloropropene	2		U
110-75-8	* 2-Chloroethylvinylether	2		U
75-25-2	* Bromoform	2		U
591-78-6	**2-Hexanone	10		U
108-10-1	**4-Methyl-2-Pentanone	10		U
127-18-4	* Tetrachloroethene	2		U
79-34-5	* 1,1,2,2-Tetrachloroethane	2		U
108-88-3	* Toluene	2		U
108-90-7	* Chlorobenzene	2		U
100-41-4	* Ethylbenzene	2		U
100-42-5	**Styrene	2		U
	**Total Xylenes	2		U
541-73-1	* 1,3-Dichlorobenzene	2		U
95-50-1	* 1,2-Dichlorobenzene	2		U
106-46-7	* 1,4-Dichlorobenzene	2		U

* A 624/8240 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)
\# A compound added by Anametrix, Inc.

For reporting purposes, the following qualifiers (Q) are used:
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 1-1.

ORGANICS ANALYSIS DATA SHEET - VOLATILE COMPOUNDS

Sample I.D. : 365-02.05 S4-1 6-6.5'
Matrix : SOIL
Date sampled : 8-10-87
Date analyzed : 8-12-87
Dilution : NONE

Anametrix I.D. : 8708028-02
Analyst : AKL
Supervisor : BWS
Date released : 8-13-87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
74-87-3	* Chloromethane	7		U
74-83-9	* Bromomethane	7		U
75-01-4	* Vinyl Chloride	7		U
75-00-3	* Chloroethane	7		U
75-09-2	* Methylene Chloride	2		U
67-64-1	**Acetone	10		U
79-69-4	* Trichlorofluoromethane	2		U
75-15-0	**Carbondisulfide	2		U
75-35-4	* 1,1-Dichloroethene	2		U
75-34-3	* 1,1-Dichloroethane	2		U
156-60-5	* Trans-1,2-Dichloroethene	2		U
156-59-2	* Cis-1,2-Dichloroethene	2		U
67-66-3	* Chloroform	2		U
76-13-1	# Trichlorotrifluoroethane	2		U
107-06-2	* 1,2-Dichloroethane	2		U
78-93-3	**2-Butanone	10		U
71-55-6	* 1,1,1-Trichloroethane	2		U
56-23-5	* Carbon Tetrachloride	2		U
108-05-4	**Vinyl Acetate	10		U
75-27-4	* Bromodichloromethane	2		U
78-87-5	* 1,2-Dichloropropane	2		U
10061-02-6	* Trans-1,3-Dichloropropene	2		U
79-01-6	* Trichloroethene	2		U
124-48-1	* Dibromochloromethane	2		U
79-00-5	* 1,1,2-Trichloroethane	2		U
71-43-2	* Benzene	2		U
10061-01-5	* cis-1,3-Dichloropropene	2		U
110-75-8	* 2-Chloroethylvinylether	2		U
75-25-2	* Bromoform	2		U
591-78-6	**2-Hexanone	10		U
108-10-1	**4-Methyl-2-Pentanone	10		U
127-18-4	* Tetrachloroethene	2		U
79-34-5	* 1,1,2,2-Tetrachloroethane	2		U
108-88-3	* Toluene	2		U
108-90-7	* Chlorobenzene	2		U
100-41-4	* Ethylbenzene	2		U
100-42-5	**Styrene	2		U
	**Total Xylenes	2		U
541-73-1	* 1,3-Dichlorobenzene	2		U
95-50-1	* 1,2-Dichlorobenzene	2		U
106-46-7	* 1,4-Dichlorobenzene	2		U

* A 624/8240 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)
\# A compound added by Anametrix, Inc.

For reporting purposes, the following qualifiers (Q) are used:
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 1-2.

ORGANICS ANALYSIS DATA SHEET - VOLATILE COMPOUNDS

Sample I.D. : 365-02.05 S4-1 8-8.5'
Matrix : SOIL
Date sampled : 8-10-87
Date analyzed : 8-12-87
Dilution : NONE

Anametrix I.D. : 8708028-03
Analyst : AKL
Supervisor : BWS
Date released : 8-13-87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
74-87-3	* Chloromethane	7		U
74-83-9	* Bromomethane	7		U
75-01-4	* Vinyl Chloride	7		U
75-00-3	* Chloroethane	7		U
75-09-2	* Methylene Chloride	2		U
67-64-1	**Acetone	10		U
79-69-4	* Trichlorofluoromethane	2		U
75-15-0	**Carbondisulfide	2		U
75-35-4	* 1,1-Dichloroethene	2		U
75-34-3	* 1,1-Dichloroethane	2		U
156-60-5	* Trans-1,2-Dichloroethene	2		U
156-59-2	* Cis-1,2-Dichloroethene	2		U
67-66-3	* Chloroform	2		U
76-13-1	# Trichlorotrifluoroethane	2		U
107-06-2	* 1,2-Dichloroethane	2		U
78-93-3	**2-Butanone	10		U
71-55-6	* 1,1,1-Trichloroethane	2		U
56-23-5	* Carbon Tetrachloride	2		U
108-05-4	**Vinyl Acetate	10		U
75-27-4	* Bromodichloromethane	2		U
78-87-5	* 1,2-Dichloropropane	2		U
10061-02-6	* Trans-1,3-Dichloropropene	2		U
79-01-6	* Trichloroethene	2		U
124-48-1	* Dibromochloromethane	2		U
79-00-5	* 1,1,2-Trichloroethane	2		U
71-43-2	* Benzene	2		U
10061-01-5	* cis-1,3-Dichloropropene	2		U
110-75-8	* 2-Chloroethylvinylether	2		U
75-25-2	* Bromoform	2		U
591-78-6	**2-Hexanone	10		U
108-10-1	**4-Methyl-2-Pentanone	10		U
127-18-4	* Tetrachloroethene	2		U
79-34-5	* 1,1,2,2-Tetrachloroethane	2		U
108-88-3	* Toluene	2		U
108-90-7	* Chlorobenzene	2		U
100-41-4	* Ethylbenzene	2		U
100-42-5	**Styrene	2		U
	**Total Xylenes	2		U
541-73-1	* 1,3-Dichlorobenzene	2		U
95-50-1	* 1,2-Dichlorobenzene	2		U
106-46-7	* 1,4-Dichlorobenzene	2		U

* A 624/8240 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)
\# A compound added by Anametrix, Inc.

For reporting purposes, the following qualifiers (Q) are used:
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 1-3.

ORGANIC ANALYSIS DATA SHEET -- SEMIVOLATILE COMPOUNDS

Sample I.D. : 365-02.05 S4-1 1.5-2'
Matrix : SOIL
Date sampled : 8-10-87
Date extracted : 8-12-87
Date analyzed : 8-13-87
Weight extracted : 30 G

Anametrix I.D. : 8708028-01
Analyst : CP
Supervisor : BWS
Date released : 8-13-87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
62-75-9	* N-Nitrosodimethylamine	66		U
108-95-2	* Phenol	66		U
62-53-3	**Aniline	66		U
111-44-4	* bis(-2-Chloroethyl)Ether	66		U
95-57-8	* 2-Chlorophenol	66		U
541-73-1	* 1,3-Dichlorobenzene	66		U
106-46-7	* 1,4-Dichlorobenzene	66		U
100-51-6	**Benzyl Alcohol	66		U
95-50-1	* 1,2-Dichlorobenzene	66		U
95-48-7	**2-Methylphenol	66		U
39638-32-9	**bis(2-chloroisopropyl)Ether	66		U
106-44-5	**4-Methylphenol	66		U
621-64-7	* N-Nitroso-Di-n-Propylamine	66		U
67-72-1	* Hexachloroethane	66		U
98-95-3	* Nitrobenzene	66		U
78-59-1	* Isophorone	66		U
88-75-5	* 2-Nitrophenol	66		U
105-67-9	* 2,4-Dimethylphenol	66		U
65-85-0	**Benzoic Acid	320		U
111-91-1	* bis(-2-Chloroethoxy)Methane	66		U
120-83-2	* 2,4-Dichlorophenol	66		U
120-82-1	* 1,2,4-Trichlorobenzene	66		U
91-20-3	* Naphthalene	66		U
106-47-8	**4-Chloroaniline	66		U
87-68-3	* Hexachlorobutadiene	66		U
59-50-7	* 4-Chloro-3-Methylphenol	66		U
91-57-6	**2-Methylnaphthalene	66		U
77-47-4	* Hexachlorocyclopentadiene	66		U
88-06-2	* 2,4,6-Trichlorophenol	66		U
95-95-4	**2,4,5-Trichlorophenol	320		U
91-58-7	* 2-Chloronaphthalene	66		U
88-74-4	**2-Nitroaniline	320		U
131-11-3	* Dimethyl Phthalate	66		U
208-96-8	* Acenaphthylene	66		U
99-09-2	**3-Nitroaniline	320		U

* An 8270 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 2-1a.

ORGANIC ANALYSIS DATA SHEET -- SEMIVOLATILE COMPOUNDS

Sample I.D. : 365-02.05 S4-1 1.5-2'
Matrix : SOIL
Date sampled : 8-10-87
Date extracted : 8-12-87
Date analyzed : 8-13-87
Weight extracted : 30 G

Anametrix I.D. : 8708028-01
Analyst : CP
Supervisor : BWS
Date released : 8-13-87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
83-32-9	* Acenaphthene	66		U
51-28-5	* 2,4-Dinitrophenol	320		U
100-02-7	* 4-Nitrophenol	320		U
132-64-9	**Dibenzofuran	66		U
121-14-2	* 2,4-Dinitrotoluene	66		U
606-20-2	* 2,6-Dinitrotoluene	66		U
84-66-2	* Diethylphthalate	66		U
7005-72-3	* 4-Chlorophenyl-phenylether	66		U
86-73-7	* Fluorene	66		U
100-01-6	**4-Nitroaniline	320		U
534-52-1	**4,6-Dinitro-2-Methylphenol	320		U
86-30-6	* N-Nitrosodiphenylamine	66		U
122-66-7	**1,2-Diphenylhydrazine	66		U
101-55-3	* 4-Bromophenyl-phenylether	66		U
118-74-1	* Hexachlorobenzene	66		U
87-86-5	* Pentachlorophenol	320		U
85-01-8	* Phenanthrene	66		U
120-12-7	* Anthracene	66		U
84-74-2	* Di-n-Butylphthalate	66		U
206-44-0	* Fluoranthene	66		U
92-87-5	* Benzidine	320		U
129-00-0	* Pyrene	66		U
85-68-7	* Butylbenzylphthalate	66		U
91-94-1	* 3,3'-Dichlorobenzidine	160		U
56-55-3	* Benzo(a)Anthracene	66		U
117-81-7	* bis(2-Ethylhexyl)Phthalate	66	4400	+
218-01-9	* Chrysene	66		U
117-84-0	* Di-n-Octyl Phthalate	66		U
205-99-2	* Benzo(b)Fluoranthene	66		U
207-08-9	* Benzo(k)Fluoranthene	66		U
50-32-8	* Benzo(a)Pyrene	66		U
193-39-5	* Indeno(1,2,3-cd)Pyrene	66		U
53-70-3	* Dibenz(a,h)Anthracene	66		U
191-24-2	* Benzo(g,h,i)Perylene	66		U

* An 8270 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

ORGANIC ANALYSIS DATA SHEET -- SEMIVOLATILE COMPOUNDS

Sample I.D. : 365-02.05 S4-1 6-6.5'
Matrix : SOIL
Date sampled : 8-10-87
Date extracted : 8-12-87
Date analyzed : 8-13-87
Weight extracted : 30 G

Anametrix I.D. : 8708028-02
Analyst : CP
Supervisor : BWS
Date released : 8-13-87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
62-75-9	* N-Nitrosodimethylamine	66		U
108-95-2	* Phenol	66		U
62-53-3	**Aniline	66		U
111-44-4	* bis(-2-Chloroethyl)Ether	66		U
95-57-8	* 2-Chlorophenol	66		U
541-73-1	* 1,3-Dichlorobenzene	66		U
106-46-7	* 1,4-Dichlorobenzene	66		U
100-51-6	**Benzyl Alcohol	66		U
95-50-1	* 1,2-Dichlorobenzene	66		U
95-48-7	**2-Methylphenol	66		U
39638-32-9	**bis(2-chloroisopropyl)Ether	66		U
106-44-5	**4-Methylphenol	66		U
621-64-7	* N-Nitroso-Di-n-Propylamine	66		U
67-72-1	* Hexachloroethane	66		U
98-95-3	* Nitrobenzene	66		U
78-59-1	* Isophorone	66		U
88-75-5	* 2-Nitrophenol	66		U
105-67-9	* 2,4-Dimethylphenol	66		U
65-85-0	**Benzoic Acid	320		U
111-91-1	* bis(-2-Chloroethoxy)Methane	66		U
120-83-2	* 2,4-Dichlorophenol	66		U
120-82-1	* 1,2,4-Trichlorobenzene	66		U
91-20-3	* Naphthalene	66		U
106-47-8	**4-Chloroaniline	66		U
87-68-3	* Hexachlorobutadiene	66		U
59-50-7	* 4-Chloro-3-Methylphenol	66		U
91-57-6	**2-Methylnaphthalene	66	71	+
77-47-4	* Hexachlorocyclopentadiene	66		U
88-06-2	* 2,4,6-Trichlorophenol	66		U
95-95-4	**2,4,5-Trichlorophenol	320		U
91-58-7	* 2-Chloronaphthalene	66		U
88-74-4	**2-Nitroaniline	320		U
131-11-3	* Dimethyl Phthalate	66		U
208-96-8	* Acenaphthylene	66		U
99-09-2	**3-Nitroaniline	320		U

* An 8270 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 2-2a.

ORGANIC ANALYSIS DATA SHEET -- SEMIVOLATILE COMPOUNDS

Sample I.D. : 365-02.05 S4-1 6-6.5'
Matrix : SOIL
Date sampled : 8-10-87
Date extracted : 8-12-87
Date analyzed : 8-13-87
Weight extracted : 30 G

Anametrix I.D. : 8708028-02
Analyst : CP
Supervisor : Bus
Date released : 8-13-87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
83-32-9	* Acenaphthene	66		U
51-28-5	* 2,4-Dinitrophenol	320		U
100-02-7	* 4-Nitrophenol	320		U
132-64-9	**Dibenzofuran	66		U
121-14-2	* 2,4-Dinitrotoluene	66		U
606-20-2	* 2,6-Dinitrotoluene	66		U
84-66-2	* Diethylphthalate	66		U
7005-72-3	* 4-Chlorophenyl-phenylether	66		U
86-73-7	* Fluorene	66		U
100-01-6	**4-Nitroaniline	320		U
534-52-1	**4,6-Dinitro-2-Methylphenol	320		U
86-30-6	* N-Nitrosodiphenylamine	66		U
122-66-7	**1,2-Diphenylhydrazine	66		U
101-55-3	* 4-Bromophenyl-phenylether	66		U
118-74-1	* Hexachlorobenzene	66		U
87-86-5	* Pentachlorophenol	320		U
85-01-8	* Phenanthrene	66	80	+
120-12-7	* Anthracene	66		U
84-74-2	* Di-n-Butylphthalate	66		U
206-44-0	* Fluoranthene	66		U
92-87-5	* Benzidine	320		U
129-00-0	* Pyrene	66		U
85-68-7	* Butylbenzylphthalate	66		U
91-94-1	* 3,3'-Dichlorobenzidine	160		U
56-55-3	* Benzo(a)Anthracene	66		U
117-81-7	* bis(2-Ethylhexyl)Phthalate	66	1800	+
218-01-9	* Chrysene	66		U
117-84-0	* Di-n-Octyl Phthalate	66		U
205-99-2	* Benzo(b)Fluoranthene	66		U
207-08-9	* Benzo(k)Fluoranthene	66		U
50-32-8	* Benzo(a)Pyrene	66		U
193-39-5	* Indeno(1,2,3-cd)Pyrene	66		U
53-70-3	* Dibenz(a,h)Anthracene	66		U
191-24-2	* Benzo(g,h,i)Perylene	66		U

* An 8270 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 2-2b.

ORGANIC ANALYSIS DATA SHEET -- SEMIVOLATILE COMPOUNDS

Sample I.D.	: 365-02.05 S4-1 8-8.5'	Anametrix I.D.	: 8708028-03
Matrix	: SOIL	Analyst	: CP
Date sampled	: 8-10-87	Supervisor	: BWS
Date extracted	: 8-12-87	Date released	: 8-13-87
Date analyzed	: 8-13-87		
Weight extracted	: 30 G		

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
62-75-9	* N-Nitrosodimethylamine	66		U
108-95-2	* Phenol	66		U
62-53-3	**Aniline	66		U
111-44-4	* bis(-2-Chloroethyl)Ether	66		U
95-57-8	* 2-Chlorophenol	66		U
541-73-1	* 1,3-Dichlorobenzene	66		U
106-46-7	* 1,4-Dichlorobenzene	66		U
100-51-6	**Benzyl Alcohol	66		U
95-50-1	* 1,2-Dichlorobenzene	66		U
95-48-7	**2-Methylphenol	66		U
39638-32-9	**bis(2-chloroisopropyl)Ether	66		U
106-44-5	**4-Methylphenol	66		U
621-64-7	* N-Nitroso-Di-n-Propylamine	66		U
67-72-1	* Hexachloroethane	66		U
98-95-3	* Nitrobenzene	66		U
78-59-1	* Isophorone	66		U
88-75-5	* 2-Nitrophenol	66		U
105-67-9	* 2,4-Dimethylphenol	66		U
65-85-0	**Benzoic Acid	320		U
111-91-1	* bis(-2-Chloroethoxy)Methane	66		U
120-83-2	* 2,4-Dichlorophenol	66		U
120-82-1	* 1,2,4-Trichlorobenzene	66		U
91-20-3	* Naphthalene	66		U
106-47-8	**4-Chloroaniline	66		U
87-68-3	* Hexachlorobutadiene	66		U
59-50-7	* 4-Chloro-3-Methylphenol	66		U
91-57-6	**2-Methylnaphthalene	66		U
77-47-4	* Hexachlorocyclopentadiene	66		U
88-06-2	* 2,4,6-Trichlorophenol	66		U
95-95-4	**2,4,5-Trichlorophenol	320		U
91-58-7	* 2-Chloronaphthalene	66		U
88-74-4	**2-Nitroaniline	320		U
131-11-3	* Dimethyl Phthalate	66		U
208-96-8	* Acenaphthylene	66		U
99-09-2	**3-Nitroaniline	320		U

* An 8270 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 2-3a.

ORGANIC ANALYSIS DATA SHEET -- SEMIVOLATILE COMPOUNDS

Sample I.D. : 365-02.05 S4-1 8-8.5'
Matrix : SOIL
Date sampled : 8-10-87
Date extracted : 8-12-87
Date analyzed : 8-13-87
Weight extracted : 30 G

Anametrix I.D. : 8708028-03
Analyst : CP
Supervisor : BWS
Date released : 8-13-87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
83-32-9	* Acenaphthene	66		U
51-28-5	* 2,4-Dinitrophenol	320		U
100-02-7	* 4-Nitrophenol	320		U
132-64-9	**Dibenzofuran	66		U
121-14-2	* 2,4-Dinitrotoluene	66		U
606-20-2	* 2,6-Dinitrotoluene	66		U
84-66-2	* Diethylphthalate	66		U
7005-72-3	* 4-Chlorophenyl-phenylether	66		U
86-73-7	* Fluorene	66		U
100-01-6	**4-Nitroaniline	320		U
534-52-1	**4,6-Dinitro-2-Methylphenol	320		U
86-30-6	* N-Nitrosodiphenylamine	66		U
122-66-7	**1,2-Diphenylhydrazine	66		U
101-55-3	* 4-Bromophenyl-phenylether	66		U
118-74-1	* Hexachlorobenzene	66		U
87-86-5	* Pentachlorophenol	320		U
85-01-8	* Phenanthrene	66		U
120-12-7	* Anthracene	66		U
84-74-2	* Di-n-Butylphthalate	66		U
206-44-0	* Fluoranthene	66		U
92-87-5	* Benzidine	320		U
129-00-0	* Pyrene	66		U
85-68-7	* Butylbenzylphthalate	66		U
91-94-1	* 3,3'-Dichlorobenzidine	160		U
56-55-3	* Benzo(a)Anthracene	66		U
117-81-7	* bis(2-Ethylhexyl)Phthalate	66	1300	+
218-01-9	* Chrysene	66		U
117-84-0	* Di-n-Octyl Phthalate	66		U
205-99-2	* Benzo(b)Fluoranthene	66		U
207-08-9	* Benzo(k)Fluoranthene	66		U
50-32-8	* Benzo(a)Pyrene	66		U
193-39-5	* Indeno(1,2,3-cd)Pyrene	66		U
53-70-3	* Dibenz(a,h)Anthracene	66		U
191-24-2	* Benzo(g,h,i)Perylene	66		U

* An 8270 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

ORGANICS ANALYSIS DATA SHEET - TENTATIVELY IDENTIFIED COMPOUNDS

Sample I.D. : 365-02.05 S4-1 1.5-2'
Matrix : SOIL
Date Sampled : 8-10-87
Analyzed VOA : 8-12-87
Dilution VOA : NONE
Analyzed SV : 8-13-87
Dilution SV : NONE

Anametrix I.D. : 8708028-01
Analyst : CR
Supervisor : BWS
Date Released : 8-13-87

	CAS #	Scan#	Volatile Fraction Compound Name	Det. Limit ppb	ppb
1				5	
2				5	
3				5	
4				5	
5				5	
6				5	
7				5	
8				5	
9				5	
10				5	

	CAS #	Scan#	Semivolatile Fraction Compound Name	Det. Limit ppb	ppb
1	103-23-1	1670	bis(2-ethylhexyl)ester hexanedioic acid	330	790
2				330	
3				330	
4				330	
5				330	
6				330	
7				330	
8				330	
9				330	
10				330	
11				330	
12				330	
13				330	
14				330	
15				330	
16				330	
17				330	
18				330	
19				330	
20				330	

Tentatively identified compounds are significant chromatographic peaks (TICs) other than priority pollutants. TIC spectra are compared with entries in the National Bureau of Standards mass spectral library. Identification is made by following US EPA guidelines and acceptance criteria. TICs are quantitated by using the area of the nearest internal standard and assuming a response factor of one (1). Values calculated are ESTIMATES ONLY.

Form 4-1.

ORGANICS ANALYSIS DATA SHEET - TENTATIVELY IDENTIFIED COMPOUNDS

Sample I.D. : 365-02.05 S4-1 6-6.5'
Matrix : SOIL
Date Sampled : 8-10-87
Analyzed VOA : 8-12-87
Dilution VOA : NONE
Analyzed SV : 8-13-87
Dilution SV : NONE

Anametrix I.D. : 8708028-02
Analyst : CP
Supervisor : BWS
Date Released : 8-13-87

	CAS #	Scan#	Volatile Fraction Compound Name	Det. Limit ppb	ppb
1				5	
2				5	
3				5	
4				5	
5				5	
6				5	
7				5	
8				5	
9				5	
10				5	

	CAS #	Scan#	Semivolatile Fraction Compound Name	Det. Limit ppb	ppb
1	119-64-2	820	1,2,3,4-tetrahydronaphthalene	330	<330
2	589-43-5	848	2,4-dimethylhexane	330	<330
3	90-12-0	962	1-methylnaphthalene	330	<330
4	581-40-8	1054	2,3-dimethylnaphthalene	330	<330
5	103-23-1	1670	bis(2-ethylhexyl)ester hexanedioic acid	330	890
6				330	
7				330	
8				330	
9				330	
10				330	
11				330	
12				330	
13				330	
14				330	
15				330	
16				330	
17				330	
18				330	
19				330	
20				330	

Tentatively identified compounds are significant chromatographic peaks (TICs) other than priority pollutants. TIC spectra are compared with entries in the National Bureau of Standards mass spectral library. Identification is made by following US EPA guidelines and acceptance criteria. TICs are quantitated by using the area of the nearest internal standard and assuming a response factor of one (1). Values calculated are ESTIMATES ONLY.

ORGANICS ANALYSIS DATA SHEET - TENTATIVELY IDENTIFIED COMPOUNDS

Sample I.D.	: 365-02.05 S4-1 8-8.5'	Anametrix I.D.	: 8708028-03
Matrix	: SOIL	Analyst	: CP
Date Sampled	: 8-10-87	Supervisor	: BWS
Analyzed VOA	: 8-12-87	Date Released	: 8-13-87
Dilution VOA	: NONE		
Analyzed SV	: 8-13-87		
Dilution SV	: NONE		

	CAS #	Scan#	Volatile Fraction Compound Name	Det. Limit ppb	ppb
1				5	
2				5	
3				5	
4				5	
5				5	
6				5	
7				5	
8				5	
9				5	
10				5	

	CAS #	Scan#	Semivolatile Fraction Compound Name	Det. Limit ppb	ppb
1	103-23-1	1667	bis(2-ethylhexyl)ester hexanedioic acid	330	1000
2				330	
3				330	
4				330	
5				330	
6				330	
7				330	
8				330	
9				330	
10				330	
11				330	
12				330	
13				330	
14				330	
15				330	
16				330	
17				330	
18				330	
19				330	
20				330	

Tentatively identified compounds are significant chromatographic peaks (TICs) other than priority pollutants. TIC spectra are compared with entries in the National Bureau of Standards mass spectral library. Identification is made by following US EPA guidelines and acceptance criteria. TICs are quantitated by using the area of the nearest internal standard and assuming a response factor of one (1). Values calculated are ESTIMATES ONLY.

SOIL VOLATILE/SEMIVOLATILE SURROGATE RECOVERY SUMMARY

ANAMETRIX WORKORDER# : 8708028
CLIENT PROJECT # : 365-02.05

SUPERVISOR : BWS
ANALYST : CF

#	SAMPLE ID	VO1 (DCE)	VO2 (TOL)	VO3 (BFB)	A1 (2FP)	A2 (PHL)	A3 (TBP)	BN1 (NBZ)	BN2 (FBH)	BN3 (TPH)	TOTAL OUT
01	S4-1 1.5-2'	110	103	90	43	45	45	41	53	58	0
02	S4-1 6-6.5'	102	91	70	36	39	55	34	46	74	0
03	S4-1 8-8.5'	107	100	89	60	61	77	53	59	69	0
04											
05											
06											
07											
08											
09											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											

ANAMETRIX PERCENT RECOVERY LIMITS
(generated from sample data)

VO1	(DCE)	= 1,2-DICHLOROETHANE-D4	84-125%
VO2	(TOL)	= TOLUENE-D8	78-130%
VO3	(BFB)	= 4-BROMOFLUOROBENZENE	70-118%
A1	(2FP)	= 2-FLUOROPHENOL	24-82%
A2	(PHL)	= PHENOL-D5	27-94%
A3	(TBP)	= 2,4,6-TRIBROMOPHENOL	31-118%
BN1	(NBZ)	= NITROBENZENE-D5	21-75%
BN2	(FBH)	= 2-FLUOROBIPHENYL	29-87%
BN3	(TPH)	= TERPHENYL-D14	31-127%

FORM 5-2

EMCON ASSOCIATES • CHEMICAL LABORATORIES

Analysis • Consultation • Research • Environmental Studies
State Approved Water Laboratory

EMCON

CERTIFIED ANALYTICAL REPORT

Report to:

Project Number: 365-02.05

Naval Facilities Engineering
Command
P.O. Box 727
San Bruno, CA 94066-0720

Location: SAN FRANCISCO, CA

Sample Type: WATER
Units: ug/l

Sample Designation:	PUMP BLANK
Field Date:	08/12/87
Laboratory Number:	E87-0857
Trichloroethene	<0.5
Tetrachloroethene	<0.5
Benzene	<0.5
Toluene	<0.5
Xylenes and Ethylbenzene	<2

Reported by: Kevin A Murphy Date: August 19, 1987

1921 RINGWOOD AVENUE, SAN JOSE, CALIFORNIA 95131 TELEPHONE (408) 275-1444

These results were obtained by following standard laboratory procedures; the liability of the corporation shall not exceed the amount paid for this report.

