Phase I and Phase II Environmental Investigation
Yerba Buena Project Site
Emeryville, California

August 15, 1990
1649

Volume IV of IV
Appendices F, G, H, and I

Prepared for:

Catellus Development Corporation
201 Mission Street
San Francisco, California 94105

LEVINE·FRICKE

APPENDIX F

LABORATORY CERTIFICATES -- GROUND-WATER ANALYSES

FILE
1649

MED-TOX ASSOCIATES, INC.

ENVIRONMENTAL & OCCUPATIONAL HEALTH SERVICES
3440 Vincent Road Pleasant Hill, CA 94523 • (415) 930-9090 • FAX# (415) 930-0256

LABORATORY ANALYSIS REPORT

LEVINE-FRICKE
1900 POWELL ST., 12TH FL.
EMERYVILLE, CA 94608

ATTN: AMANDA SPENCER

CLIENT PROJECT NO: 1649

REPORT DATE: 02/08/90

DATE SAMPLED: 01/23-24/90

DATE RECEIVED: 01/24/90

MED-TOX JOB NO: 9001131

ANALYSIS OF: WATER SAMPLES FOR GC/MS VOLATILE ORGANICS, BASE/NEUTRAL AND ACID EXTRACTABLES, BTXE, PURGEABLE AND EXTRACTABLE HYDROCARBONS, AND PRIORITY POLLUTANT METALS

See attached for results

Michael Lynch
Michael Lynch, Manager
Organic Laboratory

FEB 1990

Results FAXed to Amanda Spencer 02/07/90

LEVINE-FRICKE

CLIENT ID: A24C
CLIENT JOB NO: 1649
DATE SAMPLED: 01/23/90
DATE RECEIVED: 01/24/90
REPORT DATE: 02/08/90

MED-TOX LAB NO: 9001131-01F
MED-TOX JOB NO: 9001131
DATE ANALYZED: 01/29/90
INSTRUMENT: 12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: A6C
CLIENT JOB NO: 1649
DATE SAMPLED: 01/24/90
DATE RECEIVED: 01/24/90
REPORT DATE: 02/08/90

MED-TOX LAB NO: 9001131-02C
MED-TOX JOB NO: 9001131
DATE ANALYZED: 01/29/90
INSTRUMENT: 12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: A24C
CLIENT JOB NO: 1649
DATE SAMPLED: 01/23/90
DATE RECEIVED: 01/24/90
REPORT DATE: 02/08/90

MED-TOX LAB NO: 9001131-01H
MED-TOX JOB NO: 9001131
DATE EXTRACTED: 01/29/90
DATE ANALYZED: 02/01/90
INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acenaphthene	83-32-9	ND	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	ND	10
Benzidine	92-87-5	ND	50
Benzoic Acid	65-85-0	ND	50
Benzo(a)anthracene	56-55-3	ND	10
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	10
Benzo(g,h,i)perylene	191-24-2	ND	10
Benzo(a)pyrene	50-32-8	ND	10
Benzyl Alcohol	100-51-6	ND	20
Bis(2-chloroethoxy) methane	111-91-1	ND	10
Bis(2-chloroethyl)ether	111-44-4	ND	10
Bis(2-chloroisopropyl) ether	39638-32-9	ND	10
Bis(2-ethylhexyl) phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	10
Butylbenzyl phthalate	85-68-7	ND	10
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	10
4-Chlorophenyl phenyl ether	7005-72-3	ND	10
Chrysene	218-01-9	ND	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Dibenzofuran	132-64-9	ND	10
Di-n-butylphthalate	84-74-2	ND	10
1,2-Dichlorobenzene	95-50-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: A24C
CLIENT JOB NO: 1649
DATE SAMPLED: 01/23/90
DATE RECEIVED: 01/24/90
REPORT DATE: 02/08/90

MED-TOX LAB NO: 9001131-01H
MED-TOX JOB NO: 9001131
DATE EXTRACTED: 01/29/90
DATE ANALYZED: 02/01/90
INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES (cont.)

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
1,3-Dichlorobenzene	541-73-1	ND	10
1,4-Dichlorobenzene	106-46-7	ND	10
3,3'-Dichlorobenzidine	91-94-1	ND	20
Diethylphthalate	84-66-2	ND	10
Dimethylphthalate	131-11-3	ND	10
2,4-Dinitrotoluene	121-14-2	ND	10
2,6-Dinitrotoluene	606-20-2	ND	10
Di-n-octylphthalate	117-84-0	ND	10
1,2-Diphenylhydrazine	122-66-7	ND	10
Fluoranthene	206-44-0	ND	10
Fluorene	86-73-7	ND	10
Hexachlorobenzene	118-74-1	ND	10
Hexachlorobutadiene	87-68-3	ND	10
Hexachlorocyclopentadiene	77-47-4	ND	10
Hexachloroethane	67-72-1	ND	10
Indeno(1,2,3-cd)pyrene	193-39-5	ND	10
Isophorone	78-59-1	ND	10
2-Methylnaphthalene	91-57-6	ND	10
Naphthalene	91-20-3	ND	10
2-Nitroaniline	88-74-4	ND	50
3-Nitroaniline	99-09-2	ND	50
4-Nitroaniline	100-01-6	ND	50
Nitrobenzene	98-95-3	ND	10
N-nitrosodimethylamine	62-75-9	ND	10
N-nitrosodiphenylamine	86-30-6	ND	10
N-nitroso-di-n-propylamine	621-64-7	ND	10
Phenanthrene	85-01-8	ND	10
Pyrene	129-00-0	ND	10
1,2,4-Trichlorobenzene	120-82-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: A24C
CLIENT JOB NO: 1649
DATE SAMPLED: 01/23/90
DATE RECEIVED: 01/24/90
REPORT DATE: 02/08/90

MED-TOX LAB NO: 9001131-01H
MED-TOX JOB NO: 9001131
DATE EXTRACTED: 01/29/90
DATE ANALYZED: 02/01/90
INSTRUMENT: 11

EPA METHOD 8270

ACID EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
4-Chloro-3-methylphenol	59-50-7	ND	10
2-Chlorophenol	95-57-8	ND	10
2,4-Dichlorophenol	120-83-2	ND	10
2,4-Dimethylphenol	105-67-9	ND	10
4,6-Dinitro-2-methylphenol	534-52-1	ND	50
2,4-Dinitrophenol	51-28-5	ND	50
2-Methylphenol	95-48-7	ND	10
4-Methylphenol	106-44-5	ND	10
2-Nitrophenol	88-75-5	ND	10
4-Nitrophenol	100-02-7	ND	50
Pentachlorophenol	87-86-5	ND	50
Phenol	108-95-2	ND	10
2,4,5-Trichlorophenol	95-95-4	ND	10
2,4,6-Trichlorophenol	88-06-2	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: A24C
CLIENT JOB NO: 1649
DATE SAMPLED: 01/23/90
DATE RECEIVED: 01/24/90

REPORT DATE: 02/08/90

MED-TOX LAB NO: 9001131-01A
MED-TOX JOB NO: 9001131
DATE EXTRACTED: 01/26/90

DATE ANALYZED: 01/25-27/90
INSTRUMENT: 9, 1

BTXE AND HYDROCARBONS

METHOD: EPA 8020, 8015 (PURGE & TRAP AND EXTRACTION)

	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene.	ND	0.5
Xylenes	ND	2
PURGEABLE HYDROCARBONS AS:		
Gasoline	ND mg/L	0.1 mg/L
EXTRACTABLE HYDROCARBONS AS:		
Lab No: 01E		
Diesel	ND mg/L	0.3 mg/L
Waste Oil	ND mg/L	0.5 mg/L

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: A24C
CLIENT JOB NO: 1649
DATE RECEIVED: 01/24/90

MED-TOX LAB NO: 9001131-01C
MED-TOX JOB NO: 9001131
REPORT DATE: 02/08/90

PRIORITY POLLUTANT METALS

CODE	METAL	CONCENTRATION (mg/L)	DETECTION LIMIT (mg/L)	METHOD REFERENCE	INST.*
Sb	Antimony	ND	0.5	7040	V22
As	Arsenic	ND	0.001	7060	V12
Be	Beryllium	ND	0.003	7090	V22
Cd	Cadmium	ND	0.003	7130	V22
Cr	Chromium	ND	0.02	7190	V22
Cu	Copper	ND	0.005	7210	V22
Pb	Lead	ND	0.01	7421	V22
Hg	Mercury	ND	0.0003	7470	Hg
Ni	Nickel	1	0.01	7520	V22
Se	Selenium	0.003	0.003	7740	V12
Ag	Silver	ND	0.01	7760	V22
Tl	Thallium	ND	0.02	7840	V22
Zn	Zinc	0.026	0.003	7950	V22

ND = Not Detected

* INST. = Instrument Number

LEVINE-FRICKE

CLIENT ID: A6C
CLIENT JOB NO: 1649
DATE RECEIVED: 01/24/90

MED-TOX LAB NO: 9001131-02A
MED-TOX JOB NO: 9001131
REPORT DATE: 02/08/90

PRIORITY POLLUTANT METALS

CODE	METAL	CONCENTRATION (mg/L)	DETECTION LIMIT (mg/L)	METHOD REFERENCE	INST.*
Sb	Antimony	ND	0.5	7040	V22
As	Arsenic	0.003	0.001	7060	V12
Be	Beryllium	ND	0.003	7090	V22
Cd	Cadmium	ND	0.003	7130	V22
Cr	Chromium	ND	0.02	7190	V22
Cu	Copper	ND	0.005	7210	V22
Pb	Lead	ND	0.01	7421	V22
Hg	Mercury	ND	0.0003	7470	Hg
Ni	Nickel	ND	0.01	7520	V22
Se	Selenium	ND	0.003	7740	V12
Ag	Silver	ND	0.01	7760	V22
Tl	Thallium	ND	0.02	7840	V22
Zn	Zinc	0.026	0.003	7950	V22

ND = Not Detected

* INST. = Instrument Number

R-1, S-F
R-3, S-3

9001131

9001130

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: 1649	Field Logbook No.:	Date: 1-22-90	Serial No.: № 6080
Project Name: YERBA BUENA	Project Location: OAKLAND		
Sampler (Signature): [signature]			Samplers: LPL

ANALYSES

SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	~~EPA 8020~~ ~~EPA 601~~ BTEX	CAM-17 ~~EPA~~	EPA 8015 TPH GAS	EPA 8015 TPH DIESEL / WASTE OIL	EPA 8240 (VOC)	EPA 8270 (BNA)	~~LEAD~~	HOLD	RUSH	REMARKS
A1(1)B	1-22		01A	1	Soil			X	X				X		
A1(14)C	↓		02A	1	↓	X		X	X			X	X		NORMAL TURNAROUND
A1(16)C			03A	1		X		X	X			X	X		
A1(17.5)C			04A	1		X		X	X			X			SEND RESULTS TO
A2(1)B			05A	1			X	X	X	X	X		X		
A3(1)B	↓		06A	1			X		X	X	X		X		AMANDA SPENSER
A24(3.5)B	1-23		07A	1		X		X	X						
A24(17)C			08A	1	↓	X		X	X			X			
X A2AC		1130		9	WATER	X	X	X	X	X	X				01A, B, C, D, E, F, G, H, I
A4(1)B			09A	1	Soil								X		
A6(1)A			10A	1									X		
A6(1.5)B	↓		11A	1											
A24(1)A	1-23		12A	1									X		
A6(2.5)C	1-24		13A	1			X			X					
A7(5.5)B	1-24		14A	1			X		X						
A7(2)A	1-24		15A	1									X		

RELINQUISHED BY: (Signature) [signature]	DATE 1-24-90	TIME 338	RECEIVED BY: (Signature) R St John	DATE 01/24/90	TIME 15:38
RELINQUISHED BY: (Signature) [signature]	DATE 1/24/90	TIME 4:42	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature) Denise Harrington	DATE 1/24/90	TIME 1645
METHOD OF SHIPMENT: P.U.	DATE	TIME	LAB COMMENTS:		

Sample Collector: LEVINE-FRICKE
1900 Powell Street, 12th Floor
Emeryville, Ca 94608
(415) 652-4500

Analytical Laboratory: MED TOX

FORM NO. 86/COC/ARF

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

9001131 9001130

Project No.: ~~3~~ 1649	Field Logbook No.:	Date: 1-24-90	Serial No.: № 6035
Project Name: YERBA BUENA	Project Location: OAKLAND		
Sampler (Signature): Larry Jayaweera			Samplers: LPL

SAMPLES: SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	EPA 8020 BTEX / ~~EPA~~ 601	CAM-17 METALS / ~~EPA~~	EPA 8240 VOCs	EPA 8270 SEMI-VOLS	EPA 8015 TPH DIESEL/WASTE OIL	EPA 8080 PCB	HOLD	RUSH	REMARKS
A7(~~1.5~~ 3.0)A	1-24		16A	1	SOIL							X		
X A6C	1-24	1200	~~2~~	4	WATER		X	X	~~X~~	~~X~~				02A, B, C, D
A5(3.5)B	1-24		17A	1	SOIL		X	X	X	X				
A5(2)A	1-24		18A	1	↓							X		
A8(1.5)A	1-24		19A	1								X		
A8(2)A	1-24		20A	1								X		
A8(2)A	1-24		21A	1								X		
A8(4.5)B	1-24		22A	1								X		
A8(4.5)B	1-24		23A	1			X			X	X			
A9(1.5)A	1-24		24A	1			X							
A9(4.5)B	1-24		25A	1			X			X	X			
A10(1.5)A	1-24		26A	1	↓		X					X		

RELINQUISHED BY: (Signature) Larry Jayaweera	DATE 1-24-90	TIME 353	RECEIVED BY: (Signature) Hallon St John	DATE 1/24/90	TIME 353
RELINQUISHED BY: (Signature) Hallon St John	DATE 1/24/90	TIME 4:42	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature) Denise Harrington	DATE 1/24/90	TIME 1645
METHOD OF SHIPMENT: P/U	DATE	TIME	LAB COMMENTS:		

Sample Collector: LEVINE-FRICKE 1900 Powell Street, 12th Floor Emeryville, Ca 94608 (415) 652-4500	Analytical Laboratory: MED TOX

Shipping Copy (White) Lab Copy (Green) File Copy (Yellow) Field Copy (Pink) FORM NO. 86/COC/ARF

FILE
1649

MED-TOX ASSOCIATES, INC.

ENVIRONMENTAL & OCCUPATIONAL HEALTH SERVICES
3440 Vincent Road Pleasant Hill, CA 94523 • (415) 930-9090 • FAX# (415) 930-0256

LABORATORY ANALYSIS REPORT

LEVINE-FRICKE
1900 POWELL ST., 12TH FL.
EMERYVILLE, CA 94608

REPORT DATE: 02/21/90

DATE SAMPLED: 01/31-02/02/90

ATTN: AMANDA SPENCER

DATE RECEIVED: 02/02/90

CLIENT PROJECT NO: 1649

MED-TOX JOB NO: 9002023

ANALYSIS OF: WATER SAMPLES FOR GC/MS VOLATILE ORGANICS, PURGEABLE AND EXTRACTABLE HYDROCARBONS, BTXE AND PRIORITY POLLUTANT METALS

See attached for results

RECEIVED
FEB 22 1990
LEVINE-FRICKE

Michael Lynch, Manager
Organic Laboratory

Results FAXed to Amanda Spencer 02/15/90 & 02/16/90

LEVINE-FRICKE

CLIENT ID: C15W
CLIENT JOB NO: 1649
DATE SAMPLED: 01/31/90
DATE RECEIVED: 02/02/90
REPORT DATE: 02/21/90

MED-TOX LAB NO: 9002023-01A
MED-TOX JOB NO: 9002023
DATE ANALYZED: 02/09/90
INSTRUMENT: 12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	50
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	**540-59-0**	**15**	**5**
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	**79-01-6**	**26**	**5**
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: B14AW
CLIENT JOB NO: 1649
DATE SAMPLED: 02/02/90
DATE RECEIVED: 02/02/90

REPORT DATE: 02/21/90

MED-TOX LAB NO: 9002023-02A
MED-TOX JOB NO: 9002023
DATE EXTRACTED: 02/13/90

DATE ANALYZED: 02/05-12/90
INSTRUMENT: 1, 9

BTXE AND HYDROCARBONS

METHOD: EPA 8020, 8015 (PURGE & TRAP AND EXTRACTION)

	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene.	ND	0.5
Xylenes	ND	2
PURGEABLE HYDROCARBONS AS:		
Gasoline*	ND mg/L	2 mg/L
EXTRACTABLE HYDROCARBONS AS:		
Lab No: 02D		
Diesel	12 mg/L	0.6 mg/L
Waste oil	ND mg/L	1 mg/L

ND = Not Detected

* Elevated detection limit due to presence of hydrocarbons heavier than those contained in gasoline.

LEVINE-FRICKE

CLIENT ID: B17W
CLIENT JOB NO: 1649
DATE SAMPLED: 02/02/90
DATE RECEIVED: 02/02/90

REPORT DATE: 02/21/90

MED-TOX LAB NO: 9002023-03A
MED-TOX JOB NO: 9002023
DATE EXTRACTED: 02/13/90

DATE ANALYZED: 02/05-14/90
INSTRUMENT: 9, 1

BTXE AND HYDROCARBONS

METHOD: EPA 8020, 8015 (PURGE & TRAP AND EXTRACTION)

	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	3,000	0.5
Toluene	2,200	0.5
Ethylbenzene.	730	0.5
Xylenes	3,300	2
PURGEABLE HYDROCARBONS AS:		
Gasoline	20 mg/L	0.1 mg/L
EXTRACTABLE HYDROCARBONS AS:		
Lab No: 03D		
Diesel	ND mg/L	0.6 mg/L
Waste oil	2 mg/L	1 mg/L

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: C15W
CLIENT JOB NO: 1649
DATE RECEIVED: 02/02/90

MED-TOX LAB NO: 9002023-01C
MED-TOX JOB NO: 9002023
REPORT DATE: 02/21/90

PRIORITY POLLUTANT METALS

CODE	METAL	CONCENTRATION (mg/L)	DETECTION LIMIT (mg/L)	METHOD REFERENCE	INST.*
Sb	Antimony	ND	0.5	7040	V22
As	Arsenic	0.002	0.001	7060	V12
Be	Beryllium	ND	0.003	7090	V22
Cd	Cadmium	ND	0.003	7130	V22
Cr	Chromium	ND	0.02	7190	V22
Cu	Copper	ND	0.005	7210	V22
Pb	Lead	ND	0.01	7421	V22
Hg	Mercury	ND	0.0003	7470	Hg
Ni	Nickel	0.02	0.01	7520	V22
Se	Selenium	ND	0.003	7740	V12
Ag	Silver	ND	0.01	7760	V22
Tl	Thallium	ND	0.02	7840	V22
Zn	Zinc	0.009	0.003	7950	V22

ND = Not Detected

* INST. = Instrument Number

i7 K-3,8-3
C-1,8-1

900-023
9002022

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: 1649	Field Logbook No.:	Date: 2/2/90	Serial No.: № 6074
Project Name: SPRC-YERBA BUENA	Project Location: Emeryville + Oakland, CA		
Sampler (Signature): C Good			Samplers: CKG

SAMPLES / ANALYSES

SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	8240	8010 EPA 601	8100 EPA 624	8080	8015 TPH Gas	8015 TPH Diesel	SM 503E	HOLD	RUSH	CAM metals	Asbestos	BTXE	REMARKS
B14B(1.5)	2/1	3:26	1A	1	Soil								X					
B14B(4.0)B	↓	3:40	2A	↓	↓					X	X						X	odor observed
B14B(7.5)C		3:45	3A							X	X						X	odor observed
B14B(14.0)	↓	3:50	4A	↓	↓								X					
C15W	1/31	400	01A, B	2	Water	X												
C15W	↓	↓	C	1	↓										X			"
B14A(1.0)A	2/2	9:25	5A	1	Soil								X					
B14A(4.0)B	↓	9:35	6A	↓	↓					X	X						X	odor observed
B14A(9.0)C		9:50	7A							X	X		X				X	odor observed
B14A(12.5)	↓	9:55	8A	↓	↓								X					
B14AW	2/2	10:30	02A, B	2	Water												X	"
B14AW	↓	↓	C, D	↓						X	[redacted]							preserved w/ HCl
B14AW	↓	↓	E, F	↓							X							

RELINQUISHED BY: (Signature) Chris Good	DATE 2/2/90	TIME 3:05	RECEIVED BY: (Signature) Fallon St. John	DATE 2/2/90	TIME 3:25
RELINQUISHED BY: (Signature) F. St. John	DATE 2/2/90	TIME 4:40	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature) Denise Harrington	DATE 2/2/90	TIME 1645
METHOD OF SHIPMENT:	DATE	TIME	LAB COMMENTS:		

Sample Collector: LEVINE-FRICKE 1900 Powell Street, 12th Floor Emeryville, Ca 94608 (415) 652-4500	Analytical Laboratory: Med Tox

Shipping Copy (White) Lab Copy (Green) File Copy (Yellow) Field Copy (Pink) FORM NO. 86/COC/ARF

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

900203

Project No.: 1649	Field Logbook No.:	Date: 2/2/90	Serial No.: Nº 5991
Project Name: SFPRC-Yerba Buena	Project Location: Emeryville + Oakland		
Sampler (Signature): C. Goodwin			Samplers: CKE

ANALYSES

SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	8240	8270	8240 SIM	8080	8015 TPH Gas	8015 TPH Diesel w/ silica gel	5mm 503E	HOLD	RUSH	CAM 17 Metals Asbestos	BTXE	REMARKS
B15(1.0)A	2/2	11:05	9A	1	Soil							X					
B15(4.0)B		11:15	10A			X	X		X	X						X	odor observed
B15(9.0)C		11:25	11A									X					
B15(13.0)		11:30	12A									X					
B15W	2/2	11:30	03A, B	2	Water											X	
B15W			C, D	2					X								preserved w/ HCl
B15W			E, F	2						X							
B17(4.0)	2/2	12:58	13A	1	Soil						X						
B17(5.5)		1:15	14A									X					odor observed
B17(9.0)		1:32	15A									X					
B17(13.0)		2:13	16A									X					
B22 1.5	analyze		32A														
3.0	on hold		33A														
4.5	hold		34A														NOTE: No B17A "5" sample

RELINQUISHED BY: (Signature) Chris Goodwin	DATE 2/2/90	TIME 3:05	RECEIVED BY: (Signature) Galen St John	DATE 2/2/90	TIME 5:05
RELINQUISHED BY: (Signature) Galen St John	DATE 2/2/90	TIME 4:40	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature) Denise Harrington	DATE 2/2/90	TIME 1645
METHOD OF SHIPMENT:	DATE	TIME	LAB COMMENTS:		

Sample Collector: PCB's PNA's 8270 PNA's present PCB TPH Diesel

LEVINE-FRICKE
1900 Powell Street, 12th Floor
Emeryville, Ca 94608
(415) 652-4500

Analytical Laboratory: Med Tox

Shipping Copy (White) W.O. Pb Lab Copy (Green) File Copy (Yellow) Field Copy (Pink)

FORM NO. 86/COC/ARF

FILE
1649

MED-TOX ASSOCIATES, INC.

ENVIRONMENTAL & OCCUPATIONAL HEALTH SERVICES

3440 Vincent Road Pleasant Hill, CA 94523 • (415) 930-9090 • FAX# (415) 930-0256

LABORATORY ANALYSIS REPORT

LEVINE-FRICKE
1900 POWELL ST., 12TH FL.
EMERYVILLE, CA 94608

ATTN: AMANDA SPENCER

REPORT DATE: 02/28/90

DATE SAMPLED: 02/05-06/90
DATE RECEIVED: 02/06/90

DATE EXTRACTED: 02/16/90
DATE ANALYZED: 02/07-20/90

CLIENT PROJECT NO: 1649

MED-TOX JOB NO: 9002034

ANALYSIS OF: WATER SAMPLES FOR PURGEABLE AND EXTRACTABLE HYDROCARBONS, GC/MS VOLATILE ORGANICS, BASE/NEUTRAL & ACID EXTRACTABLES, AND PRIORITY POLLUTANT METALS

Sample Identification Client Id.	Lab No.	Purgeable Hydrocarbons as Gasoline (mg/L)	Extractable Hydrocarbons as Diesel (mg/L)	Extractable Hydrocarbons as Waste Oil (mg/L)
LF1-FB-7503	01C	ND	---	---
LF1-7503	02E	---	ND	ND
LF1-7503	02F	ND	---	---
LF5-7503	04E	---	ND	ND
LF5-7503	04F	ND	---	---
LF2-7503	05E	---	ND	ND
LF2-7503	05F	ND	---	---
LF3-7503	06E	---	ND	ND
LF3-7503	06F	ND	---	---
Detection limit		0.1	0.3	0.5

Method: EPA 8015

Instrument: 9, 5
ND = Not Detected

Michael Lynch, Manager
Organic Laboratory

Results FAXed to Amanda Spencer 02/23/90

RECEIVED
MAR - 1 1990
LEVINE-FRICKE

LEVINE-FRICKE

CLIENT ID: LF1-FB-7503
CLIENT JOB NO: 1649
DATE SAMPLED: 02/05/90
DATE RECEIVED: 02/06/90
REPORT DATE: 02/28/90

MED-TOX LAB NO: 9002034-01A
MED-TOX JOB NO: 9002034
DATE ANALYZED: 02/16/90
INSTRUMENT: #12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF1-7503
CLIENT JOB NO: 1649
DATE SAMPLED: 02/05/90
DATE RECEIVED: 02/06/90
REPORT DATE: 02/28/90

MED-TOX LAB NO: 9002034-02A
MED-TOX JOB NO: 9002034
DATE ANALYZED: 02/16/90
INSTRUMENT: #12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF5-7503
CLIENT JOB NO: 1649
DATE SAMPLED: 02/06/90
DATE RECEIVED: 02/06/90
REPORT DATE: 02/28/90

MED-TOX LAB NO: 9002034-04A
MED-TOX JOB NO: 9002034
DATE ANALYZED: 02/16-19/90
INSTRUMENT: #12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	**75-34-3**	**14**	**5**
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	**75-35-4**	**730**	**5**
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	**71-55-6**	**270**	**5**
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF2-7503
CLIENT JOB NO: 1649
DATE SAMPLED: 02/06/90
DATE RECEIVED: 02/06/90
REPORT DATE: 02/28/90

MED-TOX LAB NO: 9002034-05A
MED-TOX JOB NO: 9002034
DATE ANALYZED: 02/16/90
INSTRUMENT: #12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF3-7503
CLIENT JOB NO: 1649
DATE SAMPLED: 02/06/90
DATE RECEIVED: 02/06/90
REPORT DATE: 02/28/90

MED-TOX LAB NO: 9002034-06A
MED-TOX JOB NO: 9002034
DATE ANALYZED: 02/16/90
INSTRUMENT: #12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF1-7503
CLIENT JOB NO: 1649
DATE SAMPLED: 02/05/90
DATE RECEIVED: 02/06/90
REPORT DATE: 02/28/90

MED-TOX LAB NO: 9002034-02C
MED-TOX JOB NO: 9002034
DATE EXTRACTED: 02/09/90
DATE ANALYZED: 02/11/90
INSTRUMENT: #11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acenaphthene	83-32-9	ND	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	ND	10
Benzidine	92-87-5	ND	50
Benzoic Acid	65-85-0	ND	50
Benzo(a)anthracene	56-55-3	ND	10
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	10
Benzo(g,h,i)perylene	191-24-2	ND	10
Benzo(a)pyrene	50-32-8	ND	10
Benzyl Alcohol	100-51-6	ND	20
Bis(2-chloroethoxy) methane	111-91-1	ND	10
Bis(2-chloroethyl)ether	111-44-4	ND	10
Bis(2-chloroisopropyl) ether	39638-32-9	ND	10
Bis(2-ethylhexyl) phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	10
Butylbenzyl phthalate	85-68-7	ND	10
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	10
4-Chlorophenyl phenyl ether	7005-72-3	ND	10
Chrysene	218-01-9	ND	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Dibenzofuran	132-64-9	ND	10
Di-n-butylphthalate	84-74-2	ND	10
1,2-Dichlorobenzene	95-50-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF1-7503
CLIENT JOB NO: 1649
DATE SAMPLED: 02/05/90
DATE RECEIVED: 02/06/90
REPORT DATE: 02/28/90

MED-TOX LAB NO: 9002034-02C
MED-TOX JOB NO: 9002034
DATE EXTRACTED: 02/09/90
DATE ANALYZED: 02/11/90
INSTRUMENT: #11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES (cont.)

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
1,3-Dichlorobenzene	541-73-1	ND	10
1,4-Dichlorobenzene	106-46-7	ND	10
3,3'-Dichlorobenzidine	91-94-1	ND	20
Diethylphthalate	84-66-2	ND	10
Dimethylphthalate	131-11-3	ND	10
2,4-Dinitrotoluene	121-14-2	ND	10
2,6-Dinitrotoluene	606-20-2	ND	10
Di-n-octylphthalate	117-84-0	ND	10
1,2-Diphenylhydrazine	122-66-7	ND	10
Fluoranthene	206-44-0	ND	10
Fluorene	86-73-7	ND	10
Hexachlorobenzene	118-74-1	ND	10
Hexachlorobutadiene	87-68-3	ND	10
Hexachlorocyclopentadiene	77-47-4	ND	10
Hexachloroethane	67-72-1	ND	10
Indeno(1,2,3-cd)pyrene	193-39-5	ND	10
Isophorone	78-59-1	ND	10
2-Methylnaphthalene	91-57-6	ND	10
Naphthalene	91-20-3	ND	10
2-Nitroaniline	88-74-4	ND	50
3-Nitroaniline	99-09-2	ND	50
4-Nitroaniline	100-01-6	ND	50
Nitrobenzene	98-95-3	ND	10
N-nitrosodimethylamine	62-75-9	ND	10
N-nitrosodiphenylamine	86-30-6	ND	10
N-nitroso-di-n-propylamine	621-64-7	ND	10
Phenanthrene	85-01-8	ND	10
Pyrene	129-00-0	ND	10
1,2,4-Trichlorobenzene	120-82-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF1-7503
CLIENT JOB NO: 1649
DATE SAMPLED: 02/05/90
DATE RECEIVED: 02/06/90
REPORT DATE: 02/28/90

MED-TOX LAB NO: 9002034-02C
MED-TOX JOB NO: 9002034
DATE EXTRACTED: 02/09/90
DATE ANALYZED: 02/11/90
INSTRUMENT: #11

EPA METHOD 8270

ACID EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
4-Chloro-3-methylphenol	59-50-7	ND	10
2-Chlorophenol	95-57-8	ND	10
2,4-Dichlorophenol	120-83-2	ND	10
2,4-Dimethylphenol	105-67-9	ND	10
4,6-Dinitro-2-methylphenol	534-52-1	ND	50
2,4-Dinitrophenol	51-28-5	ND	50
2-Methylphenol	95-48-7	ND	10
4-Methylphenol	106-44-5	ND	10
2-Nitrophenol	88-75-5	ND	10
4-Nitrophenol	100-02-7	ND	50
Pentachlorophenol	87-86-5	ND	50
Phenol	108-95-2	ND	10
2,4,5-Trichlorophenol	95-95-4	ND	10
2,4,6-Trichlorophenol	88-06-2	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF5-7503
CLIENT JOB NO: 1649
DATE SAMPLED: 02/06/90
DATE RECEIVED: 02/06/90
REPORT DATE: 02/28/90

MED-TOX LAB NO: 9002034-04C
MED-TOX JOB NO: 9002034
DATE EXTRACTED: 02/09/90
DATE ANALYZED: 02/11/90
INSTRUMENT: #11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acenaphthene	83-32-9	ND	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	ND	10
Benzidine	92-87-5	ND	50
Benzoic Acid	65-85-0	ND	50
Benzo(a)anthracene	56-55-3	ND	10
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	10
Benzo(g,h,i)perylene	191-24-2	ND	10
Benzo(a)pyrene	50-32-8	ND	10
Benzyl Alcohol	100-51-6	ND	20
Bis(2-chloroethoxy) methane	111-91-1	ND	10
Bis(2-chloroethyl)ether	111-44-4	ND	10
Bis(2-chloroisopropyl) ether	39638-32-9	ND	10
Bis(2-ethylhexyl) phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	10
Butylbenzyl phthalate	85-68-7	ND	10
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	10
4-Chlorophenyl phenyl ether	7005-72-3	ND	10
Chrysene	218-01-9	ND	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Dibenzofuran	132-64-9	ND	10
Di-n-butylphthalate	84-74-2	ND	10
1,2-Dichlorobenzene	95-50-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF5-7503
CLIENT JOB NO: 1649
DATE SAMPLED: 02/06/90
DATE RECEIVED: 02/06/90
REPORT DATE: 02/28/90

MED-TOX LAB NO: 9002034-04C
MED-TOX JOB NO: 9002034
DATE EXTRACTED: 02/09/90
DATE ANALYZED: 02/11/90
INSTRUMENT: #11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES (cont.)

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
1,3-Dichlorobenzene	541-73-1	ND	10
1,4-Dichlorobenzene	106-46-7	ND	10
3,3'-Dichlorobenzidine	91-94-1	ND	20
Diethylphthalate	84-66-2	ND	10
Dimethylphthalate	131-11-3	ND	10
2,4-Dinitrotoluene	121-14-2	ND	10
2,6-Dinitrotoluene	606-20-2	ND	10
Di-n-octylphthalate	117-84-0	ND	10
1,2-Diphenylhydrazine	122-66-7	ND	10
Fluoranthene	206-44-0	ND	10
Fluorene	86-73-7	ND	10
Hexachlorobenzene	118-74-1	ND	10
Hexachlorobutadiene	87-68-3	ND	10
Hexachlorocyclopentadiene	77-47-4	ND	10
Hexachloroethane	67-72-1	ND	10
Indeno(1,2,3-cd)pyrene	193-39-5	ND	10
Isophorone	78-59-1	ND	10
2-Methylnaphthalene	91-57-6	ND	10
Naphthalene	91-20-3	ND	10
2-Nitroaniline	88-74-4	ND	50
3-Nitroaniline	99-09-2	ND	50
4-Nitroaniline	100-01-6	ND	50
Nitrobenzene	98-95-3	ND	10
N-nitrosodimethylamine	62-75-9	ND	10
N-nitrosodiphenylamine	86-30-6	ND	10
N-nitroso-di-n-propylamine	621-64-7	ND	10
Phenanthrene	85-01-8	ND	10
Pyrene	129-00-0	ND	10
1,2,4-Trichlorobenzene	120-82-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF5-7503
CLIENT JOB NO: 1649
DATE SAMPLED: 02/06/90
DATE RECEIVED: 02/06/90
REPORT DATE: 02/28/90

MED-TOX LAB NO: 9002034-04C
MED-TOX JOB NO: 9002034
DATE EXTRACTED: 02/09/90
DATE ANALYZED: 02/11/90
INSTRUMENT: #11

EPA METHOD 8270

ACID EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
4-Chloro-3-methylphenol	59-50-7	ND	10
2-Chlorophenol	95-57-8	ND	10
2,4-Dichlorophenol	120-83-2	ND	10
2,4-Dimethylphenol	105-67-9	ND	10
4,6-Dinitro-2-methylphenol	534-52-1	ND	50
2,4-Dinitrophenol	51-28-5	ND	50
2-Methylphenol	95-48-7	ND	10
4-Methylphenol	106-44-5	ND	10
2-Nitrophenol	88-75-5	ND	10
4-Nitrophenol	100-02-7	ND	50
Pentachlorophenol	87-86-5	ND	50
Phenol	108-95-2	ND	10
2,4,5-Trichlorophenol	95-95-4	ND	10
2,4,6-Trichlorophenol	88-06-2	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF2-7503
CLIENT JOB NO: 1649
DATE SAMPLED: 02/06/90
DATE RECEIVED: 02/06/90
REPORT DATE: 02/28/90

MED-TOX LAB NO: 9002034-05C
MED-TOX JOB NO: 9002034
DATE EXTRACTED: 02/09/90
DATE ANALYZED: 02/11/90
INSTRUMENT: #11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acenaphthene	83-32-9	ND	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	ND	10
Benzidine	92-87-5	ND	50
Benzoic Acid	65-85-0	ND	50
Benzo(a)anthracene	56-55-3	ND	10
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	10
Benzo(g,h,i)perylene	191-24-2	ND	10
Benzo(a)pyrene	50-32-8	ND	10
Benzyl Alcohol	100-51-6	ND	20
Bis(2-chloroethoxy) methane	111-91-1	ND	10
Bis(2-chloroethyl)ether	111-44-4	ND	10
Bis(2-chloroisopropyl) ether	39638-32-9	ND	10
Bis(2-ethylhexyl) phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	10
Butylbenzyl phthalate	85-68-7	ND	10
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	10
4-Chlorophenyl phenyl ether	7005-72-3	ND	10
Chrysene	218-01-9	ND	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Dibenzofuran	132-64-9	ND	10
Di-n-butylphthalate	84-74-2	ND	10
1,2-Dichlorobenzene	95-50-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF2-7503
CLIENT JOB NO: 1649
DATE SAMPLED: 02/06/90
DATE RECEIVED: 02/06/90
REPORT DATE: 02/28/90

MED-TOX LAB NO: 9002034-05C
MED-TOX JOB NO: 9002034
DATE EXTRACTED: 02/09/90
DATE ANALYZED: 02/11/90
INSTRUMENT: #11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES (cont.)

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
1,3-Dichlorobenzene	541-73-1	ND	10
1,4-Dichlorobenzene	106-46-7	ND	10
3,3'-Dichlorobenzidine	91-94-1	ND	20
Diethylphthalate	84-66-2	ND	10
Dimethylphthalate	131-11-3	ND	10
2,4-Dinitrotoluene	121-14-2	ND	10
2,6-Dinitrotoluene	606-20-2	ND	10
Di-n-octylphthalate	117-84-0	ND	10
1,2-Diphenylhydrazine	122-66-7	ND	10
Fluoranthene	206-44-0	ND	10
Fluorene	86-73-7	ND	10
Hexachlorobenzene	118-74-1	ND	10
Hexachlorobutadiene	87-68-3	ND	10
Hexachlorocyclopentadiene	77-47-4	ND	10
Hexachloroethane	67-72-1	ND	10
Indeno(1,2,3-cd)pyrene	193-39-5	ND	10
Isophorone	78-59-1	ND	10
2-Methylnaphthalene	91-57-6	ND	10
Naphthalene	91-20-3	ND	10
2-Nitroaniline	88-74-4	ND	50
3-Nitroaniline	99-09-2	ND	50
4-Nitroaniline	100-01-6	ND	50
Nitrobenzene	98-95-3	ND	10
N-nitrosodimethylamine	62-75-9	ND	10
N-nitrosodiphenylamine	86-30-6	ND	10
N-nitroso-di-n-propylamine	621-64-7	ND	10
Phenanthrene	85-01-8	ND	10
Pyrene	129-00-0	ND	10
1,2,4-Trichlorobenzene	120-82-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF2-7503
CLIENT JOB NO: 1649
DATE SAMPLED: 02/06/90
DATE RECEIVED: 02/06/90
REPORT DATE: 02/28/90

MED-TOX LAB NO: 9002034-05C
MED-TOX JOB NO: 9002034
DATE EXTRACTED: 02/09/90
DATE ANALYZED: 02/11/90
INSTRUMENT: #11

EPA METHOD 8270

ACID EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
4-Chloro-3-methylphenol	59-50-7	ND	10
2-Chlorophenol	95-57-8	ND	10
2,4-Dichlorophenol	120-83-2	ND	10
2,4-Dimethylphenol	105-67-9	ND	10
4,6-Dinitro-2-methylphenol	534-52-1	ND	50
2,4-Dinitrophenol	51-28-5	ND	50
2-Methylphenol	95-48-7	ND	10
4-Methylphenol	106-44-5	ND	10
2-Nitrophenol	88-75-5	ND	10
4-Nitrophenol	100-02-7	ND	50
Pentachlorophenol	87-86-5	ND	50
Phenol	108-95-2	ND	10
2,4,5-Trichlorophenol	95-95-4	ND	10
2,4,6-Trichlorophenol	88-06-2	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF3-7503
CLIENT JOB NO: 1649
DATE SAMPLED: 02/06/90
DATE RECEIVED: 02/06/90
REPORT DATE: 02/28/90

MED-TOX LAB NO: 9002034-06C
MED-TOX JOB NO: 9002034
DATE EXTRACTED: 02/09/90
DATE ANALYZED: 02/11/90
INSTRUMENT: #11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acenaphthene	83-32-9	ND	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	ND	10
Benzidine	92-87-5	ND	50
Benzoic Acid	65-85-0	ND	50
Benzo(a)anthracene	56-55-3	ND	10
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	10
Benzo(g,h,i)perylene	191-24-2	ND	10
Benzo(a)pyrene	50-32-8	ND	10
Benzyl Alcohol	100-51-6	ND	20
Bis(2-chloroethoxy) methane	111-91-1	ND	10
Bis(2-chloroethyl)ether	111-44-4	ND	10
Bis(2-chloroisopropyl) ether	39638-32-9	ND	10
Bis(2-ethylhexyl) phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	10
Butylbenzyl phthalate	85-68-7	ND	10
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	10
4-Chlorophenyl phenyl ether	7005-72-3	ND	10
Chrysene	218-01-9	ND	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Dibenzofuran	132-64-9	ND	10
Di-n-butylphthalate	84-74-2	ND	10
1,2-Dichlorobenzene	95-50-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF3-7503
CLIENT JOB NO: 1649
DATE SAMPLED: 02/06/90
DATE RECEIVED: 02/06/90
REPORT DATE: 02/28/90

MED-TOX LAB NO: 9002034-06C
MED-TOX JOB NO: 9002034
DATE EXTRACTED: 02/09/90
DATE ANALYZED: 02/11/90
INSTRUMENT: #11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES (cont.)

