

LEVINE-FRICKE

ENGINEERS, HYDROGEOLOGISTS & APPLIED SCIENTISTS

July 6, 1994

Mr. Scott Seery Senior Hazardous Materials Specialist Alameda County Health Care Services Agency Department of Environmental Health 1131 Harbor Bay Parkway Alameda, California 94501

Subject: Polvorosa Business Park

1555 Doolittle Drive San Leandro, California (Alameda County STID #4462)

Dear Mr. Seery:

This letter is written in response to your May 20, 1994 letter to Mr. Stephen Chamberlin of Rouse & Associates. The letter concerned the Polvorosa Business Park in San Leandro, California ("the Site"). In the letter, you accepted Levine Fricke's August 6, 1993 proposal to resume sampling of monitoring wells at the Site with two changes. First it was requested that all wells in the network were to be sampled, not only the five that were proposed. Secondly, it was requested that the water sample analyses be amended to included total petroleum hydrocarbons as gasoline (TPHg).

Listed below are our responses to these requests.

Levine Fricke Response to Request One

There are a total of eight monitoring wells at the Site and at an adjacent property (see Figure 1). The six onsite monitoring wells include: MW-3, MW-8, MW-10, LF-12, LF-12A, LF-13 and LF-14. Monitoring well LF-15 is located on an adjacent property. We propose to collect and analyzed water samples from seven of these wells. As shown on Figure 1, two of the wells, LF-12 and LF-12A, are located only 10 feet apart. Water level readings will be taken in both wells, however, it is our opinion that due to the close proximity of the wells, collection of one ground water sample from well LF-12 will be sufficient to provide water quality data from this area. Per your request, we are currently in the process of contacting the owner of the adjacent property to request access to monitoring well LF-15.

Levine Fricke Response to Request Two

Ground water samples will be analyzed for TPHg, TPH as diesel

4900 Powell Street, 12th Floor Emeryville, California 94608 (510) 652-4500 Fax (510) 652-2246

LF 1204 HÄZMÄT JUL 12 AHI

H 10: 05

LEVINE-FRICKE

and benzene, toluene, ethlybenzene and xylenes.

Additionally, enclosed are copies of analytical results of samples collected from the treatment system effluent water. These samples were collected by the City of San Leandro in accordance with the treatment system discharge permit. These analytical results represent the final remaining data contained in our files for the Site.

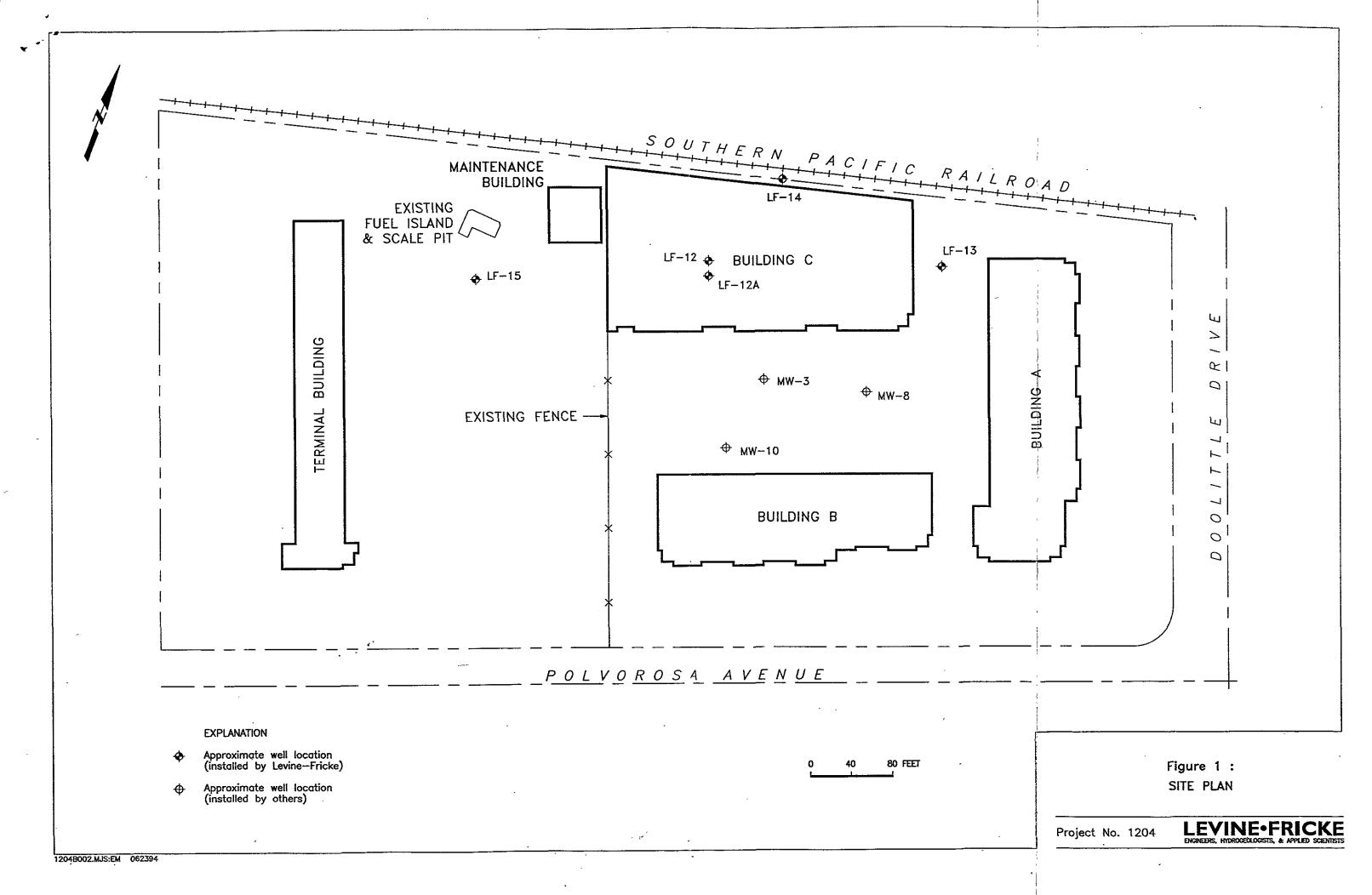
Please contact me or Ted Splitter if you wish to discuss our proposed monitoring plan. Per your request, we will contact you prior to conducting the water sampling.