Date: 18 AUG 87
Project Number: 365-02.05

Naval Facilities Engineering
Command
P.O. Box 727
San Bruno, CA 94066-0720

Location: SAN FRANCISCO, CA

METHODS OF ANALYSIS

Sample Type: WATER

PARAMETER	METHOD
Trichloroethene Tetrachloroethene Benzene Toluene Xylenes and Ethylbenzene	The method of analysis is taken from EPA methods 5030, 8015, 8020 and 602. The samples are tested by gas chromatography using the purge and trap technique. Detection is by means of flame and photo ionization detectors.

EMCON ASSOCIATES • CHEMICAL LABORATORIES

Analysis • Consultation • Research • Environmental Studies
State Approved Water Laboratory

CERTIFIED ANALYTICAL REPORT

Report to:

Project Number: 365-02.05

Naval Facilities Engineering
Command
P.O. Box 727
San Bruno, CA 94066-0720

Location: SAN FRANCISCO, CA

Sample Type: SOIL
Units: mg/kg

Sample Designation:	SDM-A-2.5-	SDM-B-2.5-	SDM-C-1-1.	SDM-D-1-1.
Field Date:	08/12/87	08/12/87	08/12/87	08/12/87
Laboratory Number:	E87-0845	E87-0845	E87-0845	E87-0845
Volatile Hydrocarbons due to Gasoline	<5	<5	<5	<5
Benzene	<0.05	<0.05	<0.05	<0.05
Toluene	<0.1	<0.1	<0.1	<0.1
Xylenes and Ethylbenzene	<0.4	<0.4	<0.4	<0.4

Sample Designation:	SDM-E-0.5-	SDM-F-4-4.	SDM-F-4-4.
Field Date:	08/12/87	08/12/87	08/12/87
Laboratory Number:	E87-0845	E87-0845	E87-0845
Volatile Hydrocarbons due to Gasoline	<5	<5	<5
Benzene	<0.05	<0.05	<0.05
Toluene	<0.1	<0.1	<0.1
Xylenes and Ethylbenzene	<0.4	<0.4	<0.4

Reported by: Kermit Murphy Date: August 21, 1987

1921 RINGWOOD AVENUE, SAN JOSE, CALIFORNIA 95131 TELEPHONE (408) 275-1444

These results were obtained by following standard laboratory procedures; the liability of the corporation shall not exceed the amount paid for this report.

Date: 20 AUG 87
Project Number: 365-02.05

Naval Facilities Engineering
Command
P.O. Box 727
San Bruno, CA 94066-0720

Location: SAN FRANCISCO, CA

METHODS OF ANALYSIS

Sample Type: SOIL

PARAMETER	METHOD
Volatile Hydrocarbons due to Gasoline Benzene Toluene Xylenes and Ethylbenzene	The method of analysis is taken from EPA methods 5030, 8015, 8020 and 602. The samples are tested by gas chromatography using the purge and trap technique. Detection is by means of flame and photo ionization detectors.

ANAMETRIX, INC.
LABORATORY SERVICES
ENVIRONMENTAL • ANALYTICAL CHEMISTRY
2754 AIELLO DRIVE • SAN JOSE, CA 95111 • (408) 629-1132

August 26, 1987
Work Order Number 8708037
Date Received 8/13/87
PO No. 15503

Keoni Murphy
Emcon Associates
1921 Ringwood Avenue
San Jose, CA 95131

Six soil samples were received for analysis of priority pollutants by GC/MS, using the following EPA method(s):

ANAMETRIX I.D.	SAMPLE I.D.	METHOD(S)
8708037-01	365-02.05 S7-1 3.5-4.0	8240/8270
-02	S7-1 6.5-7.0	"
-03	S7-1 8.5-9.0	"
-04	S13-1 2.0-2.5	"
-05	S13-1 4.5-5.0	"
-06	S13-1 6.0-6.5	"

RESULTS

See enclosed data sheets, Forms 1-1 thru 2-6b.

EXTRA COMPOUNDS

See enclosed data sheets, Forms 4-1 thru 4-3.

QUALITY ASSURANCE REPORTS

See enclosed data sheet, Form 5-2.

If there is any more that we can do, please give us a call. Thank you for using ANAMETRIX, INC.

Sincerely,

Burt Sutherland

Burt Sutherland
Laboratory Manager

BWS/mh

ORGANICS ANALYSIS DATA SHEET - EPA METHOD 624/8240

Sample I.D. :365-02.05 S7-1 3.5-4.0'
Matrix :SOIL
Date sampled :8/11/87
Date analyzed :8/20/87
Dilution :NONE

Anametrix I.D. :8708037-01
Analyst : ARL
Supervisor : BWS
Date released :8/26/87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
74-87-3	* Chloromethane	7		U
74-83-9	* Bromomethane	7		U
75-01-4	* Vinyl Chloride	7		U
75-00-3	* Chloroethane	7		U
75-09-2	* Methylene Chloride	2		U
67-64-1	**Acetone	10		U
79-69-4	* Trichlorofluoromethane	2		U
75-15-0	**Carbondisulfide	2		U
75-35-4	* 1,1-Dichloroethene	2		U
75-34-3	* 1,1-Dichloroethane	2		U
156-60-5	* Trans-1,2-Dichloroethene	2		U
156-59-2	* Cis-1,2-Dichloroethene	2		U
67-66-3	* Chloroform	2		U
76-13-1	# Trichlorotrifluoroethane	2		U
107-06-2	* 1,2-Dichloroethane	2		U
78-93-3	**2-Butanone	10		U
71-55-6	* 1,1,1-Trichloroethane	2		U
56-23-5	* Carbon Tetrachloride	2		U
108-05-4	**Vinyl Acetate	10		U
75-27-4	* Bromodichloromethane	2		U
78-87-5	* 1,2-Dichloropropane	2		U
10061-02-6	* Trans-1,3-Dichloropropene	2		U
79-01-6	* Trichloroethene	2		U
124-48-1	* Dibromochloromethane	2		U
79-00-5	* 1,1,2-Trichloroethane	2		U
71-43-2	* Benzene	2		U
10061-01-5	* cis-1,3-Dichloropropene	2		U
110-75-8	* 2-Chloroethylvinylether	2		U
75-25-2	* Bromoform	2		U
591-78-6	**2-Hexanone	10		U
108-10-1	**4-Methyl-2-Pentanone	10		U
127-18-4	* Tetrachloroethene	2		U
79-34-5	* 1,1,2,2-Tetrachloroethane	2		U
108-88-3	* Toluene	2		U
108-90-7	* Chlorobenzene	2		U
100-41-4	* Ethylbenzene	2		U
100-42-5	**Styrene	2		U
	**Total Xylenes	2		U
541-73-1	* 1,3-Dichlorobenzene	2		U
95-50-1	* 1,2-Dichlorobenzene	2		U
106-46-7	* 1,4-Dichlorobenzene	2		U

* A 624/8240 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)
\# A compound added by Anametrix, Inc.

For reporting purposes, the following qualifiers (Q) are used:
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 1-1.

ORGANICS ANALYSIS DATA SHEET - EPA METHOD 624/8240

Sample I.D. :365-02.05 S7-1 6.5-7.0'
Matrix :SOIL
Date sampled :8/11/87
Date analyzed :8/21/87
Dilution :NONE

Anametrix I.D. :8708037-02
Analyst : ARL
Supervisor : BWS
Date released :8/26/87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
74-87-3	* Chloromethane	7		U
74-83-9	* Bromomethane	7		U
75-01-4	* Vinyl Chloride	7		U
75-00-3	* Chloroethane	7		U
75-09-2	* Methylene Chloride	2		U
67-64-1	**Acetone	10		U
79-69-4	* Trichlorofluoromethane	2		U
75-15-0	**Carbondisulfide	2	2	+
75-35-4	* 1,1-Dichloroethene	2		U
75-34-3	* 1,1-Dichloroethane	2		U
156-60-5	* Trans-1,2-Dichloroethene	2		U
156-59-2	* Cis-1,2-Dichloroethene	2		U
67-66-3	* Chloroform	2		U
76-13-1	# Trichlorotrifluoroethane	2		U
107-06-2	* 1,2-Dichloroethane	2		U
78-93-3	**2-Butanone	10		U
71-55-6	* 1,1,1-Trichloroethane	2		U
56-23-5	* Carbon Tetrachloride	2		U
108-05-4	**Vinyl Acetate	10		U
75-27-4	* Bromodichloromethane	2		U
78-87-5	* 1,2-Dichloropropane	2		U
10061-02-6	* Trans-1,3-Dichloropropene	2		U
79-01-6	* Trichloroethene	2		U
124-48-1	* Dibromochloromethane	2		U
79-00-5	* 1,1,2-Trichloroethane	2		U
71-43-2	* Benzene	2	3	+
10061-01-5	* cis-1,3-Dichloropropene	2		U
110-75-8	* 2-Chloroethylvinylether	2		U
75-25-2	* Bromoform	2		U
591-78-6	**2-Hexanone	10		U
108-10-1	**4-Methyl-2-Pentanone	10		U
127-18-4	* Tetrachloroethene	2		U
79-34-5	* 1,1,2,2-Tetrachloroethane	2		U
108-88-3	* Toluene	2		U
108-90-7	* Chlorobenzene	2		U
100-41-4	* Ethylbenzene	2		U
100-42-5	**Styrene	2		U
	**Total Xylenes	2		U
541-73-1	* 1,3-Dichlorobenzene	2		U
95-50-1	* 1,2-Dichlorobenzene	2		U
106-46-7	* 1,4-Dichlorobenzene	2		U

* A 624/8240 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)
\# A compound added by Anametrix, Inc.

For reporting purposes, the following qualifiers (Q) are used:
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 1-2.

ORGANICS ANALYSIS DATA SHEET - EPA METHOD 624/8240

Sample I.D. :365-02.05 S7-1 8.5-9.0'
Matrix :SOIL
Date sampled :8/11/87
Date analyzed :8/21/87
Dilution :NONE

Anametrix I.D. :8708037-03
Analyst : ARL
Supervisor : BWS
Date released :8/26/87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
74-87-3	* Chloromethane	7		U
74-83-9	* Bromomethane	7		U
75-01-4	* Vinyl Chloride	7		U
75-00-3	* Chloroethane	7		U
75-09-2	* Methylene Chloride	2		U
67-64-1	**Acetone	10		U
79-69-4	* Trichlorofluoromethane	2		U
75-15-0	**Carbondisulfide	2		U
75-35-4	* 1,1-Dichloroethene	2		U
75-34-3	* 1,1-Dichloroethane	2		U
156-60-5	* Trans-1,2-Dichloroethene	2		U
156-59-2	* Cis-1,2-Dichloroethene	2		U
67-66-3	* Chloroform	2		U
76-13-1	# Trichlorotrifluoroethane	2		U
107-06-2	* 1,2-Dichloroethane	2		U
78-93-3	**2-Butanone	10		U
71-55-6	* 1,1,1-Trichloroethane	2		U
56-23-5	* Carbon Tetrachloride	2		U
108-05-4	**Vinyl Acetate	10		U
75-27-4	* Bromodichloromethane	2		U
78-87-5	* 1,2-Dichloropropane	2		U
10061-02-6	* Trans-1,3-Dichloropropene	2		U
79-01-6	* Trichloroethene	2		U
124-48-1	* Dibromochloromethane	2		U
79-00-5	* 1,1,2-Trichloroethane	2		U
71-43-2	* Benzene	2		U
10061-01-5	* cis-1,3-Dichloropropene	2		U
110-75-8	* 2-Chloroethylvinylether	2		U
75-25-2	* Bromoform	2		U
591-78-6	**2-Hexanone	10		U
108-10-1	**4-Methyl-2-Pentanone	10		U
127-18-4	* Tetrachloroethene	2		U
79-34-5	* 1,1,2,2-Tetrachloroethane	2		U
108-88-3	* Toluene	2		U
108-90-7	* Chlorobenzene	2		U
100-41-4	* Ethylbenzene	2		U
100-42-5	**Styrene	2		U
	**Total Xylenes	2		U
541-73-1	* 1,3-Dichlorobenzene	2		U
95-50-1	* 1,2-Dichlorobenzene	2		U
106-46-7	* 1,4-Dichlorobenzene	2		U

* A 624/8240 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)
\# A compound added by Anametrix, Inc.

For reporting purposes, the following qualifiers (Q) are used:
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

ORGANICS ANALYSIS DATA SHEET - EPA METHOD 624/8240

Sample I.D. :365-02.05 S13-1 2.0-2.5'
Matrix :SOIL
Date sampled :8/11/87
Date analyzed :8/20/87
Dilution :NONE

Anametrix I.D. :8708037-04
Analyst : ARL
Supervisor : BCS
Date released :8/26/87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
74-87-3	* Chloromethane	7		U
74-83-9	* Bromomethane	7		U
75-01-4	* Vinyl Chloride	7		U
75-00-3	* Chloroethane	7		U
75-09-2	* Methylene Chloride	2		U
67-64-1	**Acetone	10		U
79-69-4	* Trichlorofluoromethane	2		U
75-15-0	**Carbondisulfide	2		U
75-35-4	* 1,1-Dichloroethene	2		U
75-34-3	* 1,1-Dichloroethane	2		U
156-60-5	* Trans-1,2-Dichloroethene	2		U
156-59-2	* Cis-1,2-Dichloroethene	2		U
67-66-3	* Chloroform	2		U
76-13-1	# Trichlorotrifluoroethane	2		U
107-06-2	* 1,2-Dichloroethane	2		U
78-93-3	**2-Butanone	10		U
71-55-6	* 1,1,1-Trichloroethane	2		U
56-23-5	* Carbon Tetrachloride	2		U
108-05-4	**Vinyl Acetate	10		U
75-27-4	* Bromodichloromethane	2		U
78-87-5	* 1,2-Dichloropropane	2		U
10061-02-6	* Trans-1,3-Dichloropropene	2		U
79-01-6	* Trichloroethene	2		U
124-48-1	* Dibromochloromethane	2		U
79-00-5	* 1,1,2-Trichloroethane	2		U
71-43-2	* Benzene	2		U
10061-01-5	* cis-1,3-Dichloropropene	2		U
110-75-8	* 2-Chloroethylvinylether	2		U
75-25-2	* Bromoform	2		U
591-78-6	**2-Hexanone	10		U
108-10-1	**4-Methyl-2-Pentanone	10		U
127-18-4	* Tetrachloroethene	2		U
79-34-5	* 1,1,2,2-Tetrachloroethane	2		U
108-88-3	* Toluene	2		U
108-90-7	* Chlorobenzene	2		U
100-41-4	* Ethylbenzene	2		U
100-42-5	**Styrene	2		U
	**Total Xylenes	2		U
541-73-1	* 1,3-Dichlorobenzene	2		U
95-50-1	* 1,2-Dichlorobenzene	2		U
106-46-7	* 1,4-Dichlorobenzene	2		U

* A 624/8240 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)
\# A compound added by Anametrix, Inc.

For reporting purposes, the following qualifiers (Q) are used:
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 1-4.

ORGANICS ANALYSIS DATA SHEET - EPA METHOD 624/8240

Sample I.D. :365-02.05 S13-1 4.5-5.0'
Matrix :SOIL
Date sampled :8/11/87
Date analyzed :8/20/87
Dilution :NONE

Anametrix I.D. :8708037-05
Analyst : ARL
Supervisor : BWS
Date released :8/26/87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
74-87-3	* Chloromethane	7		U
74-83-9	* Bromomethane	7		U
75-01-4	* Vinyl Chloride	7		U
75-00-3	* Chloroethane	7		U
75-09-2	* Methylene Chloride	2		U
67-64-1	**Acetone	10		U
79-69-4	* Trichlorofluoromethane	2		U
75-15-0	**Carbondisulfide	2		U
75-35-4	* 1,1-Dichloroethene	2		U
75-34-3	* 1,1-Dichloroethane	2		U
156-60-5	* Trans-1,2-Dichloroethene	2		U
156-59-2	* Cis-1,2-Dichloroethene	2		U
67-66-3	* Chloroform	2		U
76-13-1	# Trichlorotrifluoroethane	2		U
107-06-2	* 1,2-Dichloroethane	2		U
78-93-3	**2-Butanone	10		U
71-55-6	* 1,1,1-Trichloroethane	2		U
56-23-5	* Carbon Tetrachloride	2		U
108-05-4	**Vinyl Acetate	10		U
75-27-4	* Bromodichloromethane	2		U
78-87-5	* 1,2-Dichloropropane	2		U
10061-02-6	* Trans-1,3-Dichloropropene	2		U
79-01-6	* Trichloroethene	2		U
124-48-1	* Dibromochloromethane	2		U
79-00-5	* 1,1,2-Trichloroethane	2		U
71-43-2	* Benzene	2		U
10061-01-5	* cis-1,3-Dichloropropene	2		U
110-75-8	* 2-Chloroethylvinylether	2		U
75-25-2	* Bromoform	2		U
591-78-6	**2-Hexanone	10		U
108-10-1	**4-Methyl-2-Pentanone	10		U
127-18-4	* Tetrachloroethene	2		U
79-34-5	* 1,1,2,2-Tetrachloroethane	2		U
108-88-3	* Toluene	2		U
108-90-7	* Chlorobenzene	2		U
100-41-4	* Ethylbenzene	2		U
100-42-5	**Styrene	2		U
	**Total Xylenes	2		U
541-73-1	* 1,3-Dichlorobenzene	2		U
95-50-1	* 1,2-Dichlorobenzene	2		U
106-46-7	* 1,4-Dichlorobenzene	2		U

* A 624/8240 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)
\# A compound added by Anametrix, Inc.

For reporting purposes, the following qualifiers (Q) are used:
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 1-5.

ORGANICS ANALYSIS DATA SHEET - EPA METHOD 624/8240

Sample I.D. :365-02.05 S13-1 6.0-6.5'
Matrix :SOIL
Date sampled :8/11/87
Date analyzed :8/20/87
Dilution :NONE

Anametrix I.D. :8708037-06
Analyst : ARL
Supervisor : BWS
Date released :8/26/87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
74-87-3	* Chloromethane	7		U
74-83-9	* Bromomethane	7		U
75-01-4	* Vinyl Chloride	7		U
75-00-3	* Chloroethane	7		U
75-09-2	* Methylene Chloride	2		U
67-64-1	**Acetone	10		U
79-69-4	* Trichlorofluoromethane	2		U
75-15-0	**Carbondisulfide	2		U
75-35-4	* 1,1-Dichloroethene	2		U
75-34-3	* 1,1-Dichloroethane	2		U
156-60-5	* Trans-1,2-Dichloroethene	2		U
156-59-2	* Cis-1,2-Dichloroethene	2		U
67-66-3	* Chloroform	2		U
76-13-1	# Trichlorotrifluoroethane	2	8	+
107-06-2	* 1,2-Dichloroethane	2		U
78-93-3	**2-Butanone	10		U
71-55-6	* 1,1,1-Trichloroethane	2		U
56-23-5	* Carbon Tetrachloride	2		U
108-05-4	**Vinyl Acetate	10		U
75-27-4	* Bromodichloromethane	2		U
78-87-5	* 1,2-Dichloropropane	2		U
10061-02-6	* Trans-1,3-Dichloropropene	2		U
79-01-6	* Trichloroethene	2	3	+
124-48-1	* Dibromochloromethane	2		U
79-00-5	* 1,1,2-Trichloroethane	2		U
71-43-2	* Benzene	2		U
10061-01-5	* cis-1,3-Dichloropropene	2		U
110-75-8	* 2-Chloroethylvinylether	2		U
75-25-2	* Bromoform	2		U
591-78-6	**2-Hexanone	10		U
108-10-1	**4-Methyl-2-Pentanone	10		U
127-18-4	* Tetrachloroethene	2		U
79-34-5	* 1,1,2,2-Tetrachloroethane	2		U
108-88-3	* Toluene	2		U
108-90-7	* Chlorobenzene	2		U
100-41-4	* Ethylbenzene	2		U
100-42-5	**Styrene	2		U
	**Total Xylenes	2		U
541-73-1	* 1,3-Dichlorobenzene	2		U
95-50-1	* 1,2-Dichlorobenzene	2		U
106-46-7	* 1,4-Dichlorobenzene	2		U

* A 624/8240 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)
\# A compound added by Anametrix, Inc.

For reporting purposes, the following qualifiers (Q) are used:
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 1-6.

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 625/8270

Sample I.D. :365-02.05 S7-1 3.5-4.0'
Matrix :SOIL
Date sampled :8/11/87
Date extracted :8/18/87
Date analyzed :8/23/87
Weight extracted :30 G

Anametrix I.D. :8708037-01
Analyst : CP
Supervisor : BWS
Date released :8/26/87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
62-75-9	* N-Nitrosodimethylamine	66		U
108-95-2	* Phenol	66		U
62-53-3	**Aniline	66		U
111-44-4	* bis(-2-Chloroethyl)Ether	66		U
95-57-8	* 2-Chlorophenol	66		U
541-73-1	* 1,3-Dichlorobenzene	66		U
106-46-7	* 1,4-Dichlorobenzene	66		U
100-51-6	**Benzyl Alcohol	66		U
95-50-1	* 1,2-Dichlorobenzene	66		U
95-48-7	**2-Methylphenol	66		U
39638-32-9	**bis(2-chloroisopropyl)Ether	66		U
106-44-5	**4-Methylphenol	66		U
621-64-7	* N-Nitroso-Di-n-Propylamine	66		U
67-72-1	* Hexachloroethane	66		U
98-95-3	* Nitrobenzene	66		U
78-59-1	* Isophorone	66		U
88-75-5	* 2-Nitrophenol	66		U
105-67-9	* 2,4-Dimethylphenol	66		U
65-85-0	**Benzoic Acid	320		U
111-91-1	* bis(-2-Chloroethoxy)Methane	66		U
120-83-2	* 2,4-Dichlorophenol	66		U
120-82-1	* 1,2,4-Trichlorobenzene	66		U
91-20-3	* Naphthalene	66		U
106-47-8	**4-Chloroaniline	66		U
87-68-3	* Hexachlorobutadiene	66		U
59-50-7	* 4-Chloro-3-Methylphenol	66		U
91-57-6	**2-Methylnaphthalene	66	86	+
77-47-4	* Hexachlorocyclopentadiene	66		U
88-06-2	* 2,4,6-Trichlorophenol	66		U
95-95-4	**2,4,5-Trichlorophenol	320		U
91-58-7	* 2-Chloronaphthalene	66		U
88-74-4	**2-Nitroaniline	320		U
131-11-3	* Dimethyl Phthalate	66		U
208-96-8	* Acenaphthylene	66		U
99-09-2	**3-Nitroaniline	320		U

* An 8270 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 625/8270

Sample I.D. :365-02.05 S7-1 3.5-4.0'
Matrix :SOIL
Date sampled :8/11/87
Date extracted :8/18/87
Date analyzed :8/23/87
Weight extracted :30 G

Anametrix I.D. :8708037-01
Analyst : CF
Supervisor : Bias
Date released :8/26/87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
83-32-9	* Acenaphthene	66	79	+
51-28-5	* 2,4-Dinitrophenol	320		U
100-02-7	* 4-Nitrophenol	320		U
132-64-9	**Dibenzofuran	66		U
121-14-2	* 2,4-Dinitrotoluene	66		U
606-20-2	* 2,6-Dinitrotoluene	66		U
84-66-2	* Diethylphthalate	66		U
7005-72-3	* 4-Chlorophenyl-phenylether	66		U
86-73-7	* Fluorene	66	96	+
100-01-6	**4-Nitroaniline	320		U
534-52-1	**4,6-Dinitro-2-Methylphenol	320		U
86-30-6	* N-Nitrosodiphenylamine	66		U
122-66-7	**1,2-Diphenylhydrazine	66		U
101-55-3	* 4-Bromophenyl-phenylether	66		U
118-74-1	* Hexachlorobenzene	66		U
87-86-5	* Pentachlorophenol	320		U
85-01-8	* Phenanthrene	66	450	+
120-12-7	* Anthracene	66		U
84-74-2	* Di-n-Butylphthalate	66		U
206-44-0	* Fluoranthene	66	69	+
92-87-5	* Benzidine	320		U
129-00-0	* Pyrene	66		U
85-68-7	* Butylbenzylphthalate	66		U
91-94-1	* 3,3'-Dichlorobenzidine	160		U
56-55-3	* Benzo(a)Anthracene	66		U
117-81-7	* bis(2-Ethylhexyl)Phthalate	66		U
218-01-9	* Chrysene	66		U
117-84-0	* Di-n-Octyl Phthalate	66		U
205-99-2	* Benzo(b)Fluoranthene	66		U
207-08-9	* Benzo(k)Fluoranthene	66		U
50-32-8	* Benzo(a)Pyrene	66		U
193-39-5	* Indeno(1,2,3-cd)Pyrene	66		U
53-70-3	* Dibenz(a,h)Anthracene	66		U
191-24-2	* Benzo(g,h,i)Perylene	66		U

* An 8270 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 2-1b.

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 625/8270

Sample I.D. :365-02.05 S7-1 6.5-7.0'
Matrix :SOIL
Date sampled :8/11/87
Date extracted :8/18/87
Date analyzed :8/23/87
Weight extracted :30 G

Anametrix I.D. :8708037-02
Analyst : CP
Supervisor : BWS
Date released :8/26/87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
62-75-9	* N-Nitrosodimethylamine	66		U
108-95-2	* Phenol	66		U
62-53-3	**Aniline	66		U
111-44-4	* bis(-2-Chloroethyl)Ether	66		U
95-57-8	* 2-Chlorophenol	66		U
541-73-1	* 1,3-Dichlorobenzene	66		U
106-46-7	* 1,4-Dichlorobenzene	66		U
100-51-6	**Benzyl Alcohol	66		U
95-50-1	* 1,2-Dichlorobenzene	66		U
95-48-7	**2-Methylphenol	66		U
39638-32-9	**bis(2-chloroisopropyl)Ether	66		U
106-44-5	**4-Methylphenol	66		U
621-64-7	* N-Nitroso-Di-n-Propylamine	66		U
67-72-1	* Hexachloroethane	66		U
98-95-3	* Nitrobenzene	66		U
78-59-1	* Isophorone	66		U
88-75-5	* 2-Nitrophenol	66		U
105-67-9	* 2,4-Dimethylphenol	66		U
65-85-0	**Benzoic Acid	320		U
111-91-1	* bis(-2-Chloroethoxy)Methane	66		U
120-83-2	* 2,4-Dichlorophenol	66		U
120-82-1	* 1,2,4-Trichlorobenzene	66		U
91-20-3	* Naphthalene	66	86	+
106-47-8	**4-Chloroaniline	66		U
87-68-3	* Hexachlorobutadiene	66		U
59-50-7	* 4-Chloro-3-Methylphenol	66		U
91-57-6	**2-Methylnaphthalene	66		U
77-47-4	* Hexachlorocyclopentadiene	66		U
88-06-2	* 2,4,6-Trichlorophenol	66		U
95-95-4	**2,4,5-Trichlorophenol	320		U
91-58-7	* 2-Chloronaphthalene	66		U
88-74-4	**2-Nitroaniline	320		U
131-11-3	* Dimethyl Phthalate	66		U
208-96-8	* Acenaphthylene	66		U
99-09-2	**3-Nitroaniline	320		U

* An 8270 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 2-2a.