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
1,3-Dichlorobenzene	541-73-1	ND	10
1,4-Dichlorobenzene	106-46-7	ND	10
3,3'-Dichlorobenzidine	91-94-1	ND	20
Diethylphthalate	84-66-2	ND	10
Dimethylphthalate	131-11-3	ND	10
2,4-Dinitrotoluene	121-14-2	ND	10
2,6-Dinitrotoluene	606-20-2	ND	10
Di-n-octylphthalate	117-84-0	ND	10
1,2-Diphenylhydrazine	122-66-7	ND	10
Fluoranthene	206-44-0	ND	10
Fluorene	86-73-7	ND	10
Hexachlorobenzene	118-74-1	ND	10
Hexachlorobutadiene	87-68-3	ND	10
Hexachlorocyclopentadiene	77-47-4	ND	10
Hexachloroethane	67-72-1	ND	10
Indeno(1,2,3-cd)pyrene	193-39-5	ND	10
Isophorone	78-59-1	ND	10
2-Methylnaphthalene	91-57-6	ND	10
Naphthalene	91-20-3	ND	10
2-Nitroaniline	88-74-4	ND	50
3-Nitroaniline	99-09-2	ND	50
4-Nitroaniline	100-01-6	ND	50
Nitrobenzene	98-95-3	ND	10
N-nitrosodimethylamine	62-75-9	ND	10
N-nitrosodiphenylamine	86-30-6	ND	10
N-nitroso-di-n-propylamine	621-64-7	ND	10
Phenanthrene	85-01-8	ND	10
Pyrene	129-00-0	ND	10
1,2,4-Trichlorobenzene	120-82-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF3-7503
CLIENT JOB NO: 1649
DATE SAMPLED: 02/06/90
DATE RECEIVED: 02/06/90
REPORT DATE: 02/28/90

MED-TOX LAB NO: 9002034-06C
MED-TOX JOB NO: 9002034
DATE EXTRACTED: 02/09/90
DATE ANALYZED: 02/11/90
INSTRUMENT: #11

EPA METHOD 8270

ACID EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
4-Chloro-3-methylphenol	59-50-7	ND	10
2-Chlorophenol	95-57-8	ND	10
2,4-Dichlorophenol	120-83-2	ND	10
2,4-Dimethylphenol	105-67-9	ND	10
4,6-Dinitro-2-methylphenol	534-52-1	ND	50
2,4-Dinitrophenol	51-28-5	ND	50
2-Methylphenol	95-48-7	ND	10
4-Methylphenol	106-44-5	ND	10
2-Nitrophenol	88-75-5	ND	10
4-Nitrophenol	100-02-7	ND	50
Pentachlorophenol	87-86-5	ND	50
Phenol	108-95-2	ND	10
2,4,5-Trichlorophenol	95-95-4	ND	10
2,4,6-Trichlorophenol	88-06-2	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF1-7503
CLIENT JOB NO: 1649
DATE RECEIVED: 02/06/90

MED-TOX LAB NO: 9002034-02H
MED-TOX JOB NO: 9002034
REPORT DATE: 02/28/90

PRIORITY POLLUTANT METALS

CODE	METAL	CONCENTRATION (mg/L)	DETECTION LIMIT (mg/L)	METHOD REFERENCE	INST.*
Sb	Antimony	ND	0.5	7040	V22
As	Arsenic	ND	0.001	7060	V22
Be	Beryllium	ND	0.003	7090	V22
Cd	Cadmium	ND	0.003	7130	V22
Cr	Chromium	ND	0.02	7190	V22
Cu	Copper	ND	0.005	7210	V22
Pb	Lead	ND	0.01	7421	V22
Hg	Mercury	ND	0.0003	7470	Hg
Ni	Nickel	ND	0.01	7520	V22
Se	Selenium	ND	0.003	7740	V22
Ag	Silver	ND	0.01	7760	V22
Tl	Thallium	ND	0.02	7840	V22
Zn	Zinc	0.015	0.003	7950	V22

ND = Not Detected

* INST. = Instrument Number

LEVINE-FRICKE

CLIENT ID: LF5-7503
CLIENT JOB NO: 1649
DATE RECEIVED: 02/06/90

MED-TOX LAB NO: 9002034-04H
MED-TOX JOB NO: 9002034
REPORT DATE: 02/28/90

PRIORITY POLLUTANT METALS

CODE	METAL	CONCENTRATION (mg/L)	DETECTION LIMIT (mg/L)	METHOD REFERENCE	INST.*
Sb	Antimony	ND	0.5	7040	V22
As	Arsenic	ND	0.001	7060	V22
Be	Beryllium	ND	0.003	7090	V22
Cd	Cadmium	ND	0.003	7130	V22
Cr	Chromium	ND	0.02	7190	V22
Cu	Copper	ND	0.005	7210	V22
Pb	Lead	ND	0.01	7421	V22
Hg	Mercury	ND	0.0003	7470	Hg
Ni	Nickel	ND	0.01	7520	V22
Se	Selenium	ND	0.003	7740	V22
Ag	Silver	ND	0.01	7760	V22
Tl	Thallium	ND	0.02	7840	V22
Zn	Zinc	0.018	0.003	7950	V22

ND = Not Detected

* INST. = Instrument Number

LEVINE-FRICKE

CLIENT ID: LF2-7503
CLIENT JOB NO: 1649
DATE RECEIVED: 02/06/90

MED-TOX LAB NO: 9002034-05H
MED-TOX JOB NO: 9002034
REPORT DATE: 02/28/90

PRIORITY POLLUTANT METALS

CODE	METAL	CONCENTRATION (mg/L)	DETECTION LIMIT (mg/L)	METHOD REFERENCE	INST.*
Sb	Antimony	ND	0.5	7040	V22
As	Arsenic	0.002	0.001	7060	V22
Be	Beryllium	ND	0.003	7090	V22
Cd	Cadmium	ND	0.003	7130	V22
Cr	Chromium	ND	0.02	7190	V22
Cu	Copper	0.007	0.005	7210	V22
Pb	Lead	ND	0.01	7421	V22
Hg	Mercury	ND	0.0003	7470	Hg
Ni	Nickel	ND	0.01	7520	V22
Se	Selenium	ND	0.003	7740	V22
Ag	Silver	ND	0.01	7760	V22
Tl	Thallium	ND	0.02	7840	V22
Zn	Zinc	0.026	0.003	7950	V22

ND = Not Detected

* INST. = Instrument Number

LEVINE-FRICKE

CLIENT ID: LF3-7503
CLIENT JOB NO: 1649
DATE RECEIVED: 02/06/90

MED-TOX LAB NO: 9002034-06H
MED-TOX JOB NO: 9002034
REPORT DATE: 02/28/90

PRIORITY POLLUTANT METALS

CODE	METAL	CONCENTRATION (mg/L)	DETECTION LIMIT (mg/L)	METHOD REFERENCE	INST.*
Sb	Antimony	ND	0.5	7040	V22
As	Arsenic	ND	0.001	7060	V22
Be	Beryllium	ND	0.003	7090	V22
Cd	Cadmium	0.004	0.003	7130	V22
Cr	Chromium	ND	0.02	7190	V22
Cu	Copper	0.006	0.005	7210	V22
Pb	Lead	ND	0.01	7421	V22
Hg	Mercury	ND	0.0003	7470	Hg
Ni	Nickel	ND	0.01	7520	V22
Se	Selenium	ND	0.003	7740	V22
Ag	Silver	ND	0.01	7760	V22
Tl	Thallium	ND	0.02	7840	V22
Zn	Zinc	0.024	0.003	7950	V22

ND = Not Detected

* INST. = Instrument Number

R-1, S-1
R-3, S-1
C-1, S-1

9002034

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

625 Hold 2/12

Project No.: 1649	Field Logbook No.:	Date: 2-6-90	Serial No.: No 7503
Project Name: YERBA BUENA	Project Location: Berkeley / OAKLAND		
Sampler (Signature): Lan Lapuyade			

SAMPLES — ANALYSES — Samplers: LPL - NPD

SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	EPA 8240	EPA 8270	EPA 8015 TPH DIESEL/LUBE	EPA 8015 TPH GAS	PP-13 METALS		HOLD	RUSH	REMARKS
LF-1-FB-7503	2-5	1435	01A,B,C,D	4	GROUND WATER	X	[redacted]	[redacted]	X					NORMAL TURNAROUND
LF-1-7503	2-5	1445	02A,B,C,D,E,F,G,H	8		X	X	X	X	X				
LF-5-FB-7503	2-6	1110	03A,B,C,D	4								X		SEND RESULTS TO
LF-5-7503	2-6	1120	04A-H	8		X	X	X	X	X				AMANDA SPENSER
LF-2-7503	2-6	1510	05A-H	8		X	X	X	X	X				BETH GURNEY
LF-3-7503	2-6	1434	06A-H	8		X	X	X	X	X				LARRY LAPUYADE

RELINQUISHED BY: (Signature) Lan Lapuyade	DATE 2-6-90	TIME 413	RECEIVED BY: (Signature) Carlton S. John	DATE 2/6/90	TIME 4'13
RELINQUISHED BY: (Signature) Carlton S. John	DATE 2/6/90	TIME 4:45	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature) Denise Harrington	DATE 2/6/90	TIME 1645
METHOD OF SHIPMENT: Pick-up	DATE	TIME	LAB COMMENTS:		

Sample Collector:
LEVINE-FRICKE
1900 Powell Street, 12th Floor
Emeryville, Ca 94608
(415) 652-4500

Analytical Laboratory:
MED TOX

Shipping Copy (White) Lab Copy (Green) File Copy (Yellow) Field Copy (Pink) FORM NO. 86/COC/ARF

FILE
1649

MED-TOX ASSOCIATES, INC.

ENVIRONMENTAL & OCCUPATIONAL HEALTH SERVICES

3440 Vincent Road Pleasant Hill, CA 94523 • (415) 930-9090 • FAX# (415) 930-0256

LABORATORY ANALYSIS REPORT

LEVINE-FRICKE
1900 POWELL ST., 12TH FL.
EMERYVILLE, CA 94608

REPORT DATE: 03/20/90

DATE SAMPLED: 02/23/90
DATE RECEIVED: 02/23/90

ATTN: AMANDA SPENCER

DATE EXTRACTED: 02/26/90
DATE ANALYZED: 03/02-07/90

CLIENT PROJECT NO: 1649

MED-TOX JOB NO: 9002174

ANALYSIS OF: WATER SAMPLES FOR EXTRACTABLE AND PURGEABLE HYDROCARBONS, GC/MS VOLATILE ORGANICS, GC/MS BASE/NEUTRAL AND ACID EXTRACTABLES, AND PRIORITY POLLUTANT METALS

Sample Identification Client Id.	Lab No.	Extractable Hydrocarbons as Diesel (mg/L)	Extractable Hydrocarbons as Waste Oil (mg/L)	Purgeable Hydrocarbons as Gasoline (mg/L)
LF12W	01	0.5	ND	ND
LF16W	02	ND	ND	ND
Detection limit		0.3	0.5	0.1
Method: EPA 8015				
Instrument		1	1	9

ND = Not Detected

RECEIVED
MAR 21 1990
LEVINE-FRICKE

Michael Lynch, Manager
Organic Laboratory

Results FAXed to Amanda Spencer 03/08/90 & 03/13/90

LEVINE-FRICKE

CLIENT ID: LF12W
CLIENT JOB NO: 1649
DATE SAMPLED: 02/23/90
DATE RECEIVED: 02/23/90
REPORT DATE: 03/20/90

MED-TOX LAB NO: 9002174-01A
MED-TOX JOB NO: 9002174
DATE ANALYZED: 03/05/90
INSTRUMENT: 12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	**540-59-0**	**67**	**5**
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	**79-01-6**	**8**	**5**
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF16W
CLIENT JOB NO: 1649
DATE SAMPLED: 02/23/90
DATE RECEIVED: 02/23/90
REPORT DATE: 03/20/90

MED-TOX LAB NO: 9002174-02A
MED-TOX JOB NO: 9002174
DATE ANALYZED: 03/05/90
INSTRUMENT: 12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF12W
CLIENT JOB NO: 1649
DATE SAMPLED: 02/23/90
DATE RECEIVED: 02/23/90
REPORT DATE: 03/20/90

MED-TOX LAB NO: 9002174-01E
MED-TOX JOB NO: 9002174
DATE EXTRACTED: 02/26, 03/12/90
DATE ANALYZED: 02/28-03/12/90
INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acenaphthene	83-32-9	ND	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	ND	10
Benzidine	92-87-5	ND	50
Benzoic Acid	65-85-0	ND	50
Benzo(a)anthracene	56-55-3	ND	10
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	10
Benzo(g,h,i)perylene	191-24-2	ND	10
Benzo(a)pyrene	50-32-8	ND	10
Benzyl Alcohol	100-51-6	ND	20
Bis(2-chloroethoxy) methane	111-91-1	ND	10
Bis(2-chloroethyl)ether	111-44-4	ND	10
Bis(2-chloroisopropyl) ether	108-60-1	ND	10
Bis(2-ethylhexyl) phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	10
Butylbenzyl phthalate	85-68-7	ND	10
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	10
4-Chlorophenyl phenyl ether	7005-72-3	ND	10
Chrysene	218-01-9	ND	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Dibenzofuran	132-64-9	ND	10
Di-n-butylphthalate	84-74-2	ND	10
1,2-Dichlorobenzene	95-50-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF12W
CLIENT JOB NO: 1649
DATE SAMPLED: 02/23/90
DATE RECEIVED: 02/23/90
REPORT DATE: 03/20/90

MED-TOX LAB NO: 9002174-01E
MED-TOX JOB NO: 9002174
DATE EXTRACTED: 02/26, 03/12/90
DATE ANALYZED: 02/28-03/12/90
INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES (cont.)

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
1,3-Dichlorobenzene	541-73-1	ND	10
1,4-Dichlorobenzene	106-46-7	ND	10
3,3'-Dichlorobenzidine	91-94-1	ND	20
Diethylphthalate	84-66-2	ND	10
Dimethylphthalate	131-11-3	ND	10
2,4-Dinitrotoluene	121-14-2	ND	10
2,6-Dinitrotoluene	606-20-2	ND	10
Di-n-octylphthalate	117-84-0	ND	10
1,2-Diphenylhydrazine	122-66-7	ND	10
Fluoranthene	206-44-0	ND	10
Fluorene	86-73-7	ND	10
Hexachlorobenzene	118-74-1	ND	10
Hexachlorobutadiene	87-68-3	ND	10
Hexachlorocyclopentadiene	77-47-4	ND	10
Hexachloroethane	67-72-1	ND	10
Indeno(1,2,3-cd)pyrene	193-39-5	ND	10
Isophorone	78-59-1	ND	10
2-Methylnaphthalene	91-57-6	ND	10
Naphthalene	91-20-3	ND	10
2-Nitroaniline	88-74-4	ND	50
3-Nitroaniline	99-09-2	ND	50
4-Nitroaniline	100-01-6	ND	50
Nitrobenzene	98-95-3	ND	10
N-nitrosodimethylamine	62-75-9	ND	10
N-nitrosodiphenylamine	86-30-6	ND	10
N-nitroso-di-n-propylamine	621-64-7	ND	10
Phenanthrene	85-01-8	ND	10
Pyrene	129-00-0	ND	10
1,2,4-Trichlorobenzene	120-82-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF12W
CLIENT JOB NO: 1649
DATE SAMPLED: 02/23/90
DATE RECEIVED: 02/23/90
REPORT DATE: 03/20/90

MED-TOX LAB NO: 9002174-01E
MED-TOX JOB NO: 9002174
DATE EXTRACTED: 02/26, 03/12/90
DATE ANALYZED: 02/28-03/12/90
INSTRUMENT: 11

EPA METHOD 8270

ACID EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
4-Chloro-3-methylphenol	59-50-7	ND	10
2-Chlorophenol	95-57-8	ND	10
2,4-Dichlorophenol	120-83-2	ND	10
2,4-Dimethylphenol	105-67-9	ND	10
4,6-Dinitro-2-methylphenol	534-52-1	ND	50
2,4-Dinitrophenol	51-28-5	ND	50
2-Methylphenol	95-48-7	ND	10
4-Methylphenol	106-44-5	ND	10
2-Nitrophenol	88-75-5	ND	10
4-Nitrophenol	100-02-7	ND	50
Pentachlorophenol	87-86-5	ND	50
Phenol	108-95-2	ND	10
2,4,5-Trichlorophenol	95-95-4	ND	10
2,4,6-Trichlorophenol	88-06-2	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF16W
CLIENT JOB NO: 1649
DATE SAMPLED: 02/23/90
DATE RECEIVED: 02/23/90
REPORT DATE: 03/20/90

MED-TOX LAB NO: 9002174-02E
MED-TOX JOB NO: 9002174
DATE EXTRACTED: 02/26/90
DATE ANALYZED: 02/28/90
INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acenaphthene	83-32-9	ND	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	ND	10
Benzidine	92-87-5	ND	50
Benzoic Acid	65-85-0	ND	50
Benzo(a)anthracene	56-55-3	ND	10
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	10
Benzo(g,h,i)perylene	191-24-2	ND	10
Benzo(a)pyrene	50-32-8	ND	10
Benzyl Alcohol	100-51-6	ND	20
Bis(2-chloroethoxy) methane	111-91-1	ND	10
Bis(2-chloroethyl)ether	111-44-4	ND	10
Bis(2-chloroisopropyl) ether	108-60-1	ND	10
Bis(2-ethylhexyl) phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	10
Butylbenzyl phthalate	85-68-7	ND	10
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	10
4-Chlorophenyl phenyl ether	7005-72-3	ND	10
Chrysene	218-01-9	ND	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Dibenzofuran	132-64-9	ND	10
Di-n-butylphthalate	84-74-2	ND	10
1,2-Dichlorobenzene	95-50-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF16W
CLIENT JOB NO: 1649
DATE SAMPLED: 02/23/90
DATE RECEIVED: 02/23/90
REPORT DATE: 03/20/90

MED-TOX LAB NO: 9002174-02E
MED-TOX JOB NO: 9002174
DATE EXTRACTED: 02/26/90
DATE ANALYZED: 02/28/90
INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES (cont.)

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
1,3-Dichlorobenzene	541-73-1	ND	10
1,4-Dichlorobenzene	106-46-7	ND	10
3,3'-Dichlorobenzidine	91-94-1	ND	20
Diethylphthalate	84-66-2	ND	10
Dimethylphthalate	131-11-3	ND	10
2,4-Dinitrotoluene	121-14-2	ND	10
2,6-Dinitrotoluene	606-20-2	ND	10
Di-n-octylphthalate	117-84-0	ND	10
1,2-Diphenylhydrazine	122-66-7	ND	10
Fluoranthene	206-44-0	ND	10
Fluorene	86-73-7	ND	10
Hexachlorobenzene	118-74-1	ND	10
Hexachlorobutadiene	87-68-3	ND	10
Hexachlorocyclopentadiene	77-47-4	ND	10
Hexachloroethane	67-72-1	ND	10
Indeno(1,2,3-cd)pyrene	193-39-5	ND	10
Isophorone	78-59-1	ND	10
2-Methylnaphthalene	91-57-6	ND	10
Naphthalene	91-20-3	ND	10
2-Nitroaniline	88-74-4	ND	50
3-Nitroaniline	99-09-2	ND	50
4-Nitroaniline	100-01-6	ND	50
Nitrobenzene	98-95-3	ND	10
N-nitrosodimethylamine	62-75-9	ND	10
N-nitrosodiphenylamine	86-30-6	ND	10
N-nitroso-di-n-propylamine	621-64-7	ND	10
Phenanthrene	85-01-8	ND	10
Pyrene	129-00-0	ND	10
1,2,4-Trichlorobenzene	120-82-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF16W
CLIENT JOB NO: 1649
DATE SAMPLED: 02/23/90
DATE RECEIVED: 02/23/90
REPORT DATE: 03/20/90

MED-TOX LAB NO: 9002174-02E
MED-TOX JOB NO: 9002174
DATE EXTRACTED: 02/26/90
DATE ANALYZED: 02/28/90
INSTRUMENT: 11

EPA METHOD 8270

ACID EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
4-Chloro-3-methylphenol	59-50-7	ND	10
2-Chlorophenol	95-57-8	ND	10
2,4-Dichlorophenol	120-83-2	ND	10
2,4-Dimethylphenol	105-67-9	ND	10
4,6-Dinitro-2-methylphenol	534-52-1	ND	50
2,4-Dinitrophenol	51-28-5	ND	50
2-Methylphenol	95-48-7	ND	10
4-Methylphenol	106-44-5	ND	10
2-Nitrophenol	88-75-5	ND	10
4-Nitrophenol	100-02-7	ND	50
Pentachlorophenol	87-86-5	ND	50
Phenol	108-95-2	ND	10
2,4,5-Trichlorophenol	95-95-4	ND	10
2,4,6-Trichlorophenol	88-06-2	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LFI2W
CLIENT JOB NO: 1649
DATE RECEIVED: 02/23/90

MED-TOX LAB NO: 9002174-01I
MED-TOX JOB NO: 9002174
REPORT DATE: 03/20/90

PRIORITY POLLUTANT METALS

CODE	METAL	CONCENTRATION (mg/L)	DETECTION LIMIT (mg/L)	METHOD REFERENCE	INST.*
Sb	Antimony	ND	0.5	7040	V22
As	Arsenic	0.003	0.001	7060	V12
Be	Beryllium	ND	0.003	7090	V22
Cd	Cadmium	ND	0.003	7130	V22
Cr	Chromium	ND	0.02	7190	V22
Cu	Copper	0.011	0.005	7210	V22
Pb	Lead	ND	0.01	7420	V22
Hg	Mercury	ND	0.0003	7470	Hg
Ni	Nickel	0.02	0.01	7520	V22
Se	Selenium	ND	0.03	7740	V12
Ag	Silver	ND	0.01	7760	V22
Tl	Thallium	ND	0.02	7840	V22
Zn	Zinc	0.005	0.003	7950	V22

ND = Not Detected

* INST. = Instrument Number

Sample was filtered through a 0.45um filter and preserved with HNO3 on 02/23/90.

LEVINE-FRICKE

CLIENT ID: LF16W
CLIENT JOB NO: 1649
DATE RECEIVED: 02/23/90

MED-TOX LAB NO: 9002174-021
MED-TOX JOB NO: 9002174
REPORT DATE: 03/20/90

PRIORITY POLLUTANT METALS

CODE	METAL	CONCENTRATION (mg/L)	DETECTION LIMIT (mg/L)	METHOD REFERENCE	INST.*
Sb	Antimony	ND	0.5	7040	V22
As	Arsenic	ND	0.001	7060	V12
Be	Beryllium	ND	0.003	7090	V22
Cd	Cadmium	ND	0.003	7130	V22
Cr	Chromium	ND	0.02	7190	V22
Cu	Copper	ND	0.005	7210	V22
Pb	Lead	ND	0.01	7420	V22
Hg	Mercury	ND	0.0003	7470	Hg
Ni	Nickel	ND	0.01	7520	V22
Se	Selenium	ND	0.03	7740	V12
Ag	Silver	ND	0.01	7760	V22
Tl	Thallium	ND	0.02	7840	V22
Zn	Zinc	0.005	0.003	7950	V22

ND = Not Detected

* INST. = Instrument Number

Sample was filtered through a 0.45um filter and preserved with HNO3 on 02/23/90.

R-1, SH
R-3, S-2

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

900217H

Project No.: 1649	Field Logbook No.:	Date: 2/23/90	Serial No.: No 7547
Project Name: SFRC-Yerba Buena	Project Location:		
Sampler (Signature): CK Goodwin			Samplers: CKG/RDT

SAMPLES						ANALYSES								
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	EPA 601	EPA 624	8248	8270	8015 TPH Gas	8015 TPH Diesel	HOLD	RUSH	Composited	REMARKS
LFRW	2/23	2:13	1A, B	2	water		X	[redacted]	[redacted]					[redacted]	Filter the Cam metals w/in 24 hrs.
			1E, F					X							
			1C, D						X						
			1I											X	
			1G, H							X					
															ATTN results to Amanda Spencer
LFLOW	2/23	4:08	2A, B	2	water		X								
			2E, F					X							
			2C, D						X						
			2I											X	
			2G, H							X					

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
Richard D. Thorpe	2/23/90	4:15pm	Talon St John	2/23/90	4:18
RELINQUISHED BY: (Signature) Talon St John	2/27/91	4:55	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature) Denise Harrington	DATE 2/23/90	TIME 1700
METHOD OF SHIPMENT:	DATE	TIME	LAB COMMENTS:		

Sample Collector:
LEVINE-FRICKE
1900 Powell Street, 12th Floor
Emeryville, Ca 94608
(415) 652-4500

Analytical Laboratory:
MEDTOX.

Shipping Copy (White) Lab Copy (Green) File Copy (Yellow) Field Copy (Pink) FORM NO. 86/COC/ARF

LEVINE-FRICKE

CLIENT ID: B27W
CLIENT JOB NO: 1649
DATE RECEIVED: 02/23/90

MED-TOX LAB NO: 9002165-14G
MED-TOX JOB NO: 9002165
REPORT DATE: 03/20/90

PRIORITY POLLUTANT METALS

CODE	METAL	CONCENTRATION (mg/L)	DETECTION LIMIT (mg/L)	METHOD REFERENCE	INST.*
Sb	Antimony	ND	0.5	7040	V22
As	Arsenic	ND	0.001	7060	V12
Be	Beryllium	ND	0.003	7090	V22
Cd	Cadmium	ND	0.003	7130	V22
Cr	Chromium	ND	0.02	7190	V22
Cu	Copper	0.006	0.005	7210	V22
Pb	Lead	ND	0.01	7420	V22
Hg	Mercury	ND	0.0003	7470	Hg
Ni	Nickel	0.05	0.01	7520	V22
Se	Selenium	ND	0.03	7740	V12
Ag	Silver	ND	0.01	7760	V22
Tl	Thallium	ND	0.02	7840	V22
Zn	Zinc	0.040	0.003	7950	V22

ND = Not Detected

* INST. = Instrument Number

LEVINE-FRICKE

CLIENT ID: B27W
CLIENT JOB NO: 1649
DATE SAMPLED: 02/22/90
DATE RECEIVED: 02/23/90
REPORT DATE: 03/20/90

MED-TOX LAB NO: 9002165-14A
MED-TOX JOB NO: 9002165
DATE ANALYZED: 03/05/90
INSTRUMENT: 12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	**75-34-3**	**12**	**5**
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: B27W
CLIENT JOB NO: 1649
DATE SAMPLED: 02/22/90
DATE RECEIVED: 02/23/90
REPORT DATE: 03/20/90

MED-TOX LAB NO: 9002165-14F
MED-TOX JOB NO: 9002165
DATE EXTRACTED: 03/02/90
DATE ANALYZED: 03/05/90
INSTRUMENT: 2B

EPA METHOD 8080

POLYCHLORINATED BIPHENYLS

AROCLOR	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Aroclor 1016	12674-11-2	ND	0.5
Aroclor 1221	11104-28-2	ND	0.5
Aroclor 1232	11141-16-5	ND	0.5
Aroclor 1242	53469-21-9	ND	0.5
Aroclor 1248	12672-29-6	ND	0.5
Aroclor 1254	11097-69-1	ND	0.5
Aroclor 1260	11096-82-5	ND	0.5

ND = Not Detected

Analytical Method: EPA 8080, SW-846 3rd Edition, 1986

LEVINE-FRICKE

CLIENT PROJECT NO: 1649
DATE SAMPLED: 02/22/90
DATE RECEIVED: 02/22/90

MED-TOX JOB NO: 9002165
DATE EXTRACTED: 03/01/90
DATE ANALYZED: 02/28-03/05/90
REPORT DATE: 03/20/90

Sample Identification Client Id.	Lab No.	Extractable Hydrocarbons as Diesel (mg/L)	Extractable Hydrocarbons as Waste Oil (mg/L)	Purgeable Hydrocarbons as Gasoline (mg/L)
B27W	14C	---	---	ND
B27W	14E	ND	0.6	---
Detection Limit		0.3	0.5	0.1
EPA Method: 8015				
Instrument:		1	1	9

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: C26W
CLIENT JOB NO: 1649
DATE SAMPLED: 02/22/90
DATE RECEIVED: 02/23/90
REPORT DATE: 03/20/90

MED-TOX LAB NO: 9002165-15A
MED-TOX JOB NO: 9002165
DATE ANALYZED: 03/05/90
INSTRUMENT: 12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	**540-59-0**	**11**	**5**
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	**79-01-6**	**60**	**5**
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: C26W
CLIENT JOB NO: 1649
DATE SAMPLED: 02/22/90
DATE RECEIVED: 02/23/90
REPORT DATE: 03/20/90

MED-TOX LAB NO: 9002165-15G
MED-TOX JOB NO: 9002165
DATE EXTRACTED: 02/26, 03/06/90
DATE ANALYZED: 02/28-03/12/90
INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acenaphthene	83-32-9	ND	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	ND	10
Benzidine	92-87-5	ND	50
Benzoic Acid	65-85-0	ND	50
Benzo(a)anthracene	56-55-3	ND	10
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	10
Benzo(g,h,i)perylene	191-24-2	ND	10
Benzo(a)pyrene	50-32-8	ND	10
Benzyl Alcohol	100-51-6	ND	20
Bis(2-chloroethoxy) methane	111-91-1	ND	10
Bis(2-chloroethyl)ether	111-44-4	ND	10
Bis(2-chloroisopropyl) ether	108-60-1	ND	10
Bis(2-ethylhexyl) phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	10
Butylbenzyl phthalate	85-68-7	ND	10
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	10
4-Chlorophenyl phenyl ether	7005-72-3	ND	10
Chrysene	218-01-9	ND	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Dibenzofuran	132-64-9	ND	10
Di-n-butylphthalate	84-74-2	ND	10
1,2-Dichlorobenzene	95-50-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: C26W
CLIENT JOB NO: 1649
DATE SAMPLED: 02/22/90
DATE RECEIVED: 02/23/90
REPORT DATE: 03/20/90

MED-TOX LAB NO: 9002165-15G
MED-TOX JOB NO: 9002165
DATE EXTRACTED: 02/26, 03/06/90
DATE ANALYZED: 02/28-03/12/90
INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES (cont.)

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
1,3-Dichlorobenzene	541-73-1	ND	10
1,4-Dichlorobenzene	106-46-7	ND	10
3,3'-Dichlorobenzidine	91-94-1	ND	20
Diethylphthalate	84-66-2	ND	10
Dimethylphthalate	131-11-3	ND	10
2,4-Dinitrotoluene	121-14-2	ND	10
2,6-Dinitrotoluene	606-20-2	ND	10
Di-n-octylphthalate	117-84-0	ND	10
1,2-Diphenylhydrazine	122-66-7	ND	10
Fluoranthene	206-44-0	ND	10
Fluorene	86-73-7	ND	10
Hexachlorobenzene	118-74-1	ND	10
Hexachlorobutadiene	87-68-3	ND	10
Hexachlorocyclopentadiene	77-47-4	ND	10
Hexachloroethane	67-72-1	ND	10
Indeno(1,2,3-cd)pyrene	193-39-5	ND	10
Isophorone	78-59-1	ND	10
2-Methylnaphthalene	91-57-6	ND	10
Naphthalene	91-20-3	ND	10
2-Nitroaniline	88-74-4	ND	50
3-Nitroaniline	99-09-2	ND	50
4-Nitroaniline	100-01-6	ND	50
Nitrobenzene	98-95-3	ND	10
N-nitrosodimethylamine	62-75-9	ND	10
N-nitrosodiphenylamine	86-30-6	ND	10
N-nitroso-di-n-propylamine	621-64-7	ND	10
Phenanthrene	85-01-8	ND	10
Pyrene	129-00-0	ND	10
1,2,4-Trichlorobenzene	120-82-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: C26W
CLIENT JOB NO: 1649
DATE SAMPLED: 02/22/90
DATE RECEIVED: 02/23/90
REPORT DATE: 03/20/90

MED-TOX LAB NO: 9002165-15G
MED-TOX JOB NO: 9002165
DATE EXTRACTED: 02/26, 03/06/90
DATE ANALYZED: 02/28-03/12/90
INSTRUMENT: 11

EPA METHOD 8270

ACID EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
4-Chloro-3-methylphenol	59-50-7	ND	10
2-Chlorophenol	95-57-8	ND	10
2,4-Dichlorophenol	120-83-2	ND	10
2,4-Dimethylphenol	105-67-9	ND	10
4,6-Dinitro-2-methylphenol	534-52-1	ND	50
2,4-Dinitrophenol	51-28-5	ND	50
2-Methylphenol	95-48-7	ND	10
4-Methylphenol	106-44-5	ND	10
2-Nitrophenol	88-75-5	ND	10
4-Nitrophenol	100-02-7	ND	50
Pentachlorophenol	87-86-5	ND	50
Phenol	108-95-2	ND	10
2,4,5-Trichlorophenol	95-95-4	ND	10
2,4,6-Trichlorophenol	88-06-2	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT PROJECT NO: 1649
DATE SAMPLED: 02/21/90
DATE RECEIVED: 02/22/90

MED-TOX JOB NO: 9002155
DATE EXTRACTED: 03/02/90
DATE ANALYZED: 02/28-03/05/90
REPORT DATE: 03/20/90

Sample Identification Client Id.	Lab No.	Extractable Hydrocarbons as Diesel (mg/L)	Extractable Hydrocarbons as Waste Oil (mg/L)	Purgeable Hydrocarbons as Gasoline (mg/L)
B29W	16C	---	---	ND
B29W	16E	ND	ND	---
B30W	17C	---	---	0.1
B30W	17E	1.4	ND	---
B31W	18C	---	---	ND
B31W	18E	ND	ND	---
Detection Limit		0.3	0.5	0.1
EPA Method		8015	8015	8015
Instrument:		1	1	9

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: B29W
CLIENT JOB NO: 1649
DATE SAMPLED: 02/21/90
DATE RECEIVED: 02/22/90
REPORT DATE: 03/20/90

MED-TOX LAB NO: 9002155-16A
MED-TOX JOB NO: 9002155
DATE ANALYZED: 03/05/90
INSTRUMENT: 12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	**75-34-3**	**20**	**5**
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: B30W
CLIENT JOB NO: 1649
DATE SAMPLED: 02/21/90
DATE RECEIVED: 02/22/90
REPORT DATE: 03/20/90

MED-TOX LAB NO: 9002155-17A
MED-TOX JOB NO: 9002155
DATE ANALYZED: 03/05/90
INSTRUMENT: 12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	**75-34-3**	**18**	**5**
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: B31W
CLIENT JOB NO: 1649
DATE SAMPLED: 02/21/90
DATE RECEIVED: 02/22/90
REPORT DATE: 03/20/90

MED-TOX LAB NO: 9002155-18A
MED-TOX JOB NO: 9002155
DATE ANALYZED: 03/05/90
INSTRUMENT: 12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	**75-34-3**	**19**	**5**
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: B29W
CLIENT JOB NO: 1649
DATE RECEIVED: 02/22/90

MED-TOX LAB NO: 9002155-16G
MED-TOX JOB NO: 9002155
REPORT DATE: 03/20/90

PRIORITY POLLUTANT METALS

CODE	METAL	CONCENTRATION (mg/L)	DETECTION LIMIT (mg/L)	METHOD REFERENCE	INST.*
Sb	Antimony	ND	0.5	7040	V22
As	Arsenic	ND	0.001	7060	V12
Be	Beryllium	ND	0.003	7090	V22
Cd	Cadmium	ND	0.003	7130	V22
Cr	Chromium	ND	0.02	7190	V22
Cu	Copper	ND	0.005	7210	V22
Pb	Lead	ND	0.01	7420	V22
Hg	Mercury	ND	0.0003	7470	Hg
Ni	Nickel	0.03	0.01	7520	V22
Se	Selenium	ND	0.03	7740	V12
Ag	Silver	ND	0.01	7760	V22
Tl	Thallium	ND	0.02	7840	V22
Zn	Zinc	0.008	0.003	7950	V22

ND = Not Detected

* INST. = Instrument Number

LEVINE-FRICKE

CLIENT ID: B30W
CLIENT JOB NO: 1649
DATE RECEIVED: 02/22/90

MED-TOX LAB NO: 9002155-17G
MED-TOX JOB NO: 9002155
REPORT DATE: 03/20/90

PRIORITY POLLUTANT METALS

CODE	METAL	CONCENTRATION (mg/L)	DETECTION LIMIT (mg/L)	METHOD REFERENCE	INST.*
Sb	Antimony	ND	0.5	7040	V22
As	Arsenic	0.001	0.001	7060	V12
Be	Beryllium	ND	0.003	7090	V22
Cd	Cadmium	ND	0.003	7130	V22
Cr	Chromium	ND	0.02	7190	V22
Cu	Copper	0.019	0.005	7210	V22
Pb	Lead	0.05	0.01	7420	V22
Hg	Mercury	ND	0.0003	7470	Hg
Ni	Nickel	0.05	0.01	7520	V22
Se	Selenium	ND	0.03	7740	V12
Ag	Silver	ND	0.01	7760	V22
Tl	Thallium	ND	0.02	7840	V22
Zn	Zinc	0.069	0.003	7950	V22

ND = Not Detected

* INST. = Instrument Number

LEVINE-FRICKE

CLIENT ID: B31W
CLIENT JOB NO: 1649
DATE RECEIVED: 02/22/90

MED-TOX LAB NO: 9002155-18G
MED-TOX JOB NO: 9002155
REPORT DATE: 03/20/90

PRIORITY POLLUTANT METALS

CODE	METAL	CONCENTRATION (mg/L)	DETECTION LIMIT (mg/L)	METHOD REFERENCE	INST.*
Sb	Antimony	ND	0.5	7040	V22
As	Arsenic	ND	0.001	7060	V12
Be	Beryllium	ND	0.003	7090	V22
Cd	Cadmium	ND	0.003	7130	V22
Cr	Chromium	ND	0.02	7190	V22
Cu	Copper	ND	0.005	7210	V22
Pb	Lead	ND	0.01	7420	V22
Hg	Mercury	ND	0.0003	7470	Hg
Ni	Nickel	0.04	0.01	7520	V22
Se	Selenium	ND	0.03	7740	V12
Ag	Silver	ND	0.01	7760	V22
Tl	Thallium	ND	0.02	7840	V22
Zn	Zinc	0.010	0.003	7950	V22

ND = Not Detected

* INST. = Instrument Number

LEVINE-FRICKE

CLIENT PROJECT NO: 1649
DATE SAMPLED: 01/25-26/90
DATE RECEIVED: 01/26/90

MED-TOX JOB NO: 9001147
DATE EXTRACTED: 02/01/90
DATE ANALYZED: 01/29-02/05/90
REPORT DATE: 02/21/90

Sample Identification Client Id.	Lab No.	Extractable Hydrocarbons as Diesel (mg/L)	Extractable Hydrocarbons as Waste Oil (mg/L)	Purgeable Hydrocarbons as Gasoline (mg/L)
A15C	01C	ND	ND	---
B4C	02C	---	---	0.2
B4C	02E	ND	ND	---
B3C	03A	ND	ND	---
Detection Limit		0.3	0.5	0.1
EPA Method		8015	8015	8015
Instrument:		#1	#1	#9

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: A15C
CLIENT JOB NO: 1649
DATE SAMPLED: 01/25/90
DATE RECEIVED: 01/26/90
REPORT DATE: 02/21/90

MED-TOX LAB NO: 9001147-01A
MED-TOX JOB NO: 9001147
DATE ANALYZED: 01/29/90
INSTRUMENT: 12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	**75-35-4**	**14**	**5**
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: B4C
CLIENT JOB NO: 1649
DATE SAMPLED: 01/26/90
DATE RECEIVED: 01/26/90
REPORT DATE: 02/21/90

MED-TOX LAB NO: 9001147-02A
MED-TOX JOB NO: 9001147
DATE ANALYZED: 01/29/90
INSTRUMENT: 12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	**75-34-3**	**10**	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: A15(3)A
CLIENT JOB NO: 1649
DATE SAMPLED: 01/25/90
DATE RECEIVED: 01/26/90
REPORT DATE: 02/21/90

MED-TOX LAB NO: 9001146-05A
MED-TOX JOB NO: 9001146
DATE EXTRACTED: 02/03/90
DATE ANALYZED: 02/05/90
INSTRUMENT: 11

EPA METHOD 8270
GC/MS EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/kg)	DETECTION LIMIT (ug/kg)
Acenaphthene	83-32-9	ND	330
Acenaphthylene	208-96-8	ND	330
Anthracene	120-12-7	ND	330
Benzidine	92-87-5	ND	1,600
Benzoic Acid	65-85-0	ND	1,600
Benzo(a)anthracene	56-55-3	ND	330
Benzo(b)fluoranthene	205-99-2	ND	330
Benzo(k)fluoranthene	207-08-9	ND	330
Benzo(g,h,i)perylene	191-24-2	ND	330
Benzo(a)pyrene	50-32-8	ND	330
Benzyl Alcohol	100-51-6	ND	660
Bis(2-chloroethoxy) methane	111-91-1	ND	330
Bis(2-chloroethyl)ether	111-44-4	ND	330
Bis(2-chloroisopropyl) ether	39638-32-9	ND	330
Bis(2-ethylhexyl) phthalate	117-81-7	ND	330
4-Bromophenyl phenyl ether	101-55-3	ND	330
Butylbenzyl phthalate	85-68-7	ND	330
4-Chloroaniline	106-47-8	ND	660
2-Chloronaphthalene	91-58-7	ND	330
4-Chlorophenyl phenyl ether	7005-72-3	ND	330
Chrysene	218-01-9	ND	330
Dibenzo(a,h)anthracene	53-70-3	ND	330
Dibenzofuran	132-64-9	ND	330
Di-n-butylphthalate	84-74-2	ND	330
1,2-Dichlorobenzene	95-50-1	ND	330

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: A15(3)A
CLIENT JOB NO: 1649
DATE SAMPLED: 01/25/90
DATE RECEIVED: 01/26/90
REPORT DATE: 02/21/90

MED-TOX LAB NO: 9001146-05A
MED-TOX JOB NO: 9001146
DATE EXTRACTED: 02/03/90
DATE ANALYZED: 02/05/90
INSTRUMENT: 11

EPA METHOD 8270
GC/MS EXTRACTABLES (cont.)

COMPOUND	CAS #	CONCENTRATION (ug/kg)	DETECTION LIMIT (ug/kg)
1,3-Dichlorobenzene	541-73-1	ND	330
1,4-Dichlorobenzene	106-46-7	ND	330
3,3'-Dichlorobenzidine	91-94-1	ND	660
Diethylphthalate	84-66-2	ND	330
Dimethylphthalate	131-11-3	ND	330
2,4-Dinitrotoluene	121-14-2	ND	330
2,6-Dinitrotoluene	606-20-2	ND	330
Di-n-octylphthalate	117-84-0	ND	330
1,2-Diphenylhydrazine	122-66-7	ND	330
Fluoranthene	206-44-0	ND	330
Fluorene	86-73-7	ND	330
Hexachlorobenzene	118-74-1	ND	330
Hexachlorobutadiene	87-68-3	ND	330
Hexachlorocyclopentadiene	77-47-4	ND	330
Hexachloroethane	67-72-1	ND	330
Indeno(1,2,3-cd)pyrene	193-39-5	ND	330
Isophorone	78-59-1	ND	330
2-Methylnaphthalene	91-57-6	ND	330
Naphthalene	91-20-3	ND	330
2-Nitroaniline	88-74-4	ND	1,600
3-Nitroaniline	99-09-2	ND	1,600
4-Nitroaniline	100-01-6	ND	1,600
Nitrobenzene	98-95-3	ND	330
N-nitrosodimethylamine	62-75-9	ND	330
N-nitrosodiphenylamine	86-30-6	ND	330
N-nitroso-di-n-propylamine	621-64-7	ND	330
Phenanthrene	85-01-8	ND	330
Pyrene	129-00-0	ND	330
1,2,4-Trichlorobenzene	120-82-1	ND	330

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: A15(3)A
CLIENT JOB NO: 1649
DATE SAMPLED: 01/25/90
DATE RECEIVED: 01/26/90
REPORT DATE: 02/21/90

MED-TOX LAB NO: 9001146-05A
MED-TOX JOB NO: 9001146
DATE EXTRACTED: 02/03/90
DATE ANALYZED: 02/05/90
INSTRUMENT: 11

EPA METHOD 8270

GC/MS EXTRACTABLES (cont.)

COMPOUND	CAS #	CONCENTRATION (ug/kg)	DETECTION LIMIT (ug/kg)
4-Chloro-3-methylphenol	59-50-7	ND	330
2-Chlorophenol	95-57-8	ND	330
2,4-Dichlorophenol	120-83-2	ND	330
2,4-Dimethylphenol	105-67-9	ND	330
4,6-Dinitro-2-methylphenol	534-52-1	ND	1,600
2,4-Dinitrophenol	51-28-5	ND	1,600
2-Methylphenol	95-48-7	ND	330
4-Methylphenol	106-44-5	ND	330
2-Nitrophenol	88-75-5	ND	330
4-Nitrophenol	100-02-7	ND	1,600
Pentachlorophenol	87-86-5	ND	1,600
Phenol	108-95-2	ND	330
2,4,5-Trichlorophenol	95-95-4	ND	330
2,4,6-Trichlorophenol	88-06-2	ND	330

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: A15(4.5)B
CLIENT JOB NO: 1649
DATE SAMPLED: 01/25/90
DATE RECEIVED: 01/26/90
REPORT DATE: 02/21/90

MED-TOX LAB NO: 9001146-07A
MED-TOX JOB NO: 9001146
DATE EXTRACTED: 02/03/90
DATE ANALYZED: 02/05/90
INSTRUMENT: 11

EPA METHOD 8270
GC/MS EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/kg)	DETECTION LIMIT (ug/kg)
Acenaphthene	83-32-9	ND	330
Acenaphthylene	208-96-8	ND	330
Anthracene	120-12-7	ND	330
Benzidine	92-87-5	ND	1,600
Benzoic Acid	65-85-0	ND	1,600
Benzo(a)anthracene	56-55-3	ND	330
Benzo(b)fluoranthene	205-99-2	ND	330
Benzo(k)fluoranthene	207-08-9	ND	330
Benzo(g,h,i)perylene	191-24-2	ND	330
Benzo(a)pyrene	50-32-8	ND	330
Benzyl Alcohol	100-51-6	ND	660
Bis(2-chloroethoxy) methane	111-91-1	ND	330
Bis(2-chloroethyl)ether	111-44-4	ND	330
Bis(2-chloroisopropyl) ether	39638-32-9	ND	330
Bis(2-ethylhexyl) phthalate	117-81-7	ND	330
4-Bromophenyl phenyl ether	101-55-3	ND	330
Butylbenzyl phthalate	85-68-7	ND	330
4-Chloroaniline	106-47-8	ND	660
2-Chloronaphthalene	91-58-7	ND	330
4-Chlorophenyl phenyl ether	7005-72-3	ND	330
Chrysene	218-01-9	ND	330
Dibenzo(a,h)anthracene	53-70-3	ND	330
Dibenzofuran	132-64-9	ND	330
Di-n-butylphthalate	84-74-2	ND	330
1,2-Dichlorobenzene	95-50-1	ND	330

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: A15(4.5)B
CLIENT JOB NO: 1649
DATE SAMPLED: 01/25/90
DATE RECEIVED: 01/26/90
REPORT DATE: 02/21/90

MED-TOX LAB NO: 9001146-07A
MED-TOX JOB NO: 9001146
DATE EXTRACTED: 02/03/90
DATE ANALYZED: 02/05/90
INSTRUMENT: 11

EPA METHOD 8270
GC/MS EXTRACTABLES (cont.)

COMPOUND	CAS #	CONCENTRATION (ug/kg)	DETECTION LIMIT (ug/kg)
1,3-Dichlorobenzene	541-73-1	ND	330
1,4-Dichlorobenzene	106-46-7	ND	330
3,3'-Dichlorobenzidine	91-94-1	ND	660
Diethylphthalate	84-66-2	ND	330
Dimethylphthalate	131-11-3	ND	330
2,4-Dinitrotoluene	121-14-2	ND	330
2,6-Dinitrotoluene	606-20-2	ND	330
Di-n-octylphthalate	117-84-0	ND	330
1,2-Diphenylhydrazine	122-66-7	ND	330
Fluoranthene	206-44-0	ND	330
Fluorene	86-73-7	ND	330
Hexachlorobenzene	118-74-1	ND	330
Hexachlorobutadiene	87-68-3	ND	330
Hexachlorocyclopentadiene	77-47-4	ND	330
Hexachloroethane	67-72-1	ND	330
Indeno(1,2,3-cd)pyrene	193-39-5	ND	330
Isophorone	78-59-1	ND	330
2-Methylnaphthalene	91-57-6	ND	330
Naphthalene	91-20-3	ND	330
2-Nitroaniline	88-74-4	ND	1,600
3-Nitroaniline	99-09-2	ND	1,600
4-Nitroaniline	100-01-6	ND	1,600
Nitrobenzene	98-95-3	ND	330
N-nitrosodimethylamine	62-75-9	ND	330
N-nitrosodiphenylamine	86-30-6	ND	330
N-nitroso-di-n-propylamine	621-64-7	ND	330
Phenanthrene	85-01-8	ND	330
Pyrene	129-00-0	ND	330
1,2,4-Trichlorobenzene	120-82-1	ND	330

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: A15(4.5)B
CLIENT JOB NO: 1649
DATE SAMPLED: 01/25/90
DATE RECEIVED: 01/26/90
REPORT DATE: 02/21/90

MED-TOX LAB NO: 9001146-07A
MED-TOX JOB NO: 9001146
DATE EXTRACTED: 02/03/90
DATE ANALYZED: 02/05/90
INSTRUMENT: 11

EPA METHOD 8270

GC/MS EXTRACTABLES (cont.)

COMPOUND	CAS #	CONCENTRATION (ug/kg)	DETECTION LIMIT (ug/kg)
4-Chloro-3-methylphenol	59-50-7	ND	330
2-Chlorophenol	95-57-8	ND	330
2,4-Dichlorophenol	120-83-2	ND	330
2,4-Dimethylphenol	105-67-9	ND	330
4,6-Dinitro-2-methylphenol	534-52-1	ND	1,600
2,4-Dinitrophenol	51-28-5	ND	1,600
2-Methylphenol	95-48-7	ND	330
4-Methylphenol	106-44-5	ND	330
2-Nitrophenol	88-75-5	ND	330
4-Nitrophenol	100-02-7	ND	1,600
Pentachlorophenol	87-86-5	ND	1,600
Phenol	108-95-2	ND	330
2,4,5-Trichlorophenol	95-95-4	ND	330
2,4,6-Trichlorophenol	88-06-2	ND	330

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: A15C
CLIENT JOB NO: 1649
DATE SAMPLED: 01/25/90
DATE RECEIVED: 01/26/90
REPORT DATE: 02/21/90

MED-TOX LAB NO: 9001147-01D
MED-TOX JOB NO: 9001147
DATE EXTRACTED: 01/29/90
DATE ANALYZED: 02/01/90
INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acenaphthene	83-32-9	ND	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	ND	10
Benzidine	92-87-5	ND	50
Benzoic Acid	65-85-0	ND	50
Benzo(a)anthracene	56-55-3	ND	10
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	10
Benzo(g,h,i)perylene	191-24-2	ND	10
Benzo(a)pyrene	50-32-8	ND	10
Benzyl Alcohol	100-51-6	ND	20
Bis(2-chloroethoxy) methane	111-91-1	ND	10
Bis(2-chloroethyl)ether	111-44-4	ND	10
Bis(2-chloroisopropyl) ether	39638-32-9	ND	10
Bis(2-ethylhexyl) phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	10
Butylbenzyl phthalate	85-68-7	ND	10
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	10
4-Chlorophenyl phenyl ether	7005-72-3	ND	10
Chrysene	218-01-9	ND	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Dibenzofuran	132-64-9	ND	10
Di-n-butylphthalate	84-74-2	ND	10
1,2-Dichlorobenzene	95-50-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: A15C
CLIENT JOB NO: 1649
DATE SAMPLED: 01/25/90
DATE RECEIVED: 01/26/90
REPORT DATE: 02/21/90

MED-TOX LAB NO: 9001147-01D
MED-TOX JOB NO: 9001147
DATE EXTRACTED: 01/29/90
DATE ANALYZED: 02/01/90
INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES (cont.)

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
1,3-Dichlorobenzene	541-73-1	ND	10
1,4-Dichlorobenzene	106-46-7	ND	10
3,3'-Dichlorobenzidine	91-94-1	ND	20
Diethylphthalate	84-66-2	ND	10
Dimethylphthalate	131-11-3	ND	10
2,4-Dinitrotoluene	121-14-2	ND	10
2,6-Dinitrotoluene	606-20-2	ND	10
Di-n-octylphthalate	117-84-0	ND	10
1,2-Diphenylhydrazine	122-66-7	ND	10
Fluoranthene	206-44-0	ND	10
Fluorene	86-73-7	ND	10
Hexachlorobenzene	118-74-1	ND	10
Hexachlorobutadiene	87-68-3	ND	10
Hexachlorocyclopentadiene	77-47-4	ND	10
Hexachloroethane	67-72-1	ND	10
Indeno(1,2,3-cd)pyrene	193-39-5	ND	10
Isophorone	78-59-1	ND	10
2-Methylnaphthalene	91-57-6	ND	10
Naphthalene	91-20-3	ND	10
2-Nitroaniline	88-74-4	ND	50
3-Nitroaniline	99-09-2	ND	50
4-Nitroaniline	100-01-6	ND	50
Nitrobenzene	98-95-3	ND	10
N-nitrosodimethylamine	62-75-9	ND	10
N-nitrosodiphenylamine	86-30-6	ND	10
N-nitroso-di-n-propylamine	621-64-7	ND	10
Phenanthrene	85-01-8	ND	10
Pyrene	129-00-0	ND	10
1,2,4-Trichlorobenzene	120-82-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: A15C
CLIENT JOB NO: 1649
DATE SAMPLED: 01/25/90
DATE RECEIVED: 01/26/90
REPORT DATE: 02/21/90

MED-TOX LAB NO: 9001147-01D
MED-TOX JOB NO: 9001147
DATE EXTRACTED: 01/29/90
DATE ANALYZED: 02/01/90
INSTRUMENT: 11

EPA METHOD 8270

ACID EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
4-Chloro-3-methylphenol	59-50-7	ND	10
2-Chlorophenol	95-57-8	ND	10
2,4-Dichlorophenol	120-83-2	ND	10
2,4-Dimethylphenol	105-67-9	ND	10
4,6-Dinitro-2-methylphenol	534-52-1	ND	50
2,4-Dinitrophenol	51-28-5	ND	50
2-Methylphenol	95-48-7	ND	10
4-Methylphenol	106-44-5	ND	10
2-Nitrophenol	88-75-5	ND	10
4-Nitrophenol	100-02-7	ND	50
Pentachlorophenol	87-86-5	ND	50
Phenol	108-95-2	ND	10
2,4,5-Trichlorophenol	95-95-4	ND	10
2,4,6-Trichlorophenol	88-06-2	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-9G
CLIENT JOB NO: 1649
DATE SAMPLED: 01/30/90
DATE RECEIVED: 01/30/90
REPORT DATE: 02/22/90

MED-TOX LAB NO: 9001162-23E
MED-TOX JOB NO: 9001162
DATE EXTRACTED: 02/05/90
DATE ANALYZED: 02/08-09/90
INSTRUMENT: 11

EPA METHOD 8270

ACID EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
4-Chloro-3-methylphenol	59-50-7	ND	100
2-Chlorophenol	95-57-8	ND	100
2,4-Dichlorophenol	120-83-2	ND	100
2,4-Dimethylphenol	105-67-9	ND	100
4,6-Dinitro-2-methylphenol	534-52-1	ND	500
2,4-Dinitrophenol	51-28-5	ND	500
2-Methylphenol	95-48-7	ND	100
4-Methylphenol	106-44-5	ND	100
2-Nitrophenol	88-75-5	ND	100
4-Nitrophenol	100-02-7	ND	500
Pentachlorophenol	87-86-5	ND	500
Phenol	108-95-2	ND	100
2,4,5-Trichlorophenol	95-95-4	ND	100
2,4,6-Trichlorophenol	88-06-2	ND	100

ND = Not Detected

Due to an apparent 'matrix effect', it was necessary to dilute this sample 10 x to achieve adequate surrogate recovery. Reported detection limits have been adjusted accordingly.

LEVINE-FRICKE

CLIENT ID: LF-9G
CLIENT JOB NO: 1649
DATE SAMPLED: 01/30/90
DATE RECEIVED: 01/30/90
REPORT DATE: 02/22/90

MED-TOX LAB NO: 9001162-23E
MED-TOX JOB NO: 9001162
DATE EXTRACTED: 02/05/90
DATE ANALYZED: 02/08-09/90
INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES (cont.)

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
1,3-Dichlorobenzene	541-73-1	ND	100
1,4-Dichlorobenzene	106-46-7	ND	100
3,3'-Dichlorobenzidine	91-94-1	ND	200
Diethylphthalate	84-66-2	ND	100
Dimethylphthalate	131-11-3	ND	100
2,4-Dinitrotoluene	121-14-2	ND	100
2,6-Dinitrotoluene	606-20-2	ND	100
Di-n-octylphthalate	117-84-0	ND	100
1,2-Diphenylhydrazine	122-66-7	ND	100
Fluoranthene	206-44-0	ND	100
Fluorene	86-73-7	ND	100
Hexachlorobenzene	118-74-1	ND	100
Hexachlorobutadiene	87-68-3	ND	100
Hexachlorocyclopentadiene	77-47-4	ND	100
Hexachloroethane	67-72-1	ND	100
Indeno(1,2,3-cd)pyrene	193-39-5	ND	100
Isophorone	78-59-1	ND	100
2-Methylnaphthalene	91-57-6	ND	100
Naphthalene	91-20-3	ND	100
2-Nitroaniline	88-74-4	ND	500
3-Nitroaniline	99-09-2	ND	500
4-Nitroaniline	100-01-6	ND	500
Nitrobenzene	98-95-3	ND	100
N-nitrosodimethylamine	62-75-9	ND	100
N-nitrosodiphenylamine	86-30-6	ND	100
N-nitroso-di-n-propylamine	621-64-7	ND	100
Phenanthrene	85-01-8	ND	100
Pyrene	129-00-0	ND	100
1,2,4-Trichlorobenzene	120-82-1	ND	100

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-9G
CLIENT JOB NO: 1649
DATE SAMPLED: 01/30/90
DATE RECEIVED: 01/30/90
REPORT DATE: 02/22/90

MED-TOX LAB NO: 9001162-23E
MED-TOX JOB NO: 9001162
DATE EXTRACTED: 02/05/90
DATE ANALYZED: 02/08-09/90
INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acenaphthene	83-32-9	ND	100
Acenaphthylene	208-96-8	ND	100
Anthracene	120-12-7	ND	100
Benzidine	92-87-5	ND	500
Benzoic Acid	65-85-0	ND	500
Benzo(a)anthracene	56-55-3	ND	100
Benzo(b)fluoranthene	205-99-2	ND	100
Benzo(k)fluoranthene	207-08-9	ND	100
Benzo(g,h,i)perylene	191-24-2	ND	100
Benzo(a)pyrene	50-32-8	ND	100
Benzyl Alcohol	100-51-6	ND	200
Bis(2-chloroethoxy) methane	111-91-1	ND	100
Bis(2-chloroethyl)ether	111-44-4	ND	100
Bis(2-chloroisopropyl) ether	39638-32-9	ND	100
Bis(2-ethylhexyl) phthalate	117-81-7	ND	100
4-Bromophenyl phenyl ether	101-55-3	ND	100
Butylbenzyl phthalate	85-68-7	ND	100
4-Chloroaniline	106-47-8	ND	200
2-Chloronaphthalene	91-58-7	ND	100
4-Chlorophenyl phenyl ether	7005-72-3	ND	100
Chrysene	218-01-9	ND	100
Dibenzo(a,h)anthracene	53-70-3	ND	100
Dibenzofuran	132-64-9	ND	100
Di-n-butylphthalate	84-74-2	ND	100
1,2-Dichlorobenzene	95-50-1	ND	100

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-9G
CLIENT JOB NO: 1649
DATE SAMPLED: 01/30/90
DATE RECEIVED: 01/30/90
REPORT DATE: 02/22/90

MED-TOX LAB NO: 9001162-23A
MED-TOX JOB NO: 9001162
DATE ANALYZED: 02/03/90
INSTRUMENT: 12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	10
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

FILE
1649

MED-TOX ASSOCIATES, INC.

ENVIRONMENTAL & OCCUPATIONAL HEALTH SERVICES

3440 Vincent Road Pleasant Hill, CA 94523 • (415) 930-9090 • FAX# (415) 930-0256

LABORATORY ANALYSIS REPORT

LEVINE-FRICKE
1900 POWELL ST., 12TH FL.
EMERYVILLE, CA 94608

ATTN: AMANDA SPENCER

REPORT DATE: 02/22/90

DATE SAMPLED: 01/26-30/90
DATE RECEIVED: 01/30/90
DATE EXTRACTED: 02/02/90
DATE ANALYZED: 02/01-12/90

CLIENT PROJECT NO: 1649

MED-TOX JOB NO: 9001162

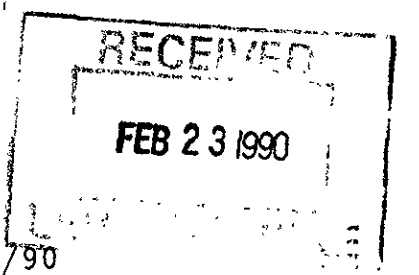
ANALYSIS OF: SOIL AND WATER SAMPLES FOR PURGEABLE AND EXTRACTABLE HYROCARBONS, HERBICIDES, GC/MS VOLATILE ORGANICS, GC/MS EXTRACTABLES, POLYNUCLEAR AROMATIC HYDROCARBONS, AND PRIORITY POLLUTANT METALS

Sample Identification Client Id.	Lab No.	Purgeable Hydrocarbons as Stoddard Solvent (mg/L)	Purgeable Hydrocarbons as Gasoline (mg/L)	Extractable Hydrocarbons as Diesel (mg/L)	Extractable Hydrocarbons as Waste Oil (mg/L)
LF-96	23C	3.6	ND	---	---
LF-96	23G	---	---	ND	7.8
Detection limit		0.1	4	0.3	0.5

Method: EPA 8015

Instrument: 9, 1

ND = Not Detected



Michael Lynch, Manager
Organic Laboratory

Results FAXed to Amanda Spencer 02/10/90 & 02/12/90

CLIENT PROJECT NO: 1649
CLIENT SAMPLE ID: C7WD
DATE SAMPLED: 01/31/90
DATE RECEIVED: 01/31/90

REPORT DATE: 02/27/90
MED-TOX JOB NO: 9001167
MED-TOX LAB NO: 9001167-15G
DATE EXTRACTED: 02/05/90
DATE ANALYZED: 02/08/90

EPA METHOD 8270
POLYNUCLEAR AROMATIC HYDROCARBONS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acenaphthene	83-32-9	ND	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	ND	10
Benzo(a)anthracene	56-55-3	ND	10
Benzo(a)pyrene	50-32-8	ND	10
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	10
Benzo(ghi)perylene	191-24-2	ND	10
Chrysene	218-01-9	ND	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Fluoranthene	206-44-0	ND	10
Fluorene	86-73-7	ND	10
Indeno(1,2,3-cd)pyrene	193-39-5	ND	10
Naphthalene	91-20-3	ND	10
Phenanthrene	85-01-8	ND	10
Pyrene	129-00-0	ND	10

ND = Not Detected

CLIENT PROJECT NO: 1649
CLIENT SAMPLE ID: C16WD
DATE SAMPLED: 01/31/90
DATE RECEIVED: 01/31/90

REPORT DATE: 02/27/90
MED-TOX JOB NO: 9001167
MED-TOX LAB NO: 9001167-16G
DATE EXTRACTED: 02/05/90
DATE ANALYZED: 02/08/90

EPA METHOD 8270
POLYNUCLEAR AROMATIC HYDROCARBONS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acenaphthene	83-32-9	ND	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	ND	10
Benzo(a)anthracene	56-55-3	ND	10
Benzo(a)pyrene	50-32-8	ND	10
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	10
Benzo(ghi)perylene	191-24-2	ND	10
Chrysene	218-01-9	ND	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Fluoranthene	206-44-0	ND	10
Fluorene	86-73-7	ND	10
Indeno(1,2,3-cd)pyrene	193-39-5	ND	10
Naphthalene	91-20-3	ND	10
Phenanthrene	85-01-8	ND	10
Pyrene	129-00-0	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: C16WA
CLIENT JOB NO: 1649
DATE SAMPLED: 01/31/90
DATE RECEIVED: 01/31/90
REPORT DATE: 02/27/90

MED-TOX LAB NO: 9001167-16A
MED-TOX JOB NO: 9001167
DATE ANALYZED: 02/13/90
INSTRUMENT: #12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: C7WA
CLIENT JOB NO: 1649
DATE SAMPLED: 01/31/90
DATE RECEIVED: 01/31/90
REPORT DATE: 02/27/90

MED-TOX LAB NO: 9001167-15A
MED-TOX JOB NO: 9001167
DATE ANALYZED: 02/13/90
INSTRUMENT: #12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT PROJECT NO: 1649
DATE SAMPLED: 01/31/90
DATE RECEIVED: 01/31/90

MED-TOX JOB NO: 9001167
DATE EXTRACTED: 02/05/90
DATE ANALYZED: 02/05-22/90
REPORT DATE: 02/27/90

Sample Identification Client Id.	Lab No.	Extractable Hydrocarbons as Diesel (mg/L)	Extractable Hydrocarbons as Waste Oil (mg/L)	Purgeable Hydrocarbons as Gasoline (mg/L)
C7WB	15C	---	---	ND
C7WD	15H	ND	0.5	---
C16WB	16C	---	---	ND
C16WD	16H	ND	0.7	---
Detection Limit		0.3	0.5	0.1
EPA Method		8015	8015	8015
Instrument:		5	5	9

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: C18W
CLIENT JOB NO: 1649
DATE RECEIVED: 02/09/90

MED-TOX LAB NO: 9002063-01G
MED-TOX JOB NO: 9002063
REPORT DATE: 03/12/90

PRIORITY POLLUTANT METALS

CODE	METAL	CONCENTRATION (mg/L)	DETECTION LIMIT (mg/L)	METHOD REFERENCE	INST.*
Sb	Antimony	ND	0.5	7040	V22
As	Arsenic	0.001	0.001	7060	V12
Be	Beryllium	ND	0.003	7090	V22
Cd	Cadmium	ND	0.003	7130	V22
Cr	Chromium	ND	0.02	7190	V22
Cu	Copper	ND	0.005	7210	V22
Pb	Lead	ND	0.01	7420	V22
Hg	Mercury	ND	0.0003	7470	Hg
Ni	Nickel	0.02	0.01	7520	V22
Se	Selenium	ND	0.003	7740	V12
Ag	Silver	ND	0.01	7760	V22
Tl	Thallium	ND	0.02	7840	V22
Zn	Zinc	0.017	0.003	7950	V22

ND = Not Detected

* INST. = Instrument Number

LEVINE-FRICKE

CLIENT ID: C10W
CLIENT JOB NO: 1649
DATE SAMPLED: 02/08/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/12/90

MED-TOX LAB NO: 9002063-03E
MED-TOX JOB NO: 9002063

DATE ANALYZED: 02/13/90
INSTRUMENT: 9

BTXE AND HYDROCARBONS

METHOD: EPA 8020, 8015 (PURGE & TRAP)

	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene.	ND	0.5
Xylenes	ND	2
PURGEABLE HYDROCARBONS AS:		
Gasoline	ND mg/L	0.1 mg/L

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: C20W
CLIENT JOB NO: 1649
DATE SAMPLED: 02/07/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/12/90

MED-TOX LAB NO: 9002063-02E
MED-TOX JOB NO: 9002063

DATE ANALYZED: 02/13/90
INSTRUMENT: 9

BTXE AND HYDROCARBONS

METHOD: EPA 8020, 8015 (PURGE & TRAP)

	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene.	ND	0.5
Xylenes	ND	2
PURGEABLE HYDROCARBONS AS:		
Gasoline*	ND mg/L	0.1 mg/L

ND = Not Detected
* Sample contains solvent peaks other than gasoline.

LEVINE-FRICKE

CLIENT PROJECT NO: 1649 **MED-TOX JOB NO: 9002063**

DATE SAMPLED: 02/07-08/90 DATE ANALYZED: 02/13/90

DATE RECEIVED: 02/09/90 REPORT DATE: 03/12/90

Sample Identification Client Id.	Lab No.	Extractable Hydrocarbons as Diesel (mg/L)	Purgeable Hydrocarbons as Gasoline (mg/L)	Lead* (mg/L)	pH (S.U.)
C18W	01E	ND	ND	--	--
C18W	01G	--	--	--	7.0
C20W	02G	--	--	ND	7.0
C10W	03G	--	--	ND	7.0
Detection limit		0.5	0.1	0.01	NA
EPA Method		8015	8015	7420	9040
Instrument		9	9	V22	ISE

* Samples for metals were filtered through a 0.45um filter and preserved with HNO_3 on 02/09/90.

ND = Not Detected
NA = Not Applicable

File
1649

MED-TOX ASSOCIATES, INC.

ENVIRONMENTAL & OCCUPATIONAL HEALTH SERVICES

3440 Vincent Road Pleasant Hill, CA 94523 • (415) 930-9090 • FAX# (415) 930-0256

LABORATORY ANALYSIS REPORT

LEVINE-FRICKE
1900 POWELL STREET
12TH FLOOR
EMERYVILLE, CA 94608
ATTN: AMANDA SPENCER

CLIENT ID NO: 1649

REPORT DATE: 05/10/90

DATE SAMPLED: 04/25-26/90

DATE RECEIVED: 04/27/90

MED-TOX JOB NO: 9004182

ANALYSIS OF: WATER SAMPLES FOR PURGEABLE HALOCARBONS

See attached for results

Michael Lynch, Manager
Organic Laboratory

RECEIVED
MAY 11 1990
LEVINE-FRICKE

Results FAXed to Amanda Spencer 05/04/90

LEVINE-FRICKE

CLIENT ID: LF-4D
CLIENT JOB NO: 1649
DATE SAMPLED: 04/25/90
DATE RECEIVED: 04/27/90
REPORT DATE: 05/10/90

MED-TOX LAB NO: 9004182-01A
MED-TOX JOB NO: 9004182

DATE ANALYZED: 04/30-05/01/90
INSTRUMENT: 8

EPA METHOD 8010
PURGEABLE HALOCARBONS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	**75-34-3**	**7**	**0.5**
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	**75-35-4**	**430**	**0.5**
1,2-Dichloroethene, total	540-59-0	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	**71-55-6**	**87**	**0.5**
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-19
CLIENT JOB NO: 1649
DATE SAMPLED: 04/25/90
DATE RECEIVED: 04/27/90
REPORT DATE: 05/10/90

MED-TOX LAB NO: 9004182-02A
MED-TOX JOB NO: 9004182

DATE ANALYZED: 04/30-05/01/90
INSTRUMENT: 8

EPA METHOD 8010
PURGEABLE HALOCARBONS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	**75-34-3**	**6**	**0.5**
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	**75-35-4**	**150**	**0.5**
1,2-Dichloroethene, total	540-59-0	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	**71-55-6**	**34**	**0.5**
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-18
CLIENT JOB NO: 1649
DATE SAMPLED: 04/25/90
DATE RECEIVED: 04/27/90
REPORT DATE: 05/10/90

MED-TOX LAB NO: 9004182-03A
MED-TOX JOB NO: 9004182

DATE ANALYZED: 04/30/90
INSTRUMENT: 8

EPA METHOD 8010
PURGEABLE HALOCARBONS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	**75-35-4**	**3**	**0.5**
1,2-Dichloroethene, total	540-59-0	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-17
CLIENT JOB NO: 1649
DATE SAMPLED: 04/25/90
DATE RECEIVED: 04/27/90
REPORT DATE: 05/10/90

MED-TOX LAB NO: 9004182-04A
MED-TOX JOB NO: 9004182

DATE ANALYZED: 04/30/90
INSTRUMENT: 8

EPA METHOD 8010
PURGEABLE HALOCARBONS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	**75-34-3**	**1**	**0.5**
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	**75-35-4**	**9**	**0.5**
1,2-Dichloroethene, total	540-59-0	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	**71-55-6**	**3**	**0.5**
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-17B
CLIENT JOB NO: 1649
DATE SAMPLED: 04/25/90
DATE RECEIVED: 04/27/90
REPORT DATE: 05/10/90

MED-TOX LAB NO: 9004182-05A
MED-TOX JOB NO: 9004182

DATE ANALYZED: 04/30/90
INSTRUMENT: 8

EPA METHOD 8010
PURGEABLE HALOCARBONS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
1,2-Dichloroethene, total	540-59-0	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-5D
CLIENT JOB NO: 1649
DATE SAMPLED: 04/26/90
DATE RECEIVED: 04/27/90
REPORT DATE: 05/10/90

MED-TOX LAB NO: 9004182-06A
MED-TOX JOB NO: 9004182

DATE ANALYZED: 04/30/90
INSTRUMENT: 8

EPA METHOD 8010
PURGEABLE HALOCARBONS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
1,2-Dichloroethene, total	540-59-0	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-20
CLIENT JOB NO: 1649
DATE SAMPLED: 04/26/90
DATE RECEIVED: 04/27/90
REPORT DATE: 05/10/90

MED-TOX LAB NO: 9004182-08A
MED-TOX JOB NO: 9004182

DATE ANALYZED: 04/30/90
INSTRUMENT: 8

EPA METHOD 8010
PURGEABLE HALOCARBONS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
1,2-Dichloroethene, total	540-59-0	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-120
CLIENT JOB NO: 1649
DATE SAMPLED: 04/26/90
DATE RECEIVED: 04/27/90
REPORT DATE: 05/10/90

MED-TOX LAB NO: 9004182-09A
MED-TOX JOB NO: 9004182

DATE ANALYZED: 04/30/90
INSTRUMENT: 8

EPA METHOD 8010
PURGEABLE HALOCARBONS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Bromodichloromethane	75-27-4	ND	0.5
Bromoform	75-25-2	ND	0.5
Bromomethane	74-83-9	ND	0.5
Carbon Tetrachloride	56-23-5	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
Chloroethane	75-00-3	ND	0.5
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5
Chloroform	67-66-3	ND	0.5
Chloromethane	74-87-3	ND	0.5
Dibromochloromethane	124-48-1	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Dichlorodifluoromethane	75-71-8	ND	0.5
1,1-Dichloroethane	75-34-3	ND	0.5
1,2-Dichloroethane	107-06-2	ND	0.5
1,1-Dichloroethene	75-35-4	ND	0.5
1,2-Dichloroethene, total	540-59-0	ND	0.5
1,2-Dichloropropane	78-87-5	ND	0.5
cis-1,3-Dichloropropene	10061-01-5	ND	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	0.5
Methylene Chloride	75-09-2	ND	0.5
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5
Tetrachloroethene	127-18-4	ND	0.5
1,1,1-Trichloroethane	71-55-6	ND	0.5
1,1,2-Trichloroethane	79-00-5	ND	0.5
Trichloroethene	79-01-6	ND	0.5
Trichlorofluoromethane	75-69-4	ND	0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ND	0.5
Vinyl Chloride	75-01-4	ND	0.5

ND = Not Detected

R-3,8-2

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

9004182

Project No.: 1649	Field Logbook No.:	Date: 4/26/90	Serial No.: No 7852
Project Name: Yerba Buena	Project Location: Oakland		
Sampler (Signature): Kyle H Kricher			Samplers: KHK

SAMPLES / ANALYSES

SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	EPA 601	EPA 624	~~EPA 625~~				HOLD	RUSH	REMARKS
LF-4D	4/25/90	16:30	01A,B	2	VOA	X								Normal T-A-T
LF-19	4/25/90	15:00	02A,B	2	VOA	X								Normal T-A-T
LF-18	4/25/90	13:10	03A,B	2	VOA	X								Normal T-A-T
LF-17	4/25/90	10:30	04A,B	2	VOA	X								Normal T-A-T
LF-17B	4/25/90	10:30	05A,B	2	VOA	X								Normal T-A-T
LF-5D	4/26/90	15:50	06A,B	2	VOA	X								Normal T-A-T
LF-5D FB	4/26/90	15:45	07A,B	2	VOA	X						X		Normal T-A-T
LF-20	4/26/90	15:30	08A,B	2	VOA	X								Normal T-A-T
LF-12D	4/26/90	15:30	09A,B	2	VOA	X								Normal T-A-T
														Amanda Spencer

RELINQUISHED BY: (Signature) Kyle H Kricher	DATE 4/27/90	TIME 9:50	RECEIVED BY: (Signature) Talon St John	DATE 4/27/90	TIME 9:50
RELINQUISHED BY: (Signature) Talon St John	DATE 4/27/90	TIME 10:35	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature) Denise Harrington	DATE 4/27/90	TIME 1035
METHOD OF SHIPMENT:	DATE	TIME	LAB COMMENTS:		

Sample Collector: LEVINE-FRICKE
1900 Powell Street, 12th Floor
Emeryville, Ca 94608
(415) 652-4500

Analytical Laboratory: Mea-Tox
Pleasant Hill CA

Shipping Cc White) Lab Copy (Green) File Copy (Yellow) F Copy (Pink) FORM NO /COC/ARF

File 1649

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Andrew John Friedman
James E. Bruya, Ph.D.
(206) 285-8282

3008-B 16th Avenue West
Seattle, WA 98119
FAX: (206) 283-5044

June 4, 1990

Amanda Spencer, Project Leader
Levine-Fricke, Inc.
1900 Powell, 12th Floor
Emeryville, CA 94608

Dear Ms. Spencer:

Enclosed are the results of the analyses of the samples submitted on May 25, 1990 from Project 1649.