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 625/8270

Sample I.D. :365-02.05 S7-1 6.5-7.0'
Matrix :SOIL
Date sampled :8/11/87
Date extracted :8/18/87
Date analyzed :8/23/87
Weight extracted :30 G

Anametrix I.D. :8708037-02
Analyst : CP
Supervisor : BWS
Date released :8/26/87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
83-32-9	* Acenaphthene	66		U
51-28-5	* 2,4-Dinitrophenol	320		U
100-02-7	* 4-Nitrophenol	320		U
132-64-9	**Dibenzofuran	66		U
121-14-2	* 2,4-Dinitrotoluene	66		U
606-20-2	* 2,6-Dinitrotoluene	66		U
84-66-2	* Diethylphthalate	66		U
7005-72-3	* 4-Chlorophenyl-phenylether	66		U
86-73-7	* Fluorene	66		U
100-01-6	**4-Nitroaniline	320		U
534-52-1	**4,6-Dinitro-2-Methylphenol	320		U
86-30-6	* N-Nitrosodiphenylamine	66		U
122-66-7	**1,2-Diphenylhydrazine	66		U
101-55-3	* 4-Bromophenyl-phenylether	66		U
118-74-1	* Hexachlorobenzene	66		U
87-86-5	* Pentachlorophenol	320		U
85-01-8	* Phenanthrene	66	160	+
120-12-7	* Anthracene	66		U
84-74-2	* Di-n-Butylphthalate	66		U
206-44-0	* Fluoranthene	66	260	+
92-87-5	* Benzidine	320		U
129-00-0	* Pyrene	66	180	+
85-68-7	* Butylbenzylphthalate	66		U
91-94-1	* 3,3'-Dichlorobenzidine	160		U
56-55-3	* Benzo(a)Anthracene	66	76	+
117-81-7	* bis(2-Ethylhexyl)Phthalate	66		U
218-01-9	* Chrysene	66	92	+
117-84-0	* Di-n-Octyl Phthalate	66		U
205-99-2	* Benzo(b)Fluoranthene	66	86	+
207-08-9	* Benzo(k)Fluoranthene	66		U
50-32-8	* Benzo(a)Pyrene	66		U
193-39-5	* Indeno(1,2,3-cd)Pyrene	66		U
53-70-3	* Dibenz(a,h)Anthracene	66		U
191-24-2	* Benzo(g,h,i)Perylene	66		U

* An 8270 approved compound (Federal Register, 10/26/84)

** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :

+ : A value greater than or equal to the method detection limit.

U : The compound was analyzed for but was not detected.

Form 2-2b.

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 625/8270

Sample I.D. :365-02.05 S7-1 8.5-9.0'
Matrix :SOIL
Date sampled :8/11/87
Date extracted :8/18/87
Date analyzed :8/23/87
Weight extracted :30 G

Anametrix I.D. :8708037-03
Analyst : CP
Supervisor : BWS
Date released :8/26/87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
62-75-9	* N-Nitrosodimethylamine	66		U
108-95-2	* Phenol	66		U
62-53-3	**Aniline	66		U
111-44-4	* bis(-2-Chloroethyl)Ether	66		U
95-57-8	* 2-Chlorophenol	66		U
541-73-1	* 1,3-Dichlorobenzene	66		U
106-46-7	* 1,4-Dichlorobenzene	66		U
100-51-6	**Benzyl Alcohol	66		U
95-50-1	* 1,2-Dichlorobenzene	66		U
95-48-7	**2-Methylphenol	66		U
39638-32-9	**bis(2-chloroisopropyl)Ether	66		U
106-44-5	**4-Methylphenol	66		U
621-64-7	* N-Nitroso-Di-n-Propylamine	66		U
67-72-1	* Hexachloroethane	66		U
98-95-3	* Nitrobenzene	66		U
78-59-1	* Isophorone	66		U
88-75-5	* 2-Nitrophenol	66		U
105-67-9	* 2,4-Dimethylphenol	66		U
65-85-0	**Benzoic Acid	320		U
111-91-1	* bis(-2-Chloroethoxy)Methane	66		U
120-83-2	* 2,4-Dichlorophenol	66		U
120-82-1	* 1,2,4-Trichlorobenzene	66		U
91-20-3	* Naphthalene	66		U
106-47-8	**4-Chloroaniline	66		U
87-68-3	* Hexachlorobutadiene	66		U
59-50-7	* 4-Chloro-3-Methylphenol	66		U
91-57-6	**2-Methylnaphthalene	66		U
77-47-4	* Hexachlorocyclopentadiene	66		U
88-06-2	* 2,4,6-Trichlorophenol	66		U
95-95-4	**2,4,5-Trichlorophenol	320		U
91-58-7	* 2-Chloronaphthalene	66		U
88-74-4	**2-Nitroaniline	320		U
131-11-3	* Dimethyl Phthalate	66		U
208-96-8	* Acenaphthylene	66		U
99-09-2	**3-Nitroaniline	320		U

* An 8270 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 2-3a.

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 625/8270

Sample I.D. :365-02.05 S7-1 8.5-9.0'
Matrix :SOIL
Date sampled :8/11/87
Date extracted :8/18/87
Date analyzed :8/23/87
Weight extracted :30 G

Anametrix I.D. :8708037-03
Analyst : CP
Supervisor : Bwo
Date released :8/26/87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
83-32-9	* Acenaphthene	66		U
51-28-5	* 2,4-Dinitrophenol	320		U
100-02-7	* 4-Nitrophenol	320		U
132-64-9	**Dibenzofuran	66		U
121-14-2	* 2,4-Dinitrotoluene	66		U
606-20-2	* 2,6-Dinitrotoluene	66		U
84-66-2	* Diethylphthalate	66		U
7005-72-3	* 4-Chlorophenyl-phenylether	66		U
86-73-7	* Fluorene	66		U
100-01-6	**4-Nitroaniline	320		U
534-52-1	**4,6-Dinitro-2-Methylphenol	320		U
86-30-6	* N-Nitrosodiphenylamine	66		U
122-66-7	**1,2-Diphenylhydrazine	66		U
101-55-3	* 4-Bromophenyl-phenylether	66		U
118-74-1	* Hexachlorobenzene	66		U
87-86-5	* Pentachlorophenol	320		U
85-01-8	* Phenanthrene	66		U
120-12-7	* Anthracene	66		U
84-74-2	* Di-n-Butylphthalate	66		U
206-44-0	* Fluoranthene	66		U
92-87-5	* Benzidine	320		U
129-00-0	* Pyrene	66		U
85-68-7	* Butylbenzylphthalate	66		U
91-94-1	* 3,3'-Dichlorobenzidine	160		U
56-55-3	* Benzo(a)Anthracene	66		U
117-81-7	* bis(2-Ethylhexyl)Phthalate	66		U
218-01-9	* Chrysene	66		U
117-84-0	* Di-n-Octyl Phthalate	66		U
205-99-2	* Benzo(b)Fluoranthene	66		U
207-08-9	* Benzo(k)Fluoranthene	66		U
50-32-8	* Benzo(a)Pyrene	66		U
193-39-5	* Indeno(1,2,3-cd)Pyrene	66		U
53-70-3	* Dibenz(a,h)Anthracene	66		U
191-24-2	* Benzo(g,h,i)Perylene	66		U

* An 8270 approved compound (Federal Register, 10/26/84)

** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :

+ : A value greater than or equal to the method detection limit.

U : The compound was analyzed for but was not detected.

Form 2-3b.

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 625/8270

Sample I.D. :365-02.05 S13-1 2.0-2.5'
Matrix :SOIL
Date sampled :8/11/87
Date extracted :8/18/87
Date analyzed :8/23/87
Weight extracted :30 G

Anametrix I.D. :8708037-04
Analyst : CP
Supervisor : GWS
Date released :8/26/87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
62-75-9	* N-Nitrosodimethylamine	66		U
108-95-2	* Phenol	66		U
62-53-3	**Aniline	66		U
111-44-4	* bis(-2-Chloroethyl)Ether	66		U
95-57-8	* 2-Chlorophenol	66		U
541-73-1	* 1,3-Dichlorobenzene	66		U
106-46-7	* 1,4-Dichlorobenzene	66		U
100-51-6	**Benzyl Alcohol	66		U
95-50-1	* 1,2-Dichlorobenzene	66		U
95-48-7	**2-Methylphenol	66		U
39638-32-9	**bis(2-chloroisopropyl)Ether	66		U
106-44-5	**4-Methylphenol	66		U
621-64-7	* N-Nitroso-Di-n-Propylamine	66		U
67-72-1	* Hexachloroethane	66		U
98-95-3	* Nitrobenzene	66		U
78-59-1	* Isophorone	66		U
88-75-5	* 2-Nitrophenol	66		U
105-67-9	* 2,4-Dimethylphenol	66		U
65-85-0	**Benzoic Acid	320		U
111-91-1	* bis(-2-Chloroethoxy)Methane	66		U
120-83-2	* 2,4-Dichlorophenol	66		U
120-82-1	* 1,2,4-Trichlorobenzene	66		U
91-20-3	* Naphthalene	66		U
106-47-8	**4-Chloroaniline	66		U
87-68-3	* Hexachlorobutadiene	66		U
59-50-7	* 4-Chloro-3-Methylphenol	66		U
91-57-6	**2-Methylnaphthalene	66		U
77-47-4	* Hexachlorocyclopentadiene	66		U
88-06-2	* 2,4,6-Trichlorophenol	66		U
95-95-4	**2,4,5-Trichlorophenol	320		U
91-58-7	* 2-Chloronaphthalene	66		U
88-74-4	**2-Nitroaniline	320		U
131-11-3	* Dimethyl Phthalate	66		U
208-96-8	* Acenaphthylene	66		U
99-09-2	**3-Nitroaniline	320		U

* An 8270 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 2-4a.

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 625/8270

Sample I.D. :365-02.05 S13-1 2.0-2.5'
Matrix :SOIL
Date sampled :8/11/87
Date extracted :8/18/87
Date analyzed :8/23/87
Weight extracted :30 G

Anametrix I.D. :8708037-04
Analyst : CP
Supervisor : BWS
Date released :8/26/87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
83-32-9	* Acenaphthene	66		U
51-28-5	* 2,4-Dinitrophenol	320		U
100-02-7	* 4-Nitrophenol	320		U
132-64-9	**Dibenzofuran	66		U
121-14-2	* 2,4-Dinitrotoluene	66		U
606-20-2	* 2,6-Dinitrotoluene	66		U
84-66-2	* Diethylphthalate	66		U
7005-72-3	* 4-Chlorophenyl-phenylether	66		U
86-73-7	* Fluorene	66		U
100-01-6	**4-Nitroaniline	320		U
534-52-1	**4,6-Dinitro-2-Methylphenol	320		U
86-30-6	* N-Nitrosodiphenylamine	66		U
122-66-7	**1,2-Diphenylhydrazine	66		U
101-55-3	* 4-Bromophenyl-phenylether	66		U
118-74-1	* Hexachlorobenzene	66		U
87-86-5	* Pentachlorophenol	320		U
85-01-8	* Phenanthrene	66		U
120-12-7	* Anthracene	66		U
84-74-2	* Di-n-Butylphthalate	66		U
206-44-0	* Fluoranthene	66		U
92-87-5	* Benzidine	320		U
129-00-0	* Pyrene	66		U
85-68-7	* Butylbenzylphthalate	66		U
91-94-1	* 3,3'-Dichlorobenzidine	160		U
56-55-3	* Benzo(a)Anthracene	66		U
117-81-7	* bis(2-Ethylhexyl)Phthalate	66		U
218-01-9	* Chrysene	66		U
117-84-0	* Di-n-Octyl Phthalate	66		U
205-99-2	* Benzo(b)Fluoranthene	66		U
207-08-9	* Benzo(k)Fluoranthene	66		U
50-32-8	* Benzo(a)Pyrene	66		U
193-39-5	* Indeno(1,2,3-cd)Pyrene	66		U
53-70-3	* Dibenz(a,h)Anthracene	66		U
191-24-2	* Benzo(g,h,i)Perylene	66		U

* An 8270 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 2-4b.

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 625/8270

Sample I.D. :365-02.05 S13-1 4.5-5.0'
Matrix :SOIL
Date sampled :8/11/87
Date extracted :8/18/87
Date analyzed :8/23/87
Weight extracted :30 G

Anametrix I.D. :8708037-05
Analyst : CP
Supervisor : BWS
Date released :8/26/87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
62-75-9	* N-Nitrosodimethylamine	66		U
108-95-2	* Phenol	66		U
62-53-3	**Aniline	66		U
111-44-4	* bis(-2-Chloroethyl)Ether	66		U
95-57-8	* 2-Chlorophenol	66		U
541-73-1	* 1,3-Dichlorobenzene	66		U
106-46-7	* 1,4-Dichlorobenzene	66		U
100-51-6	**Benzyl Alcohol	66		U
95-50-1	* 1,2-Dichlorobenzene	66		U
95-48-7	**2-Methylphenol	66		U
39638-32-9	**bis(2-chloroisopropyl)Ether	66		U
106-44-5	**4-Methylphenol	66		U
621-64-7	* N-Nitroso-Di-n-Propylamine	66		U
67-72-1	* Hexachloroethane	66		U
98-95-3	* Nitrobenzene	66		U
78-59-1	* Isophorone	66		U
88-75-5	* 2-Nitrophenol	66		U
105-67-9	* 2,4-Dimethylphenol	66		U
65-85-0	**Benzoic Acid	320		U
111-91-1	* bis(-2-Chloroethoxy)Methane	66		U
120-83-2	* 2,4-Dichlorophenol	66		U
120-82-1	* 1,2,4-Trichlorobenzene	66		U
91-20-3	* Naphthalene	66		U
106-47-8	**4-Chloroaniline	66		U
87-68-3	* Hexachlorobutadiene	66		U
59-50-7	* 4-Chloro-3-Methylphenol	66		U
91-57-6	**2-Methylnaphthalene	66		U
77-47-4	* Hexachlorocyclopentadiene	66		U
88-06-2	* 2,4,6-Trichlorophenol	66		U
95-95-4	**2,4,5-Trichlorophenol	320		U
91-58-7	* 2-Chloronaphthalene	66		U
88-74-4	**2-Nitroaniline	320		U
131-11-3	* Dimethyl Phthalate	66		U
208-96-8	* Acenaphthylene	66		U
99-09-2	**3-Nitroaniline	320		U

* An 8270 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 2-5a.

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 625/8270

Sample I.D. :365-02.05 S13-1 4.5-5.0'
Matrix :SOIL
Date sampled :8/11/87
Date extracted :8/18/87
Date analyzed :8/23/87
Weight extracted :30 G

Anametrix I.D. :8708037-05
Analyst :CP
Supervisor :BWS
Date released :8/26/87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
83-32-9	* Acenaphthene	66		U
51-28-5	* 2,4-Dinitrophenol	320		U
100-02-7	* 4-Nitrophenol	320		U
132-64-9	**Dibenzofuran	66		U
121-14-2	* 2,4-Dinitrotoluene	66		U
606-20-2	* 2,6-Dinitrotoluene	66		U
84-66-2	* Diethylphthalate	66		U
7005-72-3	* 4-Chlorophenyl-phenylether	66		U
86-73-7	* Fluorene	66		U
100-01-6	**4-Nitroaniline	320		U
534-52-1	**4,6-Dinitro-2-Methylphenol	320		U
86-30-6	* N-Nitrosodiphenylamine	66		U
122-66-7	**1,2-Diphenylhydrazine	66		U
101-55-3	* 4-Bromophenyl-phenylether	66		U
118-74-1	* Hexachlorobenzene	66		U
87-86-5	* Pentachlorophenol	320		U
85-01-8	* Phenanthrene	66	110	+
120-12-7	* Anthracene	66		U
84-74-2	* Di-n-Butylphthalate	66		U
206-44-0	* Fluoranthene	66	80	+
92-87-5	* Benzidine	320		U
129-00-0	* Pyrene	66		U
85-68-7	* Butylbenzylphthalate	66		U
91-94-1	* 3,3'-Dichlorobenzidine	160		U
56-55-3	* Benzo(a)Anthracene	66		U
117-81-7	* bis(2-Ethylhexyl)Phthalate	66		U
218-01-9	* Chrysene	66		U
117-84-0	* Di-n-Octyl Phthalate	66		U
205-99-2	* Benzo(b)Fluoranthene	66		U
207-08-9	* Benzo(k)Fluoranthene	66		U
50-32-8	* Benzo(a)Pyrene	66		U
193-39-5	* Indeno(1,2,3-cd)Pyrene	66		U
53-70-3	* Dibenz(a,h)Anthracene	66		U
191-24-2	* Benzo(g,h,i)Perylene	66		U

* An 8270 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 625/8270

Sample I.D. :365-02.05 S13-1 6.0-6.5'
Matrix :SOIL
Date sampled :8/11/87
Date extracted :8/18/87
Date analyzed :8/23/87
Weight extracted :30 G

Anametrix I.D. :8708037-06
Analyst : CP
Supervisor : Buss
Date released :8/26/87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
62-75-9	* N-Nitrosodimethylamine	66		U
108-95-2	* Phenol	66		U
62-53-3	**Aniline	66		U
111-44-4	* bis(-2-Chloroethyl)Ether	66		U
95-57-8	* 2-Chlorophenol	66		U
541-73-1	* 1,3-Dichlorobenzene	66		U
106-46-7	* 1,4-Dichlorobenzene	66		U
100-51-6	**Benzyl Alcohol	66		U
95-50-1	* 1,2-Dichlorobenzene	66		U
95-48-7	**2-Methylphenol	66		U
39638-32-9	**bis(2-chloroisopropyl)Ether	66		U
106-44-5	**4-Methylphenol	66		U
621-64-7	* N-Nitroso-Di-n-Propylamine	66		U
67-72-1	* Hexachloroethane	66		U
98-95-3	* Nitrobenzene	66		U
78-59-1	* Isophorone	66		U
88-75-5	* 2-Nitrophenol	66		U
105-67-9	* 2,4-Dimethylphenol	66		U
65-85-0	**Benzoic Acid	320		U
111-91-1	* bis(-2-Chloroethoxy)Methane	66		U
120-83-2	* 2,4-Dichlorophenol	66		U
120-82-1	* 1,2,4-Trichlorobenzene	66		U
91-20-3	* Naphthalene	66		U
106-47-8	**4-Chloroaniline	66		U
87-68-3	* Hexachlorobutadiene	66		U
59-50-7	* 4-Chloro-3-Methylphenol	66		U
91-57-6	**2-Methylnaphthalene	66		U
77-47-4	* Hexachlorocyclopentadiene	66		U
88-06-2	* 2,4,6-Trichlorophenol	66		U
95-95-4	**2,4,5-Trichlorophenol	320		U
91-58-7	* 2-Chloronaphthalene	66		U
88-74-4	**2-Nitroaniline	320		U
131-11-3	* Dimethyl Phthalate	66		U
208-96-8	* Acenaphthylene	66		U
99-09-2	**3-Nitroaniline	320		U

* An 8270 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 2-6a.

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 625/8270

Sample I.D. :365-02.05 S13-1 6.0-6.5'
Matrix :SOIL
Date sampled :8/11/87
Date extracted :8/18/87
Date analyzed :8/23/87
Weight extracted :30 G

Anametrix I.D. :8708037-06
Analyst : CP
Supervisor : BWS
Date released :8/26/87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
83-32-9	* Acenaphthene	66		U
51-28-5	* 2,4-Dinitrophenol	320		U
100-02-7	* 4-Nitrophenol	320		U
132-64-9	**Dibenzofuran	66		U
121-14-2	* 2,4-Dinitrotoluene	66		U
606-20-2	* 2,6-Dinitrotoluene	66		U
84-66-2	* Diethylphthalate	66		U
7005-72-3	* 4-Chlorophenyl-phenylether	66		U
86-73-7	* Fluorene	66		U
100-01-6	**4-Nitroaniline	320		U
534-52-1	**4,6-Dinitro-2-Methylphenol	320		U
86-30-6	* N-Nitrosodiphenylamine	66		U
122-66-7	**1,2-Diphenylhydrazine	66		U
101-55-3	* 4-Bromophenyl-phenylether	66		U
118-74-1	* Hexachlorobenzene	66		U
87-86-5	* Pentachlorophenol	320		U
85-01-8	* Phenanthrene	66	76	+
120-12-7	* Anthracene	66		U
84-74-2	* Di-n-Butylphthalate	66		U
206-44-0	* Fluoranthene	66		U
92-87-5	* Benzidine	320		U
129-00-0	* Pyrene	66		U
85-68-7	* Butylbenzylphthalate	66		U
91-94-1	* 3,3'-Dichlorobenzidine	160		U
56-55-3	* Benzo(a)Anthracene	66		U
117-81-7	* bis(2-Ethylhexyl)Phthalate	66		U
218-01-9	* Chrysene	66		U
117-84-0	* Di-n-Octyl Phthalate	66		U
205-99-2	* Benzo(b)Fluoranthene	66		U
207-08-9	* Benzo(k)Fluoranthene	66		U
50-32-8	* Benzo(a)Pyrene	66		U
193-39-5	* Indeno(1,2,3-cd)Pyrene	66		U
53-70-3	* Dibenz(a,h)Anthracene	66		U
191-24-2	* Benzo(g,h,i)Perylene	66		U

* An 8270 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 2-6b.

ORGANICS ANALYSIS DATA SHEET - TENTATIVELY IDENTIFIED COMPOUNDS

Sample I.D. :365-02.05 S7-1 3.5-4.0'
Matrix :SOIL
Date Sampled :8/11/87
Analyzed VOA :8/20/87
Dilution VOA :NONE
Analyzed SV :8/23/87
Dilution SV :NONE

Anametrix I.D. :8708037-01
Analyst : ARL
Supervisor : BWS
Date Released :8/26/87

	CAS #	Scan#	Volatile Fraction Compound Name	Det. Limit ppb	ppb
1	16883-40-0	431	1,2,4-trimethyl-	5	<5
2			(1.alpha.,2.beta.,4.alpha.)-	5	
3			cyclopentane	5	
4	2234-75-5	679	1,2,4-trimethylcyclohexane	5	10
5	7058-05-1	953	1-ethyl-2,3-dimethylcyclohexane	5	20
6	464-15-3	1315	1,7,7-trimethyl-bicyclo[2.2.1]heptane	5	50
7	2958-76-1	1436	decahydro-2-methylnaphthalene	5	140
8				5	
9				5	
10				5	

	CAS #	Scan#	Semivolatile Fraction Compound Name	Det. Limit ppb	ppb
1	2958-76-1	761	decahydro-2-methylnaphthalene	330	770
2	2437-56-1	869	1-tridecene	330	2500
3		906	unknown	330	2100
4	629-78-7	944	heptadecane	330	1400
5	6975-98-0	1063	2-methyldecane	330	2200
6		1252	unknown	330	3200
7		1257	unknown	330	4100
8		1262	unknown	330	3800
9		1284	unknown	330	3700
10	10544-50-0	1468	molecular sulfur	330	3700
11				330	
12				330	
13				330	
14				330	
15				330	
16				330	
17				330	
18				330	
19				330	
20				330	

Tentatively identified compounds are significant chromatographic peaks (TICs) other than priority pollutants. TIC spectra are compared with entries in the National Bureau of Standards mass spectral library. Identification is made by following US EPA guidelines and acceptance criteria. TICs are quantitated by using the area of the nearest internal standard and assuming a response factor of one (1). Values calculated are ESTIMATES ONLY.

Form 4-1.

ORGANICS ANALYSIS DATA SHEET - TENTATIVELY IDENTIFIED COMPOUNDS

Sample I.D. :365-02.05 S7-1 6.5-7.0'
Matrix :SOIL
Date Sampled :8/11/87
Analyzed VOA :8/21/87
Dilution VOA :NONE
Analyzed SV :8/23/87
Dilution SV :NONE

Anametrix I.D. :8708037-02
Analyst : ARL
Supervisor : BWS
Date Released :8/26/87

	CAS #	Scan#	Volatile Fraction Compound Name	Det. Limit ppb	ppb
1	935-31-9	1265	(z)-cyclodecene	5	<5
2	5876-87-9	1312	1,11-dodecadiene	5	<5
3	62108-28-5	1418	4,8-dimethyl-1,7-nonadiene	5	<5
4		1431	unknown	5	<5
5		1476	unknown	5	<5
6				5	
7				5	
8				5	
9				5	
10				5	

	CAS #	Scan#	Semivolatile Fraction Compound Name	Det. Limit ppb	ppb
1				10	
2				10	
3				10	
4				10	
5				10	
6				10	
7				10	
8				10	
9				10	
10				10	
11				10	
12				10	
13				10	
14				10	
15				10	
16				10	
17				10	
18				10	
19				10	
20				10	

Tentatively identified compounds are significant chromatographic peaks (TICs) other than priority pollutants. TIC spectra are compared with entries in the National Bureau of Standards mass spectral library. Identification is made by following US EPA guidelines and acceptance criteria. TICs are quantitated by using the area of the nearest internal standard and assuming a response factor of one (1). Values calculated are ESTIMATES ONLY.

ORGANICS ANALYSIS DATA SHEET - TENTATIVELY IDENTIFIED COMPOUNDS

Sample I.D. :365-02.05 S13-1 6.0-6.5'
Matrix :SOIL
Date Sampled :8/11/87
Analyzed VOA :8/20/87
Dilution VOA :NONE
Analyzed SV :8/23/87
Dilution SV :NONE

Anametrix I.D. :8708037-06
Analyst : PG
Supervisor : BWS
Date Released :8/26/87

	CAS #	Scan#	Volatile Fraction Compound Name	Det. Limit ppb	ppb
1				5	
2				5	
3				5	
4				5	
5				5	
6				5	
7				5	
8				5	
9				5	
10				5	

	CAS #	Scan#	Semivolatile Fraction Compound Name	Det. Limit ppb	ppb
1	1921-70-6	1245	2,6,10,14-tetramethylpentadecane	330	<330
2	18344-37-1	1369	2,6,10,14-tetramethylheptadecane	330	<330
3	112-95-8	1434	eicosane	330	<330
4	629-94-7	1494	heneicosane	330	560
5				330	
6				330	
7				330	
8				330	
9				330	
10				330	
11				330	
12				330	
13				330	
14				330	
15				330	
16				330	
17				330	
18				330	
19				330	
20				330	

Tentatively identified compounds are significant chromatographic peaks (TICs) other than priority pollutants. TIC spectra are compared with entries in the National Bureau of Standards mass spectral library. Identification is made by following US EPA guidelines and acceptance criteria. TICs are quantitated by using the area of the nearest internal standard and assuming a response factor of one (1). Values calculated are ESTIMATES ONLY.

Form 4-3.