We appreciate this opportunity to be of service to you on this project. If you have any questions regarding this material, or if you just want to discuss any aspect of your projects, please do not hesitate to contact me.

Sincerely,

Andrew John Friedman, for

Kathy McMullen, Chemist

KMC

Enclosures

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: June 4, 1990
Date Submitted: May 25, 1990
Project: 1649

**RESULTS OF ANALYSES OF WATER SAMPLES
FOR NONHALOGENATED ORGANICS
BY EPA METHOD 8015
(GAS AND DIESEL)
Results Reported as mg/L (ppm)**

Sample #	Gasoline (ppm)	Diesel (ppm)
BB3	<1	1[a]
BB6	<1	4[a]
BB7	<1	<1
Quality Assurance		
Method Blank	<1	<1
BB7 (Duplicate)	<1	<1
BB7 (Matrix Spike) Spiked @ 100 ppm Percent Recovery	120%	260%
BB7 (Matrix Spike Duplicate) Spiked @ 100 ppm Percent Recovery	120%	170%

[a] - The gas and diesel scans indicated the presence of polar materials. These may be fatty acids or phenols.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: June 4, 1990
Date Submitted: May 25, 1990
Project: 1649

RESULTS OF ANALYSES OF WATER SAMPLES BY THIN LAYER CHROMATOGRAPHY (TLC)

Samples BB3, BB6, and BB7 compared best to the mineral spirits standard after development in Iodine. Also present in each column was a band near the origin indicative of poly nuclear aromatics. BB6 appeared to have a greater concentration of the above materials than samples BB3 and BB7.

Sample	TLC Characterization
BB3	This sample contained low levels of saturated hydrocarbons (Rf(Hexane)=.9), aromatic hydrocarbons (Rf(Hexane)= 0.1-0.2), fluorescent under long wave UV, (Rf(methylene chloride)=0.8), and fluorescent under long wave UV whose Rf(methylene chloride)$\leq$0.5. This would be indicative of a broad mixture of compounds including phenols, fatty acids or other biogenic compounds.
BB6	This sample contained the same types of compounds described in sample BB3, but at higher concentrations.
BB7	This sample contained the same types of compounds described in sample BB3, at roughly the same concentrations.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: June 4, 1990
Date Submitted: May 25, 1990
Project: 1649

RESULTS OF ANALYSES OF ONE WATER SAMPLE FOR FINGERPRINT CHARACTERIZATION BY CAPILLARY GAS CHROMATOGRAPHY

Sample #	GC Characterization
BB6	The gas chromatographic trace showed a pattern of peaks in which biogenic organic compounds appeared to predominate. The gas chromatographic trace was characteristic of fatty acids and other polar biogenic compounds.

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: 1647	Field Logbook No.:	Date: 5/24/90	Serial No.: 7576
Project Name: Ferina Buena	Project Location: Emeryville		
Sampler (Signature): [signature]			Samplers: A Spencer

SAMPLES						ANALYSES								
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	EPA 601	EPA 624	TPH *				HOLD	RUSH	REMARKS
BB5	5/24		12634	2	GW			X						
BB6	"		12635 12636	2	"			"						* fuel characterization
BB7	"		12637 12638	2	"			"						
													1	1 week turnaround time if possible
5	5/25	7:55	12642	2 WATER										

RELINQUISHED BY: (Signature) [signature]	DATE 5/24/90	TIME 1:10pm	RECEIVED BY: (Signature) [signature]	DATE 5/24/90	TIME 3:10
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature) [signature]	DATE 5-25-90	TIME 12:11PM
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT:	DATE	TIME	LAB COMMENTS:		

Sample Collector:
LEVINE-FRICKE
1900 Powell Street, 12th Floor
Emeryville, Ca 94608
(415) 652-4500

Analytical Laboratory: Friedman & Bruya
3012 16th Ave W
Seattle WA 98119

Shipping Copy (White) Lab Copy (Green) File Copy (Yellow) Field Copy (Pink) FORM NO. 86/COC/ARF

FILE
1649

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Andrew John Friedman
James E. Bruya, Ph.D.
(206) 285-8282

3008-B 16th Avenue West
Seattle, WA 98119
FAX: (206) 283-5044

May 4, 1990

Kyle H. Kirchen, Project Leader
Levine-Fricke, Inc.
1900 Powell, 12th Floor
Emeryville, CA 94608

Dear Mr. Kirchen:

Enclosed are the results of the analyses of the samples submitted on April 30, 1990 from Project 1649.

The chromatograms of sample BB-1 showed some material that eluted in the range of diesel but did not appear to be whole diesel. We have seen similar looking products but these are new speciality chemical products provided specifically for assisting in bio-remediation activities. Alternatively, the unusual peak pattern and the low level of contamination may indicate that this material represents the water soluble portion of a petroleum product.

Because of the selective water solubility of various individual organic compounds that make up petroleum compounds, we are unable at this time to identify the possible source of water soluble products with a high degree of certainty. Soil samples retain a greater percentage of the compounds present in whole petroleum products which makes contaminant identification more certain. Further analysis, by liquid chromatography or GC/MS may shed more light on the identity of the material present in sample BB-1. We can proceed in these areas if you should want us to do so.

We appreciate this opportunity to be of service to you on this project. If you have any questions regarding this material, or if you just want to discuss any aspect of your projects, please do not hesitate to contact me.

Sincerely,

James E. Bruya, Ph.D.

JEB

Enclosures

MAY - 7 [redacted]

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: May 4, 1990
Date Submitted: April 30, 1990
Project: 1649

RESULTS OF ANALYSES OF WATER SAMPLES FOR NONHALOGENATED ORGANICS BY EPA METHOD 8015 (GAS AND DIESEL)
Results Reported as mg/L (ppm)

Sample #	Gasoline (ppm)	Diesel (ppm)
BB-1	<1	3[a]
BB-8	<1	<2
Quality Assurance		
Method Blank	<1	<2
BB-1 (Duplicate)	<1	3[a]
BB-1 (Matrix Spike) Spiked @ 10 ppm Percent Recovery	120%	140%

[a] - Contamination seen was not indicative of diesel.

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: 1647	Field Logbook No.:	Date: 4/ 1/90	Serial No.: 7875
Project Name: Yerba Buena	Project Location: Emeryville CA		
Sampler (Signature): S. A Fricke			Samplers: AHK

SAMPLES						ANALYSES								
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	EPA 601	EPA 624	TPH 8015 *				HOLD	RUSH	REMARKS
1-1	4/1/90	1:00	11-12-1	24	GOA			X						
1-C	4/1/90	10:50	11-12	2	VOA			X						* Fuel characterization & quant. confirm

RELINQUISHED BY: (Signature)	DATE 4/5/90	TIME 5:17 PM	RECEIVED BY: (Signature)	DATE 4/27/90	TIME 1735
RELINQUISHED BY: (Signature)	DATE 4-27-90	TIME 5:40 PM	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT:	DATE	TIME	LAB COMMENTS:		

Sample Collector:
LEVINE-FRICKE
1900 Powell Street, 12th Floor
Emeryville, Ca 94608
(415) 652-4500

Analytical Laboratory: Friedman & Bruya
ATTN Jon Bruya
3006 B 16th West
Seattle WA 98119

Shipping / (White) Lab Copy (Green) File Copy (Yellow) Old Copy (Pink) FORM 86/COC/ARF

LEVINE-FRICKE

CLIENT PROJECT NO: 1649

REPORT DATE: 03/14/90

DATE EXTRACTED: 02/23/90
DATE ANALYZED: 02/21-03/01/90

MED-TOX JOB NO: 9002105

Sample Identification Client Id.	Lab No.	Extractable Hydrocarbons as Diesel (mg/L)	Extractable Hydrocarbons as Waste Oil (mg/L)	Purgeable Hydrocarbons as Gasoline (mg/L)
C28W	12G	ND	ND	---
Detection limit (unless otherwise indicated by parentheses)		0.3	0.5	0.1
Method		8015	8015	8015
Instrument:		3	3	5

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: C28W
CLIENT JOB NO: 1649
DATE SAMPLED: 02/12/90
DATE RECEIVED: 02/15/90

REPORT DATE: 03/14/90

MED-TOX LAB NO: 9002105-12A
MED-TOX JOB NO: 9002105
DATE EXTRACTED: 02/23/90

DATE ANALYZED: 02/21-27/90
INSTRUMENT: 9, 5

BTXE AND HYDROCARBONS

METHOD: EPA 8020, 8015 (PURGE & TRAP AND EXTRACTION)

	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene.	ND	0.5
Xylenes	ND	2
PURGEABLE HYDROCARBONS AS:		
Gasoline	ND mg/L	0.1 mg/L
EXTRACTABLE HYDROCARBONS AS:		
Lab No: 12G		
Diesel	ND mg/L	0.3 mg/L
Waste Oil	ND mg/L	0.5 mg/L

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: C29W
CLIENT JOB NO: 1649
DATE SAMPLED: 02/15/90
DATE RECEIVED: 02/16/90
REPORT DATE: 03/15/90

MED-TOX LAB NO: 9002122-21C
MED-TOX JOB NO: 9002122
DATE ANALYZED: 02/27/90
INSTRUMENT: 12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	**79-01-6**	**62**	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT PROJECT NO: 1649

DATE SAMPLED: 02/07/90

DATE RECEIVED: 02/09/90

MED-TOX JOB NO: 9002064

DATE EXTRACTED: 02/21/90

DATE ANALYZED: 02/14-23/90

REPORT DATE: 03/02/90

Sample Identification Client Id.	Lab No.	Extractable Hydrocarbons as Diesel (mg/L)	Extractable Hydrocarbons as Waste Oil (mg/L)	Purgeable Hydrocarbons as Gasoline (mg/L)
LF-4-7501	02C	--	--	ND
LF-4-7501	02H	ND	ND	--
LF-6-7501	03C	--	--	ND
LF-6-7501	03H	ND	ND	--
LF-6D-7501	04C	--	--	ND
LF-6D-7501	04G	ND	ND	--
LF-8-7501	05C	--	--	ND
LF-8-7501	05H	ND	ND	--
Detection Limit		0.3	0.5	0.1
EPA Method		8015	8015	8015
Instrument:		5	5	9

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-4-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/07/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002064-02A
MED-TOX JOB NO: 9002064
DATE ANALYZED: 02/19-21/90
INSTRUMENT: 12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	**75-34-3**	**8**	**5**
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	**75-35-4**	**490**	**5**
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	**71-55-6**	**82**	**5**
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-6-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/07/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002064-03A
MED-TOX JOB NO: 9002064
DATE ANALYZED: 02/19/90
INSTRUMENT: 12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	**75-34-3**	**18**	**5**
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-6D-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/07/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002064-04A
MED-TOX JOB NO: 9002064
DATE ANALYZED: 02/19/90
INSTRUMENT: 12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	**75-34-3**	**18**	**5**
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-8-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/07/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002064-05A
MED-TOX JOB NO: 9002064
DATE ANALYZED: 02/19/90
INSTRUMENT: 12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	**75-34-3**	**15**	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	**75-35-4**	**6**	**5**
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	**71-55-6**	**10**	**5**
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-10-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/08/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002065-02A
MED-TOX JOB NO: 9002065
DATE ANALYZED: 02/22-26/90
INSTRUMENT: 12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	**75-35-4**	**31**	**5**
1,2-Dichloroethene, total	**540-59-0**	**3,200**	**5**
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	**127-18-4**	**41**	**5**
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	**79-00-5**	**7**	**5**
Trichloroethene	**79-01-6**	**7,600**	**5**
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	**75-01-4**	**1,000**	**10**
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-9-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/08/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002065-03A
MED-TOX JOB NO: 9002065
DATE ANALYZED: 02/22-24/90
INSTRUMENT: 12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	**79-01-6**	**34**	**5**
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-7-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/08/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002065-04A
MED-TOX JOB NO: 9002065
DATE ANALYZED: 02/22/90
INSTRUMENT: 12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-11-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/09/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002066-02A
MED-TOX JOB NO: 9002066
DATE ANALYZED: 02/23-24/90
INSTRUMENT: 12

EPA METHOD 8240
GC/MS VOLATILE ORGANICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acetone	67-64-1	ND	1000
Benzene	71-43-2	ND	50
Bromodichloromethane	75-27-4	ND	50
Bromoform	75-25-2	ND	50
Bromomethane	74-83-9	ND	100
2-Butanone	78-93-3	ND	1000
Carbon Disulfide	75-15-0	ND	100
Carbon Tetrachloride	56-23-5	ND	50
Chlorobenzene	108-90-7	ND	50
Chloroethane	75-00-3	ND	100
2-Chloroethyl Vinyl Ether	110-75-8	ND	100
Chloroform	67-66-3	ND	50
Chloromethane	74-87-3	ND	100
Dibromochloromethane	124-48-1	ND	50
1,1-Dichloroethane	75-34-3	ND	50
1,2-Dichloroethane	107-06-2	ND	50
1,1-Dichloroethene	75-35-4	ND	50
1,2-Dichloroethene, total	**540-59-0**	**51**	**50**
1,2-Dichloropropane	78-87-5	ND	50
cis-1,3-Dichloropropene	10061-01-5	ND	50
trans-1,3-Dichloropropene	10061-02-6	ND	50
Ethylbenzene	100-41-4	ND	50
2-Hexanone	591-78-6	ND	500
Methylene Chloride	75-09-2	ND	50
4-Methyl-2-pentanone	108-10-1	ND	500
Styrene	100-42-5	ND	50
1,1,2,2-Tetrachloroethane	79-34-5	ND	50
Tetrachloroethene	127-18-4	ND	50
Toluene	108-88-3	ND	50
1,1,1-Trichloroethane	71-55-6	ND	50
1,1,2-Trichloroethane	79-00-5	ND	50
Trichloroethene	**79-01-6**	**310**	**50**
Vinyl Acetate	108-05-4	ND	500
Vinyl Chloride	75-01-4	ND	100
Xylenes, total	1330-20-7	ND	100

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-4-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/07/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002064-02F
MED-TOX JOB NO: 9002064
DATE EXTRACTED: 02/13/90
DATE ANALYZED: 02/19/90
INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acenaphthene	83-32-9	ND	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	ND	10
Benzidine	92-87-5	ND	50
Benzoic Acid	65-85-0	ND	50
Benzo(a)anthracene	56-55-3	ND	10
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	10
Benzo(g,h,i)perylene	191-24-2	ND	10
Benzo(a)pyrene	50-32-8	ND	10
Benzyl Alcohol	100-51-6	ND	20
Bis(2-chloroethoxy) methane	111-91-1	ND	10
Bis(2-chloroethyl)ether	111-44-4	ND	10
Bis(2-chloroisopropyl) ether	108-60-1	ND	10
Bis(2-ethylhexyl) phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	10
Butylbenzyl phthalate	85-68-7	ND	10
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	10
4-Chlorophenyl phenyl ether	7005-72-3	ND	10
Chrysene	218-01-9	ND	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Dibenzofuran	132-64-9	ND	10
Di-n-butylphthalate	84-74-2	ND	10
1,2-Dichlorobenzene	95-50-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-4-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/07/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002064-02F
MED-TOX JOB NO: 9002064
DATE EXTRACTED: 02/13/90
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INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES (cont.)

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
1,3-Dichlorobenzene	541-73-1	ND	10
1,4-Dichlorobenzene	106-46-7	ND	10
3,3'-Dichlorobenzidine	91-94-1	ND	20
Diethylphthalate	84-66-2	ND	10
Dimethylphthalate	131-11-3	ND	10
2,4-Dinitrotoluene	121-14-2	ND	10
2,6-Dinitrotoluene	606-20-2	ND	10
Di-n-octylphthalate	117-84-0	ND	10
1,2-Diphenylhydrazine	122-66-7	ND	10
Fluoranthene	206-44-0	ND	10
Fluorene	86-73-7	ND	10
Hexachlorobenzene	118-74-1	ND	10
Hexachlorobutadiene	87-68-3	ND	10
Hexachlorocyclopentadiene	77-47-4	ND	10
Hexachloroethane	67-72-1	ND	10
Indeno(1,2,3-cd)pyrene	193-39-5	ND	10
Isophorone	78-59-1	ND	10
2-Methylnaphthalene	91-57-6	ND	10
Naphthalene	91-20-3	ND	10
2-Nitroaniline	88-74-4	ND	50
3-Nitroaniline	99-09-2	ND	50
4-Nitroaniline	100-01-6	ND	50
Nitrobenzene	98-95-3	ND	10
N-nitrosodimethylamine	62-75-9	ND	10
N-nitrosodiphenylamine	86-30-6	ND	10
N-nitroso-di-n-propylamine	621-64-7	ND	10
Phenanthrene	85-01-8	ND	10
Pyrene	129-00-0	ND	10
1,2,4-Trichlorobenzene	120-82-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-4-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/07/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002064-02F
MED-TOX JOB NO: 9002064
DATE EXTRACTED: 02/13/90
DATE ANALYZED: 02/19/90
INSTRUMENT: 11

EPA METHOD 8270

ACID EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
4-Chloro-3-methylphenol	59-50-7	ND	10
2-Chlorophenol	95-57-8	ND	10
2,4-Dichlorophenol	120-83-2	ND	10
2,4-Dimethylphenol	105-67-9	ND	10
4,6-Dinitro-2-methylphenol	534-52-1	ND	50
2,4-Dinitrophenol	51-28-5	ND	50
2-Methylphenol	95-48-7	ND	10
4-Methylphenol	106-44-5	ND	10
2-Nitrophenol	88-75-5	ND	10
4-Nitrophenol	100-02-7	ND	50
Pentachlorophenol	87-86-5	ND	50
Phenol	108-95-2	ND	10
2,4,5-Trichlorophenol	95-95-4	ND	10
2,4,6-Trichlorophenol	88-06-2	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-6-7501
CLIENT JOB NO: 1649
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REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002064-03F
MED-TOX JOB NO: 9002064
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DATE ANALYZED: 02/19/90
INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acenaphthene	83-32-9	ND	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	ND	10
Benzidine	92-87-5	ND	50
Benzoic Acid	65-85-0	ND	50
Benzo(a)anthracene	56-55-3	ND	10
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	10
Benzo(g,h,i)perylene	191-24-2	ND	10
Benzo(a)pyrene	50-32-8	ND	10
Benzyl Alcohol	100-51-6	ND	20
Bis(2-chloroethoxy) methane	111-91-1	ND	10
Bis(2-chloroethyl)ether	111-44-4	ND	10
Bis(2-chloroisopropyl) ether	108-60-1	ND	10
Bis(2-ethylhexyl) phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	10
Butylbenzyl phthalate	85-68-7	ND	10
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	10
4-Chlorophenyl phenyl ether	7005-72-3	ND	10
Chrysene	218-01-9	ND	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Dibenzofuran	132-64-9	ND	10
Di-n-butylphthalate	84-74-2	ND	10
1,2-Dichlorobenzene	95-50-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-6-7501
CLIENT JOB NO: 1649
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MED-TOX LAB NO: 9002064-03F
MED-TOX JOB NO: 9002064
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DATE ANALYZED: 02/19/90
INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES (cont.)

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
1,3-Dichlorobenzene	541-73-1	ND	10
1,4-Dichlorobenzene	106-46-7	ND	10
3,3'-Dichlorobenzidine	91-94-1	ND	20
Diethylphthalate	84-66-2	ND	10
Dimethylphthalate	131-11-3	ND	10
2,4-Dinitrotoluene	121-14-2	ND	10
2,6-Dinitrotoluene	606-20-2	ND	10
Di-n-octylphthalate	117-84-0	ND	10
1,2-Diphenylhydrazine	122-66-7	ND	10
Fluoranthene	206-44-0	ND	10
Fluorene	86-73-7	ND	10
Hexachlorobenzene	118-74-1	ND	10
Hexachlorobutadiene	87-68-3	ND	10
Hexachlorocyclopentadiene	77-47-4	ND	10
Hexachloroethane	67-72-1	ND	10
Indeno(1,2,3-cd)pyrene	193-39-5	ND	10
Isophorone	78-59-1	ND	10
2-Methylnaphthalene	91-57-6	ND	10
Naphthalene	91-20-3	ND	10
2-Nitroaniline	88-74-4	ND	50
3-Nitroaniline	99-09-2	ND	50
4-Nitroaniline	100-01-6	ND	50
Nitrobenzene	98-95-3	ND	10
N-nitrosodimethylamine	62-75-9	ND	10
N-nitrosodiphenylamine	86-30-6	ND	10
N-nitroso-di-n-propylamine	621-64-7	ND	10
Phenanthrene	85-01-8	ND	10
Pyrene	129-00-0	ND	10
1,2,4-Trichlorobenzene	120-82-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-6-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/07/90
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REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002064-03F
MED-TOX JOB NO: 9002064
DATE EXTRACTED: 02/13/90
DATE ANALYZED: 02/19/90
INSTRUMENT: 11

EPA METHOD 8270

ACID EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
4-Chloro-3-methylphenol	59-50-7	ND	10
2-Chlorophenol	95-57-8	ND	10
2,4-Dichlorophenol	120-83-2	ND	10
2,4-Dimethylphenol	105-67-9	ND	10
4,6-Dinitro-2-methylphenol	534-52-1	ND	50
2,4-Dinitrophenol	51-28-5	ND	50
2-Methylphenol	95-48-7	ND	10
4-Methylphenol	106-44-5	ND	10
2-Nitrophenol	88-75-5	ND	10
4-Nitrophenol	100-02-7	ND	50
Pentachlorophenol	87-86-5	ND	50
Phenol	108-95-2	ND	10
2,4,5-Trichlorophenol	95-95-4	ND	10
2,4,6-Trichlorophenol	88-06-2	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-6D-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/07/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002064-04E
MED-TOX JOB NO: 9002064
DATE EXTRACTED: 02/13/90
DATE ANALYZED: 02/19/90
INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acenaphthene	83-32-9	ND	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	ND	10
Benzidine	92-87-5	ND	50
Benzoic Acid	65-85-0	ND	50
Benzo(a)anthracene	56-55-3	ND	10
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	10
Benzo(g,h,i)perylene	191-24-2	ND	10
Benzo(a)pyrene	50-32-8	ND	10
Benzyl Alcohol	100-51-6	ND	20
Bis(2-chloroethoxy) methane	111-91-1	ND	10
Bis(2-chloroethyl)ether	111-44-4	ND	10
Bis(2-chloroisopropyl) ether	108-60-1	ND	10
Bis(2-ethylhexyl) phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	10
Butylbenzyl phthalate	85-68-7	ND	10
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	10
4-Chlorophenyl phenyl ether	7005-72-3	ND	10
Chrysene	218-01-9	ND	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Dibenzofuran	132-64-9	ND	10
Di-n-butylphthalate	84-74-2	ND	10
1,2-Dichlorobenzene	95-50-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-6D-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/07/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002064-04E
MED-TOX JOB NO: 9002064
DATE EXTRACTED: 02/13/90
DATE ANALYZED: 02/19/90
INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES (cont.)

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
1,3-Dichlorobenzene	541-73-1	ND	10
1,4-Dichlorobenzene	106-46-7	ND	10
3,3'-Dichlorobenzidine	91-94-1	ND	20
Diethylphthalate	84-66-2	ND	10
Dimethylphthalate	131-11-3	ND	10
2,4-Dinitrotoluene	121-14-2	ND	10
2,6-Dinitrotoluene	606-20-2	ND	10
Di-n-octylphthalate	117-84-0	ND	10
1,2-Diphenylhydrazine	122-66-7	ND	10
Fluoranthene	206-44-0	ND	10
Fluorene	86-73-7	ND	10
Hexachlorobenzene	118-74-1	ND	10
Hexachlorobutadiene	87-68-3	ND	10
Hexachlorocyclopentadiene	77-47-4	ND	10
Hexachloroethane	67-72-1	ND	10
Indeno(1,2,3-cd)pyrene	193-39-5	ND	10
Isophorone	78-59-1	ND	10
2-Methylnaphthalene	91-57-6	ND	10
Naphthalene	91-20-3	ND	10
2-Nitroaniline	88-74-4	ND	50
3-Nitroaniline	99-09-2	ND	50
4-Nitroaniline	100-01-6	ND	50
Nitrobenzene	98-95-3	ND	10
N-nitrosodimethylamine	62-75-9	ND	10
N-nitrosodiphenylamine	86-30-6	ND	10
N-nitroso-di-n-propylamine	621-64-7	ND	10
Phenanthrene	85-01-8	ND	10
Pyrene	129-00-0	ND	10
1,2,4-Trichlorobenzene	120-82-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-6D-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/07/90
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REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002064-04E
MED-TOX JOB NO: 9002064
DATE EXTRACTED: 02/13/90
DATE ANALYZED: 02/19/90
INSTRUMENT: 11

EPA METHOD 8270

ACID EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
4-Chloro-3-methylphenol	59-50-7	ND	10
2-Chlorophenol	95-57-8	ND	10
2,4-Dichlorophenol	120-83-2	ND	10
2,4-Dimethylphenol	105-67-9	ND	10
4,6-Dinitro-2-methylphenol	534-52-1	ND	50
2,4-Dinitrophenol	51-28-5	ND	50
2-Methylphenol	95-48-7	ND	10
4-Methylphenol	106-44-5	ND	10
2-Nitrophenol	88-75-5	ND	10
4-Nitrophenol	100-02-7	ND	50
Pentachlorophenol	87-86-5	ND	50
Phenol	108-95-2	ND	10
2,4,5-Trichlorophenol	95-95-4	ND	10
2,4,6-Trichlorophenol	88-06-2	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-8-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/07/90
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MED-TOX LAB NO: 9002064-05F
MED-TOX JOB NO: 9002064
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INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acenaphthene	83-32-9	ND	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	ND	10
Benzidine	92-87-5	ND	50
Benzoic Acid	65-85-0	ND	50
Benzo(a)anthracene	56-55-3	ND	10
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	10
Benzo(g,h,i)perylene	191-24-2	ND	10
Benzo(a)pyrene	50-32-8	ND	10
Benzyl Alcohol	100-51-6	ND	20
Bis(2-chloroethoxy) methane	111-91-1	ND	10
Bis(2-chloroethyl)ether	111-44-4	ND	10
Bis(2-chloroisopropyl) ether	108-60-1	ND	10
Bis(2-ethylhexyl) phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	10
Butylbenzyl phthalate	85-68-7	ND	10
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	10
4-Chlorophenyl phenyl ether	7005-72-3	ND	10
Chrysene	218-01-9	ND	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Dibenzofuran	132-64-9	ND	10
Di-n-butylphthalate	84-74-2	ND	10
1,2-Dichlorobenzene	95-50-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-8-7501
CLIENT JOB NO: 1649
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MED-TOX LAB NO: 9002064-05F
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INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES (cont.)

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
1,3-Dichlorobenzene	541-73-1	ND	10
1,4-Dichlorobenzene	106-46-7	ND	10
3,3'-Dichlorobenzidine	91-94-1	ND	20
Diethylphthalate	84-66-2	ND	10
Dimethylphthalate	131-11-3	ND	10
2,4-Dinitrotoluene	121-14-2	ND	10
2,6-Dinitrotoluene	606-20-2	ND	10
Di-n-octylphthalate	117-84-0	ND	10
1,2-Diphenylhydrazine	122-66-7	ND	10
Fluoranthene	206-44-0	ND	10
Fluorene	86-73-7	ND	10
Hexachlorobenzene	118-74-1	ND	10
Hexachlorobutadiene	87-68-3	ND	10
Hexachlorocyclopentadiene	77-47-4	ND	10
Hexachloroethane	67-72-1	ND	10
Indeno(1,2,3-cd)pyrene	193-39-5	ND	10
Isophorone	78-59-1	ND	10
2-Methylnaphthalene	91-57-6	ND	10
Naphthalene	91-20-3	ND	10
2-Nitroaniline	88-74-4	ND	50
3-Nitroaniline	99-09-2	ND	50
4-Nitroaniline	100-01-6	ND	50
Nitrobenzene	98-95-3	ND	10
N-nitrosodimethylamine	62-75-9	ND	10
N-nitrosodiphenylamine	86-30-6	ND	10
N-nitroso-di-n-propylamine	621-64-7	ND	10
Phenanthrene	85-01-8	ND	10
Pyrene	129-00-0	ND	10
1,2,4-Trichlorobenzene	120-82-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-8-7501
CLIENT JOB NO: 1649
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MED-TOX JOB NO: 9002064
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INSTRUMENT: 11

EPA METHOD 8270

ACID EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
4-Chloro-3-methylphenol	59-50-7	ND	10
2-Chlorophenol	95-57-8	ND	10
2,4-Dichlorophenol	120-83-2	ND	10
2,4-Dimethylphenol	105-67-9	ND	10
4,6-Dinitro-2-methylphenol	534-52-1	ND	50
2,4-Dinitrophenol	51-28-5	ND	50
2-Methylphenol	95-48-7	ND	10
4-Methylphenol	106-44-5	ND	10
2-Nitrophenol	88-75-5	ND	10
4-Nitrophenol	100-02-7	ND	50
Pentachlorophenol	87-86-5	ND	50
Phenol	108-95-2	ND	10
2,4,5-Trichlorophenol	95-95-4	ND	10
2,4,6-Trichlorophenol	88-06-2	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-10-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/08/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002065-02F
MED-TOX JOB NO: 9002065
DATE EXTRACTED: 02/13/90
DATE ANALYZED: 02/19/90
INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acenaphthene	83-32-9	ND	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	ND	10
Benzidine	92-87-5	ND	50
Benzoic Acid	65-85-0	ND	50
Benzo(a)anthracene	56-55-3	ND	10
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	10
Benzo(g,h,i)perylene	191-24-2	ND	10
Benzo(a)pyrene	50-32-8	ND	10
Benzyl Alcohol	100-51-6	ND	20
Bis(2-chloroethoxy) methane	111-91-1	ND	10
Bis(2-chloroethyl)ether	111-44-4	ND	10
Bis(2-chloroisopropyl) ether	108-60-1	ND	10
Bis(2-ethylhexyl) phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	10
Butylbenzyl phthalate	85-68-7	ND	10
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	10
4-Chlorophenyl phenyl ether	7005-72-3	ND	10
Chrysene	218-01-9	ND	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Dibenzofuran	132-64-9	ND	10
Di-n-butylphthalate	84-74-2	ND	10
1,2-Dichlorobenzene	95-50-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-10-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/08/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002065-02F
MED-TOX JOB NO: 9002065
DATE EXTRACTED: 02/13/90
DATE ANALYZED: 02/19/90
INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES (cont.)

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
1,3-Dichlorobenzene	541-73-1	ND	10
1,4-Dichlorobenzene	106-46-7	ND	10
3,3'-Dichlorobenzidine	91-94-1	ND	20
Diethylphthalate	84-66-2	ND	10
Dimethylphthalate	131-11-3	ND	10
2,4-Dinitrotoluene	121-14-2	ND	10
2,6-Dinitrotoluene	606-20-2	ND	10
Di-n-octylphthalate	117-84-0	ND	10
1,2-Diphenylhydrazine	122-66-7	ND	10
Fluoranthene	206-44-0	ND	10
Fluorene	86-73-7	ND	10
Hexachlorobenzene	118-74-1	ND	10
Hexachlorobutadiene	87-68-3	ND	10
Hexachlorocyclopentadiene	77-47-4	ND	10
Hexachloroethane	67-72-1	ND	10
Indeno(1,2,3-cd)pyrene	193-39-5	ND	10
Isophorone	78-59-1	ND	10
2-Methylnaphthalene	91-57-6	ND	10
Naphthalene	91-20-3	ND	10
2-Nitroaniline	88-74-4	ND	50
3-Nitroaniline	99-09-2	ND	50
4-Nitroaniline	100-01-6	ND	50
Nitrobenzene	98-95-3	ND	10
N-nitrosodimethylamine	62-75-9	ND	10
N-nitrosodiphenylamine	86-30-6	ND	10
N-nitroso-di-n-propylamine	621-64-7	ND	10
Phenanthrene	85-01-8	ND	10
Pyrene	129-00-0	ND	10
1,2,4-Trichlorobenzene	120-82-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-10-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/08/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002065-02F
MED-TOX JOB NO: 9002065
DATE EXTRACTED: 02/13/90
DATE ANALYZED: 02/19/90
INSTRUMENT: 11

EPA METHOD 8270

ACID EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
4-Chloro-3-methylphenol	59-50-7	ND	10
2-Chlorophenol	95-57-8	ND	10
2,4-Dichlorophenol	120-83-2	ND	10
2,4-Dimethylphenol	105-67-9	ND	10
4,6-Dinitro-2-methylphenol	534-52-1	ND	50
2,4-Dinitrophenol	51-28-5	ND	50
2-Methylphenol	95-48-7	ND	10
4-Methylphenol	106-44-5	ND	10
2-Nitrophenol	88-75-5	ND	10
4-Nitrophenol	100-02-7	ND	50
Pentachlorophenol	87-86-5	ND	50
Phenol	108-95-2	ND	10
2,4,5-Trichlorophenol	95-95-4	ND	10
2,4,6-Trichlorophenol	88-06-2	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-9-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/08/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002065-03F
MED-TOX JOB NO: 9002065
DATE EXTRACTED: 02/15/90
DATE ANALYZED: 02/20/90
INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acenaphthene	83-32-9	ND	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	ND	10
Benzidine	92-87-5	ND	50
Benzoic Acid	65-85-0	ND	50
Benzo(a)anthracene	56-55-3	ND	10
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	10
Benzo(g,h,i)perylene	191-24-2	ND	10
Benzo(a)pyrene	50-32-8	ND	10
Benzyl Alcohol	100-51-6	ND	20
Bis(2-chloroethoxy) methane	111-91-1	ND	10
Bis(2-chloroethyl)ether	111-44-4	ND	10
Bis(2-chloroisopropyl) ether	108-60-1	ND	10
Bis(2-ethylhexyl) phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	10
Butylbenzyl phthalate	85-68-7	ND	10
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	10
4-Chlorophenyl phenyl ether	7005-72-3	ND	10
Chrysene	218-01-9	ND	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Dibenzofuran	132-64-9	ND	10
Di-n-butylphthalate	84-74-2	ND	10
1,2-Dichlorobenzene	95-50-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-9-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/08/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002065-03F
MED-TOX JOB NO: 9002065
DATE EXTRACTED: 02/15/90
DATE ANALYZED: 02/20/90
INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES (cont.)

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
1,3-Dichlorobenzene	541-73-1	ND	10
1,4-Dichlorobenzene	106-46-7	ND	10
3,3'-Dichlorobenzidine	91-94-1	ND	20
Diethylphthalate	84-66-2	ND	10
Dimethylphthalate	131-11-3	ND	10
2,4-Dinitrotoluene	121-14-2	ND	10
2,6-Dinitrotoluene	606-20-2	ND	10
Di-n-octylphthalate	117-84-0	ND	10
1,2-Diphenylhydrazine	122-66-7	ND	10
Fluoranthene	206-44-0	ND	10
Fluorene	86-73-7	ND	10
Hexachlorobenzene	118-74-1	ND	10
Hexachlorobutadiene	87-68-3	ND	10
Hexachlorocyclopentadiene	77-47-4	ND	10
Hexachloroethane	67-72-1	ND	10
Indeno(1,2,3-cd)pyrene	193-39-5	ND	10
Isophorone	78-59-1	ND	10
2-Methylnaphthalene	91-57-6	ND	10
Naphthalene	91-20-3	ND	10
2-Nitroaniline	88-74-4	ND	50
3-Nitroaniline	99-09-2	ND	50
4-Nitroaniline	100-01-6	ND	50
Nitrobenzene	98-95-3	ND	10
N-nitrosodimethylamine	62-75-9	ND	10
N-nitrosodiphenylamine	86-30-6	ND	10
N-nitroso-di-n-propylamine	621-64-7	ND	10
Phenanthrene	85-01-8	ND	10
Pyrene	129-00-0	ND	10
1,2,4-Trichlorobenzene	120-82-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-9-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/08/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002065-03F
MED-TOX JOB NO: 9002065
DATE EXTRACTED: 02/15/90
DATE ANALYZED: 02/20/90
INSTRUMENT: 11

EPA METHOD 8270

ACID EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
4-Chloro-3-methylphenol	59-50-7	ND	10
2-Chlorophenol	95-57-8	ND	10
2,4-Dichlorophenol	120-83-2	ND	10
2,4-Dimethylphenol	105-67-9	ND	10
4,6-Dinitro-2-methylphenol	534-52-1	ND	50
2,4-Dinitrophenol	51-28-5	ND	50
2-Methylphenol	95-48-7	ND	10
4-Methylphenol	106-44-5	ND	10
2-Nitrophenol	88-75-5	ND	10
4-Nitrophenol	100-02-7	ND	50
Pentachlorophenol	87-86-5	ND	50
Phenol	108-95-2	ND	10
2,4,5-Trichlorophenol	95-95-4	ND	10
2,4,6-Trichlorophenol	88-06-2	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-7-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/08/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002065-04F
MED-TOX JOB NO: 9002065
DATE EXTRACTED: 02/15/90
DATE ANALYZED: 02/20/90
INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acenaphthene	83-32-9	ND	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	ND	10
Benzidine	92-87-5	ND	50
Benzoic Acid	65-85-0	ND	50
Benzo(a)anthracene	56-55-3	ND	10
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	10
Benzo(g,h,i)perylene	191-24-2	ND	10
Benzo(a)pyrene	50-32-8	ND	10
Benzyl Alcohol	100-51-6	ND	20
Bis(2-chloroethoxy) methane	111-91-1	ND	10
Bis(2-chloroethyl)ether	111-44-4	ND	10
Bis(2-chloroisopropyl) ether	108-60-1	ND	10
Bis(2-ethylhexyl) phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	10
Butylbenzyl phthalate	85-68-7	ND	10
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	10
4-Chlorophenyl phenyl ether	7005-72-3	ND	10
Chrysene	218-01-9	ND	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Dibenzofuran	132-64-9	ND	10
Di-n-butylphthalate	84-74-2	ND	10
1,2-Dichlorobenzene	95-50-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-7-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/08/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002065-04F
MED-TOX JOB NO: 9002065
DATE EXTRACTED: 02/15/90
DATE ANALYZED: 02/20/90
INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES (cont.)

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
1,3-Dichlorobenzene	541-73-1	ND	10
1,4-Dichlorobenzene	106-46-7	ND	10
3,3'-Dichlorobenzidine	91-94-1	ND	20
Diethylphthalate	84-66-2	ND	10
Dimethylphthalate	131-11-3	ND	10
2,4-Dinitrotoluene	121-14-2	ND	10
2,6-Dinitrotoluene	606-20-2	ND	10
Di-n-octylphthalate	117-84-0	ND	10
1,2-Diphenylhydrazine	122-66-7	ND	10
Fluoranthene	206-44-0	ND	10
Fluorene	86-73-7	ND	10
Hexachlorobenzene	118-74-1	ND	10
Hexachlorobutadiene	87-68-3	ND	10
Hexachlorocyclopentadiene	77-47-4	ND	10
Hexachloroethane	67-72-1	ND	10
Indeno(1,2,3-cd)pyrene	193-39-5	ND	10
Isophorone	78-59-1	ND	10
2-Methylnaphthalene	91-57-6	ND	10
Naphthalene	91-20-3	ND	10
2-Nitroaniline	88-74-4	ND	50
3-Nitroaniline	99-09-2	ND	50
4-Nitroaniline	100-01-6	ND	50
Nitrobenzene	98-95-3	ND	10
N-nitrosodimethylamine	62-75-9	ND	10
N-nitrosodiphenylamine	86-30-6	ND	10
N-nitroso-di-n-propylamine	621-64-7	ND	10
Phenanthrene	85-01-8	ND	10
Pyrene	129-00-0	ND	10
1,2,4-Trichlorobenzene	120-82-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-7-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/08/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002065-04F
MED-TOX JOB NO: 9002065
DATE EXTRACTED: 02/15/90
DATE ANALYZED: 02/20/90
INSTRUMENT: 11

EPA METHOD 8270

ACID EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
4-Chloro-3-methylphenol	59-50-7	ND	10
2-Chlorophenol	95-57-8	ND	10
2,4-Dichlorophenol	120-83-2	ND	10
2,4-Dimethylphenol	105-67-9	ND	10
4,6-Dinitro-2-methylphenol	534-52-1	ND	50
2,4-Dinitrophenol	51-28-5	ND	50
2-Methylphenol	95-48-7	ND	10
4-Methylphenol	106-44-5	ND	10
2-Nitrophenol	88-75-5	ND	10
4-Nitrophenol	100-02-7	ND	50
Pentachlorophenol	87-86-5	ND	50
Phenol	108-95-2	ND	10
2,4,5-Trichlorophenol	95-95-4	ND	10
2,4,6-Trichlorophenol	88-06-2	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-11-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/09/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002066-02F
MED-TOX JOB NO: 9002066
DATE EXTRACTED: 02/15/90
DATE ANALYZED: 02/20/90
INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Acenaphthene	83-32-9	ND	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	ND	10
Benzidine	92-87-5	ND	50
Benzoic Acid	65-85-0	ND	50
Benzo(a)anthracene	56-55-3	ND	10
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	10
Benzo(g,h,i)perylene	191-24-2	ND	10
Benzo(a)pyrene	50-32-8	ND	10
Benzyl Alcohol	100-51-6	ND	20
Bis(2-chloroethoxy) methane	111-91-1	ND	10
Bis(2-chloroethyl)ether	111-44-4	ND	10
Bis(2-chloroisopropyl) ether	108-60-1	ND	10
Bis(2-ethylhexyl) phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	10
Butylbenzyl phthalate	85-68-7	ND	10
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	10
4-Chlorophenyl phenyl ether	7005-72-3	ND	10
Chrysene	218-01-9	ND	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Dibenzofuran	132-64-9	ND	10
Di-n-butylphthalate	84-74-2	ND	10
1,2-Dichlorobenzene	95-50-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-11-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/09/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002066-02F
MED-TOX JOB NO: 9002066
DATE EXTRACTED: 02/15/90
DATE ANALYZED: 02/20/90
INSTRUMENT: 11

EPA METHOD 8270
BASE/NEUTRAL EXTRACTABLES (cont.)

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
1,3-Dichlorobenzene	541-73-1	ND	10
1,4-Dichlorobenzene	106-46-7	ND	10
3,3'-Dichlorobenzidine	91-94-1	ND	20
Diethylphthalate	84-66-2	ND	10
Dimethylphthalate	131-11-3	ND	10
2,4-Dinitrotoluene	121-14-2	ND	10
2,6-Dinitrotoluene	606-20-2	ND	10
Di-n-octylphthalate	117-84-0	ND	10
1,2-Diphenylhydrazine	122-66-7	ND	10
Fluoranthene	206-44-0	ND	10
Fluorene	86-73-7	ND	10
Hexachlorobenzene	118-74-1	ND	10
Hexachlorobutadiene	87-68-3	ND	10
Hexachlorocyclopentadiene	77-47-4	ND	10
Hexachloroethane	67-72-1	ND	10
Indeno(1,2,3-cd)pyrene	193-39-5	ND	10
Isophorone	78-59-1	ND	10
2-Methylnaphthalene	91-57-6	ND	10
Naphthalene	91-20-3	ND	10
2-Nitroaniline	88-74-4	ND	50
3-Nitroaniline	99-09-2	ND	50
4-Nitroaniline	100-01-6	ND	50
Nitrobenzene	98-95-3	ND	10
N-nitrosodimethylamine	62-75-9	ND	10
N-nitrosodiphenylamine	86-30-6	ND	10
N-nitroso-di-n-propylamine	621-64-7	ND	10
Phenanthrene	85-01-8	ND	10
Pyrene	129-00-0	ND	10
1,2,4-Trichlorobenzene	120-82-1	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-11-7501
CLIENT JOB NO: 1649
DATE SAMPLED: 02/09/90
DATE RECEIVED: 02/09/90
REPORT DATE: 03/02/90

MED-TOX LAB NO: 9002066-02F
MED-TOX JOB NO: 9002066
DATE EXTRACTED: 02/15/90
DATE ANALYZED: 02/20/90
INSTRUMENT: 11

EPA METHOD 8270

ACID EXTRACTABLES

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
4-Chloro-3-methylphenol	59-50-7	ND	10
2-Chlorophenol	95-57-8	ND	10
2,4-Dichlorophenol	120-83-2	ND	10
2,4-Dimethylphenol	105-67-9	ND	10
4,6-Dinitro-2-methylphenol	534-52-1	ND	50
2,4-Dinitrophenol	51-28-5	ND	50
2-Methylphenol	95-48-7	ND	10
4-Methylphenol	106-44-5	ND	10
2-Nitrophenol	88-75-5	ND	10
4-Nitrophenol	100-02-7	ND	50
Pentachlorophenol	87-86-5	ND	50
Phenol	108-95-2	ND	10
2,4,5-Trichlorophenol	95-95-4	ND	10
2,4,6-Trichlorophenol	88-06-2	ND	10

ND = Not Detected

LEVINE-FRICKE

CLIENT ID: LF-11-7501
CLIENT JOB NO: 1649
DATE RECEIVED: 02/09/90

MED-TOX LAB NO: 9002066-02E
MED-TOX JOB NO: 9002066
REPORT DATE: 03/02/90

PRIORITY POLLUTANT METALS

CODE	METAL	CONCENTRATION (mg/L)	DETECTION LIMIT (mg/L)	METHOD REFERENCE	INST.*
Sb	Antimony	ND	0.5	7040	V22
As	Arsenic	ND	0.001	7060	V12
Be	Beryllium	ND	0.003	7090	V22
Cd	Cadmium	ND	0.003	7130	V22
Cr	Chromium	ND	0.02	7190	V22
Cu	Copper	ND	0.005	7210	V22
Pb	Lead	ND	0.01	7420	V22
Hg	Mercury	ND	0.0003	7470	Hg
Ni	Nickel	0.05	0.01	7520	V22
Se	Selenium	ND	0.003	7740	V12
Ag	Silver	ND	0.01	7760	V22
Tl	Thallium	ND	0.02	7840	V22
Zn	Zinc	0.007	0.003	7950	V22

ND = Not Detected

* INST. = Instrument Number

LEVINE-FRICKE

CLIENT ID: LF-4-7501
CLIENT JOB NO: 1649
DATE RECEIVED: 02/09/90

MED-TOX LAB NO: 9002064-02E
MED-TOX JOB NO: 9002064
REPORT DATE: 03/02/90

PRIORITY POLLUTANT METALS

CODE	METAL	CONCENTRATION (mg/L)	DETECTION LIMIT (mg/L)	METHOD REFERENCE	INST.*
Sb	Antimony	ND	0.5	7040	V22
As	Arsenic	ND	0.001	7060	V12
Be	Beryllium	ND	0.003	7090	V22
Cd	Cadmium	ND	0.003	7130	V22
Cr	Chromium	ND	0.02	7190	V22
Cu	Copper	ND	0.005	7210	V22
Pb	Lead	ND	0.01	7420	V22
Hg	Mercury	ND	0.0003	7470	Hg
Ni	Nickel	0.01	0.01	7520	V22
Se	Selenium	ND	0.003	7740	V12
Ag	Silver	ND	0.01	7760	V22
Tl	Thallium	ND	0.02	7840	V22
Zn	Zinc	0.051	0.003	7950	V22

ND = Not Detected

* INST. = Instrument Number

LEVINE-FRICKE

CLIENT ID: LF-6-7501
CLIENT JOB NO: 1649
DATE RECEIVED: 02/09/90

MED-TOX LAB NO: 9002064-03E
MED-TOX JOB NO: 9002064
REPORT DATE: 03/02/90

PRIORITY POLLUTANT METALS

CODE	METAL	CONCENTRATION (mg/L)	DETECTION LIMIT (mg/L)	METHOD REFERENCE	INST.*
Sb	Antimony	ND	0.5	7040	V22
As	Arsenic	0.001	0.001	7060	V12
Be	Beryllium	ND	0.003	7090	V22
Cd	Cadmium	ND	0.003	7130	V22
Cr	Chromium	ND	0.02	7190	V22
Cu	Copper	ND	0.005	7210	V22
Pb	Lead	ND	0.01	7420	V22
Hg	Mercury	ND	0.0003	7470	Hg
Ni	Nickel	ND	0.01	7520	V22
Se	Selenium	ND	0.003	7740	V12
Ag	Silver	ND	0.01	7760	V22
Tl	Thallium	ND	0.02	7840	V22
Zn	Zinc	0.016	0.003	7950	V22

ND = Not Detected

* INST. = Instrument Number

LEVINE-FRICKE

CLIENT ID: LF-8-7501
CLIENT JOB NO: 1649
DATE RECEIVED: 02/09/90

MED-TOX LAB NO: 9002064-05E
MED-TOX JOB NO: 9002064
REPORT DATE: 03/02/90

PRIORITY POLLUTANT METALS

CODE	METAL	CONCENTRATION (mg/L)	DETECTION LIMIT (mg/L)	METHOD REFERENCE	INST.*
Sb	Antimony	ND	0.5	7040	V22
As	Arsenic	0.001	0.001	7060	V12
Be	Beryllium	ND	0.003	7090	V22
Cd	Cadmium	ND	0.003	7130	V22
Cr	Chromium	ND	0.02	7190	V22
Cu	Copper	ND	0.005	7210	V22
Pb	Lead	ND	0.01	7420	V22
Hg	Mercury	ND	0.0003	7470	Hg
Ni	Nickel	ND	0.01	7520	V22
Se	Selenium	ND	0.003	7740	V12
Ag	Silver	ND	0.01	7760	V22
Tl	Thallium	ND	0.02	7840	V22
Zn	Zinc	0.018	0.003	7950	V22

ND = Not Detected

* INST. = Instrument Number

LEVINE-FRICKE

CLIENT ID: LF-10-7501
CLIENT JOB NO: 1649
DATE RECEIVED: 02/09/90

MED-TOX LAB NO: 9002065-02E
MED-TOX JOB NO: 9002065
REPORT DATE: 03/02/90

PRIORITY POLLUTANT METALS

CODE	METAL	CONCENTRATION (mg/L)	DETECTION LIMIT (mg/L)	METHOD REFERENCE	INST.*
Sb	Antimony	ND	0.5	7040	V22
As	Arsenic	ND	0.001	7060	V12
Be	Beryllium	ND	0.003	7090	V22
Cd	Cadmium	ND	0.003	7130	V22
Cr	Chromium	ND	0.02	7190	V22
Cu	Copper	ND	0.005	7210	V22
Pb	Lead	ND	0.01	7420	V22
Hg	Mercury	ND	0.0003	7470	Hg
Ni	Nickel	0.05	0.01	7520	V22
Se	Selenium	ND	0.003	7740	V12
Ag	Silver	ND	0.01	7760	V22
Tl	Thallium	ND	0.02	7840	V22
Zn	Zinc	0.021	0.003	7950	V22

ND = Not Detected

* INST. = Instrument Number

LEVINE-FRICKE

CLIENT ID: LF-9-7501
CLIENT JOB NO: 1649
DATE RECEIVED: 02/09/90

MED-TOX LAB NO: 9002065-03E
MED-TOX JOB NO: 9002065
REPORT DATE: 03/02/90

PRIORITY POLLUTANT METALS

CODE	METAL	CONCENTRATION (mg/L)	DETECTION LIMIT (mg/L)	METHOD REFERENCE	INST.*
Sb	Antimony	ND	0.5	7040	V22
As	Arsenic	ND	0.001	7060	V12
Be	Beryllium	ND	0.003	7090	V22
Cd	Cadmium	ND	0.003	7130	V22
Cr	Chromium	ND	0.02	7190	V22
Cu	Copper	ND	0.005	7210	V22
Pb	Lead	ND	0.01	7420	V22
Hg	Mercury	ND	0.0003	7470	Hg
Ni	Nickel	ND	0.01	7520	V22
Se	Selenium	ND	0.003	7740	V12
Ag	Silver	ND	0.01	7760	V22
Tl	Thallium	ND	0.02	7840	V22
Zn	Zinc	0.016	0.003	7950	V22

ND = Not Detected

* INST. = Instrument Number

LEVINE-FRICKE

CLIENT ID: LF-7-7501
CLIENT JOB NO: 1649
DATE RECEIVED: 02/09/90

MED-TOX LAB NO: 9002065-04E
MED-TOX JOB NO: 9002065
REPORT DATE: 03/02/90

PRIORITY POLLUTANT METALS

CODE	METAL	CONCENTRATION (mg/L)	DETECTION LIMIT (mg/L)	METHOD REFERENCE	INST.*
Sb	Antimony	ND	0.5	7040	V22
As	Arsenic	0.001	0.001	7060	V12
Be	Beryllium	ND	0.003	7090	V22
Cd	Cadmium	ND	0.003	7130	V22
Cr	Chromium	ND	0.02	7190	V22
Cu	Copper	ND	0.005	7210	V22
Pb	Lead	ND	0.01	7420	V22
Hg	Mercury	ND	0.0003	7470	Hg
Ni	Nickel	ND	0.01	7520	V22
Se	Selenium	ND	0.003	7740	V12
Ag	Silver	ND	0.01	7760	V22
Tl	Thallium	ND	0.02	7840	V22
Zn	Zinc	0.019	0.003	7950	V22

ND = Not Detected

* INST. = Instrument Number

LEVINE-FRICKE

CLIENT PROJECT NO: 1649

MED-TOX JOB NO: 9002065, 9002066

DATE SAMPLED: 02/08-09/90

DATE EXTRACTED: 02/23/90

DATE RECEIVED: 02/09/90

DATE ANALYZED: 02/15-27/90

REPORT DATE: 03/02/90

Sample Identification Client Id.	Lab No.	Extractable Hydrocarbons as Diesel (mg/L)	Extractable Hydrocarbons as Waste Oil (mg/L)	Purgeable Hydrocarbons as Gasoline (mg/L)
9002065				
LF-10-7501	02C	--	--	ND
LF-10-7501	02H	ND	1.5	--
LF-9-7501	03C	--	--	ND
LF-9-7501	03H	ND	0.5	--
LF-7-7501	04C	--	--	ND
LF-7-7501	04H	ND	ND	--
9002066				
LF-11-7501	02C	--	--	0.1
LF-11-7501	02H	ND	0.6	--
Detection Limit		0.3	0.5	0.1
EPA Method		8015	8015	8015
Instrument:		5	5	9

ND = Not Detected

LEVINE-FRICKE

CLIENT PROJECT NO: 1649
DATE SAMPLED: 02/15/90
DATE RECEIVED: 02/16/90

MED-TOX JOB NO: 9002122
DATE EXTRACTED: 02/28/90
DATE ANALYZED: 02/27-03/01/90
REPORT DATE: 03/15/90

Sample Identification Client Id.	Lab No.	Extractable Hydrocarbons as Diesel (mg/L)	Extractable Hydrocarbons as Waste Oil (mg/L)	Purgeable Hydrocarbons as Gasoline (mg/L)
C29W	21A	---	---	ND
C29W	21E	ND	ND	---
Detection Limit		0.3	0.5	0.1

EPA Method: 8015

Instrument: 9, 1

ND = Not Detected

C-1, S-3
R-1, S-D

Due 2-26

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: 1649	Field Logbook No.:	Date: 2-7-90	Serial No.: No 7501
Project Name: YERBA BUENA	Project Location: Emeryville / OAKLAND		
Sampler (Signature): Larry Lapuyade			Samplers: LPL - NPD

SAMPLE NO.	DATE	TIME	LAB SAMPLE 900[illegible]64-	NO. OF CONTAINERS	SAMPLE TYPE	EPA 8240 Extended	EPA 8270 Extended	EPA 8015 TPH Gas	EPA 8015 Diesel/Lube Oil	PP-13 Metals	HOLD	RUSH	REMARKS
LF-1-FB-7501	2-7	1045	1A, B, C, D	4	Ground Water							X	NORMAL TURNAROUND
LF-1-7501	2-7	1055	2A-H	8		X	X	X	X	X			SEND RESULTS TO
LF-6-7501	2-7	1200	3A-H	8		X	X	X	X	X			AMANDA SPENCER
LF-6D-7501	2-7	1230	4A-H	8		X	X	X	X	[illegible]			BETA GURNEY
LF-8-7501	2-7	1430	5A-H	8		X	X	X	X	X			LARRY LAPUYADE
[illegible]													
LF-10-FB-7501	2-8	955		4								X	
LF-10-7501	2-8	1010		8		X	X	X	X	X			
LF-9-7501	2-8	1310		8		X	X	X	X	X			
LF-7-7501	2-8	1550		8		X	X	X	X	X			
LF-13-FB-7501	2-9	1010		4		X	[illegible]	[illegible]	[illegible]	[illegible]			
LF-13-7501	2-9	1020		8		X	X	X	X	X			
LF-11-7501	2-9	1200		8		X	X	X	X	X			* Missing metals spl.
LF-14-7501	2-9	1430		8		X	X	X	X	X			

RELINQUISHED BY: (Signature) Larry Lapuyade	DATE 2-9-90	TIME 3:18	RECEIVED BY: (Signature) Galen Stiffler	DATE 2/9/90	TIME 3:20
RELINQUISHED BY: (Signature) [illegible]	DATE 2/9/90	TIME 4:20	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature) Denise Harrington	DATE 2/9/90	TIME 1630
METHOD OF SHIPMENT: Pick-up	DATE	TIME	LAB COMMENTS:		

Sample Collector:
LEVINE-FRICKE
1900 Powell Street, 12th Floor
Emeryville, Ca 94608
(415) 652-4500

Analytical Laboratory:
MedTox

Shipping C (White) Lab Copy (Green) File Copy (Yellow) d Copy (Pink) FORM N 6/COC/ARF

APPENDIX G

CALCULATION OF APPLIED ACTION LEVELS

CALCUATION OF APPLIED ACTION LEVELS

The Department of Health Services describes a method in the document "The California Site Mitigation Decision Tree Manual" (1986) for a standardized approach to setting waste site mitigation criteria using Applied Action Levels (AALs). AALs are a health-based criteria predicated upon the maximum exposure of biological receptors to substances associated with hazardous waste sites and facilities. Although these AALs are not intended for use as site cleanup levels, they do provide a site-specific criteria to help protect both public health and the environment.

To calculate AALs for adult receptors for specific compounds, the Maximum Exposure Limit (MEL) for the compound is calculated using the following equation:

MEL (mg/day) = NOAEL (mg/kg/day) x 70 kg [average weight for an adult]

where,

NOAEL is the No Observed Adverse Effects Limit for the compound.

For child receptors, the MEL is calculated by:

MEL (mg/day) = NOAEL (mg/kg/day) x 10 kg [average weight for a child]

The AAL is calculated from the MEL by the equation:

$$\text{AAL (mg/kg)} = \frac{\text{MEL (mg/day)}}{\text{average daily intake}} \times \text{TF}$$

where,

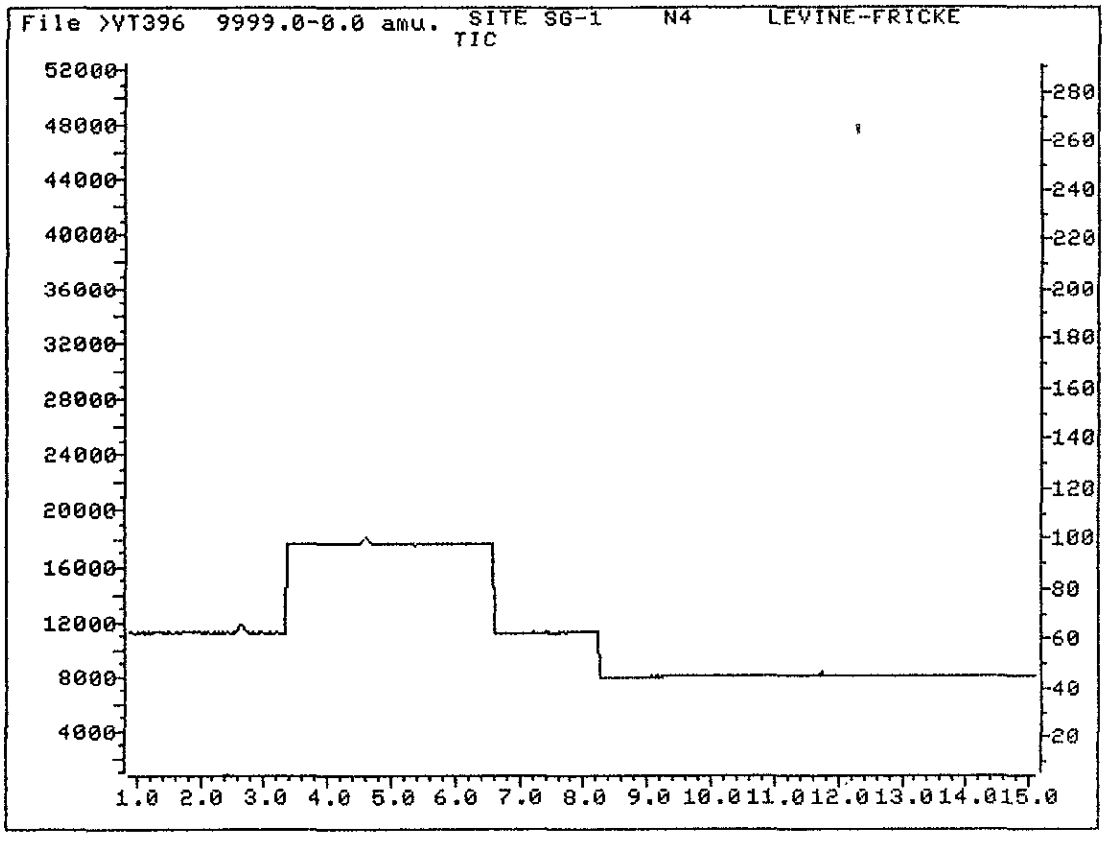
TF (toxicokinetic factor) is chosen to be 1 (most conservative case) and the average daily intake for adults is 0.1 kg and for children is 0.2 kg (DHS, 1986).

According to these equations, the AALs for beryllium, selenium, and zinc are calculated to be:

Compound	NOAEL	MEL (adult)	MEL (child)	AAL (adult)	AAL (child)
Beryllium	0.0054	0.378	0.054	378	27
Selenium	0.003	0.21	0.03	210	15
Zinc	0.2	14	2.0	14,000	1,000

APPENDIX H

FIELD DATA SHEETS -- SOIL-GAS AND SHALLOW RECONNAISSANCE GROUND-WATER SAMPLING



QUANT REPORT

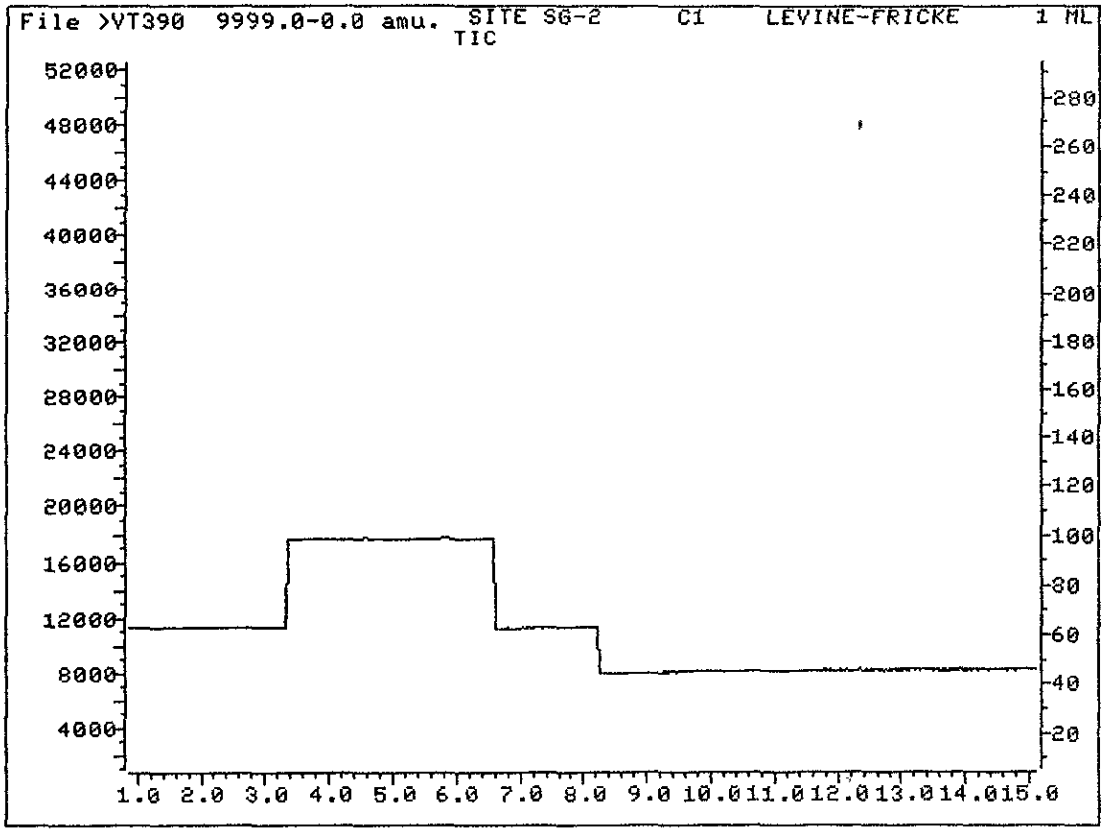
Operator ID: RAPHE
Output File: ^VT396::AQ
Data File: >VT396::DB
Name: SITE SG-1 N4
Misc: LEVINE-FRICKE 1 ML

Quant Rev: 6 Quant Time: 900410 16:09
Injected at: 900410 15:47
Dilution Factor: 1.00000

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: 900410 13:15

	Compound	R.T.	Scan#	Area	Conc	Units
4)	#1,1-DCE	2.62	75	1988	10.06	NG/ML
6)	#1,1,1-TCA	4.59	139	2361M	5.83	NG/ML

Compound uses ESTD



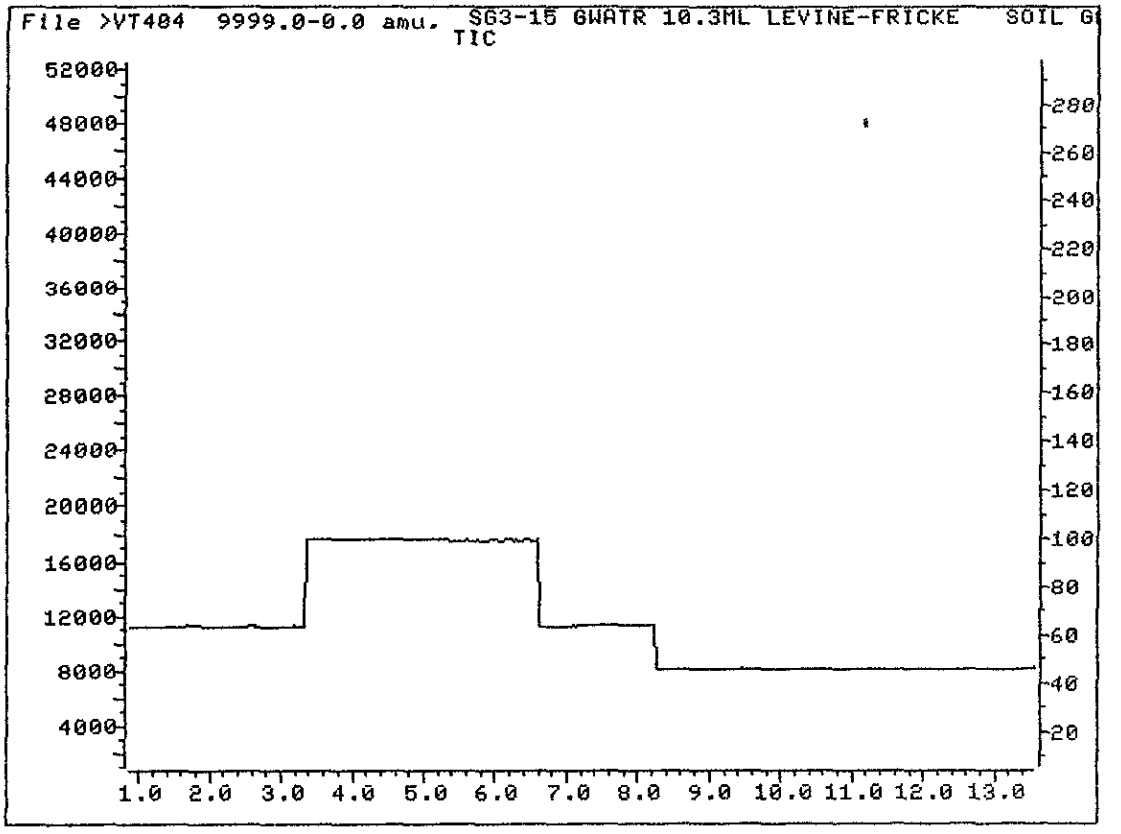
QUANT REPORT

Operator ID: RAPHE Quant Rev: 6 Quant Time: 900410 13:16
Output File: ^VT390::AQ Injected at: 900410 12:38
Data File: >VT390::DB Dilution Factor: 1.00000
Name: SITE SG-2 C1
Misc: LEVINE-FRICKE 1 ML (25ML WATER)

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: 900410 13:15

	Compound	R.T.	Scan#	Area	Conc	Units
4)	#1,1-DCE	2.62	75	237	1.20	NG/ML
6)	#1,1,1-TCA	4.59	139	820M	2.02	NG/ML
8)	#TCE	5.81	172	1068M	3.25	NG/ML
13)	#TOLUENE	8.53	280	148	.40	NG/ML

Compound uses ESTD
NOTE: APPROXIMATELY 25 ML OF WATER WERE WITHDRAWN WITH THE SOIL GAS.
IF THE PERCHED WATER IS THE SOURCE OF THE ABOVE COMPOUNDS, THEN
THEIR CONCENTRATIONS WOULD BE ROUGHLY 10 TIMES HIGHER IN THE WATER.



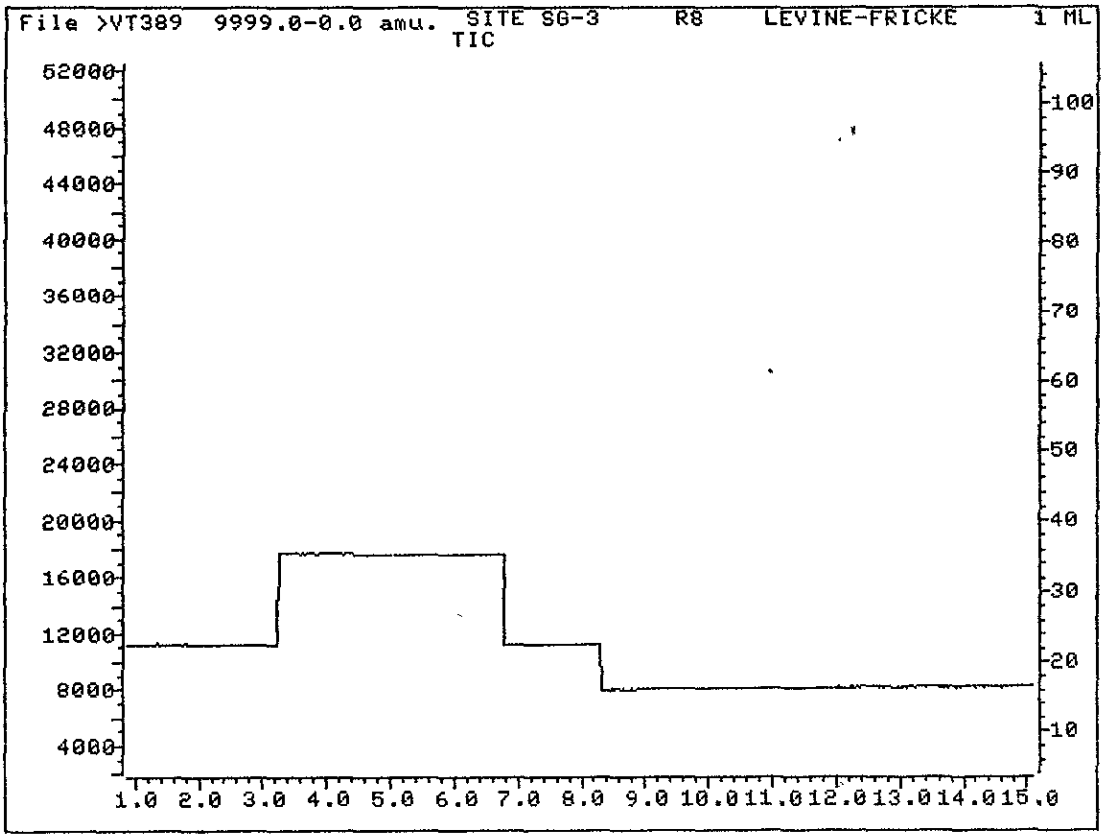
QUANT REPORT

Operator ID: RAPHE Quant Rev: 6 Quant Time: 900411 09:54
Output File: ^VT404::AQ Injected at: 900411 09:39
Data File: >VT404::DB Dilution Factor: 3.30000
Name: SG3-15 GWATR 10.3ML
Misc: LEVINE-FRICKE ~~SOIL-GAS~~ CLIPPER

ID File: ID_LFC::QT
Title: LEVINE-FRICKE ~~SOIL-GAS~~ CLIPPER
Last Calibration: 900410 13:15

	Compound	R.T.	Scan#	Area	Conc	Units
4)	#1,1-DCE	2.60	74	208	3.47	NG/ML
6)	#1,1,1-TCA	4.59	139	62M	.51	NG/ML
13)	#TOLUENE	8.49	278	269	2.39	NG/ML
18)	#LIGHTER HYDROCARBONS	1.75	38	718	7.56	NG/ML

Compound uses ESTD



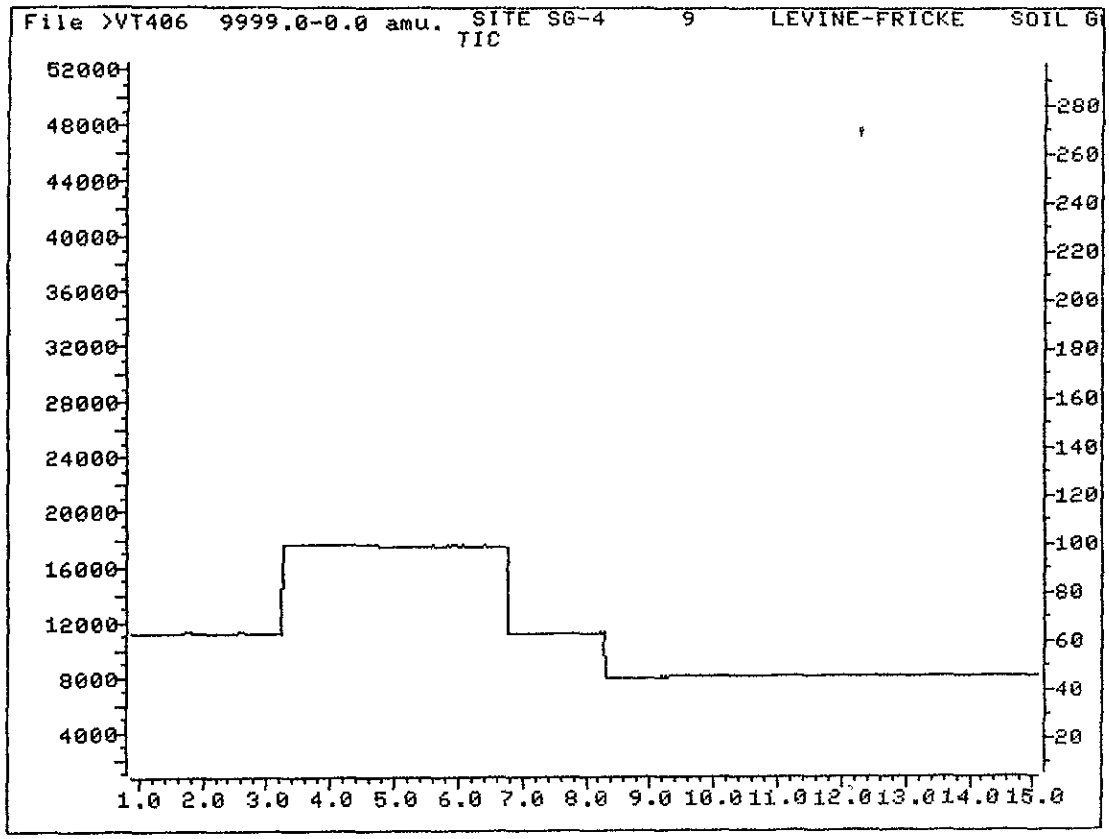
QUANT REPORT

Operator ID: RAPHE Quant Rev: 6 Quant Time: 900410 12:39
Output File: ^VT389::AQ Injected at: 900410 12:14
Data File: >VT389::DB Dilution Factor: 1.00000
Name: SITE SG-3 R8
Misc: LEVINE-FRICKE 1 ML (5ML WATER)

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: :

	Compound	R.T.	Scan#	Area	Conc	Units
6)	#1,1,1-TCA	3.92	119	148M	.36	NG/ML
13)	#TOLUENE	8.54	275	177	.44	NG/ML

Compound uses ESTD



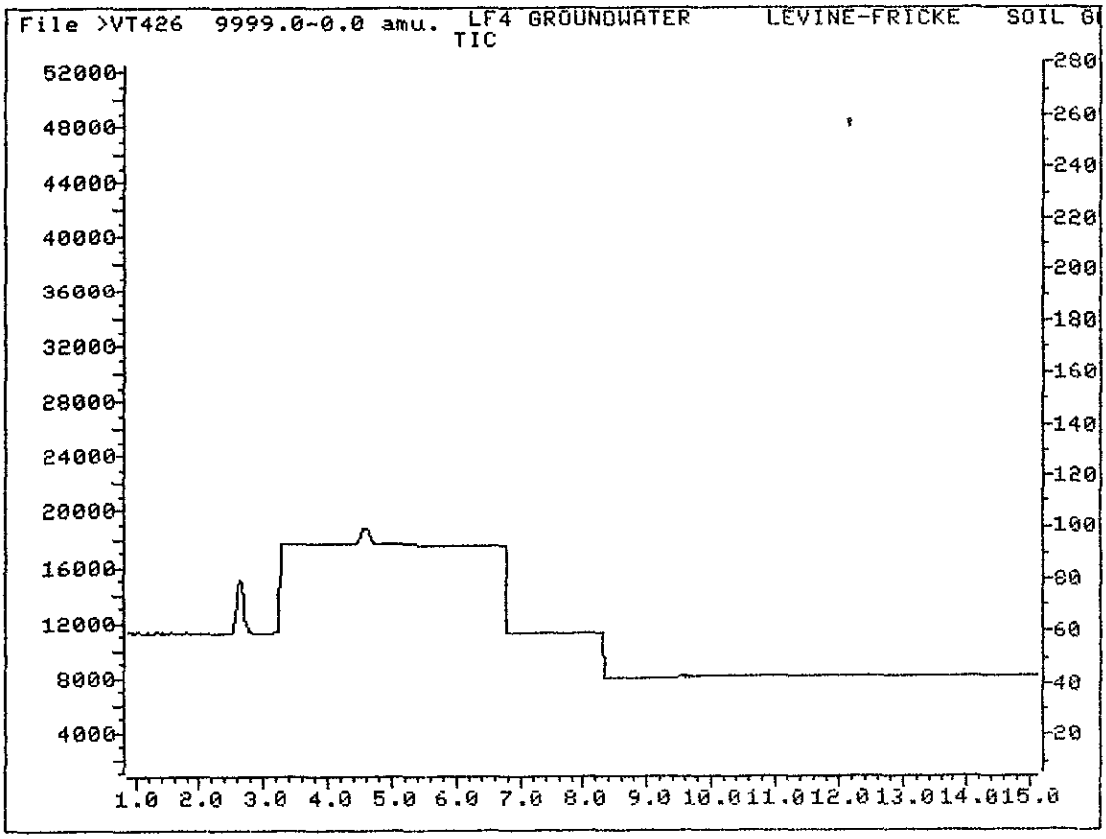
QUANT REPORT

Operator ID: RAPHE Quant Rev: 6 Quant Time: 900411 12:20
Output File: ^VT406::AQ Injected at: 900411 10:58
Data File: >VT406::DB Dilution Factor: 1.00000
Name: SITE SG-4 9
Misc: LEVINE-FRICKE SOIL GAS CLIPPER