SOIL VOLATILE/SEMIVOLATILE SURROGATE RECOVERY SUMMARY

ANAMETRIX WORKORDER# : 8708037
CLIENT PROJECT # : 365-02.05

SUPERVISOR : BJS
ANALYST : ARL

#	SAMPLE ID	VO1 (DCE)	VO2 (TOL)	VO3 (BFB)	A1 (2FP)	A2 (PHL)	A3 (TBP)	BN1 (NBZ)	BN2 (FBH)	BN3 (TPH)	TOTAL OUT
01	S7-1 3.5-4.0'	98	90	100	44	50	71	42	56	43	0
02	S7-1 6.5-7.0'	105	104	88	28	34	68	28	42	48	0
03	S7-1 8.5-9.0'	98	100	70	34	41	68	33	47	46	0
04	S13-1 2.0-2.5'	100	94	71	37	46	77	38	62	49	0
05	S13-1 4.5-5.0'	106	95	75	32	41	70	34	48	52	0
06	S13-1 6.0-6.5'	95	90	70	33	38	67	34	48	42	0
07											
08											
09											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											

ANAMETRIX PERCENT RECOVERY LIMITS
(generated from sample data)

VO1	(DCE)	= 1,2-DICHLOROETHANE-D4	84-125%
VO2	(TOL)	= TOLUENE-D8	78-130%
VO3	(BFB)	= 4-BROMOFLUOROBENZENE	70-118%
A1	(2FP)	= 2-FLUOROPHENOL	24-82%
A2	(PHL)	= PHENOL-D5	27-94%
A3	(TBP)	= 2,4,6-TRIBROMOPHENOL	31-118%
BN1	(NBZ)	= NITROBENZENE-D5	21-75%
BN2	(FBH)	= 2-FLUOROBIPHENYL	29-87%
BN3	(TPH)	= TERPHENYL-D14	31-127%

FORM 5-2

ORGANICS ANALYSIS DATA SHEET - TENTATIVELY IDENTIFIED COMPOUNDS

Sample I.D. :365-02.05 S13-1 6.0-6.5'
Matrix :SOIL
Date Sampled :8/11/87
Analyzed VOA :8/20/87
Dilution VOA :NONE
Analyzed SV :8/23/87
Dilution SV :NONE

Anametrix I.D. :8708037-06
Analyst : ARL
Supervisor : BWS
Date Released :8/26/87

	CAS #	Scan#	Volatile Fraction Compound Name	Det. Limit ppb	ppb
1				5	
2				5	
3				5	
4				5	
5				5	
6				5	
7				5	
8				5	
9				5	
10				5	

	CAS #	Scan#	Semivolatile Fraction Compound Name	Det. Limit ppb	ppb
1	1921-70-6	1245	2,6,10,14-tetramethylpentadecane	330	290
2	18344-37-1	1369	2,6,10,14-tetramethylheptadecane	330	240
3	112-95-8	1434	eicosane	330	250
4	629-94-7	1494	heneicosane	330	560
5				330	
6				330	
7				330	
8				330	
9				330	
10				330	
11				330	
12				330	
13				330	
14				330	
15				330	
16				330	
17				330	
18				330	
19				330	
20				330	

Tentatively identified compounds are significant chromatographic peaks (TICs) other than priority pollutants. TIC spectra are compared with entries in the National Bureau of Standards mass spectral library. Identification is made by following US EPA guidelines and acceptance criteria. TICs are quantitated by using the area of the nearest internal standard and assuming a response factor of one (1). Values calculated are ESTIMATES ONLY.

ANAMETRIX, INC.
LABORATORY SERVICES
ENVIRONMENTAL • ANALYTICAL CHEMISTRY
2754 AIELLO DRIVE • SAN JOSE, CA 95111 • (408) 629-1132

EMCON
AUG 27 1987

August 24, 1987
Work Order Number 8708046
Date Received 8/17/87
PO No. 15511

Keoni Murphy
Emcon Associates
1921 Ringwood Avenue
San Jose, CA 95131

Five water samples were received for analysis of priority pollutants by GC/MS, using the following EPA method(s):

ANAMETRIX I.D.	SAMPLE I.D.	METHOD(S)
8708046-01	365-02.05 S4-1	624/625
-02	" S7-1	"
-03	" S13-1	"
-04	" FB01	"
-05	" XDUP	"

RESULTS

See enclosed data sheets, Forms 1-1 thru 2-5b.

EXTRA COMPOUNDS

See enclosed data sheet, Form 4-1.

QUALITY ASSURANCE REPORTS

See enclosed data sheets, Forms 5-1 thru 6-1.

If there is any more that we can do, please give us a call. Thank you for using ANAMETRIX, INC.

Sincerely,

Burt Sutherland

Burt Sutherland
Laboratory Manager

BWS/qp

ORGANICS ANALYSIS DATA SHEET - EPA METHOD 624

Sample I.D. : 365-02.05 S4-1
Matrix : WATER
Date sampled : 8-14-87
Date analyzed : 8-21-87
Dilution : NONE

Anametrix I.D. : 8708046-01
Analyst : ARL
Supervisor : BWS
Date released : 8-24-87

CAS #	Compound Name	Det. Limit (ug/l)	(ug/l)	Q
74-87-3	* Chloromethane	7		U
74-83-9	* Bromomethane	7		U
75-01-4	* Vinyl Chloride	7		U
75-00-3	* Chloroethane	7		U
75-09-2	* Methylene Chloride	2		U
67-64-1	**Acetone	10		U
79-69-4	* Trichlorofluoromethane	2		U
75-15-0	**Carbondisulfide	2		U
75-35-4	* 1,1-Dichloroethene	2		U
75-34-3	* 1,1-Dichloroethane	2		U
156-60-5	* Trans-1,2-Dichloroethene	2		U
156-59-2	* Cis-1,2-Dichloroethene	2		U
67-66-3	* Chloroform	2		U
76-13-1	# Trichlorotrifluoroethane	2		U
107-06-2	* 1,2-Dichloroethane	2		U
78-93-3	**2-Butanone	10		U
71-55-6	* 1,1,1-Trichloroethane	2		U
56-23-5	* Carbon Tetrachloride	2		U
108-05-4	**Vinyl Acetate	10		U
75-27-4	* Bromodichloromethane	2		U
78-87-5	* 1,2-Dichloropropane	2		U
10061-02-6	* Trans-1,3-Dichloropropene	2		U
79-01-6	* Trichloroethene	2		U
124-48-1	* Dibromochloromethane	2		U
79-00-5	* 1,1,2-Trichloroethane	2		U
71-43-2	* Benzene	2		U
10061-01-5	* cis-1,3-Dichloropropene	2		U
110-75-8	* 2-Chloroethylvinylether	2		U
75-25-2	* Bromoform	2		U
591-78-6	**2-Hexanone	10		U
108-10-1	**4-Methyl-2-Pentanone	10		U
127-18-4	* Tetrachloroethene	2		U
79-34-5	* 1,1,2,2-Tetrachloroethane	2		U
108-88-3	* Toluene	2		U
108-90-7	* Chlorobenzene	2		U
100-41-4	* Ethylbenzene	2		U
100-42-5	**Styrene	2		U
	**Total Xylenes	2		U
541-73-1	* 1,3-Dichlorobenzene	2		U
95-50-1	* 1,2-Dichlorobenzene	2		U
106-46-7	* 1,4-Dichlorobenzene	2		U

* A 624/8240 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)
\# A compound added by Anametrix, Inc.

For reporting purposes, the following qualifiers (Q) are used:
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 1-1.

ORGANICS ANALYSIS DATA SHEET - EPA METHOD 624

Sample I.D. : 365-02.05 S7-1
Matrix : WATER
Date sampled : 8-14-87
Date analyzed : 8-21-87
Dilution : NONE

Anametrix I.D. : 8708046-02
Analyst : ARL
Supervisor : [illegible]
Date released : 8-24-87

CAS #	Compound Name	Det. Limit (ug/l)	(ug/l)	Q
74-87-3	* Chloromethane	7		U
74-83-9	* Bromomethane	7		U
75-01-4	* Vinyl Chloride	7		U
75-00-3	* Chloroethane	7		U
75-09-2	* Methylene Chloride	2		U
67-64-1	**Acetone	10		U
79-69-4	* Trichlorofluoromethane	2		U
75-15-0	**Carbondisulfide	2		U
75-35-4	* 1,1-Dichloroethene	2		U
75-34-3	* 1,1-Dichloroethane	2		U
156-60-5	* Trans-1,2-Dichloroethene	2		U
156-59-2	* Cis-1,2-Dichloroethene	2		U
67-66-3	* Chloroform	2		U
76-13-1	# Trichlorotrifluoroethane	2		U
107-06-2	* 1,2-Dichloroethane	2		U
78-93-3	**2-Butanone	10		U
71-55-6	* 1,1,1-Trichloroethane	2		U
56-23-5	* Carbon Tetrachloride	2		U
108-05-4	**Vinyl Acetate	10		U
75-27-4	* Bromodichloromethane	2		U
78-87-5	* 1,2-Dichloropropane	2		U
10061-02-6	* Trans-1,3-Dichloropropene	2		U
79-01-6	* Trichloroethene	2		U
124-48-1	* Dibromochloromethane	2		U
79-00-5	* 1,1,2-Trichloroethane	2		U
71-43-2	* Benzene	2		U
10061-01-5	* cis-1,3-Dichloropropene	2		U
110-75-8	* 2-Chloroethylvinylether	2		U
75-25-2	* Bromoform	2		U
591-78-6	**2-Hexanone	10		U
108-10-1	**4-Methyl-2-Pentanone	10		U
127-18-4	* Tetrachloroethene	2		U
79-34-5	* 1,1,2,2-Tetrachloroethane	2		U
108-88-3	* Toluene	2		U
108-90-7	* Chlorobenzene	2		U
100-41-4	* Ethylbenzene	2		U
100-42-5	**Styrene	2		U
	**Total Xylenes	2		U
541-73-1	* 1,3-Dichlorobenzene	2		U
95-50-1	* 1,2-Dichlorobenzene	2		U
106-46-7	* 1,4-Dichlorobenzene	2		U

* A 624/8240 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)
\# A compound added by Anametrix, Inc.

For reporting purposes, the following qualifiers (Q) are used:
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 1-2.

ORGANICS ANALYSIS DATA SHEET - EPA METHOD 624

Sample I.D. : 365-02.05 S13-1
Matrix : WATER
Date sampled : 8-14-87
Date analyzed : 8-21-87
Dilution : NONE

Anametrix I.D. : 8708046-03
Analyst : ARL
Supervisor : [illegible]
Date released : 8-24-87

CAS #	Compound Name	Det. Limit (ug/l)	(ug/l)	Q
74-87-3	* Chloromethane	7		U
74-83-9	* Bromomethane	7		U
75-01-4	* Vinyl Chloride	7		U
75-00-3	* Chloroethane	7		U
75-09-2	* Methylene Chloride	2		U
67-64-1	**Acetone	10		U
79-69-4	* Trichlorofluoromethane	2		U
75-15-0	**Carbondisulfide	2		U
75-35-4	* 1,1-Dichloroethene	2		U
75-34-3	* 1,1-Dichloroethane	2		U
156-60-5	* Trans-1,2-Dichloroethene	2		U
156-59-2	* Cis-1,2-Dichloroethene	2		U
67-66-3	* Chloroform	2		U
76-13-1	# Trichlorotrifluoroethane	2		U
107-06-2	* 1,2-Dichloroethane	2		U
78-93-3	**2-Butanone	10		U
71-55-6	* 1,1,1-Trichloroethane	2		U
56-23-5	* Carbon Tetrachloride	2		U
108-05-4	**Vinyl Acetate	10		U
75-27-4	* Bromodichloromethane	2		U
78-87-5	* 1,2-Dichloropropane	2		U
10061-02-6	* Trans-1,3-Dichloropropene	2		U
79-01-6	* Trichloroethene	2		U
124-48-1	* Dibromochloromethane	2		U
79-00-5	* 1,1,2-Trichloroethane	2		U
71-43-2	* Benzene	2		U
10061-01-5	* cis-1,3-Dichloropropene	2		U
110-75-8	* 2-Chloroethylvinylether	2		U
75-25-2	* Bromoform	2		U
591-78-6	**2-Hexanone	10		U
108-10-1	**4-Methyl-2-Pentanone	10		U
127-18-4	* Tetrachloroethene	2		U
79-34-5	* 1,1,2,2-Tetrachloroethane	2		U
108-88-3	* Toluene	2		U
108-90-7	* Chlorobenzene	2		U
100-41-4	* Ethylbenzene	2		U
100-42-5	**Styrene	2		U
	**Total Xylenes	2		U
541-73-1	* 1,3-Dichlorobenzene	2		U
95-50-1	* 1,2-Dichlorobenzene	2		U
106-46-7	* 1,4-Dichlorobenzene	2		U

* A 624/8240 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)
\# A compound added by Anametrix, Inc.

For reporting purposes, the following qualifiers (Q) are used:
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

ORGANICS ANALYSIS DATA SHEET - EPA METHOD 624

Sample I.D. : 365-02.05 FB01
Matrix : WATER
Date sampled : 8-14-87
Date analyzed : 8-21-87
Dilution : NONE

Anametrix I.D. : 8708046-04
Analyst : ARL
Supervisor : [illegible]
Date released : 8-24-87

CAS #	Compound Name	Det. Limit (ug/l)	(ug/l)	Q
74-87-3	* Chloromethane	7		U
74-83-9	* Bromomethane	7		U
75-01-4	* Vinyl Chloride	7		U
75-00-3	* Chloroethane	7		U
75-09-2	* Methylene Chloride	2		U
67-64-1	**Acetone	10		U
79-69-4	* Trichlorofluoromethane	2		U
75-15-0	**Carbondisulfide	2		U
75-35-4	* 1,1-Dichloroethene	2		U
75-34-3	* 1,1-Dichloroethane	2		U
156-60-5	* Trans-1,2-Dichloroethene	2		U
156-59-2	* Cis-1,2-Dichloroethene	2		U
67-66-3	* Chloroform	2		U
76-13-1	# Trichlorotrifluoroethane	2		U
107-06-2	* 1,2-Dichloroethane	2		U
78-93-3	**2-Butanone	10		U
71-55-6	* 1,1,1-Trichloroethane	2		U
56-23-5	* Carbon Tetrachloride	2		U
108-05-4	**Vinyl Acetate	10		U
75-27-4	* Bromodichloromethane	2		U
78-87-5	* 1,2-Dichloropropane	2		U
10061-02-6	* Trans-1,3-Dichloropropene	2		U
79-01-6	* Trichloroethene	2		U
124-48-1	* Dibromochloromethane	2		U
79-00-5	* 1,1,2-Trichloroethane	2		U
71-43-2	* Benzene	2		U
10061-01-5	* cis-1,3-Dichloropropene	2		U
110-75-8	* 2-Chloroethylvinylether	2		U
75-25-2	* Bromoform	2		U
591-78-6	**2-Hexanone	10		U
108-10-1	**4-Methyl-2-Pentanone	10		U
127-18-4	* Tetrachloroethene	2		U
79-34-5	* 1,1,2,2-Tetrachloroethane	2		U
108-88-3	* Toluene	2		U
108-90-7	* Chlorobenzene	2		U
100-41-4	* Ethylbenzene	2		U
100-42-5	**Styrene	2		U
	**Total Xylenes	2		U
541-73-1	* 1,3-Dichlorobenzene	2		U
95-50-1	* 1,2-Dichlorobenzene	2		U
106-46-7	* 1,4-Dichlorobenzene	2		U

* A 624/8240 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)
\# A compound added by Anametrix, Inc.

For reporting purposes, the following qualifiers (Q) are used:
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

ORGANICS ANALYSIS DATA SHEET - EPA METHOD 624

Sample I.D. : 365-02.05 XDUP
Matrix : WATER
Date sampled : 8-14-87
Date analyzed : 8-21-87
Dilution : NONE

Anametrix I.D. : 8708046-05
Analyst : ARL
Supervisor : [illegible]
Date released : 8-24-87

CAS #	Compound Name	Det. Limit (ug/l)	(ug/l)	Q
74-87-3	* Chloromethane	7		U
74-83-9	* Bromomethane	7		U
75-01-4	* Vinyl Chloride	7		U
75-00-3	* Chloroethane	7		U
75-09-2	* Methylene Chloride	2		U
67-64-1	**Acetone	10		U
79-69-4	* Trichlorofluoromethane	2		U
75-15-0	**Carbondisulfide	2		U
75-35-4	* 1,1-Dichloroethene	2		U
75-34-3	* 1,1-Dichloroethane	2		U
156-60-5	* Trans-1,2-Dichloroethene	2		U
156-59-2	* Cis-1,2-Dichloroethene	2		U
67-66-3	* Chloroform	2		U
76-13-1	# Trichlorotrifluoroethane	2		U
107-06-2	* 1,2-Dichloroethane	2		U
78-93-3	**2-Butanone	10		U
71-55-6	* 1,1,1-Trichloroethane	2		U
56-23-5	* Carbon Tetrachloride	2		U
108-05-4	**Vinyl Acetate	10		U
75-27-4	* Bromodichloromethane	2		U
78-87-5	* 1,2-Dichloropropane	2		U
10061-02-6	* Trans-1,3-Dichloropropene	2		U
79-01-6	* Trichloroethene	2		U
124-48-1	* Dibromochloromethane	2		U
79-00-5	* 1,1,2-Trichloroethane	2		U
71-43-2	* Benzene	2		U
10061-01-5	* cis-1,3-Dichloropropene	2		U
110-75-8	* 2-Chloroethylvinylether	2		U
75-25-2	* Bromoform	2		U
591-78-6	**2-Hexanone	10		U
108-10-1	**4-Methyl-2-Pentanone	10		U
127-18-4	* Tetrachloroethene	2		U
79-34-5	* 1,1,2,2-Tetrachloroethane	2		U
108-88-3	* Toluene	2		U
108-90-7	* Chlorobenzene	2		U
100-41-4	* Ethylbenzene	2		U
100-42-5	**Styrene	2		U
	**Total Xylenes	2		U
541-73-1	* 1,3-Dichlorobenzene	2		U
95-50-1	* 1,2-Dichlorobenzene	2		U
106-46-7	* 1,4-Dichlorobenzene	2		U

* A 624/8240 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)
\# A compound added by Anametrix, Inc.

For reporting purposes, the following qualifiers (Q) are used:
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 1-5.

ORGANIC ANALYSIS DATA SHEET -- SEMIVOLATILE COMPOUNDS

Sample I.D. : 365-02.05 S4-1
Matrix : WATER
Date sampled : 8-14-87
Date extracted : 8-18-87
Date analyzed : 8-19-87
Volume extracted : 975 ML

Anametrix I.D. : 8708046-01
Analyst : ARL
Supervisor : [illegible]
Date released : 8-24-87

CAS #	Compound Name	Det. Limit (ug/l)	(ug/l)	Q
62-75-9	* N-Nitrosodimethylamine	2		U
108-95-2	* Phenol	2		U
62-53-3	**Aniline	2		U
111-44-4	* bis(-2-Chloroethyl)Ether	2		U
95-57-8	* 2-Chlorophenol	2		U
541-73-1	* 1,3-Dichlorobenzene	2		U
106-46-7	* 1,4-Dichlorobenzene	2		U
100-51-6	**Benzyl Alcohol	2		U
95-50-1	* 1,2-Dichlorobenzene	2		U
95-48-7	**2-Methylphenol	2		U
39638-32-9	**bis(2-chloroisopropyl)Ether	2		U
106-44-5	**4-Methylphenol	2		U
621-64-7	* N-Nitroso-Di-n-Propylamine	2		U
67-72-1	* Hexachloroethane	2		U
98-95-3	* Nitrobenzene	2		U
78-59-1	* Isophorone	2		U
88-75-5	* 2-Nitrophenol	2		U
105-67-9	* 2,4-Dimethylphenol	2		U
65-85-0	**Benzoic Acid	10		U
111-91-1	* bis(-2-Chloroethoxy)Methane	2		U
120-83-2	* 2,4-Dichlorophenol	2		U
120-82-1	* 1,2,4-Trichlorobenzene	2		U
91-20-3	* Naphthalene	2		U
106-47-8	**4-Chloroaniline	2		U
87-68-3	* Hexachlorobutadiene	2		U
59-50-7	* 4-Chloro-3-Methylphenol	2		U
91-57-6	**2-Methylnaphthalene	2		U
77-47-4	* Hexachlorocyclopentadiene	2		U
88-06-2	* 2,4,6-Trichlorophenol	2		U
95-95-4	**2,4,5-Trichlorophenol	10		U
91-58-7	* 2-Chloronaphthalene	2		U
88-74-4	**2-Nitroaniline	10		U
131-11-3	* Dimethyl Phthalate	2		U
208-96-8	* Acenaphthylene	2		U
99-09-2	**3-Nitroaniline	10		U

* A 625 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 2-1a.

ORGANIC ANALYSIS DATA SHEET -- SEMIVOLATILE COMPOUNDS

Sample I.D. : 365-02.05 S4-1
Matrix : WATER
Date sampled : 8-14-87
Date extracted : 8-18-87
Date analyzed : 8-19-87
Volume extracted : 975 ML

Anametrix I.D. : 8708046-01
Analyst : ARL
Supervisor : [illegible]
Date released : 8-24-87

CAS #	Compound Name	Det. Limit (ug/l)	(ug/l)	Q
83-32-9	* Acenaphthene	2		U
51-28-5	* 2,4-Dinitrophenol	10		U
100-02-7	* 4-Nitrophenol	10		U
132-64-9	**Dibenzofuran	2		U
121-14-2	* 2,4-Dinitrotoluene	2		U
606-20-2	* 2,6-Dinitrotoluene	2		U
84-66-2	* Diethylphthalate	2		U
7005-72-3	* 4-Chlorophenyl-phenylether	2		U
86-73-7	* Fluorene	2		U
100-01-6	**4-Nitroaniline	10		U
534-52-1	**4,6-Dinitro-2-Methylphenol	10		U
86-30-6	* N-Nitrosodiphenylamine	2		U
122-66-7	**1,2-Diphenylhydrazine	2		U
101-55-3	* 4-Bromophenyl-phenylether	2		U
118-74-1	* Hexachlorobenzene	2		U
87-86-5	* Pentachlorophenol	10		U
85-01-8	* Phenanthrene	2		U
120-12-7	* Anthracene	2		U
84-74-2	* Di-n-Butylphthalate	2		U
206-44-0	* Fluoranthene	2		U
92-87-5	* Benzidine	10		U
129-00-0	* Pyrene	2		U
85-68-7	* Butylbenzylphthalate	2		U
91-94-1	* 3,3'-Dichlorobenzidine	5		U
56-55-3	* Benzo(a)Anthracene	2		U
117-81-7	* bis(2-Ethylhexyl)Phthalate	2		U
218-01-9	* Chrysene	2		U
117-84-0	* Di-n-Octyl Phthalate	2		U
205-99-2	* Benzo(b)Fluoranthene	2		U
207-08-9	* Benzo(k)Fluoranthene	2		U
50-32-8	* Benzo(a)Pyrene	2		U
193-39-5	* Indeno(1,2,3-cd)Pyrene	2		U
53-70-3	* Dibenz(a,h)Anthracene	2		U
191-24-2	* Benzo(g,h,i)Perylene	2		U

* A 625 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

ORGANIC ANALYSIS DATA SHEET -- SEMIVOLATILE COMPOUNDS

Sample I.D. : 365-02.05 S7-1
Matrix : WATER
Date sampled : 8-14-87
Date extracted : 8-18-87
Date analyzed : 8-19-87
Volume extracted : 975 ML

Anametrix I.D. : 8708046-02
Analyst : ARL
Supervisor : GAB
Date released : 8-24-87

CAS #	Compound Name	Det. Limit (ug/l)	(ug/l)	Q
62-75-9	* N-Nitrosodimethylamine	2		U
108-95-2	* Phenol	2		U
62-53-3	**Aniline	2		U
111-44-4	* bis(-2-Chloroethyl)Ether	2		U
95-57-8	* 2-Chlorophenol	2		U
541-73-1	* 1,3-Dichlorobenzene	2		U
106-46-7	* 1,4-Dichlorobenzene	2		U
100-51-6	**Benzyl Alcohol	2		U
95-50-1	* 1,2-Dichlorobenzene	2		U
95-48-7	**2-Methylphenol	2		U
39638-32-9	**bis(2-chloroisopropyl)Ether	2		U
106-44-5	**4-Methylphenol	2		U
621-64-7	* N-Nitroso-Di-n-Propylamine	2		U
67-72-1	* Hexachloroethane	2		U
98-95-3	* Nitrobenzene	2		U
78-59-1	* Isophorone	2		U
88-75-5	* 2-Nitrophenol	2		U
105-67-9	* 2,4-Dimethylphenol	2		U
65-85-0	**Benzoic Acid	10		U
111-91-1	* bis(-2-Chloroethoxy)Methane	2		U
120-83-2	* 2,4-Dichlorophenol	2		U
120-82-1	* 1,2,4-Trichlorobenzene	2		U
91-20-3	* Naphthalene	2		U
106-47-8	**4-Chloroaniline	2		U
87-68-3	* Hexachlorobutadiene	2		U
59-50-7	* 4-Chloro-3-Methylphenol	2		U
91-57-6	**2-Methylnaphthalene	2		U
77-47-4	* Hexachlorocyclopentadiene	2		U
88-06-2	* 2,4,6-Trichlorophenol	2		U
95-95-4	**2,4,5-Trichlorophenol	10		U
91-58-7	* 2-Chloronaphthalene	2		U
88-74-4	**2-Nitroaniline	10		U
131-11-3	* Dimethyl Phthalate	2		U
208-96-8	* Acenaphthylene	2		U
99-09-2	**3-Nitroaniline	10		U

* A 625 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 2-2a.

ORGANIC ANALYSIS DATA SHEET -- SEMIVOLATILE COMPOUNDS

Sample I.D. : 365-02.05 S7-1
Matrix : WATER
Date sampled : 8-14-87
Date extracted : 8-18-87
Date analyzed : 8-19-87
Volume extracted : 975 ML

Anametrix I.D. : 8708046-02
Analyst : ARL
Supervisor : [illegible]
Date released : 8-24-87

CAS #	Compound Name	Det. Limit (ug/l)	(ug/l)	Q
83-32-9	* Acenaphthene	2		U
51-28-5	* 2,4-Dinitrophenol	10		U
100-02-7	* 4-Nitrophenol	10		U
132-64-9	**Dibenzofuran	2		U
121-14-2	* 2,4-Dinitrotoluene	2		U
606-20-2	* 2,6-Dinitrotoluene	2		U
84-66-2	* Diethylphthalate	2		U
7005-72-3	* 4-Chlorophenyl-phenylether	2		U
86-73-7	* Fluorene	2		U
100-01-6	**4-Nitroaniline	10		U
534-52-1	**4,6-Dinitro-2-Methylphenol	10		U
86-30-6	* N-Nitrosodiphenylamine	2		U
122-66-7	**1,2-Diphenylhydrazine	2		U
101-55-3	* 4-Bromophenyl-phenylether	2		U
118-74-1	* Hexachlorobenzene	2		U
87-86-5	* Pentachlorophenol	10		U
85-01-8	* Phenanthrene	2		U
120-12-7	* Anthracene	2		U
84-74-2	* Di-n-Butylphthalate	2		U
206-44-0	* Fluoranthene	2		U
92-87-5	* Benzidine	10		U
129-00-0	* Pyrene	2		U
85-68-7	* Butylbenzylphthalate	2		U
91-94-1	* 3,3'-Dichlorobenzidine	5		U
56-55-3	* Benzo(a)Anthracene	2		U
117-81-7	* bis(2-Ethylhexyl)Phthalate	2		U
218-01-9	* Chrysene	2		U
117-84-0	* Di-n-Octyl Phthalate	2		U
205-99-2	* Benzo(b)Fluoranthene	2		U
207-08-9	* Benzo(k)Fluoranthene	2		U
50-32-8	* Benzo(a)Pyrene	2		U
193-39-5	* Indeno(1,2,3-cd)Pyrene	2		U
53-70-3	* Dibenz(a,h)Anthracene	2		U
191-24-2	* Benzo(g,h,i)Perylene	2		U

* A 625 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 2-2b.