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: 900410 13:15

	Compound	R.T.	Scan#	Area	Conc	Units
4)	#1,1-DCE	2.60	74	153	.77	NG/ML
6)	#1,1,1-TCA	4.55	136	405M	1.00	NG/ML

Compound uses ESTD



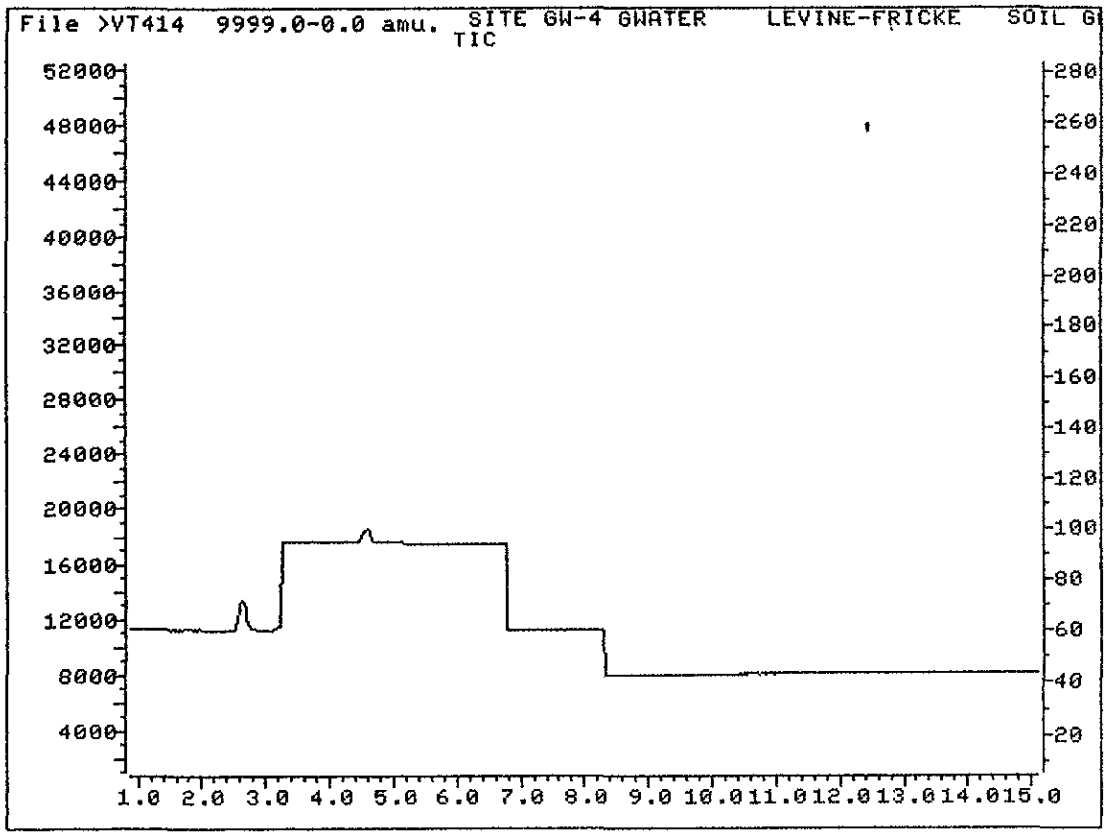
QUANT REPORT

Operator ID: RAPHE Quant Rev: 6 Quant Time: 900412 17:06
Output File: ^VT426::AQ Injected at: 900412 16:36
Data File: >VT426::D1 Dilution Factor: 6.38000
Name: LF4 GROUNDWATER
Misc: LEVINE-FRICKE SOIL GAS CLIPPER

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: 900410 13:15

Compound	R.T.	Scan#	Area	Conc	Units
4) #1,1-DCE	2.63	75	14615	471.79	NG/ML
5) #1,2-DCA	4.07	123	82	1.58	NG/ML
6) #1,1,1-TCA	4.58	137	6920	109.03	NG/ML

Compound uses ESTD



QUANT REPORT

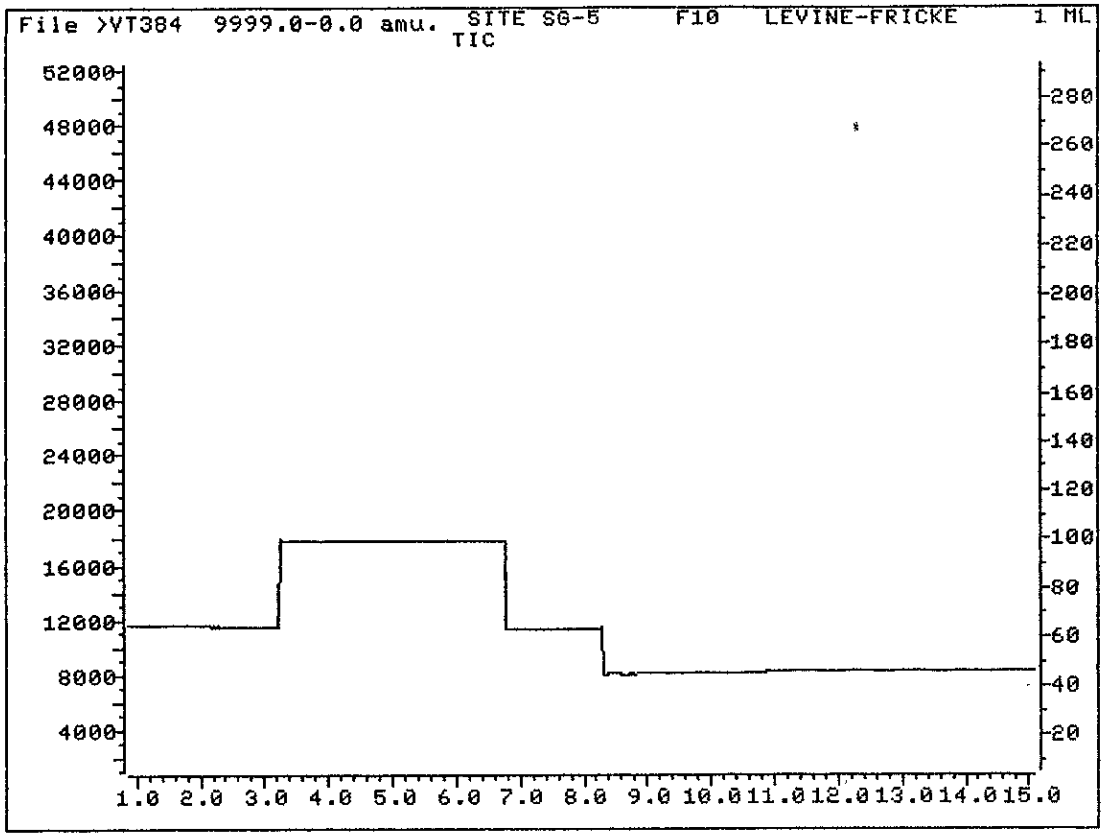
Operator ID: RAPHE
Output File: ^VT414::DB
Data File: >VT414::DB
Name: SITE GW-4 GWATER
Misc: LEVINE-FRICKE SOIL GAS CLIPPER

Quant Rev: 6 Quant Time: 900411 17:21
Injected at: 900411 17:03
Dilution Factor: 3.80000

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: 900410 13:15

	Compound	R.T.	Scan#	Area	Conc	Units
4)	#1,1-DCE	2.63	75	8370	160.93	NG/ML
5)	#1,2-DCA	4.07	123	93	1.07	NG/ML
6)	#1,1,1-TCA	4.59	137	5253	49.29	NG/ML

Compound uses ESTD



QUANT REPORT

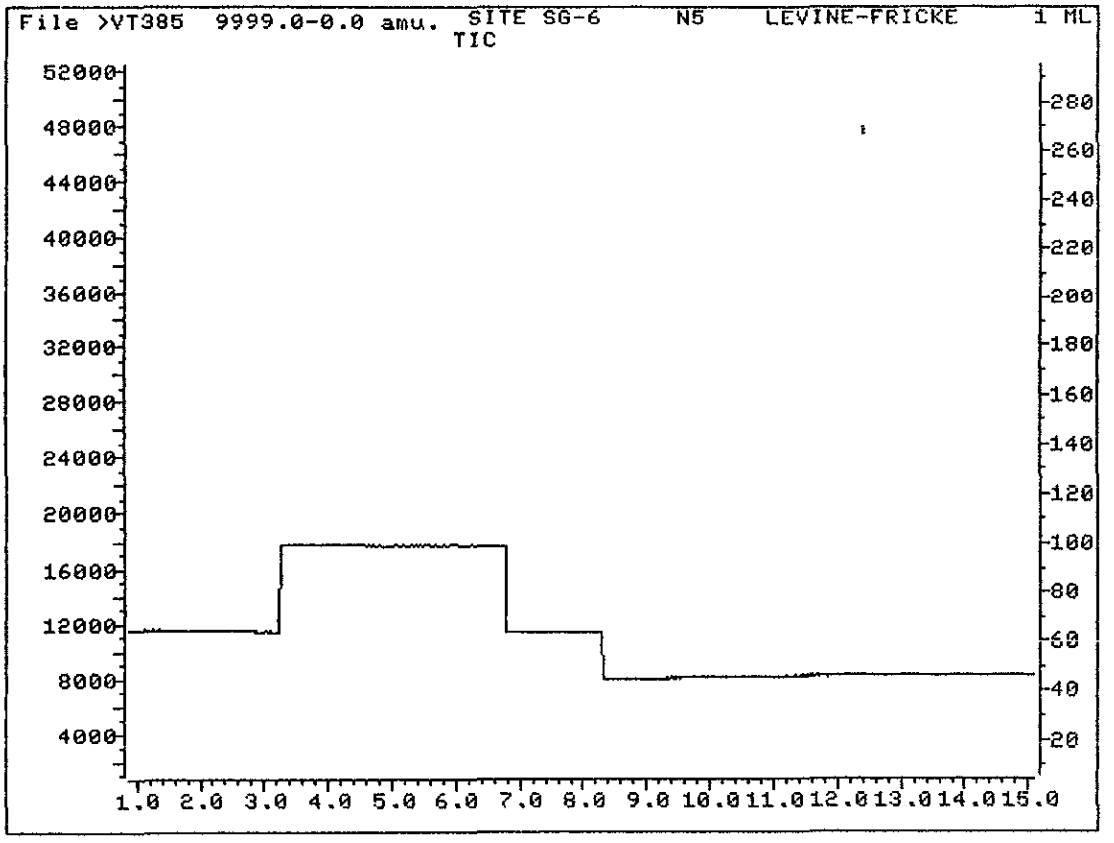
Operator ID: RAPHE
Output File: ^VT384::AQ
Data File: >VT384::DB
Name: SITE SG-5 F10
Misc: LEVINE-FRICKE 1 ML

Quant Rev: 6 Quant Time: 900410 10:20
Injected at: 900410 09:49
Dilution Factor: 1.00000

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: :

	Compound	R.T.	Scan#	Area	Conc	Units
13)	#TOLUENE	8.48	272	482	1.19	NG/ML

Compound uses ESTD



QUANT REPORT

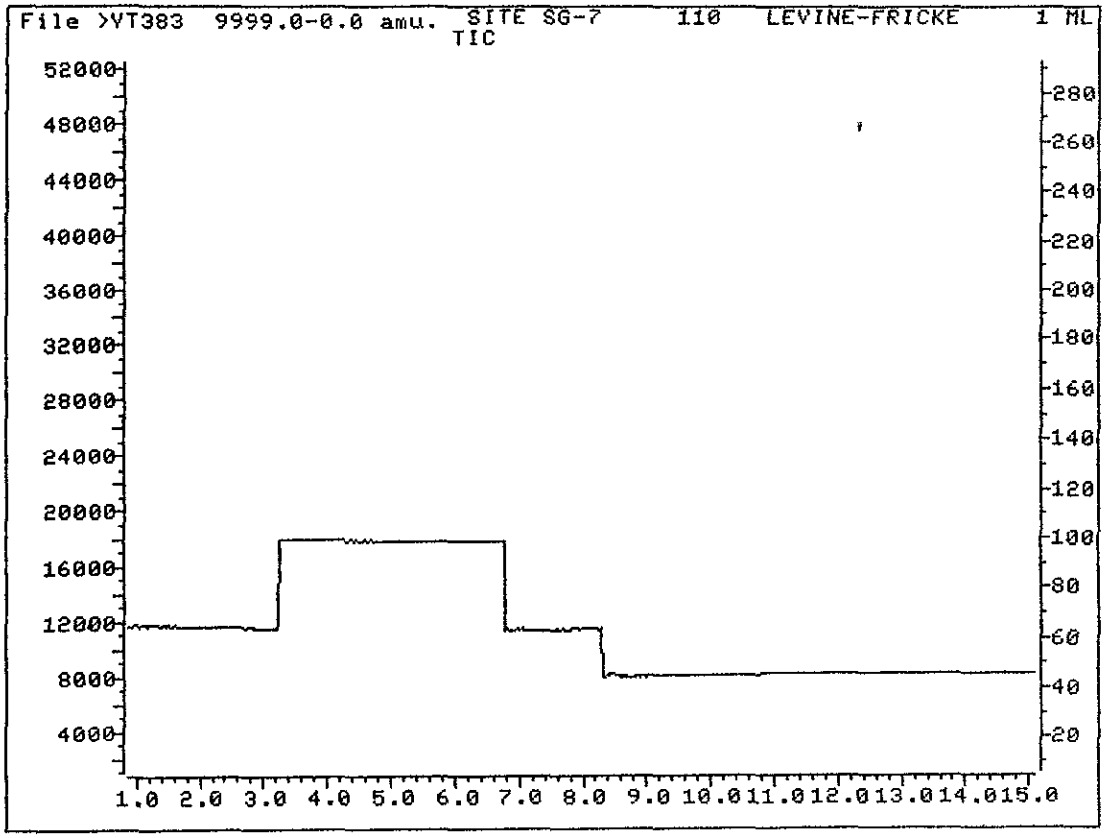
Operator ID: RAPHE
Output File: ^VT385::AQ
Data File: >VT385::DB
Name: SITE SG-6 N5
Misc: LEVINE-FRICKE 1 ML

Quant Rev: 6 Quant Time: 900410 10:38
Injected at: 900410 10:15
Dilution Factor: 1.00000

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: :

Compound	R.T.	Scan#	Area	Conc	Units

NO COMPOUNDS DETECTED



QUANT REPORT

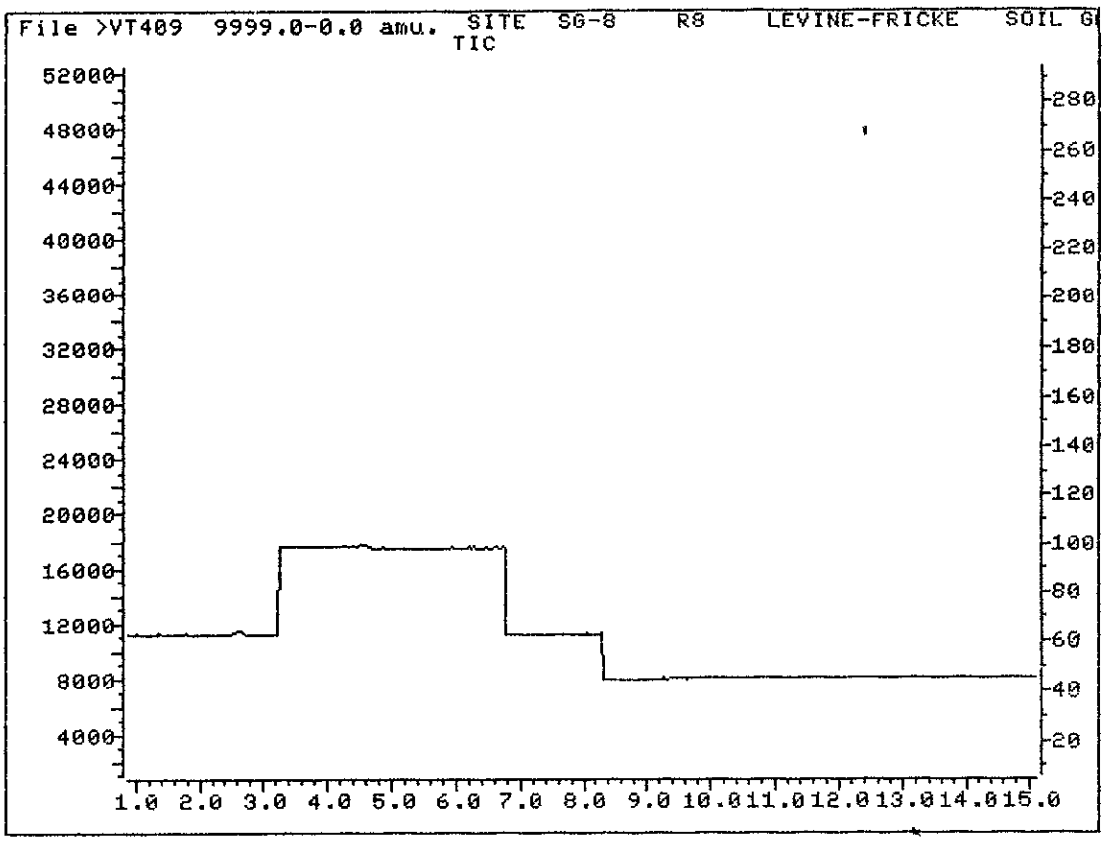
Operator ID: RAPHE
Output File: ^VT383::AQ
Data File: >VT383::DB
Name: SITE SG-7 110
Misc: LEVINE-FRICKE 1 ML

Quant Rev: 6 Quant Time: 900410 09:50
Injected at: 900410 09:28
Dilution Factor: 1.00000

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: :

	Compound	R.T.	Scan#	Area	Conc	Units
13)	#TOLUENE	8.45	270	1764	4.34	NG/ML
15)	#ETHYL BENZENE	9.61	339	349M	1.48	NG/ML
17)	#XYLENES	10.98	420	1968M	7.25	NG/ML

Compound uses ESTD



QUANT REPORT

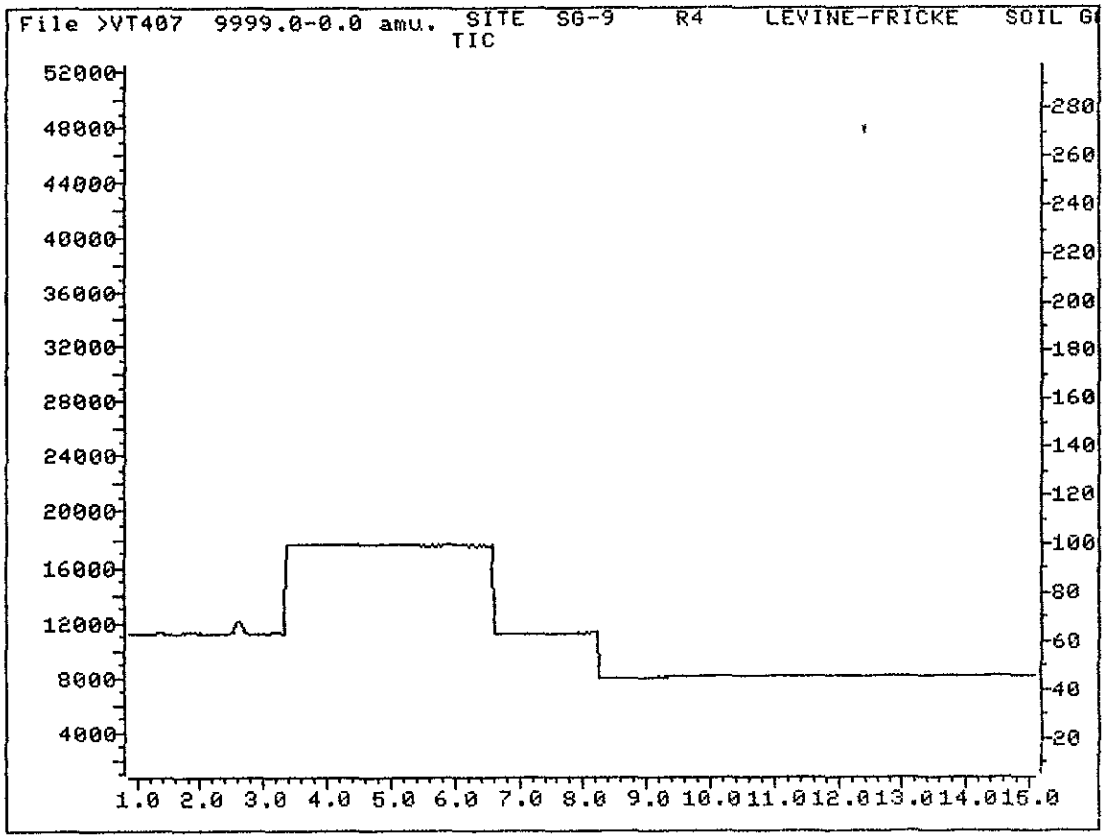
Operator ID: RAPHE
Output File: ^VT409::AQ
Data File: >VT409::DB
Name: SITE SG-8 R8
Misc: LEVINE-FRICKE SOIL GAS CLIPPER

Quant Rev: 6 Quant Time: 900411 15:01
Injected at: 900411 14:20
Dilution Factor: 1.00000

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: 900410 13:15

	Compound	R.T.	Scan#	Area	Conc	Units
4)	#1,1-DCE	2.60	74	1229	6.22	NG/ML
6)	#1,1,1-TCA	4.55	136	1902M	4.70	NG/ML

Compound uses ESTD



QUANT REPORT

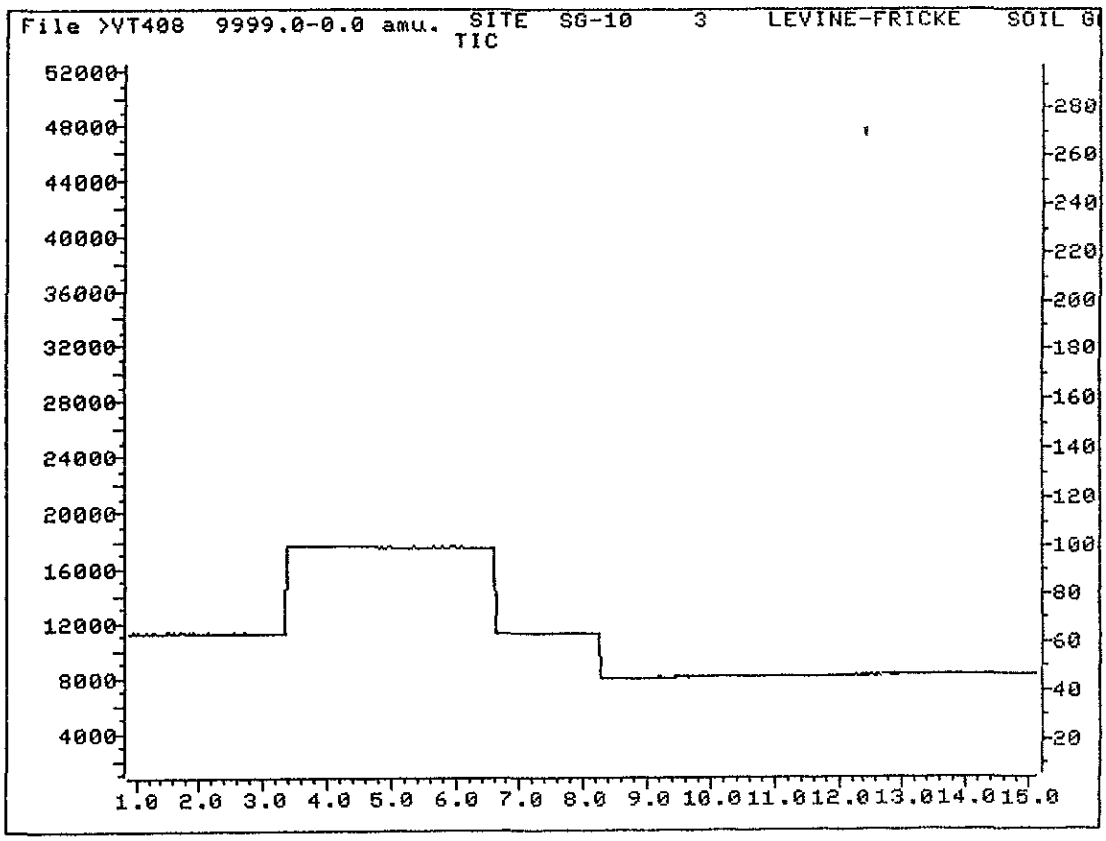
Operator ID: RAPHE
Output File: ^VT407::AQ
Data File: >VT407::DB
Name: SITE SG-9 R4
Misc: LEVINE-FRICKE SOIL GAS CLIPPER

Quant Rev: 6 Quant Time: 900411 12:41
Injected at: 900411 12:18
Dilution Factor: 1.00000

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: 900410 13:15

	Compound	R.T.	Scan#	Area	Conc	Units
4)	#1,1-DCE	2.60	74	3649	18.46	NG/ML
6)	#1,1,1-TCA	4.52	137	46M	.11	NG/ML

Compound uses ESTD



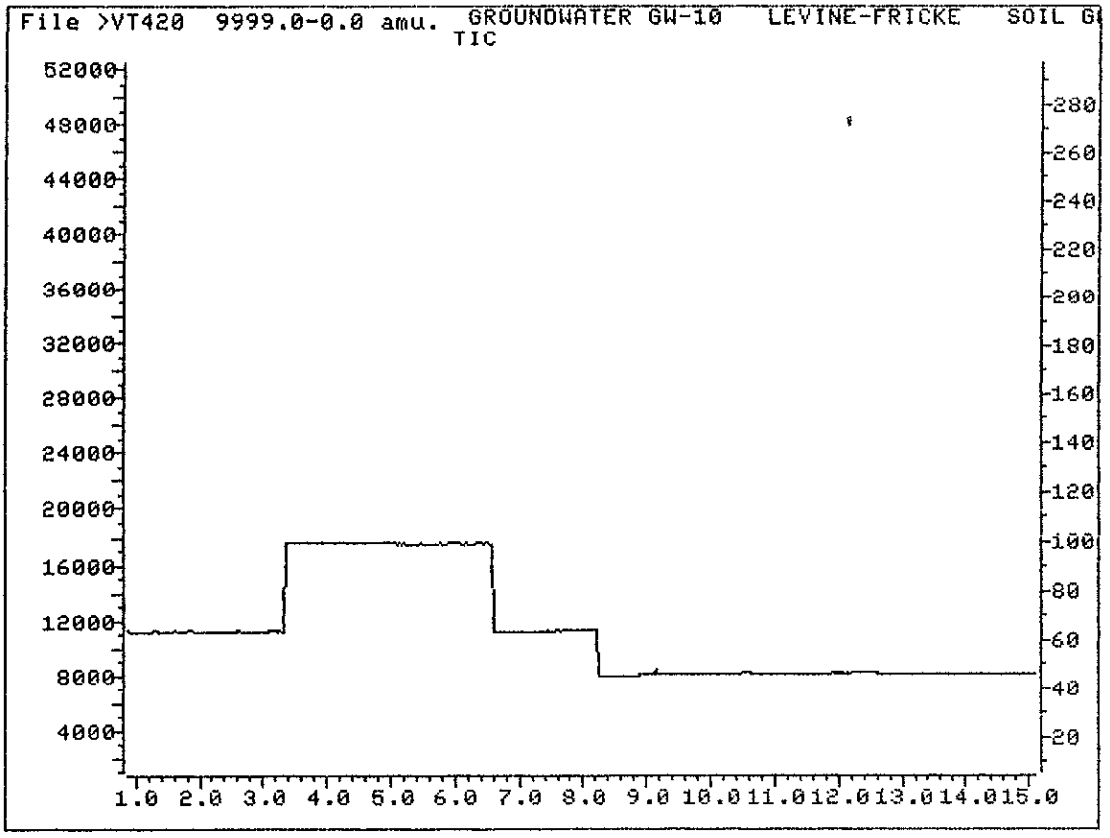
QUANT REPORT

Operator ID: RAPHE
Quant Rev: 6 Quant Time: 900411 13:19
Output File: ^VT408::AQ
Injected at: 900411 13:02
Data File: >VT408::DB
Dilution Factor: 1.00000
Name: SITE SG-10 3
Misc: LEVINE-FRICKE SOIL GAS CLIPPER

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: 900410 13:15

Compound	R.T.	Scan#	Area	Conc	Units

NO COMPOUNDS DETECTED



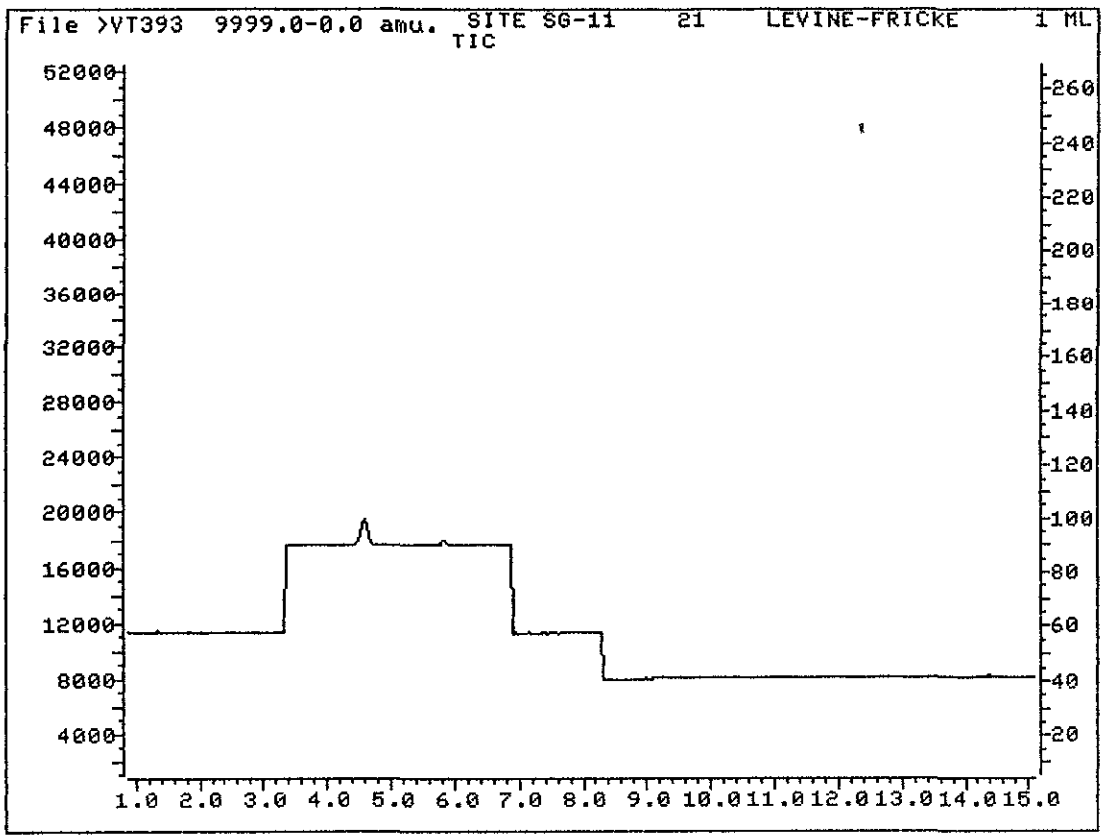
QUANT REPORT

Operator ID: RAPHE
Quant Rev: 6
Quant Time: 900412 10:46
Output File: ^VT420::AQ
Injected at: 900412 09:52
Data File: >VT420::D1
Dilution Factor: 7.78000
Name: GROUNDWATER GW-10
Misc: LEVINE-FRICKE SOIL GAS CLIPPER

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: 900410 13:15

Compound	R.T.	Scan#	Area	Conc	Units

NO COMPOUNDS DETECTED



QUANT REPORT

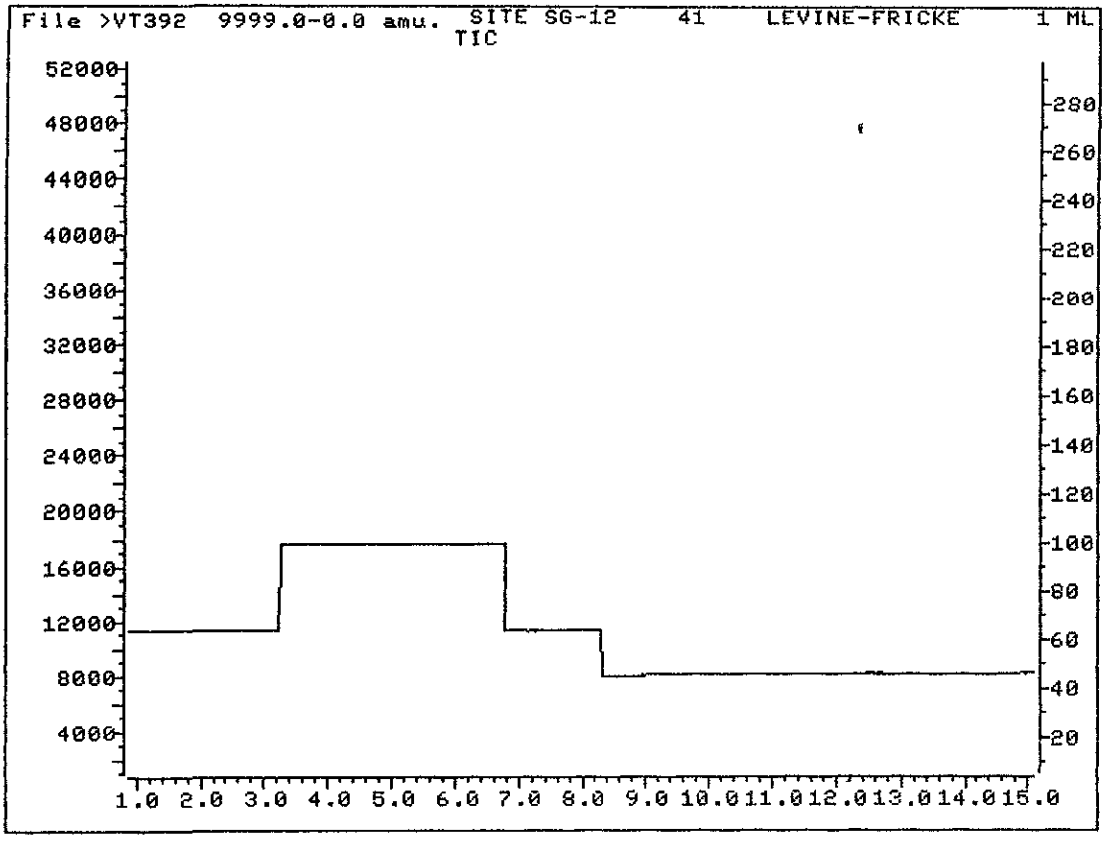
Operator ID: RAPHE
Output File: ^VT393::AQ
Data File: >VT393::DB
Name: SITE SG-11 21
Misc: LEVINE-FRICKE 1 ML

Quant Rev: 6 Quant Time: 900410 15:11
Injected at: 900410 14:35
Dilution Factor: 1.00000

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: 900410 13:15

	Compound	R.T.	Scan#	Area	Conc	Units
4)	#1,1-DCE	2.60	74	180	.91	NG/ML
6)	#1,1,1-TCA	4.59	139	10576	26.12	NG/ML
8)	#TCE	5.85	173	1328M	4.05	NG/ML
11)	#t1,2-DICHLOROETHENE	3.12	96	50	.18	NG/ML

Compound uses ESTD
NOTE: APPROXIMATELY 1 ML OF WATER WAS WITHDRAWN WITH THE SOIL GAS.



QUANT REPORT

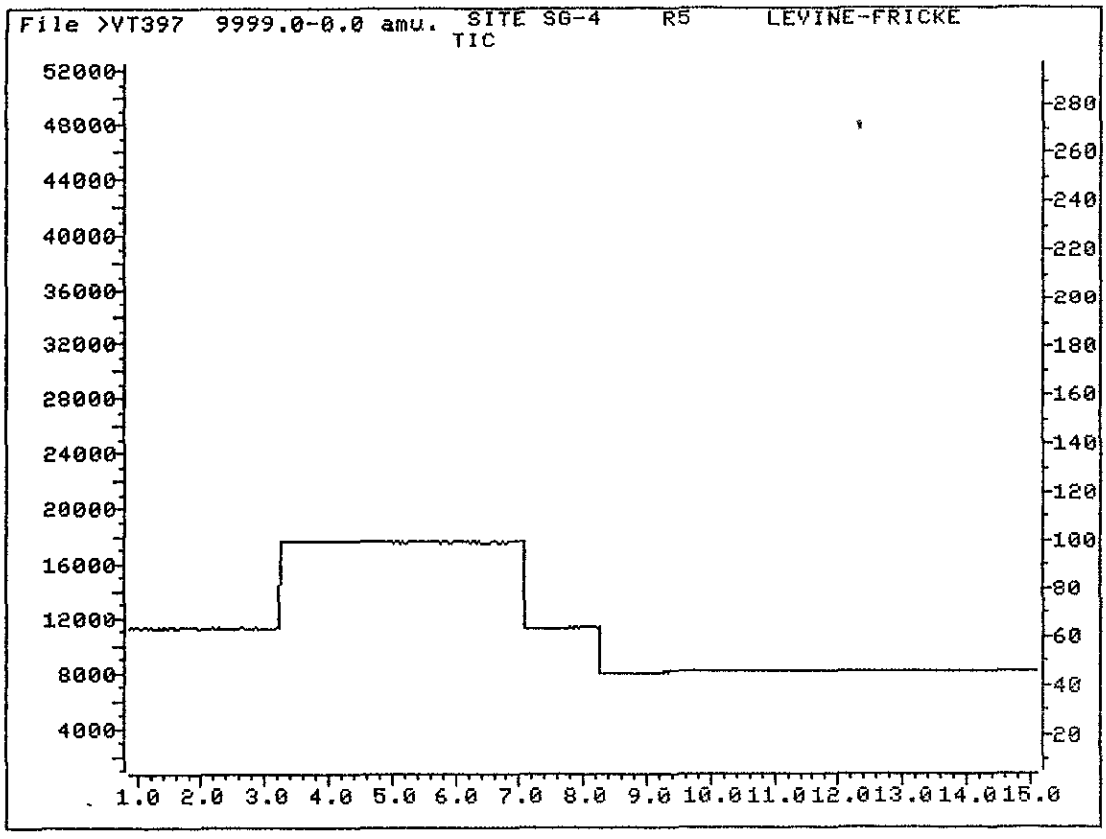
Operator ID: RAPHE
Output File: ^VT392::AQ
Data File: >VT392::DB
Name: SITE SG-12 41
Misc: LEVINE-FRICKE 1 ML

Quant Rev: 6 Quant Time: 900410 15:00
Injected at: 900410 14:14
Dilution Factor: 1.00000

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: 900410 13:15

Compound	R.T.	Scan#	Area	Conc	Units

NO COMPOUNDS DETECTED



QUANT REPORT

Operator ID: RAPHE
Output File: ^VT397::AQ
Data File: >VT397::DB
Name: SITE SG-4 R5
Misc: LEVINE-FRICKE

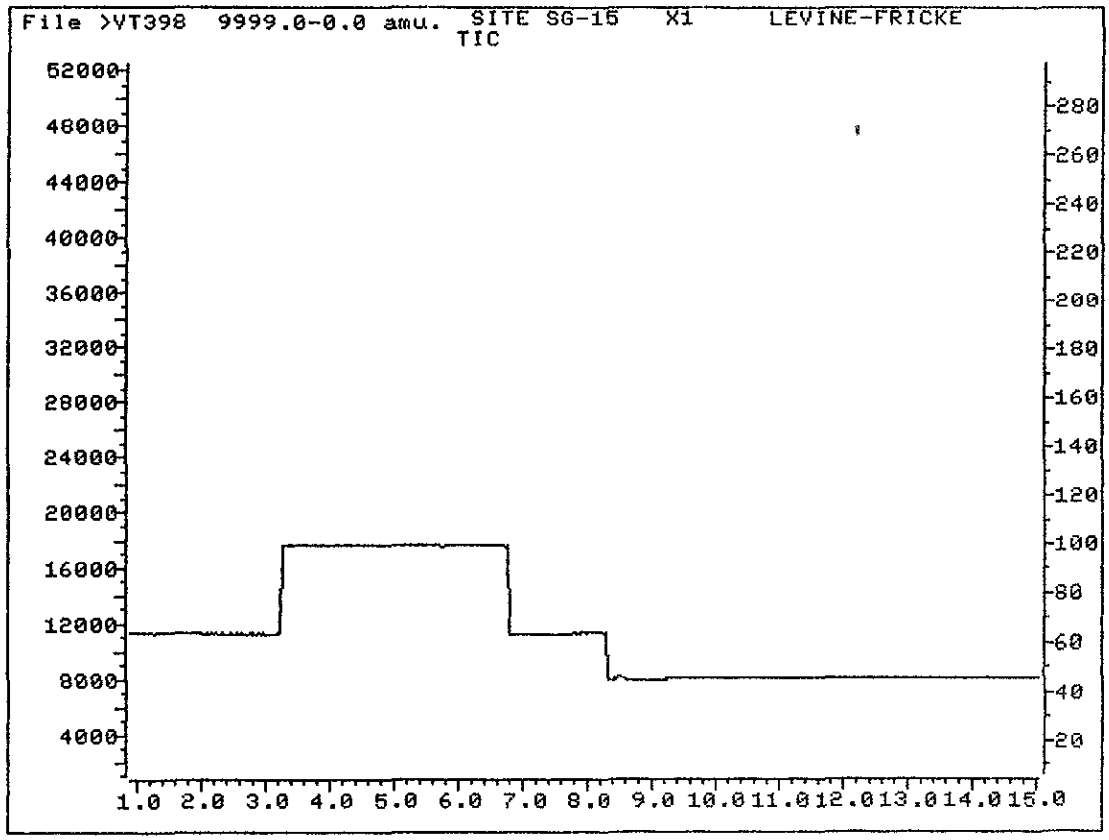
Quant Rev: 6 Quant Time: 900410 16:38
Injected at: 900410 16:22
Dilution Factor: 1.00000

1 ML

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: 900410 13:15

	Compound	R.T.	Scan#	Area	Conc	Units
13)	#TOLUENE	8.54	271	315M	.85	NG/ML
17)	#XYLENES	10.64	396	1044M	3.64	NG/ML

Compound uses ESTD



QUANT REPORT

Operator ID: RAPHE
Output File: ^VT398::AQ
Data File: >VT398::DB
Name: SITE SG-15 X1
Misc: LEVINE-FRICKE

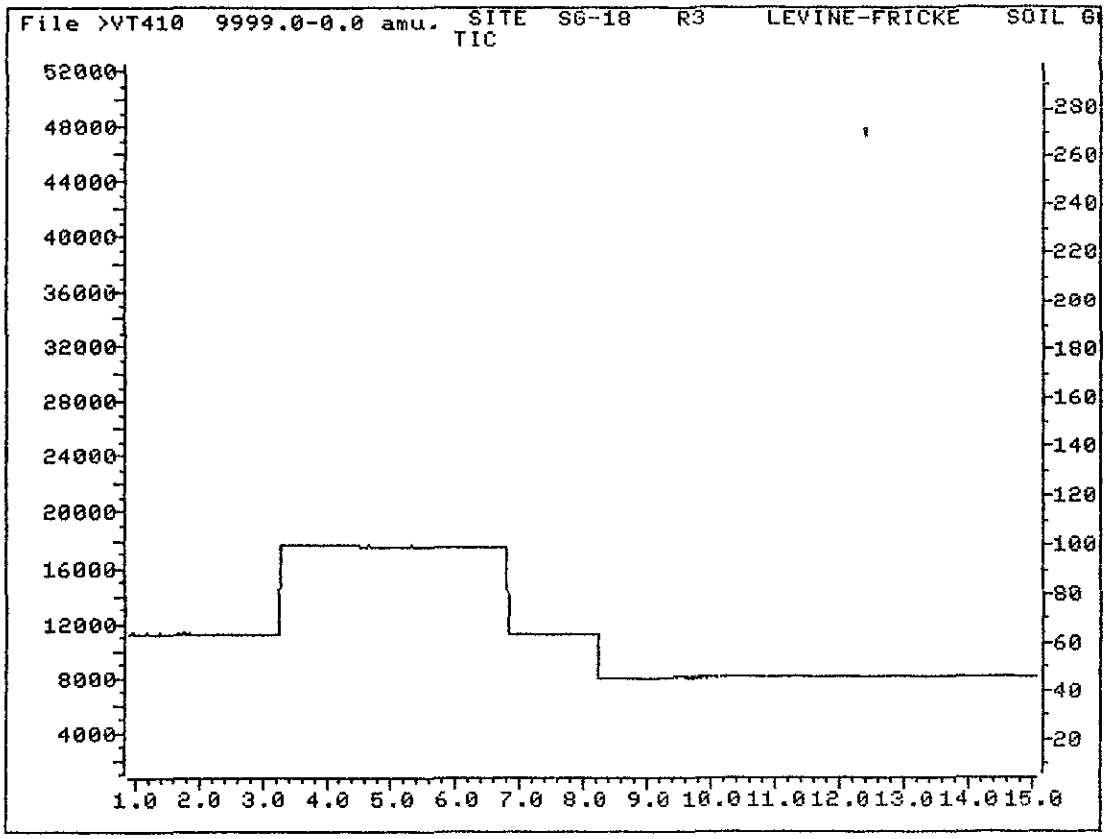
Quant Rev: 6 Quant Time: 900410 17:10
Injected at: 900410 16:44
Dilution Factor: 1.00000

1 ML

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: 900410 13:15

	Compound	R.T.	Scan#	Area	Conc	Units
1)	#METHYLENE CHLORIDE	1.58	30	689	2.90	NG/ML
13)	#TOLUENE	8.50	272	2013	5.43	NG/ML
17)	#XYLENES	11.02	422	757M	2.64	NG/ML

Compound uses ESTD



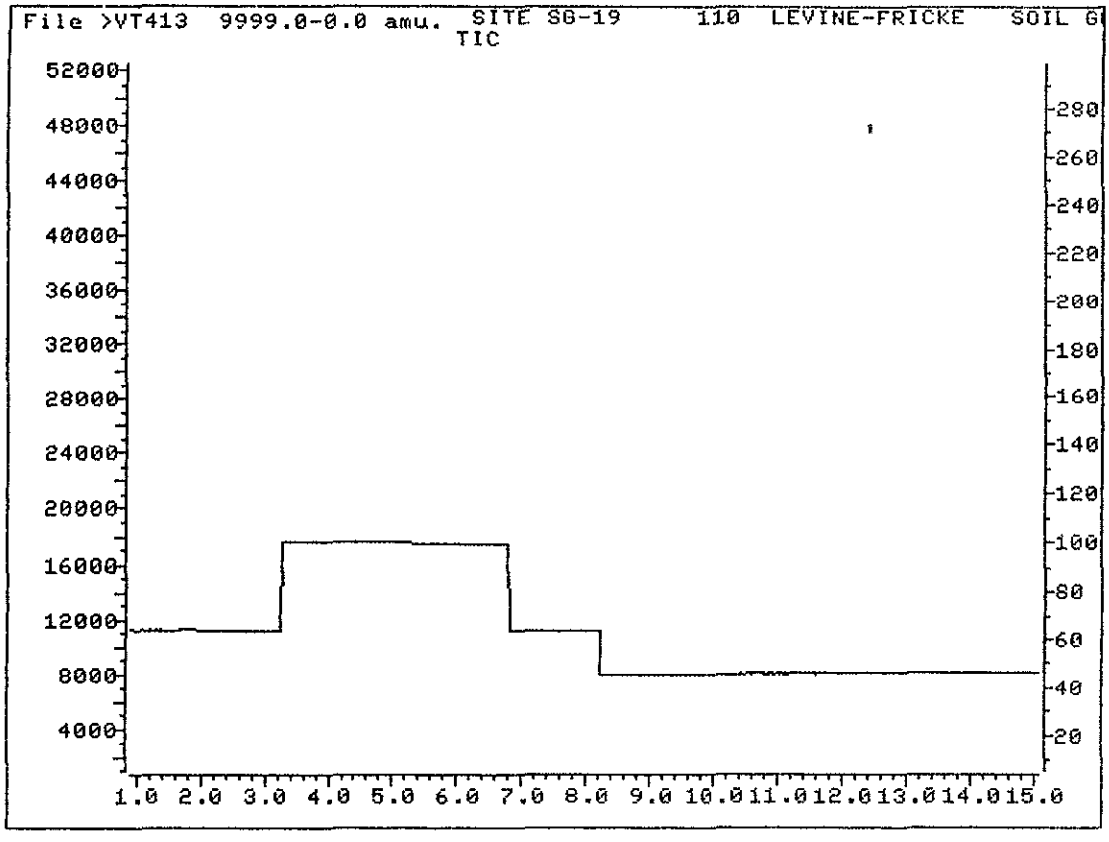
QUANT REPORT

Operator ID: RAPHE Quant Rev: 6 Quant Time: 900411 15:48
Output File: ^VT410::AQ Injected at: 900411 15:05
Data File: >VT410::DB Dilution Factor: 1.00000
Name: SITE SG-18 R3
Misc: LEVINE-FRICKE SOIL GAS CLIPPER

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: 900410 13:15

Compound	R.T.	Scan#	Area	Conc	Units

NO COMPOUNDS DETECTED



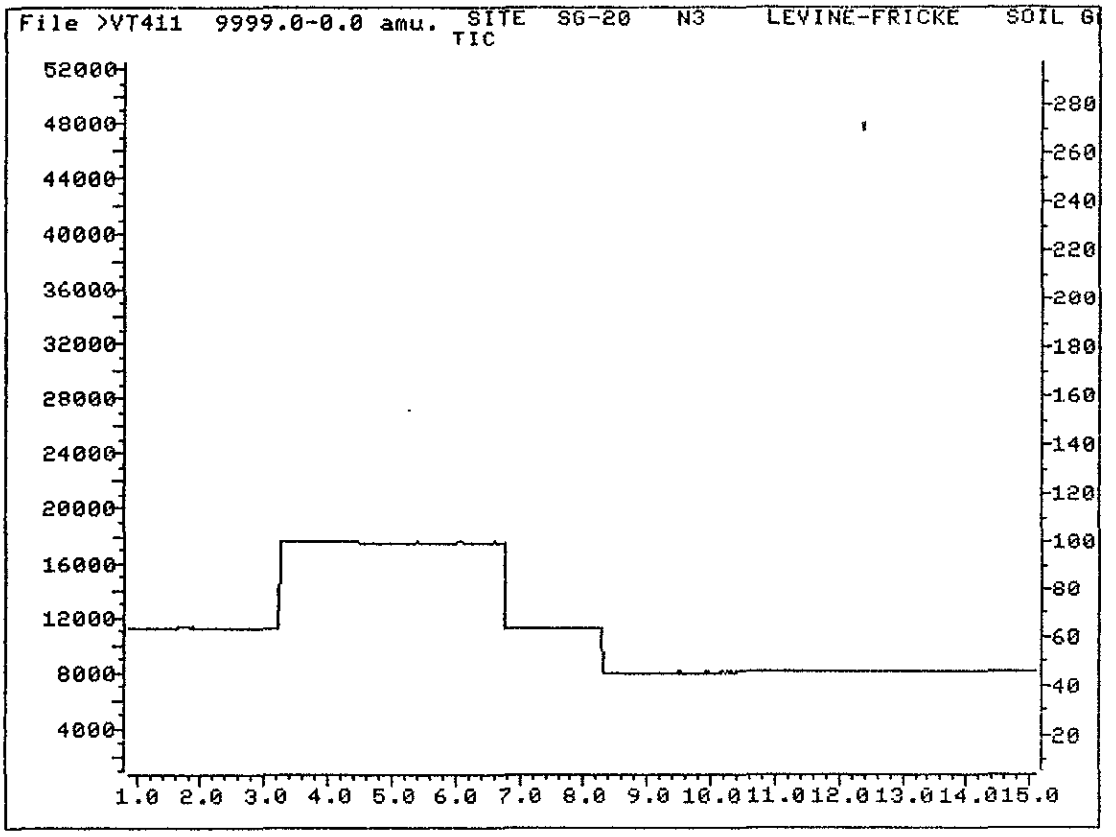
QUANT REPORT

Operator ID: RAPHE Quant Rev: 6 Quant Time: 900411 17:04
Output File: ^VT413::AQ Injected at: 900411 16:41
Data File: >VT413::DB Dilution Factor: 1.00000
Name: SITE SG-19 110
Misc: LEVINE-FRICKE SOIL GAS CLIPPER

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: 900410 13:15

Compound	R.T.	Scan#	Area	Conc	Units

NO COMPOUNDS DETECTED



QUANT REPORT

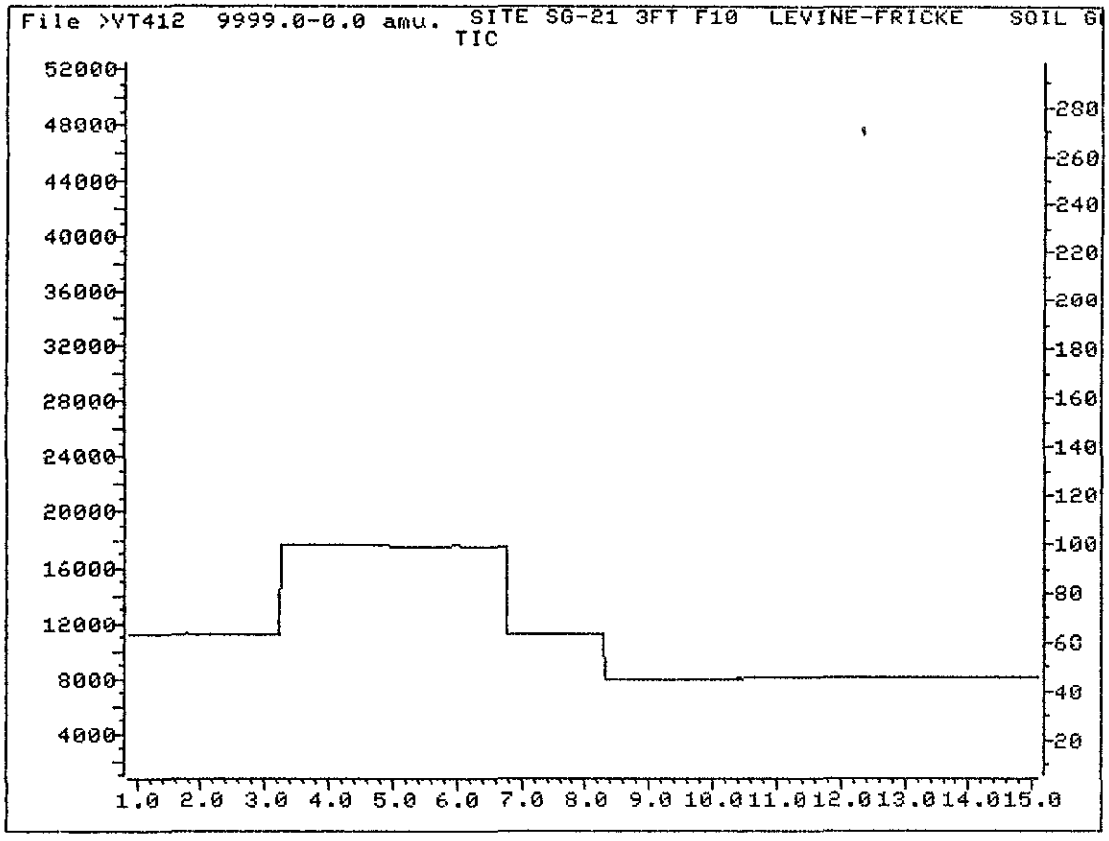
Operator ID: RAPHE
Output File: ^VT411::AQ
Data File: >VT411::DB
Name: SITE SG-20 3#N3
Misc: LEVINE-FRICKE SOIL GAS CLIPPER

Quant Rev: 6 Quant Time: 900411 16:20
Injected at: 900411 15:52
Dilution Factor: 1.00000

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: 900410 13:15

	Compound	R.T.	Scan#	Area	Conc	Units
18)	#LIGHTER HYDROCARBONS	1.71	36	556	1.77	NG/ML

Compound uses ESTD



QUANT REPORT

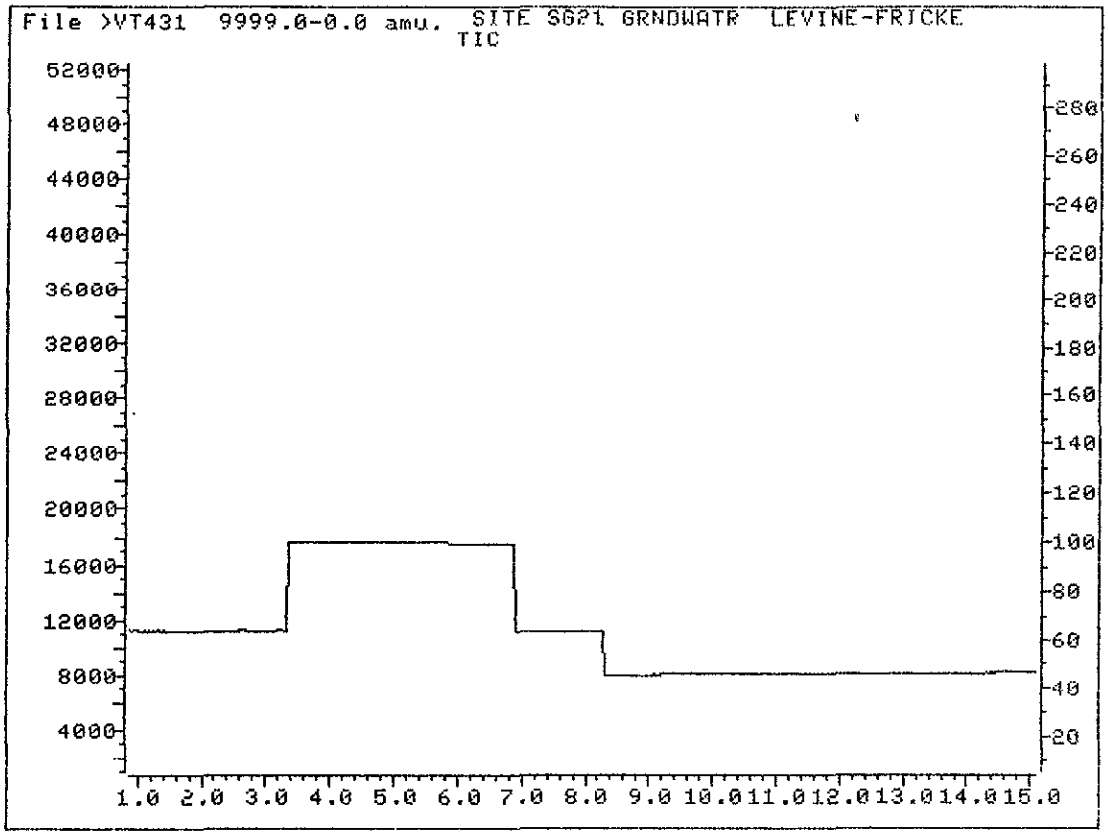
Operator ID: RAPHE
Output File: ^VT412::AQ
Data File: >VT412::DB
Name: SITE SG-21 3FT F10
Misc: LEVINE-FRICKE SOIL GAS CLIPPER

Quant Rev: 6 Quant Time: 900411 16:36
Injected at: 900411 16:18
Dilution Factor: 1.00000

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: 900410 13:15

	Compound	R.T.	Scan#	Area	Conc	Units
9)	#BENZENE	5.99	175	279M	.46	NG/ML

Compound uses ESTD



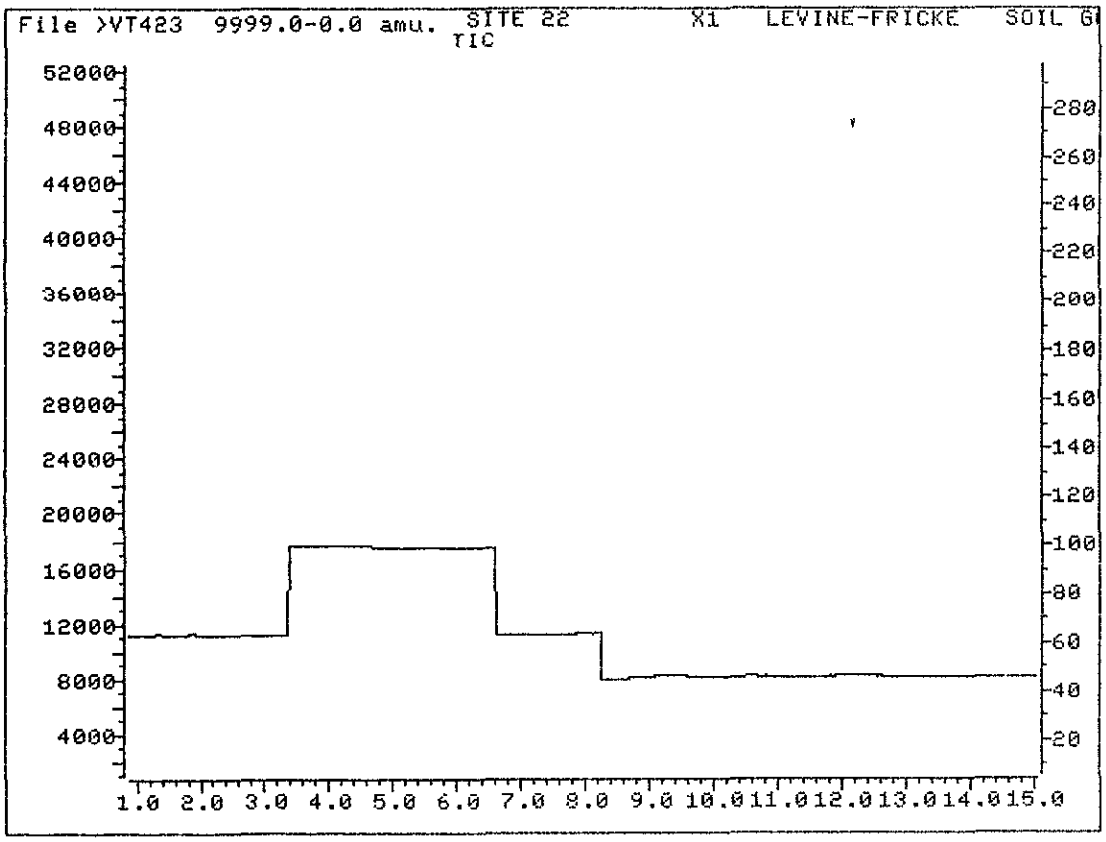
QUANT REPORT

Operator ID: RAPHE
Quant Rev: 6
Quant Time: 900413 08:19
Output File: ^VT431::AQ
Injected at: 900413 08:00
Data File: >VT431::D1
Dilution Factor: 1.00000
Name: SITE SG21 GRNDWATR
Misc: LEVINE-FRICKE CLIPPER

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: 900410 13:15

	Compound	R.T.	Scan#	Area	Conc	Units
4)	#1,1-DCE	2.65	76	221	1.12	NG/ML

Compound uses ESTD



QUANT REPORT

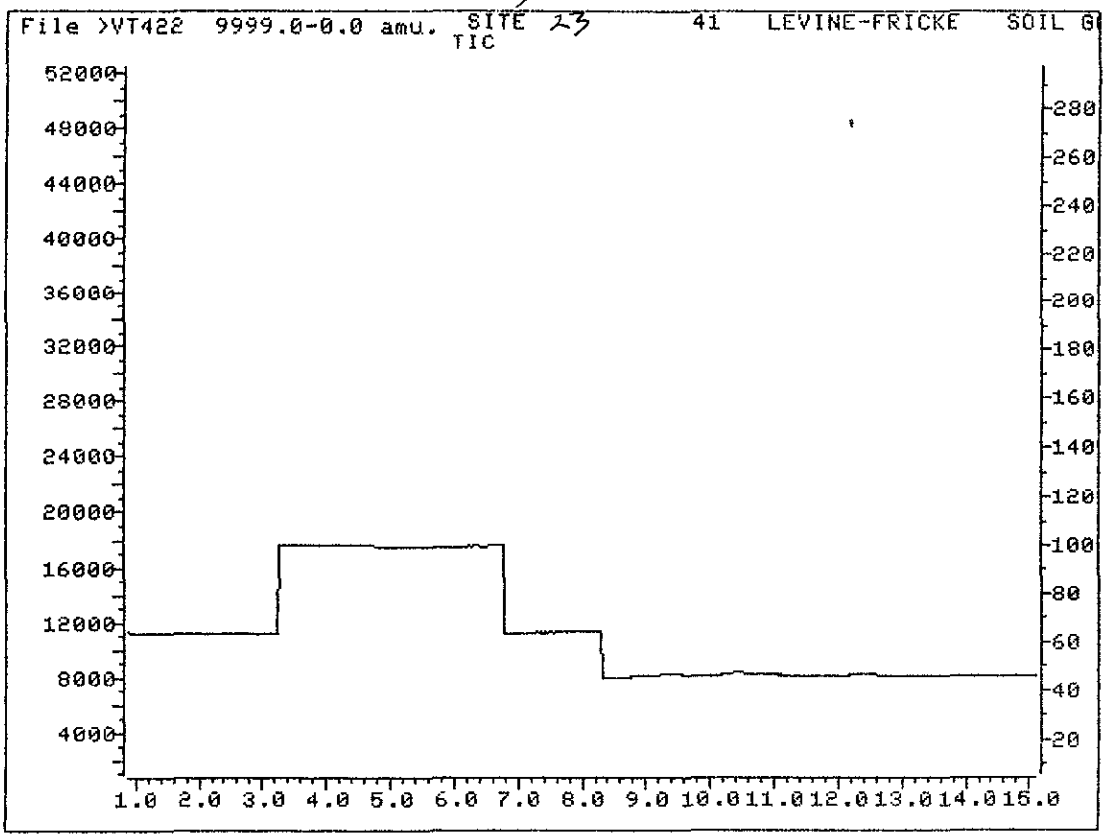
Operator ID: RAPHE Quant Rev: 6 Quant Time: 900412 14:54
Output File: ^VT423::AQ Injected at: 900412 14:25
Data File: >VT423::D1 Dilution Factor: 1.00000
Name: SITE 22 X1
Misc: LEVINE-FRICKE SOIL GAS CLIPPER

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: 900410 13:15

Compound	R.T.	Scan#	Area	Conc	Units

NO COMPOUNDS DETECTED

SG



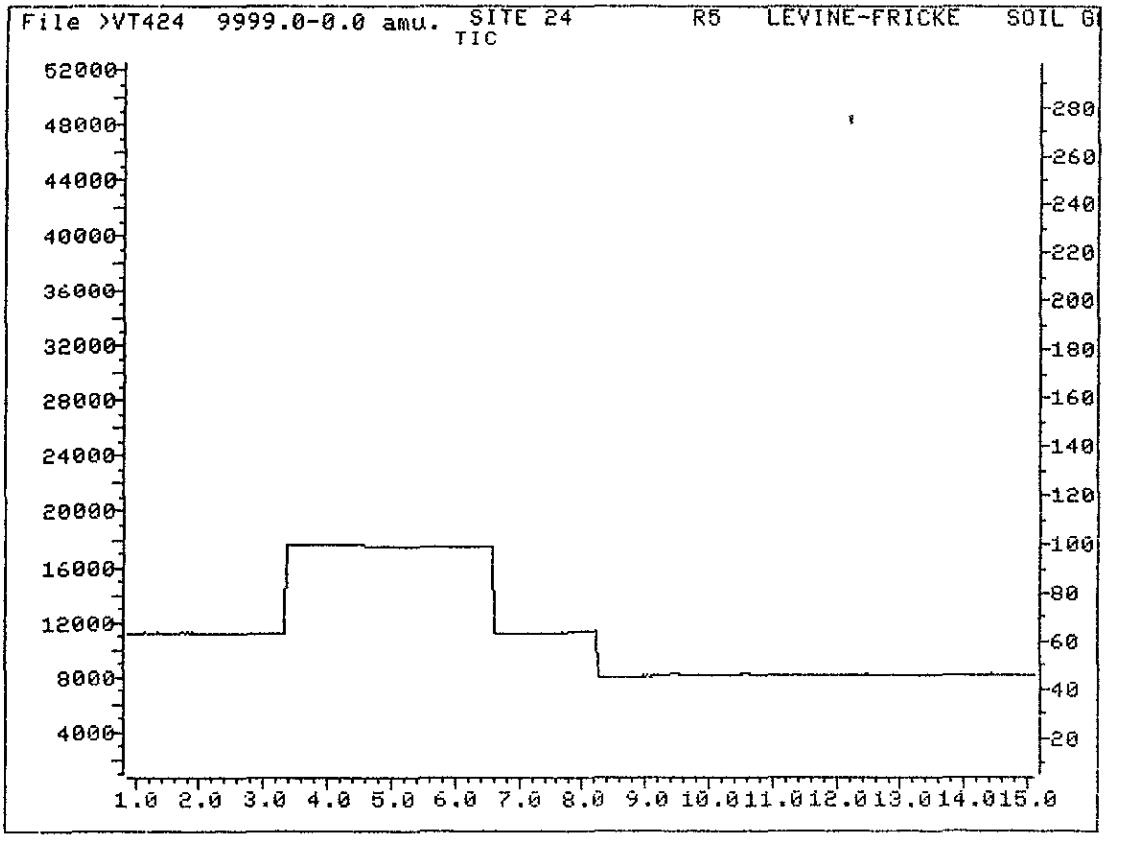
QUANT REPORT

Operator ID: RAPHE
Quant Rev: 6 Quant Time: 900412 14:09
Output File: ^VT422::AQ
Injected at: 900412 13:41
Data File: SG >VT422::D1
Dilution Factor: 1.00000
Name: SITE 23 41
Misc: LEVINE-FRICKE SOIL GAS CLIPPER

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: 900410 13:15

Compound	R.T.	Scan#	Area	Conc	Units

NO COMPOUNDS DETECTED



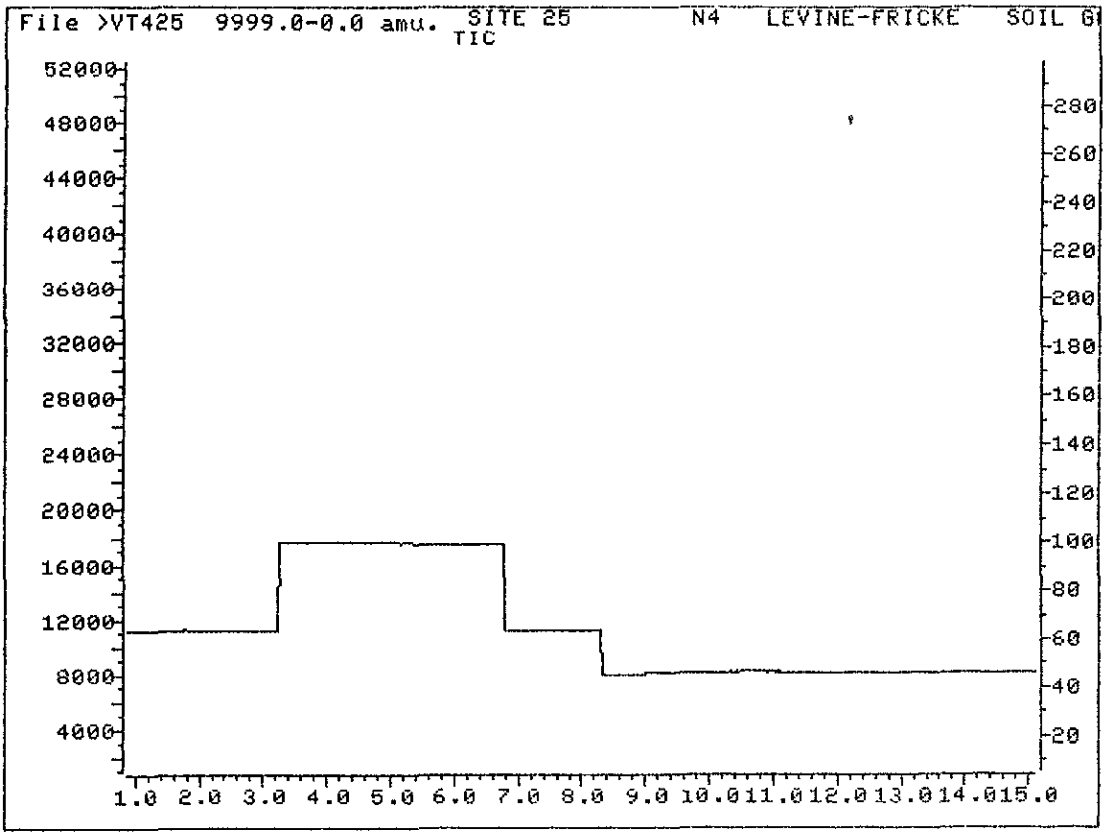
QUANT REPORT

Operator ID: RAPHE Quant Rev: 6 Quant Time: 900412 16:17
Output File: ^VT424::AQ Injected at: 900412 15:49
Data File: >VT424::D1 Dilution Factor: 1.00000
Name: SITE 24 R5
Misc: LEVINE-FRICKE SOIL GAS CLIPPER

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: 900410 13:15

Compound	R.T.	Scan#	Area	Conc	Units

NO COMPOUNDS DETECTED



QUANT REPORT

Operator ID: RAPHE Quant Rev: 6 Quant Time: 900412 16:32
Output File: ^VT425::AQ Injected at: 900412 16:13
Data File: >VT425::D1 Dilution Factor: 1.00000
Name: SITE 25 N4
Misc: LEVINE-FRICKE SOIL GAS CLIPPER

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: 900410 13:15

	Compound	R.T.	Scan#	Area	Conc	Units
1)	#METHYLENE CHLORIDE	1.64	33	176	.74	NG/ML
18)	#LIGHTER HYDROCARBONS	1.78	39	336	1.07	NG/ML

Compound uses ESTD

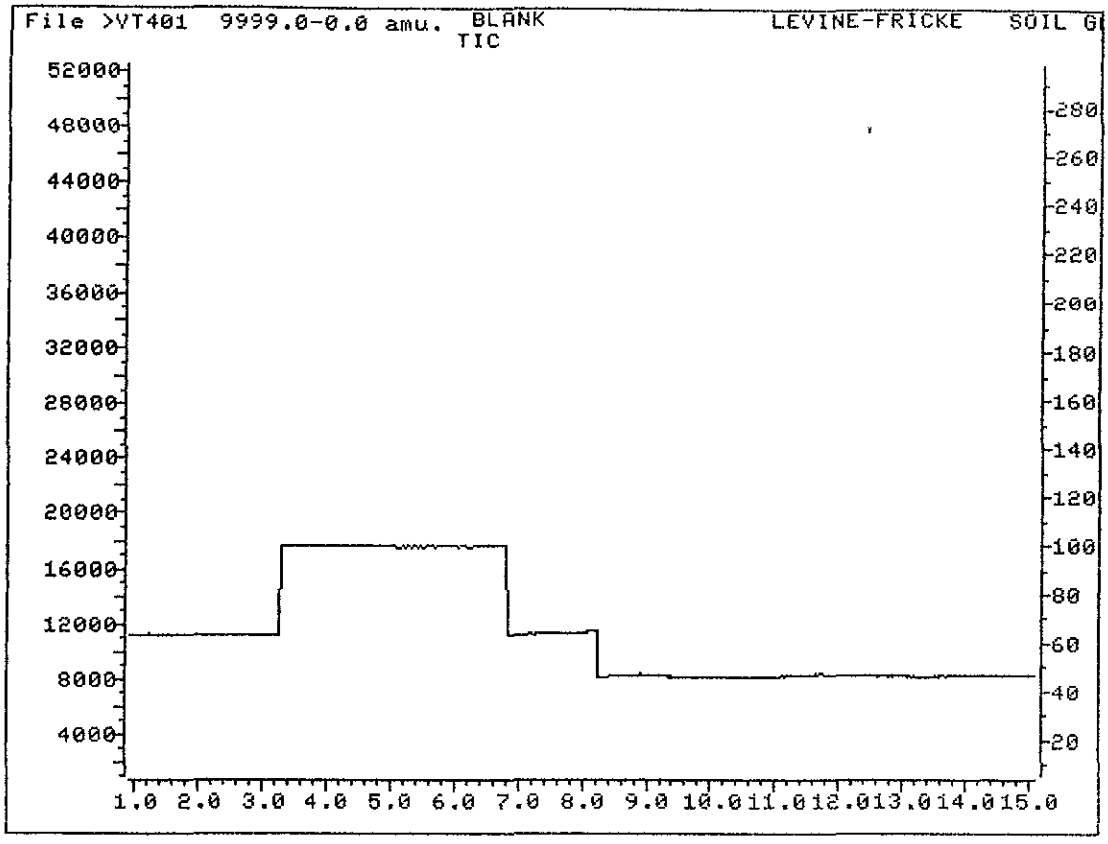
QUANT REPORT

Operator ID: RAPHE Quant Rev: 6 Quant Time: 900411 08:33
Output File: ^VT400::AQ Injected at: 900411 08:00
Data File: >VT400::DB Dilution Factor: 1.00000
Name: STANDARD 50 NG
Misc: LEVINE-FRICKE SOIL GAS CLIPPER

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: 900410 13:15

	Compound	R.T.	Scan#	Area	Conc	Units
1)	#METHYLENE CHLORIDE	1.59	31	11866	50.01	NG/ML
3)	#CHLOROFORM	3.67	114	26346M	53.84	NG/ML
4)	#1,1-DCE	2.48	69	10090	51.05	NG/ML
5)	#1,2-DCA	3.96	122	18980	57.33	NG/ML
6)	#1,1,1-TCA	4.44	135	21793	53.82	NG/ML
7)	#CARBON TETRACHLORIDE	4.59	139	20830	53.66	NG/ML
8)	#TCE	5.74	170	18576	56.59	NG/ML
9)	#BENZENE	5.88	174	31596	52.20	NG/ML
10)	#FREON-11	2.23	58	21559	52.16	NG/ML
11)	#t1,2-DICHLOROETHENE	3.31	104	14229	52.51	NG/ML
12)	#PCE	8.00	253	17420	57.78	NG/ML
13)	#TOLUENE	8.47	277	20155	54.34	NG/ML
14)	#CHLOROBENZENE	8.95	305	29649	54.77	NG/ML
15)	#ETHYL BENZENE	9.67	348	12943	53.45	NG/ML
16)	#STYRENE	10.95	424	25512	52.62	NG/ML
17)	#XYLENES	11.32	446	15492	53.96	NG/ML
18)	#LIGHTER HYDROCARBONS	3.92	121	16166	51.56	NG/ML
20)	#1,1-DCA	3.07	94	24736M	52.35	NG/ML
21)	#MEK	3.92	121	2428M	48.97	NG/ML
22)	#MIBK	7.27	222	11384	54.73	NG/ML
23)	#ACETONE	1.85	42	1047	55.22	NG/ML
26)	#DICHLOROBROMOMETHANE (THM)	4.92	148	26188	52.80	NG/ML
27)	#CHLORODIBROMOMETHANE (THM)	6.07	179	27160	54.40	NG/ML
29)	#1,1,2-TRICHLOROETHANE	6.11	180	14974	52.54	NG/ML
30)	#1,1,2,2-TETRACHLOROETHANE	8.05	255	26296	51.28	NG/ML

Compound uses ESTD



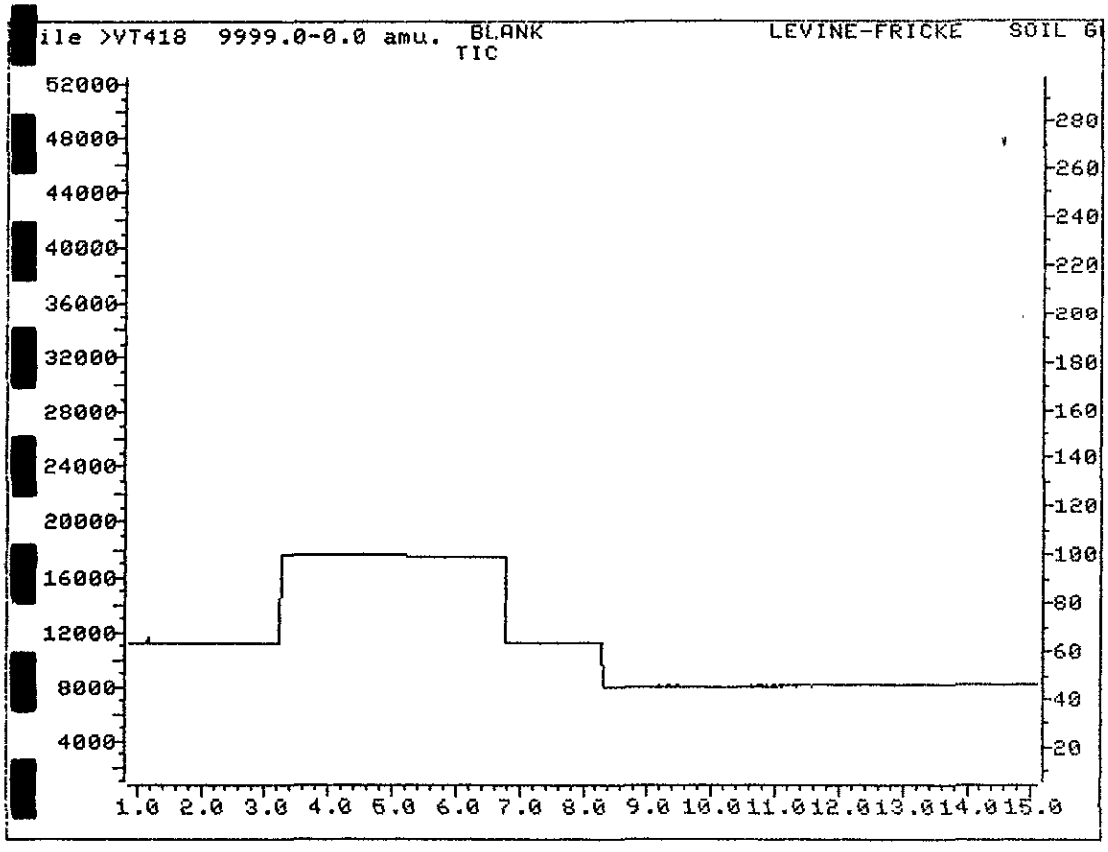
QUANT REPORT

Operator ID: RAPHE
Quant Rev: 6
Quant Time: 900411 09:10
Output File: ^VT401::AQ
Injected at: 900411 08:32
Data File: >VT401::DB
Dilution Factor: 1.00000
Name: BLANK
Misc: LEVINE-FRICKE SOIL GAS CLIPPER

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: 900410 13:15

Compound	R.T.	Scan#	Area	Conc	Units

NO COMPOUNDS DETECTED



QUANT REPORT

Operator ID: RAPHE
Output File: ^VT418::AQ
Data File: >VT418::D1
Name: BLANK
Misc: LEVINE-FRICKE SOIL GAS CLIPPER

Quant Rev: 6 Quant Time: 900412 08:58
Injected at: 900412 08:07
Dilution Factor: 1.00000

ID File: ID_LFC::QT
Title: LEVINE-FRICKE SOIL GAS CLIPPER
Last Calibration: 900410 13:15

Compound	R.T.	Scan#	Area	Conc	Units	q

NO COMPOUNDS DETECTED

APPENDIX I

PHASE II INVESTIGATION PLAN
RANSOME CONSTRUCTION COMPANY, EMERYVILLE, CALIFORNIA

Phase II Environmental Investigation Plan
Ransome Construction Company
Emeryville, California

May 22, 1990
1649

Prepared for:

Santa Fe Pacific Realty Corporation
201 Mission Street, 30th Floor
San Francisco, California 94105

LEVINE·FRICKE

C O N T E N T S

May 22, 1990 LF 1649

PHASE II ENVIRONMENTAL INVESTIGATION PLAN
RANSOME CONSTRUCTION COMPANY
EMERYVILLE, CALIFORNIA

INTRODUCTION

Levine·Fricke has been requested by Santa Fe Pacific Realty Corporation (SFPRC) to develop a Phase II Environmental Investigation Work Plan for the Ransome Construction Company Site located at 4030 Hollis Street, Emeryville, California (the "Site"). The Site is bounded by an Atchison, Topeka and Santa Fe Railway easement to the north, Santa Fe Terminal to the south and east, and Hollis Street to the west.