ORGANIC ANALYSIS DATA SHEET -- SEMIVOLATILE COMPOUNDS

Sample I.D. : 365-02.05 S13-1
Matrix : WATER
Date sampled : 8-14-87
Date extracted : 8-18-87
Date analyzed : 8-19-87
Volume extracted : 965 ML

Anametrix I.D. : 8708046-03
Analyst : ARL
Supervisor : [illegible]
Date released : 8-24-87

CAS #	Compound Name	Det. Limit (ug/l)	(ug/l)	Q
62-75-9	* N-Nitrosodimethylamine	2		U
108-95-2	* Phenol	2		U
62-53-3	**Aniline	2		U
111-44-4	* bis(-2-Chloroethyl)Ether	2		U
95-57-8	* 2-Chlorophenol	2		U
541-73-1	* 1,3-Dichlorobenzene	2		U
106-46-7	* 1,4-Dichlorobenzene	2		U
100-51-6	**Benzyl Alcohol	2		U
95-50-1	* 1,2-Dichlorobenzene	2		U
95-48-7	**2-Methylphenol	2		U
39638-32-9	**bis(2-chloroisopropyl)Ether	2		U
106-44-5	**4-Methylphenol	2		U
621-64-7	* N-Nitroso-Di-n-Propylamine	2		U
67-72-1	* Hexachloroethane	2		U
98-95-3	* Nitrobenzene	2		U
78-59-1	* Isophorone	2		U
88-75-5	* 2-Nitrophenol	2		U
105-67-9	* 2,4-Dimethylphenol	2		U
65-85-0	**Benzoic Acid	10		U
111-91-1	* bis(-2-Chloroethoxy)Methane	2		U
120-83-2	* 2,4-Dichlorophenol	2		U
120-82-1	* 1,2,4-Trichlorobenzene	2		U
91-20-3	* Naphthalene	2		U
106-47-8	**4-Chloroaniline	2		U
87-68-3	* Hexachlorobutadiene	2		U
59-50-7	* 4-Chloro-3-Methylphenol	2		U
91-57-6	**2-Methylnaphthalene	2		U
77-47-4	* Hexachlorocyclopentadiene	2		U
88-06-2	* 2,4,6-Trichlorophenol	2		U
95-95-4	**2,4,5-Trichlorophenol	10		U
91-58-7	* 2-Chloronaphthalene	2		U
88-74-4	**2-Nitroaniline	10		U
131-11-3	* Dimethyl Phthalate	2		U
208-96-8	* Acenaphthylene	2		U
99-09-2	**3-Nitroaniline	10		U

* A 625 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

ORGANIC ANALYSIS DATA SHEET -- SEMIVOLATILE COMPOUNDS

Sample I.D. : 365-02.05 S13-1
Matrix : WATER
Date sampled : 8-14-87
Date extracted : 8-18-87
Date analyzed : 8-19-87
Volume extracted : 965 ML

Anametrix I.D. : 8708046-03
Analyst : ARL
Supervisor : [illegible]
Date released : 8-24-87

CAS #	Compound Name	Det. Limit (ug/l)	(ug/l)	Q
83-32-9	* Acenaphthene	2		U
51-28-5	* 2,4-Dinitrophenol	10		U
100-02-7	* 4-Nitrophenol	10		U
132-64-9	**Dibenzofuran	2		U
121-14-2	* 2,4-Dinitrotoluene	2		U
606-20-2	* 2,6-Dinitrotoluene	2		U
84-66-2	* Diethylphthalate	2		U
7005-72-3	* 4-Chlorophenyl-phenylether	2		U
86-73-7	* Fluorene	2		U
100-01-6	**4-Nitroaniline	10		U
534-52-1	**4,6-Dinitro-2-Methylphenol	10		U
86-30-6	* N-Nitrosodiphenylamine	2		U
122-66-7	**1,2-Diphenylhydrazine	2		U
101-55-3	* 4-Bromophenyl-phenylether	2		U
118-74-1	* Hexachlorobenzene	2		U
87-86-5	* Pentachlorophenol	10		U
85-01-8	* Phenanthrene	2		U
120-12-7	* Anthracene	2		U
84-74-2	* Di-n-Butylphthalate	2		U
206-44-0	* Fluoranthene	2		U
92-87-5	* Benzidine	10		U
129-00-0	* Pyrene	2		U
85-68-7	* Butylbenzylphthalate	2		U
91-94-1	* 3,3'-Dichlorobenzidine	5		U
56-55-3	* Benzo(a)Anthracene	2		U
117-81-7	* bis(2-Ethylhexyl)Phthalate	2		U
218-01-9	* Chrysene	2		U
117-84-0	* Di-n-Octyl Phthalate	2		U
205-99-2	* Benzo(b)Fluoranthene	2		U
207-08-9	* Benzo(k)Fluoranthene	2		U
50-32-8	* Benzo(a)Pyrene	2		U
193-39-5	* Indeno(1,2,3-cd)Pyrene	2		U
53-70-3	* Dibenz(a,h)Anthracene	2		U
191-24-2	* Benzo(g,h,i)Perylene	2		U

* A 625 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 2-3b.

ORGANIC ANALYSIS DATA SHEET -- SEMIVOLATILE COMPOUNDS

Sample I.D. : 365-02.05 FB01
Matrix : WATER
Date sampled : 8-14-87
Date extracted : 8-18-87
Date analyzed : 8-19-87
Volume extracted : 990 ML

Anametrix I.D. : 8708046-04
Analyst : ARL
Supervisor : [illegible]
Date released : 8-24-87

CAS #	Compound Name	Det. Limit (ug/l)	(ug/l)	Q
62-75-9	* N-Nitrosodimethylamine	2		U
108-95-2	* Phenol	2		U
62-53-3	**Aniline	2		U
111-44-4	* bis(-2-Chloroethyl)Ether	2		U
95-57-8	* 2-Chlorophenol	2		U
541-73-1	* 1,3-Dichlorobenzene	2		U
106-46-7	* 1,4-Dichlorobenzene	2		U
100-51-6	**Benzyl Alcohol	2		U
95-50-1	* 1,2-Dichlorobenzene	2		U
95-48-7	**2-Methylphenol	2		U
39638-32-9	**bis(2-chloroisopropyl)Ether	2		U
106-44-5	**4-Methylphenol	2		U
621-64-7	* N-Nitroso-Di-n-Propylamine	2		U
67-72-1	* Hexachloroethane	2		U
98-95-3	* Nitrobenzene	2		U
78-59-1	* Isophorone	2		U
88-75-5	* 2-Nitrophenol	2		U
105-67-9	* 2,4-Dimethylphenol	2		U
65-85-0	**Benzoic Acid	10		U
111-91-1	* bis(-2-Chloroethoxy)Methane	2		U
120-83-2	* 2,4-Dichlorophenol	2		U
120-82-1	* 1,2,4-Trichlorobenzene	2		U
91-20-3	* Naphthalene	2		U
106-47-8	**4-Chloroaniline	2		U
87-68-3	* Hexachlorobutadiene	2		U
59-50-7	* 4-Chloro-3-Methylphenol	2		U
91-57-6	**2-Methylnaphthalene	2		U
77-47-4	* Hexachlorocyclopentadiene	2		U
88-06-2	* 2,4,6-Trichlorophenol	2		U
95-95-4	**2,4,5-Trichlorophenol	10		U
91-58-7	* 2-Chloronaphthalene	2		U
88-74-4	**2-Nitroaniline	10		U
131-11-3	* Dimethyl Phthalate	2		U
208-96-8	* Acenaphthylene	2		U
99-09-2	**3-Nitroaniline	10		U

* A 625 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 2-4a.

ORGANIC ANALYSIS DATA SHEET -- SEMIVOLATILE COMPOUNDS

Sample I.D. : 365-02.05 FB01
Matrix : WATER
Date sampled : 8-14-87
Date extracted : 8-18-87
Date analyzed : 8-19-87
Volume extracted : 990 ML

Anametrix I.D. : 8708046-04
Analyst : ARL
Supervisor : [illegible]
Date released : 8-24-87

CAS #	Compound Name	Det. Limit (ug/l)	(ug/l)	Q
83-32-9	* Acenaphthene	2		U
51-28-5	* 2,4-Dinitrophenol	10		U
100-02-7	* 4-Nitrophenol	10		U
132-64-9	**Dibenzofuran	2		U
121-14-2	* 2,4-Dinitrotoluene	2		U
606-20-2	* 2,6-Dinitrotoluene	2		U
84-66-2	* Diethylphthalate	2		U
7005-72-3	* 4-Chlorophenyl-phenylether	2		U
86-73-7	* Fluorene	2		U
100-01-6	**4-Nitroaniline	10		U
534-52-1	**4,6-Dinitro-2-Methylphenol	10		U
86-30-6	* N-Nitrosodiphenylamine	2		U
122-66-7	**1,2-Diphenylhydrazine	2		U
101-55-3	* 4-Bromophenyl-phenylether	2		U
118-74-1	* Hexachlorobenzene	2		U
87-86-5	* Pentachlorophenol	10		U
85-01-8	* Phenanthrene	2		U
120-12-7	* Anthracene	2		U
84-74-2	* Di-n-Butylphthalate	2		U
206-44-0	* Fluoranthene	2		U
92-87-5	* Benzidine	10		U
129-00-0	* Pyrene	2		U
85-68-7	* Butylbenzylphthalate	2		U
91-94-1	* 3,3'-Dichlorobenzidine	5		U
56-55-3	* Benzo(a)Anthracene	2		U
117-81-7	* bis(2-Ethylhexyl)Phthalate	2		U
218-01-9	* Chrysene	2		U
117-84-0	* Di-n-Octyl Phthalate	2		U
205-99-2	* Benzo(b)Fluoranthene	2		U
207-08-9	* Benzo(k)Fluoranthene	2		U
50-32-8	* Benzo(a)Pyrene	2		U
193-39-5	* Indeno(1,2,3-cd)Pyrene	2		U
53-70-3	* Dibenz(a,h)Anthracene	2		U
191-24-2	* Benzo(g,h,i)Perylene	2		U

* A 625 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 2-4b.

ORGANIC ANALYSIS DATA SHEET -- SEMIVOLATILE COMPOUNDS

Sample I.D. : 365-02.05 XDUP
Matrix : WATER
Date sampled : 8-14-87
Date extracted : 8-18-87
Date analyzed : 8-19-87
Volume extracted : 960 ML

Anametrix I.D. : 8708046-05
Analyst : ARL
Supervisor : BCS
Date released : 8-24-87

CAS #	Compound Name	Det. Limit (ug/l)	(ug/l)	Q
62-75-9	* N-Nitrosodimethylamine	2		U
108-95-2	* Phenol	2		U
62-53-3	**Aniline	2		U
111-44-4	* bis(-2-Chloroethyl)Ether	2		U
95-57-8	* 2-Chlorophenol	2		U
541-73-1	* 1,3-Dichlorobenzene	2		U
106-46-7	* 1,4-Dichlorobenzene	2		U
100-51-6	**Benzyl Alcohol	2		U
95-50-1	* 1,2-Dichlorobenzene	2		U
95-48-7	**2-Methylphenol	2		U
39638-32-9	**bis(2-chloroisopropyl)Ether	2		U
106-44-5	**4-Methylphenol	2		U
621-64-7	* N-Nitroso-Di-n-Propylamine	2		U
67-72-1	* Hexachloroethane	2		U
98-95-3	* Nitrobenzene	2		U
78-59-1	* Isophorone	2		U
88-75-5	* 2-Nitrophenol	2		U
105-67-9	* 2,4-Dimethylphenol	2		U
65-85-0	**Benzoic Acid	10		U
111-91-1	* bis(-2-Chloroethoxy)Methane	2		U
120-83-2	* 2,4-Dichlorophenol	2		U
120-82-1	* 1,2,4-Trichlorobenzene	2		U
91-20-3	* Naphthalene	2		U
106-47-8	**4-Chloroaniline	2		U
87-68-3	* Hexachlorobutadiene	2		U
59-50-7	* 4-Chloro-3-Methylphenol	2		U
91-57-6	**2-Methylnaphthalene	2		U
77-47-4	* Hexachlorocyclopentadiene	2		U
88-06-2	* 2,4,6-Trichlorophenol	2		U
95-95-4	**2,4,5-Trichlorophenol	10		U
91-58-7	* 2-Chloronaphthalene	2		U
88-74-4	**2-Nitroaniline	10		U
131-11-3	* Dimethyl Phthalate	2		U
208-96-8	* Acenaphthylene	2		U
99-09-2	**3-Nitroaniline	10		U

* A 625 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

ORGANIC ANALYSIS DATA SHEET -- SEMIVOLATILE COMPOUNDS

Sample I.D. : 365-02.05 XDUP
Matrix : WATER
Date sampled : 8-14-87
Date extracted : 8-18-87
Date analyzed : 8-19-87
Volume extracted : 960 ML

Anametrix I.D. : 8708046-05
Analyst : ARL
Supervisor : [illegible]
Date released : 8-24-87

CAS #	Compound Name	Det. Limit (ug/l)	(ug/l)	Q
83-32-9	* Acenaphthene	2		U
51-28-5	* 2,4-Dinitrophenol	10		U
100-02-7	* 4-Nitrophenol	10		U
132-64-9	**Dibenzofuran	2		U
121-14-2	* 2,4-Dinitrotoluene	2		U
606-20-2	* 2,6-Dinitrotoluene	2		U
84-66-2	* Diethylphthalate	2		U
7005-72-3	* 4-Chlorophenyl-phenylether	2		U
86-73-7	* Fluorene	2		U
100-01-6	**4-Nitroaniline	10		U
534-52-1	**4,6-Dinitro-2-Methylphenol	10		U
86-30-6	* N-Nitrosodiphenylamine	2		U
122-66-7	**1,2-Diphenylhydrazine	2		U
101-55-3	* 4-Bromophenyl-phenylether	2		U
118-74-1	* Hexachlorobenzene	2		U
87-86-5	* Pentachlorophenol	10		U
85-01-8	* Phenanthrene	2		U
120-12-7	* Anthracene	2		U
84-74-2	* Di-n-Butylphthalate	2		U
206-44-0	* Fluoranthene	2		U
92-87-5	* Benzidine	10		U
129-00-0	* Pyrene	2		U
85-68-7	* Butylbenzylphthalate	2		U
91-94-1	* 3,3'-Dichlorobenzidine	5		U
56-55-3	* Benzo(a)Anthracene	2		U
117-81-7	* bis(2-Ethylhexyl)Phthalate	2		U
218-01-9	* Chrysene	2		U
117-84-0	* Di-n-Octyl Phthalate	2		U
205-99-2	* Benzo(b)Fluoranthene	2		U
207-08-9	* Benzo(k)Fluoranthene	2		U
50-32-8	* Benzo(a)Pyrene	2		U
193-39-5	* Indeno(1,2,3-cd)Pyrene	2		U
53-70-3	* Dibenz(a,h)Anthracene	2		U
191-24-2	* Benzo(g,h,i)Perylene	2		U

* A 625 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 2-5b.

ORGANICS ANALYSIS DATA SHEET - TENTATIVELY IDENTIFIED COMPOUNDS

Sample I.D. : 365-02.05 S13-1
Matrix : WATER
Date Sampled : 8-14-87
Analyzed VOA : 8-21-87
Dilution VOA : NONE
Analyzed SV : 8-19-87
Dilution SV : NONE

Anametrix I.D. : 8708046-03
Analyst : ARL
Supervisor : [illegible]
Date Released : 8-24-87

	CAS #	Scan#	Volatile Fraction Compound Name	Det. Limit ppb	ppb
1				5	
2				5	
3				5	
4				5	
5				5	
6				5	
7				5	
8				5	
9				5	
10				5	

	CAS #	Scan#	Semivolatile Fraction Compound Name	Det. Limit ppb	ppb
1	111-90-0	644	2-(2-ethoxyethoxy)ethanol	10	20
2				10	
3				10	
4				10	
5				10	
6				10	
7				10	
8				10	
9				10	
10				10	
11				10	
12				10	
13				10	
14				10	
15				10	
16				10	
17				10	
18				10	
19				10	
20				10	

Tentatively identified compounds are significant chromatographic peaks (TICs) other than priority pollutants. TIC spectra are compared with entries in the National Bureau of Standards mass spectral library. Identification is made by following US EPA guidelines and acceptance criteria. TICs are quantitated by using the area of the nearest internal standard and assuming a response factor of one (1). Values calculated are ESTIMATES ONLY.

Form 4-1.

WATER VOLATILE/SEMIVOLATILE SURROGATE RECOVERY SUMMARY

ANAMETRIX WORKORDER# : 8708046
CLIENT PROJECT# : 365-02.05

SUPERVISOR : [illegible]
ANALYST : AKL

#	SAMPLE ID	VO1 (DCE)	VO2 (TOL)	VO3 (BFB)	A1 (2FP)	A2 (PHL)	A3 (TBP)	BN1 (NBZ)	BN2 (FBH)	BN3 (TPH)	TOTAL OUT
01	S4-1	101	109	88	48	43	74	70	67	59	0
02	S4-1 MS	104	101	83							0
03	S4-1 MSD	106	103	83							0
04	S7-1	90	95	78	10	9	23	61	59	58	2
05	S13-1	102	106	87	38	33	64	63	60	49	0
06	FB01	91	95	79	42	34	84	58	58	58	0
07	XDUP	97	100	82	13	12	35	59	60	52	2
08											
09											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											

ANAMETRIX PERCENT RECOVERY LIMITS
(generated from sample data)

VO1	(DCE)	= 1,2-DICHLOROETHANE-D4	81-124%
VO2	(TOL)	= TOLUENE-D8	85-118%
VO3	(BFB)	= BROMOFLUOROBENZENE	72-115%
A1	(2FP)	= 2-FLUOROPHENOL	18-71%
A2	(PHL)	= PHENOL-D5	20-75%
A3	(TBP)	= 2,4,6-TRIBROMOPHENOL	23-118%
BN1	(NBZ)	= NITROBENZENE-D5	28-104%
BN2	(FBH)	= 2-FLUOROBIPHENYL	36-97%
BN3	(TPH)	= TERPHENYL-D14	37-133%

CLP VOLATILE MATRIX SPIKE REPORT
EPA METHOD 624

Sample I.D. : 365-02.05 S4-1
Matrix : WATER
Date sampled : 8-14-87
Date analyzed : 8-21-87

Anametrix I.D. : 8708046-01
Analyst : ARL
Supervisor : [illegible]
Date released : 8-24-87

COMPOUND	SPIKE AMT. (UG/L)	8708046 MS (UG/L)	%REC MS	8708046 MSD (UG/L)	%REC MSD	RPD	%REC LIMITS
1,1-DICHLOROETHENE	50	48	96%	47	94%	-2%	71-125%
FREON 113	50	55	110%	54	108%	-2%	98-131%
METHYLENE CHLORIDE	50	48	96%	51	102%	6%	87-122%
CHLOROFORM	50	52	104%	51	102%	-2%	88-116%
1,1,1-TRICHLOROETHANE	50	55	110%	55	110%	0%	98-127%
BENZENE	50	51	102%	51	102%	0%	83-122%
1,2-DICHLOROETHANE	50	50	100%	51	102%	2%	88-120%
TRICHLOROETHENE	50	42	84%	42	84%	0%	73-101%
4-METHYL-2-PENTANONE	50	39	78%	42	84%	7%	70-118%
TOLUENE	50	51	102%	52	104%	2%	84-124%
CHLOROBENZENE	50	51	102%	51	102%	0%	86-118%
1,2-DICHLOROBENZENE	50	37	74%	38	76%	3%	62-103%

* Limits established by Anametrix, Inc. (5-1-87 thru 7-30-87)

Form 6-1.

EMCON

AUG 27 1987

ANATEC LABORATORIES INC.

435 Tesconi Circle • Santa Rosa, California 95401 • 707-526-7200

Annelise Jade Bazar
EMCON Associates
1921 Ringwood Avenue
San Jose, CA 95131

August 26, 1987
ANATEC Log No: **9987** (1-6)
Series No: 394/042
Client Ref: P.O. #15202

Subject: Analysis of Six Soil Samples Identified as "Project 365-02.05, E87-0845" Received August 13, 1987 to Measure Metals Content.

Dear Ms. Bazar:

Analysis of the above referenced samples has been completed. Brief descriptions of sample handling, preparation and metals analysis procedures are presented in the following paragraphs. Results of the analysis are summarized in Table 1.

The samples were delivered by a commercial courier (National Courier Service) on August 13, 1987 at 8:30 am, under documented chain-of-custody. On receipt, sample custody was transferred to ANATEC sample control personnel. The samples were noted to be intact, legibly labeled, cold by virtue of refrigerated shipment and in otherwise good condition.

Subsequent to check-in, the samples were placed in secure storage where they were maintained at 4°C until analysis commenced.

For all metals measurements (except mercury), aliquots of sample were digested with appropriate mineral acids, brought to a specified volume with reagent grade water and analyzed by atomic spectroscopy as referenced in Table 1.

In preparation for measurement of mercury content, aliquots of sample were digested with mixed mineral acids and potassium permanganate. Hydroxylamine hydrochloride was added to the digested samples to remove excess permanganate. Mercury was reduced to the elemental state by the addition of stannous chloride and aerated from solution in a closed system attached to an atomic absorption spectrophotometer. Absorbance was measured as a function of mercury concentration.

Various quality control samples were analyzed with the samples. These included blank, replicate and analyte-fortified (spiked) sample aliquots, external standards and method standards. Results of the quality control sample analyses are maintained with the sample data package. Details of the procedures and results may be provided upon request, but are not included in this report.

Please feel welcome to contact us should you have questions regarding procedures or results.

Submitted by:

Brian Fies
Atomic Spectroscopist

Approved by:

Dorothy Gower
Project Manager

Enc: Custody Document

TABLE 1. ANALYTICAL METHODS FOR "PROJECT 365-02.05, E87-0845" WATER SAMPLES RECEIVED AUGUST 13, 1987

Metal	Atomic Spectroscopic Technique[1]	EPA Method Number[2]
Aluminum	ICPAES	6010
Antimony	ICPAES	6010
Arsenic	AAS-HGA	7060
Barium	ICPAES	6010
Beryllium	ICPAES	6010
Boron	ICPAES	6010
Cadmium	ICPAES	6010
Calcium	ICPAES	6010
Chromium	ICPAES	6010
Cobalt	ICPAES	6010
Copper	ICPAES	6010
Iron	ICPAES	6010
Lead	ICPAES	6010
Lithium	ICPAES	6010
Magnesium	ICPAES	6010
Manganese	ICPAES	6010
Mercury	AAS-CV	7471
Molybdenum	ICPAES	6010
Nickel	ICPAES	6010
Potassium	ICPAES	6010
Silver	ICPAES	6010
Selenium	AAS-HGA	7740
Sodium	ICPAES	6010
Thallium	ICPAES	6010
Tin	ICPAES	6010
Vanadium	ICPAES	6010
Zinc	ICPAES	6010

[1]Atomic Spectroscopic Technique:
AAS -- Atomic absorption spectroscopy
HGA -- Heated graphite atomization
CV -- Cold-vapor generation
ICPAES -- Inductively coupled argon plasma atomic emission spectroscopy

[2]"Test Methods for Evaluating Solid Waste," U.S. EPA SW-846, Volume 1: Laboratory Manual Physical/Chemical Methods, Third Edition, November 1986.

TABLE 2. ANALYTICAL RESULTS FOR "PROJECT 365-02.05, E87-0845"

Parameter	Descriptor, Lab No. & Results (mg/Kg)[a]		
	S7-1-4-4 1/2 8/11 1345 (9987-1)	S7-1-7-7 1/2 8/11 1445 (9987-2)	S7-1-9-9 1/2 8/11 1445 (9987-3)
Aluminum	23,000	29,000	6,500
Antimony	71	71	120
Arsenic	0.28	0.31	0.055
Barium	170	300	140
Beryllium	<1	<1	<1
Boron	110	110	32
Cadmium	6	5	10
Calcium	13,000	15,000	5,500
Chromium	230	280	100
Cobalt	33	39	8
Copper	1,000	290	36
Iron	40,000	39,000	13,000
Lead	110	62	140
Lithium	500	700	400
Magnesium	50,000	59,000	11,000
Manganese	1,100	960	180
Mercury	<0.1	<0.1	<0.1
Molybdenum	<50	<50	<50
Nickel	350	450	140
Potassium	790	790	590
Selenium	<0.5	<0.5	<0.5
Silver	<10	<10	<10
Sodium	700	700	<500
Thallium	<200	<200	<200
Tin	<20	<20	<20
Vanadium	75	83	55
Zinc	440	120	29

[1]mg/Kg--Data are expressed as milligrams analyte per kilogram sample, as-received basis.

TABLE 2. (cont.)

Parameter	Descriptor, Lab No. & Results (mg/Kg)[a]		
	S13-1-2 1/2-3 8/11 1025 (9987-4)	S13-1-5-5 1/2 8/11 1035 (9987-5)	S13-1-6 1/2-7 8/11 1115 (9987-6)
Aluminum	13,000	30,000	19,000
Antimony	<50	150	230
Arsenic	0.088	0.26	0.23
Barium	41	170	170
Beryllium	<1	<1	<1
Boron	60	110	64
Cadmium	3	13	23
Calcium	9,900	20,000	13,000
Chromium	110	310	150
Cobalt	18	43	18
Copper	76	59	68
Iron	28,000	43,000	30,000
Lead	190	160	260
Lithium	<400	<400	500
Magnesium	13,000	52,000	21,000
Manganese	750	1,000	540
Mercury	<0.1	<0.1	<0.1
Molybdenum	<50	<50	<50
Nickel	120	480	220
Potassium	850	800	1,500
Selenium	<0.5	<0.5	<0.5
Silver	<10	<10	<10
Sodium	900	<500	1,800
Thallium	<200	<200	<200
Tin	<20	<20	<20
Vanadium	58	110	110
Zinc	290	84	55

[1]mg/Kg--Data are expressed as milligrams analyte per kilogram sample, as-received basis.

EMCON

AUG 27 1987

ANATEC LABORATORIES INC.

435 Tesconi Circle • Santa Rosa, California 95401 • 707-526-7200

Annelise Jade Bazar
EMCON Associates
1921 Ringwood Avenue
San Jose, CA 95131

August 26, 1987
ANATEC Log No: **9971** (1-3)
Series No: 394/038
Client Ref: P.O. #15191

Subject: Analysis of Three Soil Samples Identified as "Project 365-02.05, E87-0845" Received August 12, 1987 to Measure Metals Content.

Dear Ms. Bazar:

Analysis of the above referenced samples has been completed. Included in this report are a summary of analytical methods (Table 1) and the results of analysis (Table 2). Brief descriptions of sample handling, preparation and metals analysis procedures are presented in the following paragraphs.

Samples were delivered by a commercial courier (National Courier Service) on August 12, 1987 at 8:15 am, under documented chain-of-custody. On receipt, sample custody was transferred to ANATEC sample control personnel. Samples were noted to be intact, legibly labeled, cold by virtue of refrigerated shipment and in otherwise good condition.

Subsequent to check-in, the samples were placed in secure storage where they were maintained at 4°C until analysis commenced.