BACKGROUND

Previous Investigations

A baseline environmental assessment was conducted at the Site by Kennedy/Jenks/Chilton (K/J/C) on behalf of Ransome in November 1989 to identify past and present petroleum product handling practices and potential releases. The assessment consisted of interviewing available current and former employees of the Ransome Company, reviewing available regulatory agency records, and conducting an inspection of the Site (K/J/C, November 20, 1989).

In their November report, K/J/C identified several on-site areas where soil may have been impacted by petroleum products and/or other compounds. According to K/J/C, these areas consisted of:

Area 1	A soil stain south of the blacksmith shop and storeroom at the Site
Area 2	Stained soil in the location of the former diesel racks (identified by K/J/C in a 1983 aerial photograph of the Site)
Area 3	Stained soil near and beneath the excess material scrap pile at the Site
Area 4	Stained soil east of the asphalt mixing tank and in the area of the shed on the north side of the tank
Area 5	"Tar boils" east of the lavatory and north of the oil shed

Area 6 Potentially environmentally impacted soil in the former spray paint areas

Area 7 An area along the north fence where waste oil was used to kill weeds

Area 8 Location of former aboveground propane and butane storage tanks

A copy of this report was given to Levine·Fricke by SFPRC in April 1990 for review. The general location of the areas identified above are shown in Figure 1. The extent of these areas may need to be modified, based on field observations and/or sampling results.

According to the K/J/C report, a release of butane occurred at the Site in 1959 or 1960 (Area 8). Several shallow borings were drilled in the area of the spill to allow the butane to volatilize off the soil. The borings were backfilled when soil testing determined that the area had been sufficiently aerated. The K/J/C report did not detail the testing methods used to determine that the soil had been sufficiently remediated nor what the clean-up level was for the remediation. However, as butane is a highly volatile compound, and the release occurred 30 years ago, it is not likely that significant concentrations of butane remain in the soils in the former release area.

The Site contained four underground storage tanks (which were located in the eastern/central portion of the Site [Area 9]). One of these tanks at the Site reportedly failed tank testing which was conducted by TAT, Inc. on behalf of Ransome in 1989. Leakage had reportedly occurred from pipes leading to a gasoline storage tank. K/J/C conducted a tank excavation to remove the four underground fuel storage tanks in 1989. The results of chemical analyses of soil samples collected from the side walls and floors of the tank and pipeline excavations and ground water samples collected from the bottom of the excavations confirmed the presence of elevated concentrations of petroleum hydrocarbons in both media.

In January and February 1990 (prior to receiving the K/J/C baseline report), Levine·Fricke conducted a Phase I hydrogeologic investigation of Ransome and its vicinity. The purpose of the investigation was to assess the potential presence of contaminants that, based on Levine·Fricke's information concerning site-use, were suspected at the Site. This Phase I investigation consisted of:

- Collecting six soil samples from five shallow (less than 5 feet deep) borings and approximately twenty-seven soil samples

from fourteen deeper (10 to 13 feet) borings for chemical analysis. Soil samples were analyzed for one or more of the following suite of compounds: volatile organic compounds (VOCs) using EPA Method 8240 or 8020; semi-volatile organic compounds (SVOCs) using EPA Method 8270 or 8100; total petroleum hydrocarbons (TPH) using modified EPA Method 8015 or EPA Method 418.1; and metals using EPA Method 7000 series.

- Collecting grab ground-water samples from five of the deeper soil boreholes for chemical analysis. The ground-water samples were analyzed for VOCs (EPA Method 624), SVOCs (EPA Method 8270, TPH (modified Method 8015) and metals (EPA Method 7000 series).

The Phase I investigation work was conducted following standard Quality Assurance/Quality Control procedures.

The Phase I investigation identified additional areas impacted by contaminants as described below. Soil and ground-water sampling locations for the Phase I investigation at the Site are presented in Figure 2. Chemical analysis results of soil samples and shallow grab ground-water samples (water samples collected from within the open soil boreholes during soil sampling activities) collected from the Ransome Company construction yard indicate that shallow ground water and soil have been affected by petroleum hydrocarbons and aromatic compounds in the central portion of the property. Low concentrations (less than 0.02 ppm) of VOCs were detected in shallow ground water beneath the southern portion of the Site.

Analysis results of the grab ground-water sample collected from location B17 (Figure 2) indicate concentrations of petroleum hydrocarbons (22.0 ppm) and benzene (3.0 ppm), toluene (2.2 ppm), xylene (3.3 ppm) and ethylbenzene (0.73 ppm) [BTXE] compounds. Soil samples collected from this location at depths of 4 and 9 feet indicate concentrations of TPH up to 290 ppm and BTXE concentrations up to 21.0 ppm.

A possible source of these compounds appears to be near the location of the former fuel pump island (the western edge of Area 9), located approximately 75 feet east of location B17. Soil samples collected from location B15 (Figures 1 and 2), adjacent to the former fuel pump island, at a depth of 4.0 feet, contained up to 1,000 ppm BTXE and 2,500 ppm TPH as waste oil. An attempt to collect a grab ground-water sample at this location was not successful; however, a saturated soil sample collected below the water table depth (at a depth of 9.0 feet) contained concentrations of individual BTXE compounds up to 72 ppm, indicating that ground water at this location has likely been affected by these compounds. A grab ground-water sample

collected from location B14A, approximately 70 feet east of B15, did not contain measurable concentrations of these compounds. Grab ground-water samples collected from the western part of the property (B30, B31) also did not contain detectable concentrations of these compounds.

Low concentrations of 1,1-dichloroethane (1,1-DCA) [less than 0.02 ppm] were detected in three grab ground-water samples collected in the area of the former waste oil tank (Area 11). A grab ground-water sample collected from location B-17 (upgradient with respect to the direction of shallow ground-water flow) during the Phase I investigation did not contain detectable concentrations of 1,1-DCA, indicating that the source of this compound in the shallow ground water is likely on the Ransome site. Monitoring well LF-16, located approximately 150 feet west of Area 11 (approximately downgradient with respect to the direction of ground-water flow) did not contain detectable concentrations of 1,1-DCA, nor did soil samples collected in the vicinity of Area 11.

Elevated concentrations (up to 10,000 ppm) of total oil and grease (TOG) were detected in shallow soils at several locations at depths between 1 and 5 feet in the western central portion of the property (at locations B18, B19, B21 and B22 [Area 10] Figure 1). This portion of the property was formerly used for asphalt batching; the TOG detected may be associated with this former site usage.

TPH as diesel (660 ppm) was detected in the 2-foot depth sample collected from location B30, located adjacent to the former waste oil tank in the southwestern portion of the property (Area 11, Figure 1). Kerosene (220 ppm) and waste oil (360 ppm) were detected in the 3-foot depth sample collected from location B29, located approximately 10 feet northwest of B30. Concentrations of waste oil (up to 4,600 ppm) were detected in the 1- to 2-foot depth samples collected from locations B32 (near Area 5) and B33 (near Area 1), near the southern boundary of the property (Figure 1).

OBJECTIVES OF PHASE II

The objective of the Phase II investigation will be to fully characterize the lateral and vertical extent and severity of soil and ground-water contamination at the Site. This assessment will include:

1. Completion of the assessment of petroleum-affected ground water and soils related to releases from the former underground storage tanks and pipes, in accordance with California Water Resources Control Board (CWRCB) Leaking

Underground Fuel Tanks (LUFT) Manual and Alameda County guidelines.

2. Assessment of additional potential on-site contamination source areas and/or areas of actual on-site contamination as noted by K/J/C in their baseline assessment or identified by Levine·Fricke during their Phase I investigation.

3. Development of recommended actions to remediate affected soil and ground water at the Site in accordance with the CWRCB LUFT Manual, Alameda County Guidelines and other applicable and relevant guidelines.

SCOPE OF WORK

The scope of work for the Phase II Assessment will include the following specific tests:

Task 1: Preparation of Site Health and Safety Plan
Task 2: Preparation of Sampling Plan
Task 3: Performance of a Shallow Ground-Water Reconnaissance Survey
Task 4: Collection of Soil Samples
Task 5: Installation of Monitoring Wells
Task 6: Development and Sampling of Monitoring Wells
Task 7: Analysis of Soil and Ground-Water Samples
Task 8: Evaluation of Data and Preparation of a Report

These tasks are described in detail below.

Task 1: Preparation of Site Health and Safety Plan

A Health and Safety Plan (HSP) will be prepared to address potential concerns for workers at the Site and surrounding community in performing this second phase of investigation. The HSP will be submitted to SFPRC for their advance review and approval and will be reviewed with field personnel and subcontractors prior to the initiation of field work.

Task 2: Preparation of Sampling Plan

A Sampling Plan will be prepared to apply to sampling activities at the Ransome site. This plan will detail the Quality Assurance (QA) and Quality Control (QC) procedures to be used to ensure that the technical data generated during this Phase II investigation are accurate, precise, complete and representative of actual field conditions. QA procedures will provide an integrated program designed to ensure the reliability of monitoring and measurement data (including analytical data). QC procedures will outline routine application of methods for obtaining prescribed performance standards for the Phase II work.

This plan shall be completed and submitted to SFPRC for their review and approval prior to initiation of field work.

Task 3: Performance of a Shallow Reconnaissance Ground-Water Survey

Shallow ground-water samples will be collected and analyzed using soil-gas equipment from approximately 13 locations in the vicinity of location B-17 (Figure 2). The shallow ground-water survey is proposed to determine the lateral extent of TPH and BTEX compounds detected in shallow ground water at location B-17. Additionally, a minimum of three to four sampling points will be located in the vicinity of Area 11 (Figure 2) to better define the lateral extent and concentrations of 1,1-DCA in shallow ground water. These are minimum sampling locations for site characterization; additional shallow ground-water reconnaissance sampling may need to be conducted by Ransome in this Phase II investigation, depending upon the results of the initial sampling, to fully assess the extent of petroleum-affected or 1,1-DCA-affected ground water.

The use of soil-gas sampling equipment to collect and analyze shallow ground-water samples has proven to be an effective method of providing reconnaissance data on ground-water quality. Ground-water samples can be analyzed on site immediately after sample collection. These real-time data can then be used to adjust, as appropriate, the placement of any subsequent sampling locations during the investigation.

The sampling methodology will be as follows. A small diameter (1-inch) pipe and drive-point will be hydraulically pushed approximately 10 to 15 feet below grade and then pulled back approximately 1 foot to dislodge the drive-point and create a small open space below the end of the pipe. A vacuum will be applied at the top of the drive pipe in order to evacuate air from the pipe. A 0.25-inch inner diameter PVC line will then be inserted into the rod to a depth of about 13 feet. A vacuum is applied to the top of the line, causing water (if present) to enter the line. If water is present, the line will be pinched off, pulled out of the rod, and the water in the line will be carefully decanted into a 40-ml glass vial. A water sample will then be extracted from the vial, using a syringe, and immediately injected into the gas chromatograph (GC) injection port.

If ground water is not encountered in the PVC line, a vacuum will be re-applied to the 1-inch rod for up to several minutes. The PVC line will then be re-inserted into the rod causing water (if present) to enter the line. If water is not present at this time, the rod will be left in place for up to several hours in an attempt to allow slowly infiltrating water to enter into the borehole for sampling.

Analyses for the ground-water samples collected in the vicinity of B-17 will include TPH, benzene, toluene, xylene and ethylbenzene. Samples collected from points located near the former waste oil tank (Area 11) will be analyzed for 1,1-DCA. Utility clearances will be obtained prior to conducting subsurface investigations. Regulatory agencies will be contacted regarding applicable permitting requirements.

Task 4: Collection of Soil Samples

Soil samples will be collected for laboratory analysis in the vicinity of the former diesel racks (Area 2), the asphalt mixing tank (Area 4), the spray paint area (Area 6), along the northern fence line (Area 7) and beneath the excess material/debris pile (Area 3) to assess potential environmental concerns identified by K/J/C during their baseline environmental assessment of the Site. Additional samples will be collected under the floor slab of the maintenance building (Area 13) near the floor drain in the maintenance building (Area 12) and north of Area 10 to better determine the lateral extent of oil-affected soil. Proposed sample locations are shown in Figure 3. Samples will be collected at depths of 1, 3 and 5 feet. Samples collected from the 1- and 3-foot depths will be submitted for chemical analysis; the 5-foot depth samples will be held by the laboratory pending results of the 1- and 3-foot depth sample analyses.

Additionally, soil samples will be collected at the southwestern boundary of the Site (Area 1) to better assess the vertical and lateral extent of elevated concentrations of waste oil detected in soils during the Phase I investigation of the Site. Proposed sample locations in this area are shown on Figure 3. Samples will be collected from depths of 1, 3, 5 and 7 feet. Samples collected from the 1- to 3-foot depth will be submitted for chemical analysis; the 5- to 7-foot depth samples will be held pending results of the shallower samples.

Soil samples will be collected from test pits using a backhoe to dig to the desired depth or using hollow-stem auger drilling equipment to advance soil borings and a modified California Sampler lined with brass tubes to collect the samples.

To investigate the possible source of the upwelling tar, test pits will be advanced using a backhoe to locate and assess all "tar boil" areas, including the two identified by K/J/C during their baseline assessment of the Site (Area 5). Should visual indication of affected soil be observed, the excavation will be extended to attempt to define the vertical and lateral extent of affected soil, if practical, and soil samples will be collected for chemical analysis immediately outside the vertical and horizontal margins of affected walls.

All augering and sampling equipment will be cleaned prior to each use to avoid cross-contamination. Soil sampling locations will be cleared of utility lines, to the extent possible, prior to drilling or backhoe excavation.

Soil borings will be backfilled with the soils from the boreholes mixed with bentonite grout to approximately 1 foot below the surface. The remaining 1 foot will be sealed with neat cement to the ground surface to provide a seal against surface infiltration. Test pits will be backfilled with the soils excavated from the pits.

It should be noted that, based on the results of this investigation, additional soil sampling may be required to be conducted by Ransome in the Phase II investigation to fully characterize the soil quality at the Site and that it will be the responsibility of Ransome to see that any additional work needed to characterize the soil quality is completed.

Additional soil excavation and remediation in the area of the former tanks (Area (9) is not included in this Investigation Work Plan. However, this work will be the responsibility of Ransome and will be conducted according to the letter from the Alameda County Health Care Services Agency to SFPRC dated April 18, 1990, and any applicable local, State or Federal regulations.

5: Installation of Monitoring Wells

At least three shallow (approximately 20 feet) monitoring wells will be installed in the vicinity of location B-17 to determine and monitor the lateral extent of the VOC-affected ground water. Results of the reconnaissance ground-water survey will be used to select the locations of the wells.

At least one deeper well (estimated 30 to 40 feet deep) will be installed in the vicinity of well B-17 to assess the vertical extent of petroleum-affected ground-water at the Site. If the results show that ground water contains contaminants of concern, Ransome will install additional ground-waer monitoring wells to fully characterize the extent of contamination.

The wellbores will be advanced using hollow-stem auger equipment. Soil samples will be collected at approximate 2-1/2-foot intervals for lithologic description and possible chemical analysis. Samples will be field screened using an OVA (Organic Vapor Analyzer) to aid in selecting samples for chemical analysis.

The wells will be constructed of 4-inch diameter PVC casing with 0.002-inch factory slotted screen. It is estimated that the screened interval will be approximately 10 feet in length. The

screen will be placed so as to extend across the top of the ground-water table.

After the well casing has been placed in the completed borehole, the well annulus will be backfilled with clean #3 sand to a height of approximately 2 feet above the screened interval. Approximately 1 foot of bentonite seal will be placed on top of the sand to isolate the sand from material above and to prevent the entrance of grout into the sand pack. A cement-bentonite grout will then be placed above the bentonite seal and will extend up to the ground surface. A locking well cover will then be placed over the top of the casing to protect the integrity of the well.

All pertinent drilling and sampling equipment and well casing will be cleaned using high-pressure hot water prior to use in each boring.

Soil cuttings will be stored in debris bins at the Site. Disposal of chemical-affected soil cuttings from drilling activities will be the responsibility of Ransome and will be disposed of off-site in accordance with all applicable regulations, unless otherwise approved by SFPRC.

Top-of-casing elevations will be surveyed by a state-licensed surveyor to the nearest 0.01 foot relative to mean sea level.

It should be noted that additional wells may be necessary to fully characterize the ground-water quality at the Site. It will be the responsibility of Ransome to see that any additional wells needed to fully characterize the ground water at the Site are installed and sampled.

Task 6: Development and Sampling of Monitoring Wells

Shortly after the ground-water monitoring wells have been installed, the wells will be developed by bailing, overpumping and/or jetting to remove sediment around the well and enhance hydraulic communication with the surrounding formation. Observations concerning specific conductance, pH, temperature, quantity, and clarity of purged water will be recorded during well development.

Representative ground-water samples will be collected following well development. Prior to sample collection, a minimum of three well volumes of water will be removed from the wells to achieve a representative sample. The wells will be sampled in accordance with the letter from the Alameda County Health Agency to Ransome dated April 18, 1990, and with applicable Alameda County Water District (ACWD) guidelines outlined in the document "Guidelines for Ground-Water and Soil Investigations at Leaking Underground

Fuel Tank Sites," dated December 1988.

After top-of-well-casing elevations of the newly installed wells are surveyed, ground-water levels will be measured from the monitoring wells to obtain ground-water flow direction data. Waste water from the sampling activities will be stored in a water tank on the Site. As with waste soils, disposal of waste water generated through well development and sampling is the responsibility of Ransome and will be disposed of off-site in accordance with all applicable regulations unless otherwise approved by SFPRC.

Task 7: Analysis of Soil and Ground-Water Samples

Soil

Soil samples collected from the areas outlined in Task 4 will be analyzed for one or more of the following constituents: total petroleum hydrocarbons (TPH) characterized as diesel and/or waste oil, TOG, VOCs and/or polynuclear aromatics (PNAs) as indicated below.

Area	Chemical Analysis for:
1	TPH as waste oil, TOG
2	PH as diesel and waste oil, TOG
3	TPH as diesel and waste oil, VOCs
4	TPH as diesel and waste oil, VOCs, PNAs
5	TPH as waste oil, PNAs
6	TPH as waste oil, VOCs
7	TPH as waste oil, TOG
8	(1)
9	(2)
10	TPH as waste oil, TOG
11	(3)
12	TPH as waste oil, VOCs
13	TPH as waste oil, TOG, VOCs

Notes:

(1) Not likely that significant concentrations remain in the soil from the 1959/1960 butane spill; additional sampling does not appear warranted

(2) Sampling was conducted in this area by the Ransome Company.

(3) Sampling in this area was conducted during the Phase I investigation; additional sampling does not appear warranted

TPH, TOG, VOC and PNA analysis will be performed using modified EPA Method 8015, EPA Method 503e, EPA Method 8240 and EPA Method

8100, respectively. All samples will be analyzed by a State-certified laboratory.

Ground Water

Ground-water samples collected while conducting Task 5 will be submitted for laboratory analysis for TPH as gasoline and diesel using modified EPA Method 8015 and for BTEX compounds using EPA Method 8020. One duplicate sample and one field blank sample will also be submitted for laboratory analysis for TPH (EPA Method 8015) and BTEX (EPA Method 8020) for quality assurance/ quality control.

Samples will be analyzed by a State-certified laboratory.

Task 8: Evaluation of Data and Preparation of a Report

Within 40 days of receipt of all Quality Assured data, Ransome will submit a final report to ACHA and RWQCB summarizing the methods, procedures and results associated with the Phase II investigation. The report should be prepared following ACWD guidelines contained in the document "Guidelines for Ground-Water and Soil Investigations at Leaking Underground Fuel Tank Sites," dated December 1988. The report will contain the geologic logs obtained from drilling, a graphic representation of sampling locations and distribution of chemicals detected at the Site, and an interpretation of findings. Recommendations for possible remedial alternatives will also be included in the report.

A copy of the draft report will be submitted to SFPRC for its review and approval at least 10 working days prior to Ransome's submission of the final report to the agencies.

GENERAL PERFORMANCE OF WORK

Ransome Company and/or their consultants will obtain all necessary permits and other necessary government approvals prior to initiating the work under this Work Plan. All work will be conducted following all applicable, local, state or Federal regulations.

PROJECT MANAGEMENT AND ACCESS TO DATA

On behalf of SFPRC, Levine·Fricke will oversee this work. Any changes to this Work Plan must receive the approval of SFPRC. Ransome Company will provide at least 10 working days advance notice of field work so as to allow time for SFPRC to arrange oversight of the work and/or to obtain split samples.

Ransome Company and their consultant will provide copies of all

laboratory or associated data to SFPRC within 24 hours of their receipt. As discussed in Task 8, a final report on the investigation results will be submitted to the ACHA and RWQCB within 40 days of receipt of all Quality Assured data. Draft copies of any reports to be submitted to the ACHA and/or RWQCB will be submitted to SFPRC for its review and approval 10 working days prior to submittal to the agencies. After any comments of SFPRC or their consultants have been incorporated, the final report will be submitted to the agencies. Copies of any reports, data or other documents submitted to agencies will be submitted simultaneously to SFPRC.

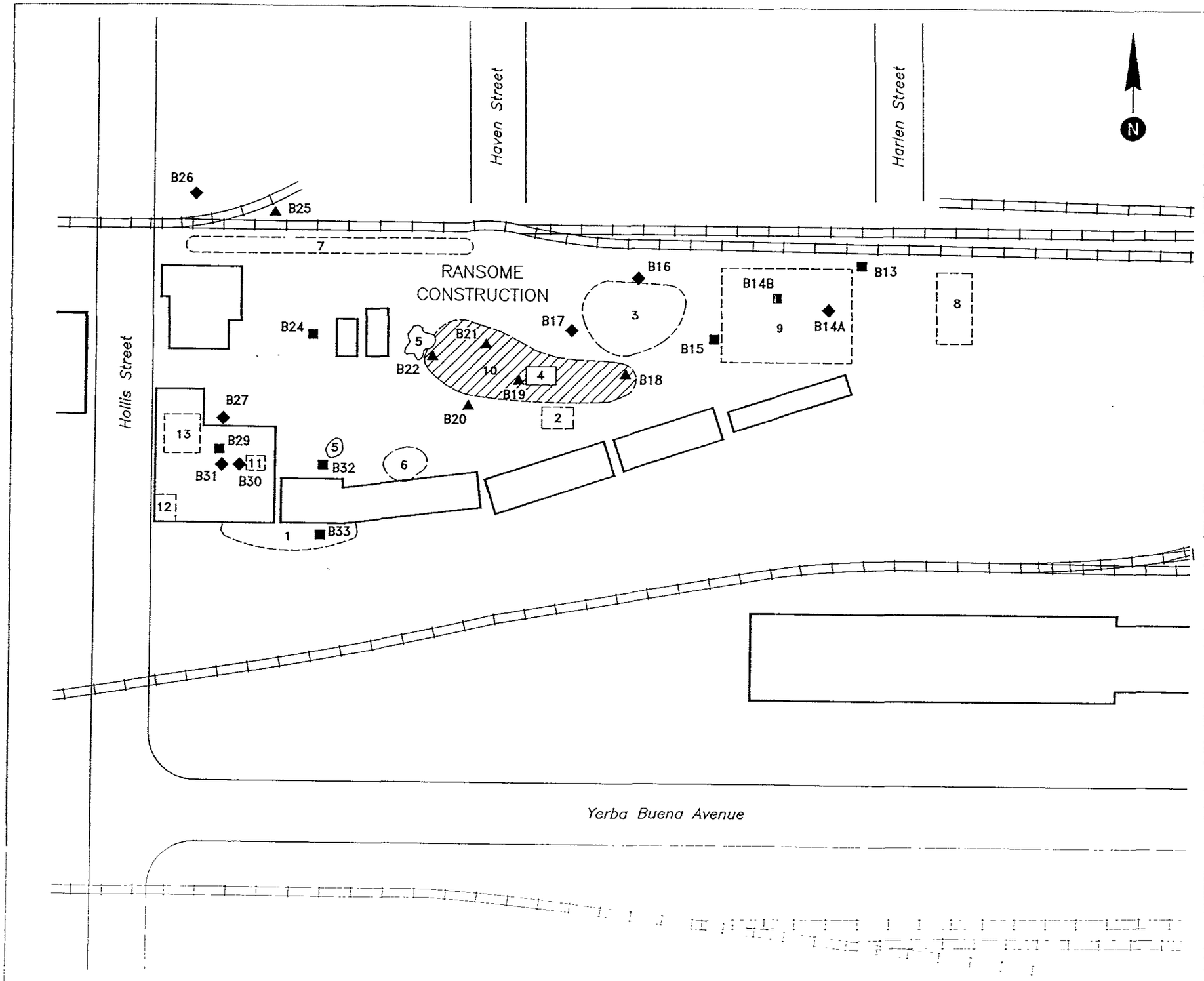
REFERENCES

Alameda County Water District, "Guidelines for Ground-Water and Soil Investigations at Leaking Underground Fuel Tank Sites," December 1988

Kennedy/Jenks/Chilton, Inc. "Baseline Environmental Assessment Report, The Ransome Company, 4030 Hollis Street, Emeryville, California." Prepared for The Ransome Company. (K/J/C 890066.00-G-91)

Levine·Fricke, "Phase I Environmental Investigation Results, Ransome Company Site," April 3, 1990

State Water Resources Control Board, "Draft Leaking Underground Fuel Tank Field Manual, " May 5, 1989



EXPLANATION

- ● Monitoring well location
- ▲ Shallow soil sampling location (less than 5 feet)
- ■ Deeper soil sampling location (13 to 18 feet)
- ◆ Deeper soil sampling location (13 to 18 feet) and grab ground-water sample location

KEY TO AREAS IDENTIFIED BY NUMBERS

Area	Description
1	Stained soil south of blacksmith shop and store room
2	Former diesel racks
3	Excess material scrap pile
4	Asphalt mixing tank
5	Tar boil areas
6	Former spray paint area
7	Oil applied to soil to kill weeds
8	Former location of butane and propane tanks
9	Former location of underground fuel storage tanks and associated piping
10	Elevated concentration of TOG detected during Phase I investigation
11	Location of former waste oil tank
12	Floor drain
13	Heavily stained and cracked cement floor

* Dashed lines are used to show the general locations of areas and are not intended to define the limit of affected areas

0 40 80 FEET

Figure 1 :
SITE PLANNING SHOWING AREAS IDENTIFIED AS HAVING BEEN POTENTIALLY IMPACTED BY CHEMICAL COMPOUNDS AND PHASE I SOIL AND GROUND-WATER SAMPLING LOCATIONS

Project No 1649

LEVINE•FRICKE
CONSULTING ENGINEERS AND HYDROGEOLOGISTS

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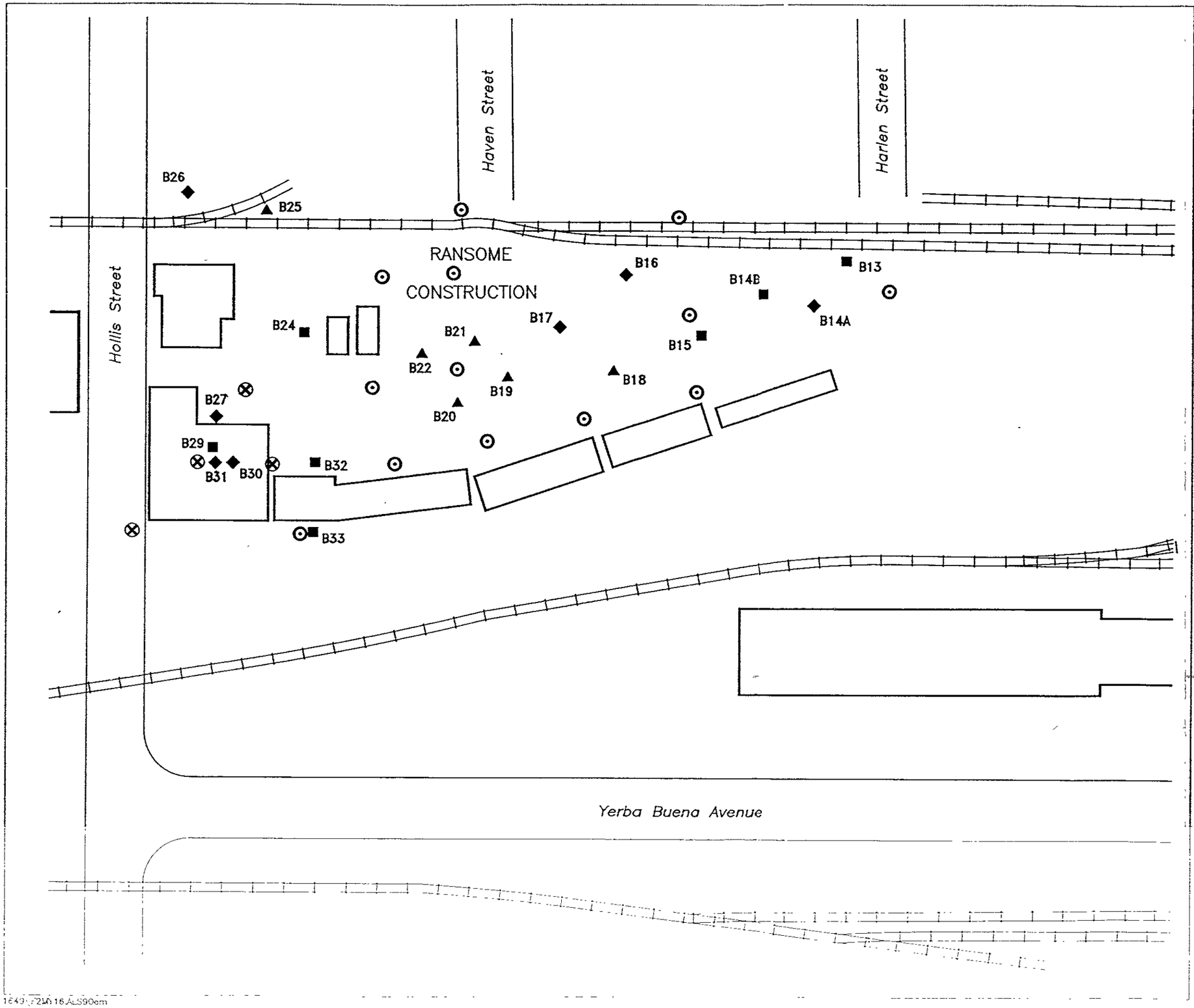

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EXPLANATION

- ● Monitoring well location
- ▲ Shallow soil sampling location (less than 5 feet)
- ■ Deeper soil sampling location (13 to 18 feet)
- ◆ Deeper soil sampling location (13 to 18 feet) and grab ground–water sample location
- ⊙ Proposed shallow ground–water reconnaissance survey location for fuel compounds
- ⊗ Proposed shallow ground–water reconnaissance survey location for 1,1–DCA

0 40 80 FEET

Figure 2 :

PROPOSED SHALLOW GROUND–WATER RECONNAISSANCE SURVEY LOCATIONS

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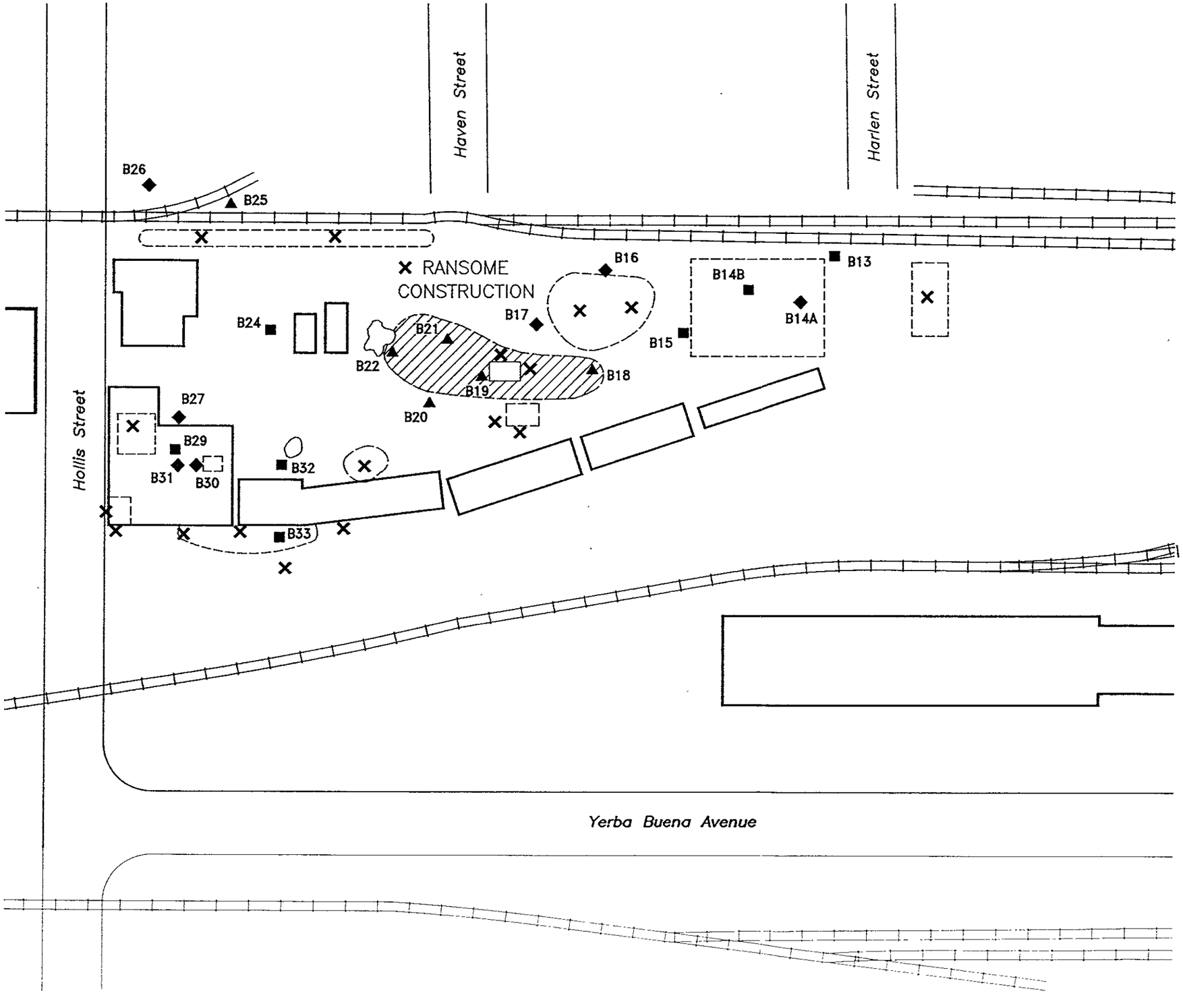

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EXPLANATION

- ● Monitoring well location
- ▲ Shallow soil sampling location (less than 5 feet)
- ■ Deeper soil sampling location (13 to 18 feet)
- ◆ Deeper soil sampling location (13 to 18 feet) and grab ground-water sample location
- × Proposed soil sampling location

0 40 80 FEET

Figure 3 :

PROPOSED SOIL SAMPLING LOCATIONS

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