For all metals measurements (except mercury), aliquots of sample were digested with appropriate mineral acids, brought to a specified volume with reagent grade water and analyzed by atomic spectroscopy as referenced in Table 1.

In preparation for measurement of mercury content, aliquots of sample were digested with mixed mineral acids and potassium permanganate. Hydroxylamine hydrochloride was added to the digested samples to remove excess permanganate. Mercury was reduced to the elemental state by the addition of stannous chloride and aerated from solution in a closed system attached to an atomic absorption spectrophotometer. Absorbance was measured as a function of mercury concentration.

As requested, all analyses for sample "365-02.05 S4-1-6 1/2-7" were performed in duplicate. Results are shown in Table 2.

Various quality control samples were analyzed with the samples. These included blank, replicate and analyte-fortified (spiked) sample aliquots, external standards and method standards. Results of the quality control sample analyses are maintained with the sample data package. Details of the procedures and results may be provided upon request, but are not included in this report.

Please feel welcome to contact us should you have questions regarding procedures or results.

Submitted by:

Brian Fies
Atomic Spectroscopist

Approved by:

Dorothy Gower
Project Manager

Enc: Custody Document

TABLE 1. ANALYTICAL METHODS FOR "PROJECT 365-02.05, E87-0845" WATER SAMPLES RECEIVED AUGUST 12, 1987

Metal	Atomic Spectroscopic Technique[1]	EPA Method Number[2]
Aluminum	ICPAES	6010
Antimony	ICPAES	6010
Arsenic	AAS-HGA	7060
Barium	ICPAES	6010
Beryllium	ICPAES	6010
Boron	ICPAES	6010
Cadmium	ICPAES	6010
Calcium	ICPAES	6010
Chromium	ICPAES	6010
Cobalt	ICPAES	6010
Copper	ICPAES	6010
Iron	ICPAES	6010
Lead	ICPAES	6010
Lithium	ICPAES	6010
Magnesium	ICPAES	6010
Manganese	ICPAES	6010
Mercury	AAS-CV	7471
Molybdenum	ICPAES	6010
Nickel	ICPAES	6010
Potassium	ICPAES	6010
Silver	ICPAES	6010
Selenium	AAS-HGA	7740
Sodium	ICPAES	6010
Thallium	ICPAES	6010
Tin	ICPAES	6010
Vanadium	ICPAES	6010
Zinc	ICPAES	6010

[1]Atomic Spectroscopic Technique:
AAS -- Atomic absorption spectroscopy
HGA -- Heated graphite atomization
CV -- Cold-vapor generation
ICPAES -- Inductively coupled argon plasma atomic emission spectroscopy

[2]"Test Methods for Evaluating Solid Waste," U.S. EPA SW-846, Volume 1: Laboratory Manual Physical/Chemical Methods, Third Edition, November 1986.

TABLE 2. ANALYTICAL RESULTS FOR "PROJECT 365-02.05, E87-0845"

Parameter	Descriptor, Lab No. & Results (mg/Kg)[1]			
	S4-1-2-2 1/2 1300 8/10 (9971-1)	S4-1-6 1/2-7 1315 8/10 (9971-2)	(9971-2D)	S4-1-8 1/2-9 1330 8/10 SK (9971-3)
Aluminum	2,800	36,000	44,000	20,000
Antimony	94	220	170	160
Arsenic	16	37	39	28
Barium	74	190	190	100
Beryllium	<10	<10	<10	<10
Boron	100	110	110	89
Cadmium	8.7	13	13	11
Calcium	3,200	19,000	19,000	17,000
Chromium	780	350	340	310
Cobalt	79	37	38	42
Copper	800	620	580	510
Iron	36,000	46,000	46,000	32,000
Lead	180	120	140	110
Lithium	900	500	600	600
Magnesium	160,000	69,000	69,000	69,000
Manganese	650	930	860	580
Mercury	<0.1	<0.1	<0.1	<0.1
Molybdenum	<30	<30	<30	<30
Nickel	550	530	520	650
Potassium	200	400	400	900
Selenium	<0.5	<0.5	<0.5	<0.5
Silver	<10	<10	<10	<10
Sodium	<500	<500	<500	<500
Thallium	<30	<30	<30	<30
Tin	<10	<10	<10	<10
Vanadium	41	130	130	75
Zinc	300	83	82	57

[1]mg/Kg--Data are expressed as milligrams analyte per kilogram sample, as-received basis.

INTERNATIONAL TECHNOLOGY CORPORATION

EMCON
AUG 27 1987

Emcon Associates
1921 Ringwood Avenue
San Jose, CA 95131

August 26, 1987

ATTN: Annelise Bazar

Following are the results of analyses on the samples described below.

Project Number:	365-02.05, E87-0845
Lab Numbers:	S7-08-092-02A thru S7-08-092-07A, S7-08-092-07B
Number of Samples:	7
Sample Type:	soil
Date Received:	8/13/87
Analyses Requested:	High Boiling Hydrocarbons

The method of analysis for high boiling hydrocarbons in soil involves extracting the sample with acetone. The mixture is partitioned with hexane and the resulting extract is examined by gas chromatography using a flame ionization detector.

Fred Rouse

Fred Rouse

FR/ksr

7 Pages Following - Tables of Results

IT/Santa Clara to Emcon
ATTN: Annelise Bazar

August 26, 1987

Lab Number: S7-Ø8-Ø92-Ø2A
Sample Identification: 365-Ø2.Ø5, E87-Ø845, SDM-A-3-3 1/2

	Results			
	Parts per Million - dry soil basis			
Total Petroleum Hydrocarbons	Detected	Detection Limit	Identity	Calculated as
High Boiling Hydrocarbons	19Ø.	—	Weathered Diesel	Diesel
High Boiling Hydrocarbons	4ØØ.	—	Oil	Oil

IT/Santa Clara to Emcon
ATTN: Annelise Bazar

Lab Number: S7-Ø8-Ø92-Ø3A
Sample Identification: 365-Ø2.Ø5, E87-Ø845, SDM-B-3-3 1/2

nd = none detected

	Results			
	Parts per Million - dry soil basis			
Total Petroleum Hydrocarbons	Detected	Detection Limit	Identity	Calculated as
High Boiling Hydrocarbons	nd	2Ø.	Diesel	—
High Boiling Hydrocarbons	28Ø.	—	Oil	Oil

IT/Santa Clara to Emcon
ATTN: Annelise Bazar

Lab Number: S7-Ø8-Ø92-Ø4A
Sample Identification: 365-Ø2.Ø5, E87-Ø845, SDM-C-1 1/2-2

nd = none detected

	Results			
	Parts per Million - dry soil basis			
Total Petroleum Hydrocarbons	Detected	Detection Limit	Identity	Calculated as
High Boiling Hydrocarbons	nd	1Ø.	Diesel	—
High Boiling Hydrocarbons	3Ø.	—	Oil	Oil

IT/Santa Clara to Emcon
ATTN: Annelise Bazar

August 26, 1987

Lab Number: S7-Ø8-Ø92-Ø5A
Sample Identification: 365-Ø2.Ø5, E87-Ø845, SDM-D-1 1/2-2

	Results			
	Parts per Million - dry soil basis			
Total Petroleum Hydrocarbons	Detected	Detection Limit	Identity	Calculated as
High Boiling Hydrocarbons	1Ø.	—	Unidentified Hydrocarbons	Diesel
High Boiling Hydrocarbons	3Ø.	—	Oil	Oil

IT/Santa Clara to Emcon
ATTN: Annelise Bazar

Lab Number: S7-Ø8-Ø92-Ø6A
Sample Identification: 365-Ø2.Ø5, E87-Ø845, SDM-E-1 -1 1/2

nd = none detected

	Results			
	Parts per Million - dry soil basis			
Total Petroleum Hydrocarbons	Detected	Detection Limit	Identity	Calculated as
High Boiling Hydrocarbons	nd	1Ø.	Diesel	—
High Boiling Hydrocarbons	nd	1Ø.	Oil	—

IT/Santa Clara to Emcon
ATTN: Annelise Bazar

Lab Number: S7-Ø8-Ø92-Ø7A
Sample Identification: 365-Ø2.Ø5, E87-Ø845, SDM-F-4 1/2-5

	Results			
	Parts per Million - dry soil basis			
Total Petroleum Hydrocarbons	Detected	Detection Limit	Identity	Calculated as
High Boiling Hydrocarbons	13Ø.	—	Unidentified Hydrocarbons	Diesel
High Boiling Hydrocarbons	15Ø.	—	Oil	Oil

IT/Santa Clara to Emcon
ATTN: Annelise Bazar

Lab Number: S7-08-092-07B (duplicate)
Sample Identification: 365-02.05, E87-0845, SDM-F-4 1/2-5

	Results			
	Parts per Million - dry soil basis			
Total Petroleum Hydrocarbons	Detected	Detection Limit	Identity	Calculated as
High Boiling Hydrocarbons	100.	—	Unidentified Hydrocarbons	Diesel
High Boiling Hydrocarbons	120.	—	Oil	Oil

ANATEC
LABORATORIES
INC.

435 Tesconi Circle • Santa Rosa, California 95401 • 707-526-7200

EMCON

Annelise Jade Bazar
EMCON Associates
1921 Ringwood Avenue
San Jose, CA 95131

September 2, 1987
ANATEC Log No: **1010** (1-5)
Series No: 394/045
Client Ref: P.O. #15509

Subject: Analysis of Five Water Samples Identified as "Project 365-02.05, E87-0868" Received August 17, 1987.

Dear Ms. Bazar:

Analysis of the above referenced samples has been completed. Included in this report are a summary of analytical methods (Table 1) and the results of analysis (Table 2). Brief descriptions of sample handling, preparation and metals analysis procedures are presented in the following paragraphs.

Samples were delivered by a commercial courier (National Courier Service) on August 17, 1987 at 5:05 pm, under documented chain-of-custody. On receipt, sample custody was transferred to ANATEC sample control personnel. Samples were noted to be intact, legibly labeled, cold by virtue of refrigerated shipment and in otherwise good condition. Additional samples received in the same shipment were assigned separate log numbers according to instructions received in the accompanying purchase orders; results of these analyses will be reported under separate cover.

Subsequent to check-in, the pH of each sample was verified to be less than 2, and the samples were placed in secure storage where they were kept at 4°C until analysis commenced.

For all metals measurements (except mercury), aliquots of sample were digested with appropriate mineral acids, brought to a specified volume with reagent grade water and analyzed by atomic spectroscopy as referenced in Table 1.

In preparation for measurement of mercury content, aliquots of sample were digested with mixed mineral acids and potassium permanganate. Hydroxylamine hydrochloride was added to the digested samples to remove excess permanganate. Mercury was reduced to the elemental state by the addition of stannous chloride and aerated from solution in a closed system attached to an atomic absorption spectrophotometer. Absorbance was measured as a function of mercury concentration.

Various quality control samples were analyzed with the samples. These included blank, replicate and analyte-fortified (spiked) sample aliquots, external standards and method standards. Results of the quality control sample analyses are maintained with the sample data package. Details of the procedures and results may be provided upon request, but are not included in this report.

If you have any questions regarding procedures or results please call.

Submitted by:

Brian Lea for
William F. Furney
Project Chemist

Approved by:

Dorothy Gower
Dorothy Gower
Project Manager

Enclosure: Chain-of-Custody

TABLE 1. ANALYTICAL METHODS - ATOMIC SPECTROSCOPY FOR "PROJECT 365-02.05, E87-0868" RECEIVED AUGUST 17, 1987

Metal	Atomic Spectroscopic Technique[1]	EPA Method No.[2]
Aluminum	ICPAES	200.7
Antimony	ICPAES	200.7
Arsenic	AAS-HGA	206.2
Barium	ICPAES	200.7
Beryllium	ICPAES	200.7
Boron	ICPAES	200.7
Cadmium	ICPAES	200.7
Calcium	ICPAES	200.7
Chromium	ICPAES	200.7
Cobalt	ICPAES	200.7
Copper	ICPAES	200.7
Iron	ICPAES	200.7
Lead	ICPAES	200.7
Lithium	ICPAES	200.7
Magnesium	ICPAES	200.7
Manganese	ICPAES	200.7
Mercury	AAS-CV	245.1
Molybdenum	ICPAES	200.7
Nickel	ICPAES	200.7
Potassium	ICPAES	200.7
Selenium	AAS-HGA	270.2
Silver	ICPAES	200.7
Sodium	ICPAES	200.7
Thallium	ICPAES	200.7
Tin	ICPAES	200.7
Vanadium	ICPAES	200.7
Zinc	ICPAES	200.7

[1]Atomic spectroscopic technique:
AAS -- Atomic absorption spectroscopy
HGA -- Heated graphite atomization
CV -- Cold-vapor generation
ICPAES -- Inductively coupled argon plasma atomic emission spectroscopy

[2]U.S. Environmental Protection Agency Methods are contained in "Methods for Chemical Analysis of Water and Wastes," (EPA 600/4-79-020, revised March 1983).

TABLE 2. SUMMARIZED RESULTS FOR "PROJECT 365-02.05, E87-0868"

	Descriptor, Lab No. & Results (mg/L)[1]				
Parameter	S4-1 8/14 (1010-1)	S7-1 8/14 1140 (1010-2)	S13-1 8/14 1300 (1010-3)	FB01 8/14 1030 (1010-4)	XDUP(1) 8/14 1030 (1010-5)
Aluminum	1.0	1.7	1.0	0.31	5.0
Antimony	0.70	0.93	0.55	0.23	0.42
Arsenic	0.004	0.005	0.004	0.001	0.003
Barium	0.73	0.32	0.094	<0.02	0.83
Beryllium	0.005	0.009	<0.005	0.011	0.006
Boron	0.64	1.8	2.1	0.13	0.66
Cadmium	0.051	0.095	0.054	0.019	0.037
Calcium	29	120	400	<0.1	32
Chromium	0.11	0.17	0.11	0.063	0.15
Cobalt	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	0.14	0.19	0.12	0.049	0.090
Iron	<0.05	0.18	0.42	<0.05	7.2
Lead	0.62	0.56	0.24	0.44	0.55
Lithium	<5	<5	<5	<5	<5
Magnesium	30	220	500	<0.1	45
Manganese	0.045	1.9	1.5	<0.02	0.16
Mercury	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Molybdenum	0.19	0.059	<0.02	<0.02	<0.02
Nickel	0.23	0.28	0.17	<0.02	0.25
Potassium	5.0	72	190	<0.5	5.5
Selenium	<0.001	<0.001	<0.001	<0.001	<0.001
Silver	<0.02	<0.02	<0.02	<0.02	<0.02
Sodium	350	2,300	5,100	<1	350
Thallium	<0.3	<0.3	<0.3	<0.3	<0.3
Tin	<0.1	<0.1	<0.1	<0.1	<0.1
Vanadium	0.090	<0.05	<0.05	0.052	0.095
Zinc	0.05	0.05	0.05	0.04	0.03

[1]mg/L--Data are expressed in units of milligrams analyte per liter sample.

INTERNATIONAL TECHNOLOGY CORPORATION

Emcon Associates
1921 Ringwood Avenue
San Jose, CA 95131

September 2, 1987

ATTN: Annelise Bazar

Following are the results of analyses on the samples described below.

Project Number: 365-02.05, E87-0845

Lab Numbers: S7-08-092-01 and Duplicate
Number of Samples: 2
Date Received: 8/13/87
Sample Type: Soil
Analysis Requested: PCBs by EPA 8080

The method of analysis for organochlorine pesticides and PCBs in soil is adapted from the E.P.A.'s Methods 3550 and 8080. The sample is extracted with dichloromethane. The extract is evaporated, exchanged to hexane and cleaned-up through Florisil. The extract is analyzed by gas chromatography with an electron capture detector.

Any of the compounds in the Table of Results would have been detected had it been present at or above the limit of detection listed. Detection limits vary from compound to compound depending on instrument sensitivity, and they may also vary from sample to sample depending on sample matrix.

Margaret Swayne for D.M.
Donald Magarian

DM/jd

2 pages following - Tables of Results

IT/Santa Clara to Emcon Associates
ATTN: Annelise Bazar

September 2, 1987

Report of Analysis - Method 8080 PCBs in Soil

Project Number: 365-02.05, E87-0845

Lab Number: S7-08-092-01
Sample Identification: S10/11-A- 1/4 - 1/2
Date Received: 8/13/87

Table of Results - Milligrams per Kilogram (Dry Soil Basis)

Compound	Detected	Detection Limit
PCB 1016	None	0.1
PCB 1221	None	0.1
PCB 1232	None	0.2
PCB 1242	None	0.1
PCB 1248	None	0.1
PCB 1254	0.15	0.1
PCB 1260	None	0.2

IT/Santa Clara to Emcon Associates
ATTN: Annelise Bazar

Report of Analysis - Method 8080 PCBs in Soil

Project Number: 365-02.05, E87-0845

Lab Number: S7-08-092-01 Duplicate
Sample Identification: S10/11-A- 1/4 - 1/2
Date Received: 8/13/87

Table of Results - Milligrams per Kilogram (Dry Soil Basis)

Compound	Detected	Detection Limit
PCB 1016	None	0.1
PCB 1221	None	0.1
PCB 1232	None	0.2
PCB 1242	None	0.1
PCB 1248	None	0.1
PCB 1254	0.17	0.1
PCB 1260	None	0.2

ANAMETRIX, INC.
LABORATORY SERVICES
ENVIRONMENTAL • ANALYTICAL CHEMISTRY
2754 AIELLO DRIVE • SAN JOSE, CA 95111 • (408) 629-1132

September 21, 1987
Work Order Number 8709074
Date Received 9/17/87
PO No. 15925

Keoni Murphy
Emcon Associates
1921 Ringwood Avenue
San Jose, CA 95131

One soil sample was received for analysis of priority pollutants by GC/MS, using the following EPA method(s):

ANAMETRIX I.D.	SAMPLE I.D.	METHOD(S)
8709074-01	365-02.05 S7-1 3-3.5'	8240/8270

RESULTS

See enclosed data sheets, Forms 1-1 thru 2-1b.

EXTRA COMPOUNDS

See enclosed data sheet, Form 4-1.

QUALITY ASSURANCE REPORTS

See enclosed data sheet, Form 5-2.

If there is any more that we can do, please give us a call. Thank you for using ANAMETRIX, INC.

Sincerely,

BURT SUTHERLAND

Burt Sutherland
Laboratory Manager

BWS/qp

ORGANICS ANALYSIS DATA SHEET - EPA METHOD 624/8240
ANAMETRIX, INC. (408) 629-1132

Sample I.D. : 365-02.05 S7-1 3-3.5'
Matrix : SOIL
Date sampled : 9-18-87
Date analyzed : 9-21-87
Dilution : NONE

Anametrix I.D. : 8709074-01
Analyst : PG
Supervisor : BWS
Date released : 9-21-87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
74-87-3	* Chloromethane	7		U
74-83-9	* Bromomethane	7		U
75-01-4	* Vinyl Chloride	7		U
75-00-3	* Chloroethane	7		U
75-09-2	* Methylene Chloride	2		U
67-64-1	**Acetone	10		U
79-69-4	* Trichlorofluoromethane	2		U
75-15-0	**Carbondisulfide	2		U
75-35-4	* 1,1-Dichloroethene	2		U
75-34-3	* 1,1-Dichloroethane	2		U
156-60-5	* Trans-1,2-Dichloroethene	2		U
156-59-2	* Cis-1,2-Dichloroethene	2		U
67-66-3	* Chloroform	2		U
76-13-1	# Trichlorotrifluoroethane	2		U
107-06-2	* 1,2-Dichloroethane	2		U
78-93-3	**2-Butanone	10		U
71-55-6	* 1,1,1-Trichloroethane	2		U
56-23-5	* Carbon Tetrachloride	2		U
108-05-4	**Vinyl Acetate	10		U
75-27-4	* Bromodichloromethane	2		U
78-87-5	* 1,2-Dichloropropane	2		U
10061-02-6	* Trans-1,3-Dichloropropene	2		U
79-01-6	* Trichloroethene	2		U
124-48-1	* Dibromochloromethane	2		U
79-00-5	* 1,1,2-Trichloroethane	2		U
71-43-2	* Benzene	2		U
10061-01-5	* cis-1,3-Dichloropropene	2		U
110-75-8	* 2-Chloroethylvinylether	2		U
75-25-2	* Bromoform	2		U
591-78-6	**2-Hexanone	10		U
108-10-1	**4-Methyl-2-Pentanone	10		U
127-18-4	* Tetrachloroethene	2	4	+
79-34-5	* 1,1,2,2-Tetrachloroethane	2		U
108-88-3	* Toluene	2		U
108-90-7	* Chlorobenzene	2		U
100-41-4	* Ethylbenzene	2		U
100-42-5	**Styrene	2		U
	**Total Xylenes	2		U
541-73-1	* 1,3-Dichlorobenzene	2		U
95-50-1	* 1,2-Dichlorobenzene	2		U
106-46-7	* 1,4-Dichlorobenzene	2	18	+

* A 624/8240 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)
\# A compound added by Anametrix, Inc.

For reporting purposes, the following qualifiers (Q) are used:
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 1-1.

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 625/827C
ANAMETRIX, INC. (408) 629-1132

Sample I.D. :365-02.05 S7-1 3-3.5'
Matrix :SOIL
Date sampled :9-18-87
Date extracted :9-21-87
Date analyzed :9-21-87
Weight extracted :3 G

Anametrix I.D. : 8709074-01
Analyst : PG
Supervisor : CWS
Date released : 9-21-87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
62-75-9	* N-Nitrosodimethylamine	6600		U
108-95-2	* Phenol	6600		U
62-53-3	**Aniline	6600		U
111-44-4	* bis(-2-Chloroethyl)Ether	6600		U
95-57-8	* 2-Chlorophenol	6600		U
541-73-1	* 1,3-Dichlorobenzene	6600		U
106-46-7	* 1,4-Dichlorobenzene	6600		U
100-51-6	**Benzyl Alcohol	6600		U
95-50-1	* 1,2-Dichlorobenzene	6600		U
95-48-7	**2-Methylphenol	6600		U
39638-32-9	**bis(2-chloroisopropyl)Ether	6600		U
106-44-5	**4-Methylphenol	6600		U
621-64-7	* N-Nitroso-Di-n-Propylamine	6600		U
67-72-1	* Hexachloroethane	6600		U
98-95-3	* Nitrobenzene	6600		U
78-59-1	* Isophorone	6600		U
88-75-5	* 2-Nitrophenol	6600		U
105-67-9	* 2,4-Dimethylphenol	6600		U
65-85-0	**Benzoic Acid	32000		U
111-91-1	* bis(-2-Chloroethoxy)Methane	6600		U
120-83-2	* 2,4-Dichlorophenol	6600		U
120-82-1	* 1,2,4-Trichlorobenzene	6600		U
91-20-3	* Naphthalene	6600		U
106-47-8	**4-Chloroaniline	6600		U
87-68-3	* Hexachlorobutadiene	6600		U
59-50-7	* 4-Chloro-3-Methylphenol	6600		U
91-57-6	**2-Methylnaphthalene	6600		U
77-47-4	* Hexachlorocyclopentadiene	6600		U
88-06-2	* 2,4,6-Trichlorophenol	6600		U
95-95-4	**2,4,5-Trichlorophenol	32000		U
91-58-7	* 2-Chloronaphthalene	6600		U
88-74-4	**2-Nitroaniline	32000		U
131-11-3	* Dimethyl Phthalate	6600		U
208-96-8	* Acenaphthylene	6600		U
99-09-2	**3-Nitroaniline	32000		U

* An 8270 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 2-1a.

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 625/8270
ANAMETRIX, INC. (408) 629-1132

Sample I.D. :365-02.05 S7-1 3-3.5'
Matrix :SOIL
Date sampled :9-18-87
Date extracted :9-21-87
Date analyzed :9-21-87
Weight extracted :3 G

Anametrix I.D. : 8709074-01
Analyst : PG
Supervisor : BWS
Date released : 9-21-87

CAS #	Compound Name	Det. Limit (ug/kg)	(ug/kg)	Q
83-32-9	* Acenaphthene	6600		U
51-28-5	* 2,4-Dinitrophenol	32000		U
100-02-7	* 4-Nitrophenol	32000		U
132-64-9	**Dibenzofuran	6600		U
121-14-2	* 2,4-Dinitrotoluene	6600		U
606-20-2	* 2,6-Dinitrotoluene	6600		U
84-66-2	* Diethylphthalate	6600		U
7005-72-3	* 4-Chlorophenyl-phenylether	6600		U
86-73-7	* Fluorene	6600		U
100-01-6	**4-Nitroaniline	32000		U
534-52-1	**4,6-Dinitro-2-Methylphenol	32000		U
86-30-6	* N-Nitrosodiphenylamine	6600		U
122-66-7	**1,2-Diphenylhydrazine	6600		U
101-55-3	* 4-Bromophenyl-phenylether	6600		U
118-74-1	* Hexachlorobenzene	6600		U
87-86-5	* Pentachlorophenol	32000		U
85-01-8	* Phenanthrene	6600		U
120-12-7	* Anthracene	6600		U
84-74-2	* Di-n-Butylphthalate	6600		U
206-44-0	* Fluoranthene	6600		U
92-87-5	* Benzidine	32000		U
129-00-0	* Pyrene	6600		U
85-68-7	* Butylbenzylphthalate	6600		U
91-94-1	* 3,3'-Dichlorobenzidine	16000		U
56-55-3	* Benzo(a)Anthracene	6600		U
117-81-7	* bis(2-Ethylhexyl)Phthalate	6600		U
218-01-9	* Chrysene	6600		U
117-84-0	* Di-n-Octyl Phthalate	6600		U
205-99-2	* Benzo(b)Fluoranthene	6600		U
207-08-9	* Benzo(k)Fluoranthene	6600		U
50-32-8	* Benzo(a)Pyrene	6600		U
193-39-5	* Indeno(1,2,3-cd)Pyrene	6600		U
53-70-3	* Dibenz(a,h)Anthracene	6600		U
191-24-2	* Benzo(g,h,i)Perylene	6600		U

* An 8270 approved compound (Federal Register, 10/26/84)
** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)

For reporting purposes, the following qualifiers (Q) are used :
+ : A value greater than or equal to the method detection limit.
U : The compound was analyzed for but was not detected.

Form 2-1b.

ORGANICS ANALYSIS DATA SHEET - TENTATIVELY IDENTIFIED COMPOUNDS
ANAMETRIX, INC. (408) 629-1132

Sample I.D. : 365-02.05 S7-1 3-3.5'
Matrix : SOIL
Date Sampled : 9-18-87
Analyzed VOA : 9-21-87
Dilution VOA : NONE
Analyzed SV : 9-21-87
Dilution SV : 1:10

Anametrix I.D. : 8709074-01
Analyst : PG
Supervisor : BWS
Date Released : 9-21-87

	CAS #	Scan#	Volatile Fraction Compound Name	Det. Limit ppb	ppb
1	16538-93-5	701	butylcyclooctane	5	10
2	7058-05-1	1040	1-ethyl-2,3-dimethylcyclohexane	5	20
3	473-55-2	1222	2,6,6-trimethyl-bicyclo[3.1.1]heptane	5	20
4	493-01-6	1341	cis-decahydro-naphthalene	5	30
5	2958-76-1	1464	decahydro-2-methylnaphthalene	5	70
6				5	
7				5	
8				5	
9				5	
10				5	

	CAS #	Scan#	Semivolatile Fraction Compound Name	Det. Limit ppm	ppm
1	2958-76-1	742	2-methyldecahydronaphthalene	33	33
2	17301-23-4	834	2,6-dimethylundecane	33	46
3	26730-14-3	887	7-methyltridecane	33	76
4	31295-56-4	976	2,6,11-trimethyldodecane	33	150
5	18344-37-1	1045	2,6,10,14-tetramethylheptadecane	33	150
6		1187	unknown	33	140
7		1212	unknown	33	110
8	1921-70-6	1225	2,6,10,14-tetramethylpentadecane	33	210
9		1229	unknown	33	100
10		1240	unknown	33	76
11				33	
12				33	
13				33	
14				33	
15				33	
16				33	
17				33	
18				33	
19				33	
20				33	

Tentatively identified compounds are significant chromatographic peaks (TICs) other than priority pollutants. TIC spectra are compared with entries in the National Bureau of Standards mass spectral library. Identification is made by following US EPA guidelines and acceptance criteria. TICs are quantitated by using the area of the nearest interna standard and assuming a response factor of one (1). Values calculated ar ESTIMATES ONLY.

SOIL VOLATILE/SEMIVOLATILE SURROGATE RECOVERY SUMMARY
ANAMETRIX, INC. (408) 629-1132

ANAMETRIX WORKORDER# : 8709074 SUPERVISOR : BLOS
CLIENT PROJECT # : 365-02.05 ANALYST : PG

#	SAMPLE ID	VO1 (DCE)	VO2 (TOL)	VO3 (BFB)	A1 (2FP)	A2 (PHL)	A3 (TBP)	BN1 (NBZ)	BN2 (FBH)	BN3 (TPH)	TOTAL OUT
01	S7-1 3-3.5'	108	88	112	66	67	118	67	108	113	1
02											
03											
04											
05											
06											
07											
08											
09											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											

ANAMETRIX PERCENT RECOVERY LIMITS
(generated from sample data)

VO1	(DCE)	= 1,2-DICHLOROETHANE-D4	80-127%
VO2	(TOL)	= TOLUENE-D8	80-125%
VO3	(BFB)	= 4-BROMOFLUOROBENZENE	64-115%
A1	(2FP)	= 2-FLUOROPHENOL	22-81%
A2	(PHL)	= PHENOL-D5	24-95%
A3	(TBP)	= 2,4,6-TRIBROMOPHENOL	33-119%
BN1	(NBZ)	= NITROBENZENE-D5	19-75%
BN2	(FBH)	= 2-FLUOROBIPHENYL	28-87%
BN3	(TPH)	= TERPHENYL-D14	29-122%

FORM 5-2

Attachment C

CHAIN-OF-CUSTODY DOCUMENTATION

SAMPLING AND ANALYSIS CHAIN OF CUSTODY RECORD

EMCON ASSOCIATES

PROJECT NO. 365-02.05

EMCON LABORATORY NO. E87-0845

REQUEST			LABORATORY REQUIREMENTS				CHAIN OF CUSTODY							
SAMPLE TYPE SOIL/STAINLESS STEEL RING									EMCON ASSOCIATES			CONTRACT LABORATORY Anametrix		
SAMPLE ID	LAB ID	PARAMETERS	BOTTLES	PRES.	LABORATORY	PO #	SAMPL'D BY	DATE	REC'D BY	DATE	COMMENTS	REC'D BY	DATE	COMMENTS
S7-1-3½-4.		8240 8270	ring	NP	Anametrix	155038	SK	8/11/87	EF	8-13	OK	MH	8-13	ok
S7-1-6½-7.												"	"	"
S7-1-8½-9.												"	"	"
S13-1-2-2½												"	"	"
S13-1-4½-5.												"	"	"
S13-1-6-6½												"	"	"

SIGNATURES:

LABORATORY REPRESENTATIVE: _____

RELEASED TO COURIER BY FIELD PERSONNEL: Steven E Rb

RECEIVED BY COURIER: Steven E Rb

RELEASED TO LABORATORY BY COURIER: Steven E Rb

RECEIVED BY LABORATORY: [illegible]

RELEASED TO LABORATORY BY COURIER: [illegible]

RECEIVED BY LABORATORY: M. Harslemin

9487

SAMPLING AND ANALYSIS CHAIN OF CUSTODY RECORD

EMCON ASSOCIATES

PROJECT NO. 365-02.05

EMCON LABORATORY NO. E87-0845

REQUEST			LABORATORY REQUIREMENTS				CHAIN OF CUSTODY							
SAMPLE TYPE SOIL/STAINLESS STEEL RING									EMCON ASSOCIATES			CONTRACT LABORATORY Anatec		
SAMPLE ID	LAB ID	PARAMETERS	BOTTLES	PRES.	LABORATORY	PO #	SAMPL'D BY	DATE	REC'D BY	DATE	COMMENTS	REC'D BY	DATE	COMMENTS
S7-1-4-4½		ICP	rings	NP	Anatec	5502	SK	8/11/87	EF	8-13	OK	GS	8-13	
S7-1-6.7-7½														
S7-1-9-9½														
S13-1-2½-3														
S13-1-5-5½														
S13-1-6½-7														

SIGNATURES:

LABORATORY REPRESENTATIVE: /

RELEASED TO COURIER BY FIELD PERSONNEL: Steven E Ro

RECEIVED BY COURIER: Steven E Ro

RELEASED TO LABORATORY BY COURIER: Steven E Ro

RECEIVED BY LABORATORY:

RELEASED TO LABORATORY BY COURIER: Greg Stow

RECEIVED BY LABORATORY: Todd Kow 1830

SAMPLING AND ANALYSIS CHAIN OF CUSTODY RECORD

EMCON ASSOCIATES

PROJECT NO. 365-02.05

EMCON LABORATORY NO. E87-0845

REQUEST			LABORATORY REQUIREMENTS				CHAIN OF CUSTODY							
SAMPLE TYPE SOIL/STAINLESS STEEL RING									EMCON ASSOCIATES			CONTRACT LABORATORY		
SAMPLE ID	LAB ID	PARAMETERS	BOTTLES	PRES.	LABORATORY	PO #	SAMPL'D BY	DATE	REC'D BY	DATE	COMMENTS	REC'D BY	DATE	COMMENTS
S4-1-1½-2		8240, 8270	stainless steel rings	NP	Anametrix	15190	SK	8/10/87	EF	8-11	OK	X MH	8-11	ok
S4-1-2-2½		ICP, Hg			Anatec									
S4-1-6-6½		8270, 8240			Anametrix	15190						X MH	8-11	ok
S4-1-6½-7		ICP, Hg			Anatec									
S4-1-8-8½		8240, 8270			Anametrix	15190						X MH	8-11	ok
S4-1-8½-9		ICP, Hg			Anatec									

SIGNATURES:

LABORATORY REPRESENTATIVE: _____

RELEASED TO COURIER BY FIELD PERSONNEL: Steven E Kirk

RECEIVED BY COURIER: Steven E Kirk

RELEASED TO LABORATORY BY COURIER: Steven E Kirk

RECEIVED BY LABORATORY: [illegible]

RELEASED TO LABORATORY BY COURIER: SK

RECEIVED BY LABORATORY: M. Hornstein

SAMPLING AND ANALYSIS CHAIN OF CUSTODY RECORD

EMCON ASSOCIATES

PROJECT NO. 3665-02.05

EMCON LABORATORY NO. E87-0845

REQUEST			LABORATORY REQUIREMENTS				CHAIN OF CUSTODY							
SAMPLE TYPE SOIL/STAINLESS STEEL RINGS									EMCON ASSOCIATES			CONTRACT LABORATORY Anatec		
SAMPLE ID	LAB ID	PARAMETERS	BOTTLES	PRES.	LABORATORY	PO #	SAMPL'D BY	DATE	REC'D BY	DATE	COMMENTS	REC'D BY	DATE	COMMENTS
S4-1-1½-2		8240, 8270	stainless steel rings	NP	Anametrix		SK	8/10/87	EF	8-11	OK			
S4-1-2-2½		ICP, Hg			Anatec	15191						XGS	8/12	
S4-1-6-6½		8270, 8240			Anametrix									
S4-1-6½-7		ICP, Hg			Anatec	15191						XGS	8-12	
S4-1-8-8½		8240, 8270			Anametrix									
S4-1-8½-9		ICP, Hg			Anatec	15191						XGS	8/12	
												9971		

SIGNATURES:

LABORATORY REPRESENTATIVE:

RELEASED TO COURIER BY FIELD PERSONNEL: Steven E Kirk

RECEIVED BY COURIER: Steven E Kirk

RELEASED TO LABORATORY BY COURIER: Steven E Kirk

RECEIVED BY LABORATORY:

RELEASED TO LABORATORY BY COURIER: VIA NCS

RECEIVED BY LABORATORY: Judy Ridley

8/12/87 0815

SAMPLING AND ANALYSIS CHAIN OF CUSTODY RECORD

EMCON ASSOCIATES

PROJECT NO. 365-02.05

EMCON LABORATORY NO. E87-0845

REQUEST			LABORATORY REQUIREMENTS				CHAIN OF CUSTODY							
SAMPLE TYPE Soil/Stainless steel Ring									EMCON ASSOCIATES			CONTRACT LABORATORY		
SAMPLE ID	LAB ID	PARAMETERS	BOTTLES	PRES.	LABORATORY	PO #	SAMPL'D BY	DATE	REC'D BY	DATE	COMMENTS	REC'D BY	DATE	COMMENTS
S10/11-A -1/4-1/2	—		ring	NP			SK	8/12/87	EF	8-13	OK			
SDM-A-2½-3	1	gas			EMCON									
SDM-B-2½-3	2													
SDM-C-1-1½	3													
SDM-D-1-1½	4													
SDM-E-½-1	5													
SDM-F-4-4½	6													

SIGNATURES:

LABORATORY REPRESENTATIVE: _____

RELEASED TO COURIER BY FIELD PERSONNEL: Steven E. [illegible]

RECEIVED BY COURIER: Steven E. [illegible]

RELEASED TO LABORATORY BY COURIER: Steven E. [illegible]

RECEIVED BY LABORATORY: [illegible]

RELEASED TO LABORATORY BY COURIER: _____

RECEIVED BY LABORATORY: _____

PROJECT NO. 365-02.05 PROJECT NAME HPNS EMCON LABORATORY NO. E87-0845

LAB ID	DEPARTMENT REC,D BY	DATE	COMMENTS	ANALYST	DATE	DISPOSITION OF SAMPLE	INITIALS	DATE	REFRIG #	STORAGE #	DISPOSAL
1	R Yee	8/13	O.K.								
2											
3											
4											
5											
6											

RELEASED TO DEPARTMENT BY SAMPLE CONTROLLER: [signature]

RECEIVED BY DEPARTMENT: R. Yee

RELEASED TO DATA ENTRY BY DEPARTMENT:

RECEIVED BY DATA ENTRY:

ANALYSES REQUIRED BY

SAMPLING AND ANALYSIS CHAIN OF CUSTODY RECORD

EMCON ASSOCIATES

PROJECT NO. 365-02.05

EMCON LABORATORY NO. E87-0845

REQUEST			LABORATORY REQUIREMENTS				CHAIN OF CUSTODY							
SAMPLE TYPE Soil/Stainless steel Ring									EMCON ASSOCIATES			CONTRACT LABORATORY		
SAMPLE ID	LAB ID	PARAMETERS	BOTTLES	PRES.	LABORATORY	PO #	SAMPL'D BY	DATE	REC'D BY	DATE	COMMENTS	REC'D BY	DATE	COMMENTS
S10/11-A -1/4-1/2		PCB's	Ring	NP	IT	1550	SK	8/12/87	EF	8-13	OK	[illegible]	8/13/87	OK
SDM-A-3-3½		High Boiling Hydrocarbons	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
SDM-B-3-3½		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
SDM-C-1½-2		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
SDM-D-1½-2		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
SDM-E-1-1½		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
SDM-F-4½-5		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓

SIGNATURES:

LABORATORY REPRESENTATIVE: _____

RELEASED TO COURIER BY FIELD PERSONNEL: Steven E. [illegible]

RECEIVED BY COURIER: Steven E. [illegible]

RELEASED TO LABORATORY BY COURIER: Steven E. [illegible]

RECEIVED BY LABORATORY: [illegible]

RELEASED TO LABORATORY BY COURIER: SK

RECEIVED BY LABORATORY: [illegible] 1750

SAMPLING AND ANALYSIS CHAIN OF CUSTODY RECORD

EMCON ASSOCIATES

PROJECT NO. 365-02.05

EMCON LABORATORY NO. E87-1003

REQUEST			LABORATORY REQUIREMENTS				CHAIN OF CUSTODY							
SAMPLE TYPE SOIL / STAINLESS STEEL RING									EMCON ASSOCIATES			CONTRACT LABORATORY		
SAMPLE ID	LAB ID	PARAMETERS	BOTTLES	PRES.	LABORATORY	PO #	SAMPL'D BY	DATE	REC'D BY	DATE	COMMENTS	REC'D BY	DATE	COMMENTS
S7-1 3-3½		8240 8270	ring	NP	Anametrix	15925	SK	9/18/87	EF	9-18	OK	NS	9-17	OK

SIGNATURES:

LABORATORY REPRESENTATIVE:

RELEASED TO COURIER BY FIELD PERSONNEL:

RECEIVED BY COURIER:

RELEASED TO LABORATORY BY COURIER:

RECEIVED BY LABORATORY:

RELEASED TO LABORATORY BY COURIER:

RECEIVED BY LABORATORY: Narine Sylv

SAMPLING AND ANALYSIS CHAIN OF CUSTODY RECORD

EMCON ASSOCIATES

PROJECT NO. 305-0205

EMCON LABORATORY NO. E87-0857

REQUEST			LABORATORY REQUIREMENTS				CHAIN OF CUSTODY							
SAMPLE TYPE									EMCON ASSOCIATES			CONTRACT LABORATORY		
SAMPLE ID	LAB ID	PARAMETERS	BOTTLES	PRES.	LABORATORY	PO #	SAMPL'D BY	DATE	REC'D BY	DATE	COMMENTS	REC'D BY	DATE	COMMENTS
pump Blank	1	BTX TCE PCE	40mlVOA	HCl	Emcon		[illegible]	8-12	EF	8/12	bubbles			
pump Blank	2	↓	↓	↓	↓		↓	↓	↓	↓	↓			
pump Blank	3	↓	↓	↓	↓		↓	↓	↓	↓	↓			

SIGNATURES:

LABORATORY REPRESENTATIVE _____

RELEASED TO COURIER BY FIELD PERSONNEL [illegible]

RECEIVED BY COURIER [illegible]

RELEASED TO LABORATORY BY COURIER [illegible]

RECEIVED BY LABORATORY [illegible]

RELEASED TO LABORATORY BY COURIER _____

RECEIVED BY LABORATORY _____

PROJECT NO. 365-02.05 PROJECT NAME Pump Blank EMCON LABORATORY NO. EK7-0857

LAB ID	DEPARTMENT REC,D BY	DATE	COMMENTS	ANALYST	DATE	DISPOSITION OF SAMPLE	INITIALS	DATE	REFRIG #	STORAGE #	DISPOSAL
1	AW	8/12	BUBBLES	AW	8/13						
2	↓	↓	↓	↓	↓						
3	↓	↓	↓	↓	↓						

RELEASED TO DEPARTMENT BY SAMPLE CONTROLLER: [signature]

RECEIVED BY DEPARTMENT: AW

RELEASED TO DATA ENTRY BY DEPARTMENT:

RECEIVED BY DATA ENTRY:

ANALYSIS REQUIRED BY

SAMPLING AND ANALYSIS CHAIN OF CUSTODY RECORD

EMCON ASSOCIATES

PROJECT NO. 365-0205

EMCON LABORATORY NO. E87-0868

REQUEST			LABORATORY REQUIREMENTS				CHAIN OF CUSTODY							
SAMPLE TYPE Water									EMCON ASSOCIATES			CONTRACT LABORATORY		
SAMPLE ID	LAB ID	PARAMETERS	BOTTLES	PRES.	LABORATORY	PO #	SAMPL'D BY	DATE	REC'D BY	DATE	COMMENTS	REC'D BY	DATE	COMMENTS
S4-1		EPA Method 625	1 liter Glass	NP	Anametrix	1551	MM	8/14	EF	8-14	OK	BLOS	8/17/87	good
S4-1														
S7-1														
S7-1														
S13-1														
S13-1														
FB01														
FB01														
XDUP(2)														
XDUP(2)														

SIGNATURES:

LABORATORY REPRESENTATIVE

RELEASED TO COURIER BY FIELD PERSONNEL

RECEIVED BY COURIER

RELEASED TO LABORATORY BY COURIER

RECEIVED BY LABORATORY

RELEASED TO LABORATORY BY COURIER

RECEIVED BY LABORATORY

SAMPLING AND ANALYSIS CHAIN OF CUSTODY RECORD

EMCON ASSOCIATES

PROJECT NO. 365-02.05

EMCON LABORATORY NO. E87-0868

REQUEST			LABORATORY REQUIREMENTS				CHAIN OF CUSTODY							
SAMPLE TYPE Water									EMCON ASSOCIATES			CONTRACT LABORATORY		
SAMPLE ID	LAB ID	PARAMETERS	BOTTLES	PRES.	LABORATORY	PO #	SAMPL'D BY	DATE	REC'D BY	DATE	COMMENTS	REC'D BY	DATE	COMMENTS
S4-1		EPA Method 624	40ml VOA	NP	Anametrix	15511	MM	8/14	EF	8-14	OK	BWS	8/17/87	good
S4-1														
S7-1														
S7-1														
S13-1														
S13-1														
FB01											bubbles			
FB01														
XDUP(1)											OK			
XDUP(2)														

SIGNATURES:

LABORATORY REPRESENTATIVE

RELEASED TO COURIER BY FIELD PERSONNEL

RECEIVED BY COURIER

RELEASED TO LABORATORY BY COURIER

RECEIVED BY LABORATORY

RELEASED TO LABORATORY BY COURIER

RECEIVED BY LABORATORY

SAMPLING AND ANALYSIS CHAIN OF CUSTODY RECORD

EMCON ASSOCIATES

PROJECT NO. 365-0205

EMCON LABORATORY NO. EX7-0868

REQUEST			LABORATORY REQUIREMENTS				CHAIN OF CUSTODY							
SAMPLE TYPE Water									EMCON ASSOCIATES			CONTRACT LABORATORY Anatec		
SAMPLE ID	LAB ID	PARAMETERS	BOTTLES	PRES.	LABORATORY	PO #	SAMPL'D BY	DATE	REC'D BY	DATE	COMMENTS	REC'D BY	DATE	COMMENTS
S4-1		ICP Metals As, Hg, Se	1 Liter LPE	HNO_3	Anatec	15509	[illegible]	8/14	EF	8-14	DK	[illegible]	8/17	
S7-1														
S13-1														
FB01														
XDUP01														

SIGNATURES:

LABORATORY REPRESENTATIVE [illegible]

RELEASED TO COURIER BY FIELD PERSONNEL [illegible]

RECEIVED BY COURIER [illegible]

RELEASED TO LABORATORY BY COURIER [illegible]

RECEIVED BY LABORATORY [illegible]

RELEASED TO LABORATORY BY COURIER VIA NCS

RECEIVED BY LABORATORY Judy Ridley

1010

1705 8/17/87

Attachment D

EXPLORATORY BORING LOGS

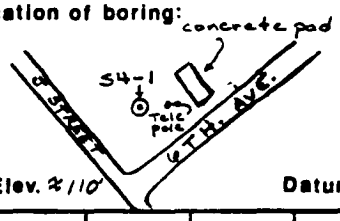
LOG OF EXPLORATORY BORING

EMCON ASSOCIATES

PROJECT No. 365-02.05 DATE 8/10/87
CLIENT US NAVY
LOCATION HPNS, SITE 4
LOGGED BY SK DRILLER Bayland

BORING No. S4-1
Sheet 1 of 1

Field location of boring:



SEE UTILITY MAP SHEET D4

N

Ground Elev. ≈110'

Datum NAVY DATUM

Drilling method Hollow-stem auger

Hole dia. 8

Casing installation data 13', 0.02" slot, 2" PVC from 5 to 18'; solid to surface;

Water level				
Time				
Date				

Pocket Torr vane TSF	Pocket Penetrometer TSF	Blows/ft. or Pressure PSI	Type of Sample (Recovery)	Sample Number	Depth	Sample	Soil Group Symbol (U.S.C.S.)	DESCRIPTION
		15 15 15	DR/2.5"OD	S4-1-1½-2	2		SW-SM	SILTY SAND TO SAND; very light brownish gray (10½, 6/2); 5-15% low-plasticity fines; 80-90% fine to coarse sand; 5% fine gravel; loose; dry.
		8 10 10	" (100%) (60%)	S4-1-2-2½	4		CL	
		4 3 6	(75%)					
		4 4 5	(50%)	S4-1-6-6½ S4-1-6½-7	6			SANDY CLAY-SERPENTINITE FILL; dark olive gray (5Y, 3/2) and light gray (2.5Y, 4/1); 60-80% low-plasticity fines; 10-30% fine to coarse sand; 10% fine gravel; 1-2% refuse; styrophoam, metal; firm to stiff; damp.
		5 6 7	(65%)	S4-1-8-8½ S4-1-8½-9	8			
					10			
					12			GRAVELLY SAND-FILL; gray (5Y, 5/1); 15% low plasticity fines; 70% fine sand; 10% medium to coarse sand; 10% fine gravel; loose to medium dense; wet.
		5 6 11	DR/2.5"OD (50%)	BAG SAMPLE	14			
					16			@ 16' driller notes change in density
			DR/2.5"OD	BAG SAMPLE	18			@ 18': 20-40% fine and coarse gravel.
					20			BOTTOM OF BORING AT 19½ FEET
					22			
					24			
					26			

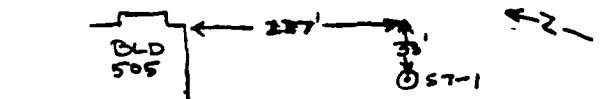
LOG OF EXPLORATORY BORING

EMCON ASSOCIATES

PROJECT No. 365-02 05 DATE 8/11/87
CLIENT US NAVY
LOCATION HPNS, SITE 7
LOGGED BY SK DRILLER Bayland

BORING No. S7-1
Sheet 1 of 1

Field location of boring: SEE UTILITY MAP SHEET F-3



Ground Elev. ≈ 109 Datum NAVY DATUM

Drilling method Hollow-stem auger
Hole dia. 8"

Casing installation data 13½ ft 0.020" slot (5½-19); solid to surface; Sand 12 x 20 Monterey (4-20½); bentonite pellets (3-4'); cement to surface; surface locking device; lock # 3900

Water level				
Time				
Date				

Pocket Torr vane TSF	Pocket Penetrometer TSF	Blows/ft. or Pressure PSI	Type of Sample	Sample Number	Depth	Sample	Soil Group Symbol (U.S.C.S.)	DESCRIPTION
		37 15	DR/2.5'00 (100%)	S7-1-½-1			SP	SAND-FILL; very pale brown (10YR 7/4); <5% non-plastic fines; 95% fine to medium sand; loose; dry
		30 25	(75%)	S7-1-2-2½	2		GP	@ 1½': serpentinized peridotite clast
*		8 11	(100%)	S7-1-3½-4	4			@ ½-1': oil in sand
		4 8	(65%)	S7-1-4-4½			GC	SANDY GRAVEL-FILL; gray (2.5Y, N5/); <5% low-plasticity fines; 20% fine to coarse sand; 75% fine and coarse gravel; medium dense; dry to damp.
		4 10	(100%)	S7-1-6½-7	6			@ 3½-4½': oil in pockets in gravel.
*		4 4	DR/2.5'00 (60%)	S7-1-7-7½	8		T-T	CLAYEY GRAVEL-FILL: gray (2.5Y, N5/); 25% low-plasticity fines; 20% fine to coarse sand; 45% fine and coarse gravel; medium dense; damp.
*				S7-1-8½-9 S7-1-9-9½			GP	@ 9' OVA check 210 ppm in the auger; 1-8 ppm in breathing zone.
		3 12	DR/2.5'00 (100%)	BAG SAMPLE	14			@ 7½-9': sand inferred from drilling
					18			SAND: gray (5Y, 5/1); <5% low-plasticity fines; 95% fine and medium sand; 1-2% shell fragments; loose; wet.
		3 3	DR/2.5'00 (100%)	BAG SAMPLE	20		SP	@ 19-20½': occasional clay layers.
					22			BOTTOM OF BORING AT 20½ FEET.
					24			

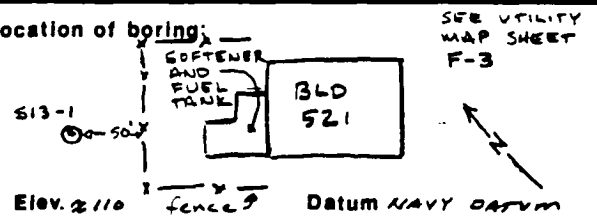
LOG OF EXPLORATORY BORING

EMCON ASSOCIATES

PROJECT No. 365-02.05 DATE 8/11/87
CLIENT US NAVY
LOCATION HPNS, SITE 13
LOGGED BY SK DRILLER Bayland

BORING No. S13-1
Sheet 1 of 1

Field location of boring:



Ground Elev. ≈110 fence Datum NAVY DATUM

Drilling method Hollow-stem auger
Hole dia. 8"

Casing installation data 11 1/2' of 0.02" slot sch 40 PVC pipe (4 1/2-16'); solid to surface; 12 x 20 Monterey sand from 3 1/2 to 16 1/2 ft.; bentonite pellets from 3 to 3 1/2 ft.; cement to surface

Water level				
Time				
Date				

Pocket Torr vane TSF	Pocket Penetrometer TSF	Blows/ft. or Pressure PSI	Type of Sample (RECOVERY)	Sample Number	Depth	Sample	Soil Group Symbol (U.S.C.S.)	DESCRIPTION
							GP-GW	SANDY GRAVEL-FILL; light brownish gray (10YR, 4/2); <5% non-plastic fines; 40% fine to coarse sand; 55% fine and coarse gravel; 1-2% brick fragments; loose to medium dense; dry
		20 20 17	DR/25'00 (30%)	S13-1-2-2 1/2 S13-1-2 1/2-3	2			
		12 14 14	(100%)				GC	
		4 8 8	(100%)	S13-1-4 1/2-5 S13-1-5-5 1/2	4			
		8 20	(80%)	S13-6-6 1/2 S13-6 1/2-7	6		▽	CLAYEY GRAVEL-FILL; dark grayish brown (10YR, 4/2); 15-25% low-plasticity fines; 30% fine to coarse sand; 45-55 fine and coarse gravel; dense to medium dense; dry
		3 4 7	(100%)				CL	
					8			
					10			@ 6': change to very dark grayish brown (10YR, 3/2)
		2 1 2	DR/2.5'00 (100%)	BAG SAMPLE	12			SILTY CLAY-BAY MUD; dark gray (5Y, 4/1); 90% moderate plasticity fines; <5% very fine sand; 1-2% shell fragments; firm; very moist.
					14			
		4 5	DR/2.5'00 (100%)	BAG SAMPLE	16			
					18			BOTTOM OF BORING AT 17 1/2 FEET.
					20			
					22			
					24			
					26			

NOTE: Well secured with a 2" locking device; Lock #3900

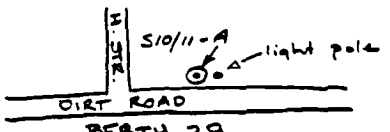
LOG OF EXPLORATORY BORING

EMCON ASSOCIATES

PROJECT No. 360-[illegible] DATE [illegible]
CLIENT U.S. NAVY
LOCATION HPNS, SITE 10/11
LOGGED BY SR DRILLER NA

BORING No. S10/11-A
Sheet 1 of 1

Field location of boring:



SEE UTILITY MAP SHEET G-3

Ground Elev. ≈107'

Datum NAVY DATUM

Drilling method HAND Dug

Hole dia. NA

Casing installation data Backfilled with soil

Pocket Torr vane TSF	Pocket Penetrometer TSF	Blows/ft. or Pressure PSI	Type of Sample	Sample Number	Depth	Sample	Soil Group Symbol (U.S.C.S.)	DESCRIPTION
				S10/11-A				
				0-1/4	1		GP	SANDY GRAVEL-FILL; brown (10YR, 5/3); <5% non-plastic fines; 15% fine to coarse sand; 80% fine and coarse gravel; material has brown stained appearance; medium dense; dry
				1/4-1/2	2			
				1/2-3/4	1/2		SP	SAND-FILL (?); light gray (10YR, 7/2); <5% non-plastic fines; 80% fine sand; 15% medium sand; loose; dry
				3/4-1	1			
								BOTTOM OF BORING AT 1 FOOT.

Water level				
Time				
Date				

LOG OF EXPLORATORY BORING

EMCON ASSOCIATES

PROJECT No. [illegible] DATE [illegible]
CLIENT US NAVY
LOCATION HPNS, SITE DIEGO MARTIN
LOGGED BY SK DRILLER Bayland

BORING No. [illegible]
Sheet 1 of 1

Field location of boring: ADDITIONAL AREA BLD 103

SEE 365-0202 report

SDM-A

1" = 400'

Ground Elev. 20.5 ± Datum MSL

Drilling method Flight auger
Hole dia. 6"

Casing installation data Backfilled with cement bentonite grout

Water level				
Time				
Date				

Pocket Torr vane TSF	Pocket Penetrometer TSF	Blows/ft. or Pressure PSI	Type of Sample (Recovery)	Sample Number	Depth	Sample	Soil Group Symbol (U.S.C.S.)	DESCRIPTION
			DR/2.5"OD	SDM-A				ASPHALT AND BASE ROCK - FILL
		6	(100)	1/2 - 1	1		CL	SILTY CLAY - FILL; dark yellowish brown (10YR, 4/6);
		6		1 - 1 1/2			CH	95% moderate to high plasticity fines; 55% fine sand;
		12			2			1-2% brick fragments; stiff to very stiff; dry
		8	(100)					@2': change to very dark grayish brown
		8		2 1/2 - 3	3			(10YR, 3/2)
		25		3 - 3 1/2			SP	@ 3-3 1/2: sand layer
		8	(100)		4		GC	CLAYEY GRAVEL - FILL; light brownish
		16						gray (10YR, 6/2); 20-35% moderate-
		16			5			plasticity fines; 13% fine to coarse
								sand; 50-65% fine to coarse gravel;
								dense; dry.
								BOTTOM OF BORING AT 5 FEET.

LOG OF EXPLORATORY BORING

EMCON ASSOCIATES

PROJECT No. 365-02-03 DATE [illegible]
CLIENT US NAVY
LOCATION HPNS, SITE DIEGO MAZY'S
LOGGED BY SK DRILLER Bayland

BORING No. SDM-B
Sheet 1 of 1

Field location of boring: ADDITIONAL AREA

BLD 108

SEE 365-02-03 REPORT

N

⊙ SDM-B

1" = 400'

Ground Elev. 18.5 ± Datum MSL

Drilling method Flight auger

Hole dia. 6"

Casing installation data Backfilled with cement bentonite grout

Water level				
Time				
Date				

Pocket Torr vane TSF	Pocket Penetrometer TSF	Blows/ft. or Pressure PSI	Type of Sample (Recovery)	Sample Number	Depth	Sample	Soil Group Symbol (U.S.C.S.)	DESCRIPTION
				SDM-B				ASPHALT and Base Rock-Fill
		4	DR/2.5"OD		1		SC	@ 3/4-1'; sandy clay layer.
		8	(100)	1-1 1/2			SP	
		12		1 1/2-2	2			SAND-FILL; dark grayish brown (2.5Y, 4/2); <5% non-plastic fines; 95% fine sand; 1-2% brick fragments; loose to medium dense; damp.
		6	(100)	BAG SAMPLE				
		7		2 1/2-3	3			
		6		3-3 1/2				
		3	(100)		4			@ 3': occasional wood fragments
		3						
		2			5			

BOTTOM OF BORING AT 5 FEET

LOG OF EXPLORATORY BORING

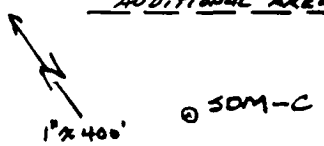
EMCON ASSOCIATES

PROJECT No. 365-[illegible] DATE [illegible]
CLIENT US NAVY
LOCATION [illegible], SITE DIEGO MAR[illegible]
LOGGED BY SK DRILLER Bayland

BORING No. SDM-C
Sheet 1 of 1

Field location of boring: ADDITIONAL AREA

SEE 365-02.02 REPORT BLD 103



Ground Elev. 22± Datum MSL

Drilling method Flight auger
Hole dia. 6"

Casing installation data Backfilled with cement bentonite grout

Water level				
Time				
Date				

Pocket Torr vane TSF	Pocket Penetrometer TSF	Blows/ft. or Pressure PSI	Type of Sample (Recovery)	Sample Number	Depth	Sample	Soil Group Symbol (U.S.C.S.)	DESCRIPTION
				SDM-C				ASPHALT
		12	DR/2.5" OD		1		GW	SANDY GRAVEL-FILL; olive gray (5Y, 4/2); <5% low-plasticity fines; 25% fine to coarse sand; 70% fine to coarse gravel; medium dense; dry
		20	(100%)	1-1 1/2			CH	
		22		1 1/2-2				
		12	(100)		2			
		18						SANDY CLAY-FILL; dark yellowish brown (10YR, 4/6) and black (5Y, 2.5/1); 80% high-plasticity fines; 20% fine sand; very stiff; damp
		24			3		Gc	
		8	(100)	BAG SAMPLE	4			
		12						
		15			5			
								CLAYEY GRAVEL-FILL; light brownish gray (2.5Y, 6/2); 35% high-plasticity fines; 15% fine to coarse sand; 40% fine to coarse gravel; 10% cobble-size clasts; chaotic layering; occasional black (5Y, 2.5/1) clay; dense to very dense; damp.
								BOTTOM OF BORING AT 5 FEET.

LOG OF EXPLORATORY BORING

EMCON ASSOCIATES

PROJECT No. _____ DATE ?

CLIENT [illegible]

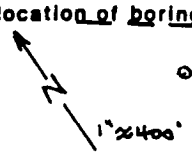
LOCATION HPNS, SITE DIEGO MARY'S

LOGGED BY SK DRILLER Gayland

BORING No. [illegible]

Sheet _____ of 1

Field location of boring: ADDITIONAL AREA [illegible] SEE 365-02-02 REPORT



⊙SDM-D

Ground Elev. 20 ± Datum MSL

Drilling method Flight Auger

Hole dia. 6"

Casing installation data Backfilled with cement bentonite grout

Water level				
Time				
Date				

Pocket Torr vane TSF	Pocket Penetrometer TSF	Blows/ft. or Pressure PSI	Type of Sample (Recovery)	Sample Number	Depth	Sample	Soil Group Symbol (U.S.C.S.)	DESCRIPTION
				SDM-D				ASPHALT
		12	DR/2.5"SS		1		GW	SANDY GRAVEL-FILL; olive gray (5Y 4/2); <5% low-plasticity fines; 25% fine to coarse sand; 70% fine and coarse gravel, medium dense; dry
		12	(100)	1-1½			CL-SC	
		15		1½-2	2			
		10	(100%)	BAG SAMPLE				
		13			3			CLAYEY SAND TO SANDY CLAY; very dark grayish brown (10YR, 3/2); 40-60% low to moderate-plasticity fines; 35-55% fine sand; 5% fine gravel; occasional chaotic layering; stiff/dense; damp to moist.
		15		BAG SAMPLE			CL	
		12	(100%)		4			
		15						
		17			5			SANDY CLAY-FILL; dark yellowish brown (10YR, 4/6); 55-75% moderate plasticity fines; 25-45% fine sand; iron oxide stained; occasional black (5Y, 2.5/1) blebs to 1/8"; stiff to very stiff; damp
								BOTTOM OF BORING AT 5 FEET.

LOG OF EXPLORATORY BORING

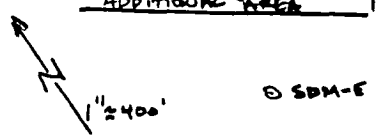
EMCON ASSOCIATES

PROJECT No. 365-02.05 DATE 8-[illegible]
CLIENT US NAVY
LOCATION HPNS, SITE [illegible]
LOGGED BY SK DRILLER Bayland

BORING No. SDM-E
Sheet 1 of 1

Field location of boring: ADDITIONAL AREA

SEE 365-02.02 REPORT



Ground Elev. 23.5 ± Datum MSL

Drilling method Flight auger
Hole dia. 6"

Casing installation data Backfilled with cement bentonite grout

Water level				
Time				
Date				

Pocket Torr vane TSF	Pocket Penetrometer TSF	Blows/ft. or Pressure PSI	Type of Sample	Sample Number	Depth	Sample	Soil Group Symbol (U.S.C.S.)	DESCRIPTION
				SDM-E				ASPHALT
		8	DR/2.5"OD	1/2-1	1		CL	
		10	(100%)	1-1 1/2				SANDY CLAY-FILL ?; dark yellowish brown
		14		BAG SAMPLE	2			(10YR, 4/6); 55-75% moderate-plasticity
		10	(100%)					fines; 25-45% fine sand; iron oxide stained
		20			3			; occasional light brownish gray (2.5Y, 6/2)
		25						pockets to 1/2" thick; occasional sand
		13	(100%)	BAG	4			pockets; common 1/8" inch pockets +
		30		SAMPLE				black (5Y, 2.5/1) MnO2 ?; stiff to very stiff; damp.
		30			5			
								@ 3 1/2': change to grayish brown (2.5Y, 5/2)
								BOTTOM OF BORING AT 5 FEET.

LOG OF EXPLORATORY BORING

EMCON ASSOCIATES

PROJECT No. 365-02.05 DATE [illegible]
CLIENT US NAVY
LOCATION HPNS, SITE [illegible] MARY'S
LOGGED BY SK DRILLER Boyland

BORING No. SDM-F
Sheet 1 of 1

Field location of boring: SEE 366-02.02 REPORT

ADDITIONAL AREA

BCD 103

SDM-F

1" x 900'

Ground Elev. 21.5 ± Datum MSL

Drilling method Flight auger
Hole dia. 6"

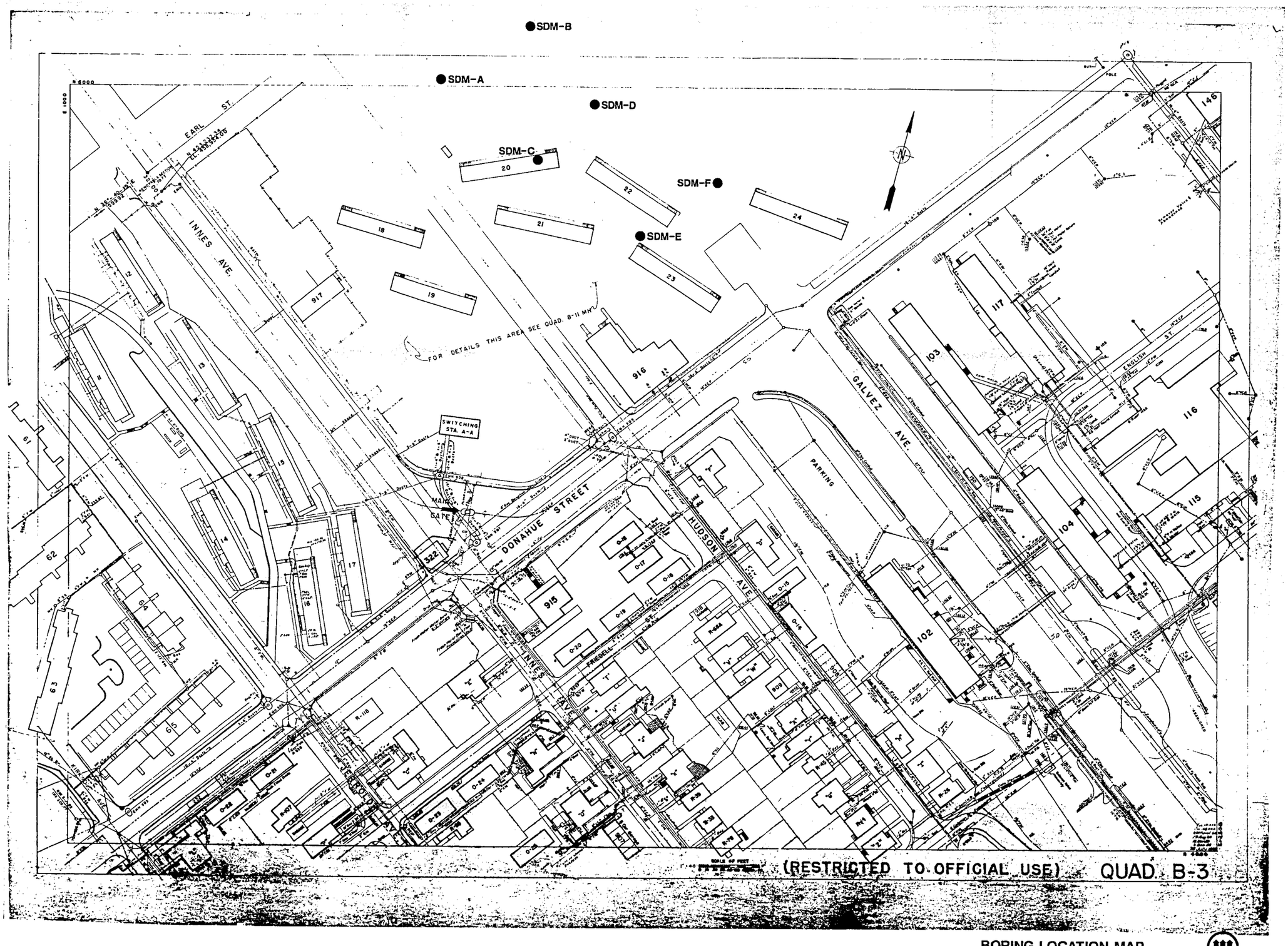
Casing installation data Backfilled with cement bentonite grout

Water level				
Time				
Date				

Pocket Torr vane TSF	Pocket Penetrometer TSF	Blows/ft. or Pressure PSI	Type of Sample (Recovery)	Sample Number	Depth	Sample	Soil Group Symbol (U.S.C.S.)	DESCRIPTION
				SDM-F				ASPHALT
		15	DR/2.5"OD	½-1	1		GW	SANDY GRAVEL-FILL; olive gray (5Y, 4/2); <5% low-plasticity fines; 35% fine to coarse sand; 60% fine to coarse gravel; medium dense; dry
		16	(100)	1-1½				
		13		BAG SAMPLE	2			
		11	(100%)				SP	SAND-FILL; light gray (2.5Y, 7/2); <5% low-plasticity fines; 85% fine to medium sand; 10% coarse sand; 1-2% glass; loose to medium dense; dry
		12		2½-3	3			
		8		BAG SAMPLE				
		4	(100%)	BAG SAMPLE	4		SC	
		5		4-4½				
(*)		10		4½-5	5			CLAYEY SAND-FILL; very dark grayish brown (10YR, 3/2); 20% low-plasticity fines; 70% fine sand; 10% medium and coarse sand; medium dense; damp to moist
								(*) (has oily appearance)
								BOTTOM OF BORING AT 5 FEET.

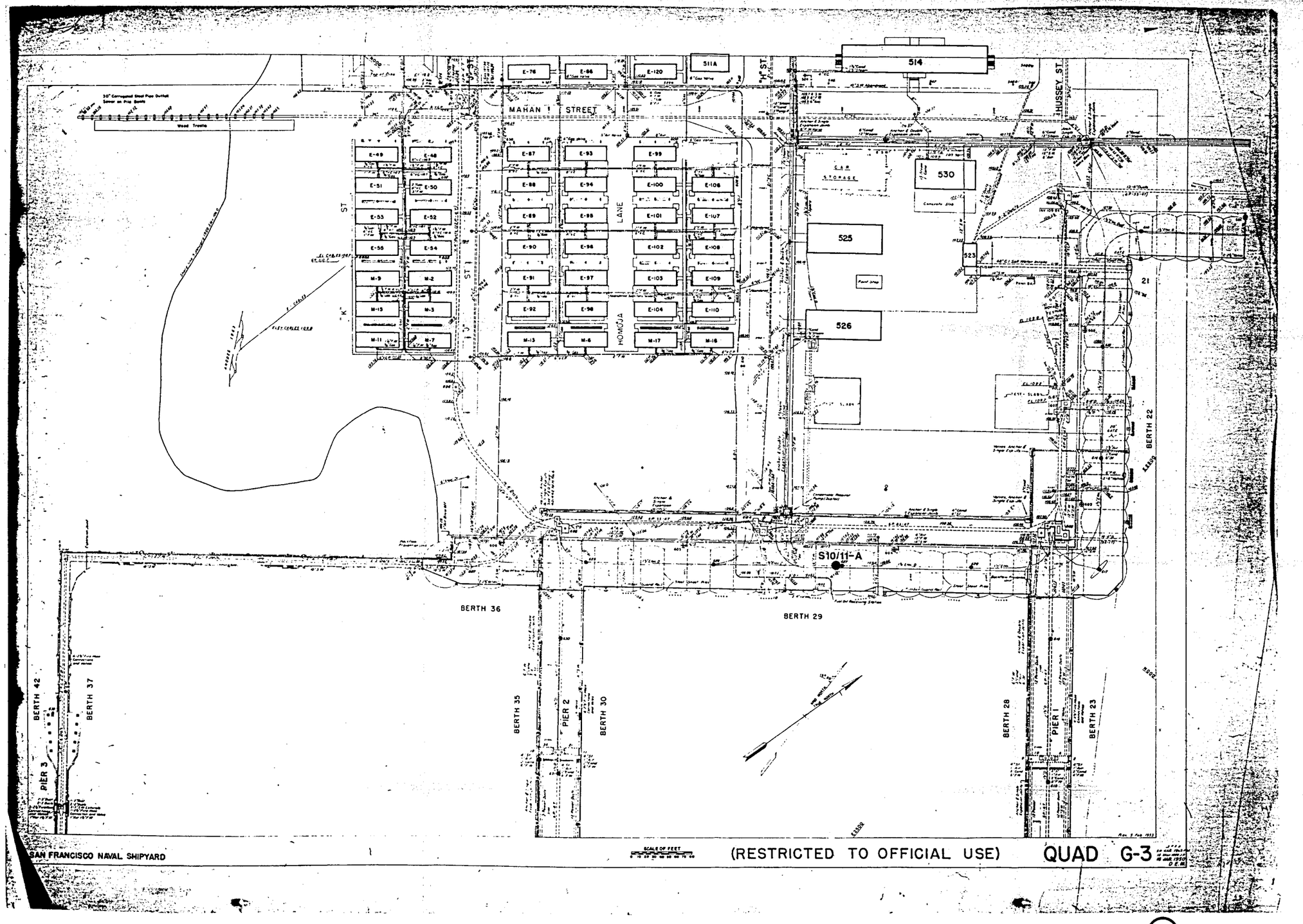
Attachment E

BORING LOCATION MAPS



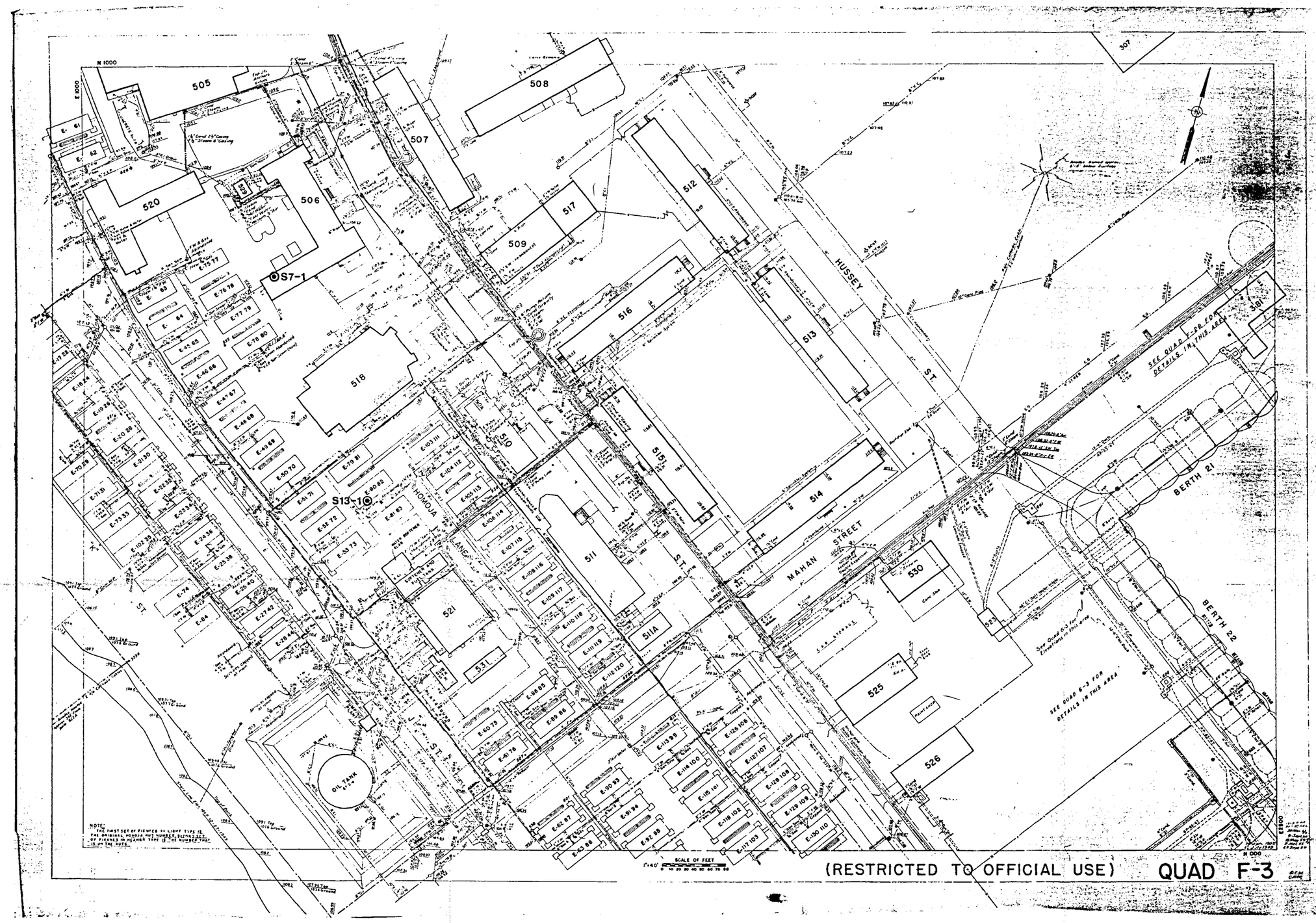
BORING LOCATION MAP
DAGO MARY SITE

EMCON ASSOCIATES



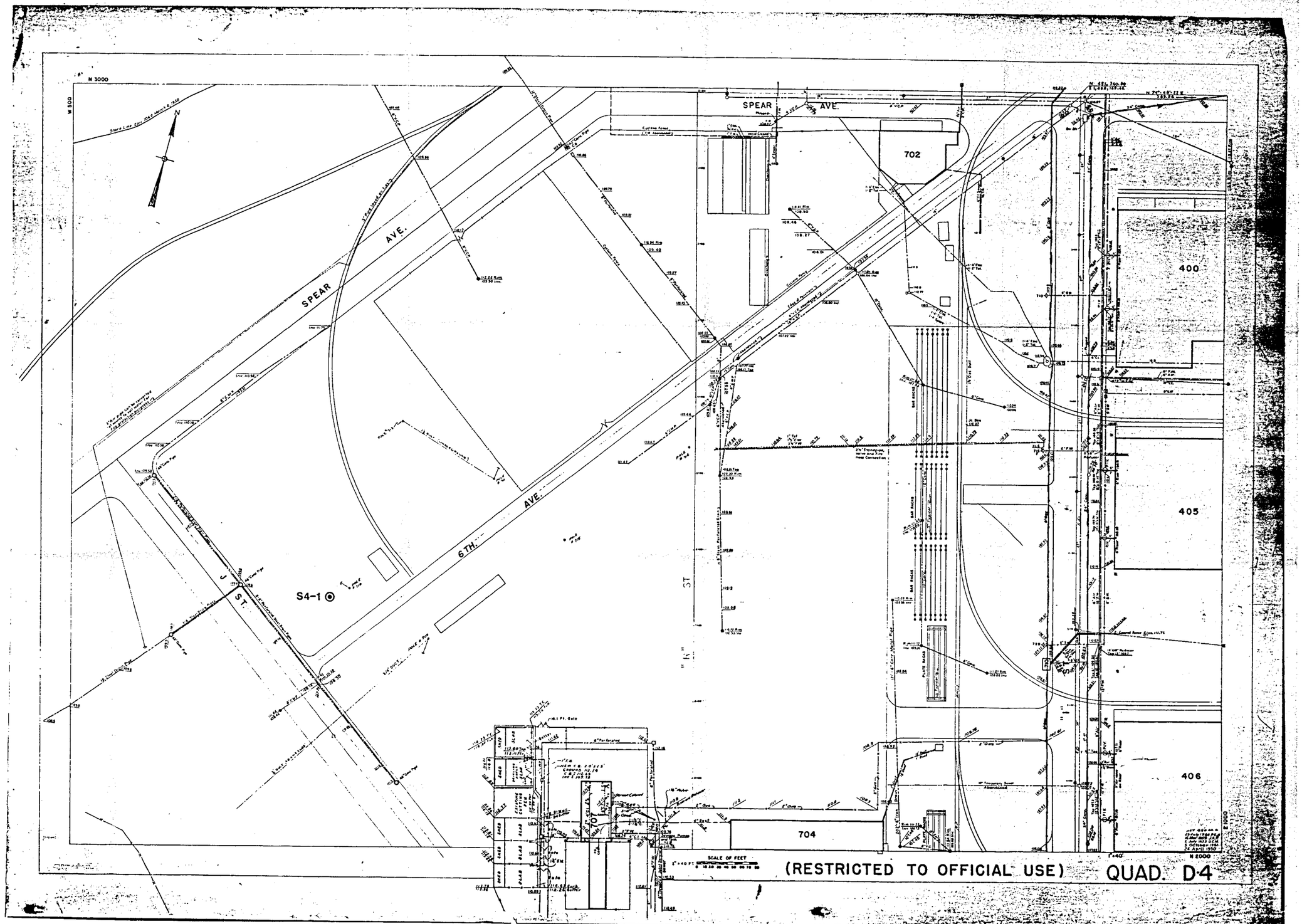
BORING LOCATION MAP
SITE 10/11

EMCON ASSOCIATES



WELL LOCATION MAP
SITE 7 AND 13

EMCON ASSOCIATES



WELL LOCATION MAP
SITE 4

EMCON ASSOCIATES