Sincerely,

Muchael Stoll, P.E. Project Engineer

cc: Mr. Stephen Chamberlin - Rouse & Associates

enclosure



MULTI - TECH, A Division of Environmental Testing and Certification Corp. 320 Tesconi Circle, Suite G

Santa Rosa, California 95401 707-544-5570



August 21, 1989

CLIENT:

CITY OF SAN LEANDRO

3000 DAVIS STREET

SAN LEANDRO, CA 94577

ATTN:

PAUL ZOLFARELLI

ANALYSIS:

CAC METALS, EPA METHOD 624: PURGEABLES, EPA METHOD 625: BASE/NEUTRALS AND ACIDS

QC BATCH NUMBER:

89-2307, 89-2250

PROJECT: SAMPLE TYPE: ROUSE/POLVORASA /P

LIQUID

COLLECTED BY:

CLIENT

SAMPLE NO.

SAMPLE POINT

SAMPLE DATE

DATE IN LAB

MA5176

1-7-039

07-31-89

07-31-89

This report is "PROPRIETARY AND CONFIDENTIAL" and delivered to, and intended for the exclusive use of the above named client only. Environmental Testing and Certification Corp. assumes no responsibility or liability for the reliance hereon or use hereof by anyone other than the above named client.

The analyses and data interpretation that form the basis of this report were prepared under the direct supervision and control of the undersigned who is solely responsible for the contents and conclusions therein.

Reviewed and

Approved by:

Caboratories, Inc.

Page 1 of 9

CITY OF SAN LEANDRO August 21, 1989 Page 2 of 9

PROJECT: ROUSE/POLVORASA /P

CAC METALS - LIQUID

Sample Number:

MA5176

Client ID:

T-7-039

			EPA			
	EPA Prep	Ргер	Analysis	Analysis		Reporting
<u>Analyte</u>	<u>Method</u>	<u>Date</u>	<u>Method</u>	<u>Date</u>	Result (mg/L)	Limit (mg/L)
Total Antimony	*	08-04-89	200.7	08-05-89	ND	1
Total Arsenic	206.5	08-10-89	206.3	08-11-89	ND	0.005
Total Barium	*	08-04-89	200.7	08-05-89	0.4	0.1
Total Beryllium	*	08-04-89	200.7	08-05-89	NO	0.01
Total Cadmium	*	08-04-89	200.7	08-05-89	ND	0.1
Total Chromium	*	08-04-89	200.7	08-05-89	ND	0.1
Total Cobalt	*	08-04-89	200.7	08-05-89	ND	0.1
Total Copper	*	08-04-89	200.7	08-05-89	ND	0.1
Total Lead	*	08-04-89	239.1	08-06-89	ND	0.1
Total Mercury	245.1	08-16-89	245.1	08-17-89	ND	0.001
Total Molybdenum	*	08-04-89	200.7	08-05-89	NO	0.1
Total Nickel	*	08-04-89	200.7	08-05-89	ND	0.1
Total Selenium	206.5	08-14-89	270.3	08-15-89	ND	0.001
Total Silver	*	08-04-89	272.1	08-06-89	ND	0.05
Total Thallium	*	08-04-89	279.1	08-06-89	ND	0.5
Total Vanadium	*	08-04-89	200.7	08-05-89	ND	0.1
Total Zinc	*	08-04-89	200.7	08-05-89	ND	0.1

Date Preserved: 08-05-89

ND = None Detected

^{*}The sample was prepared following the method outlined in metals, section 4.1.3 of EPA-600/4-79-020, March, 1983.

CITY OF SAN LEANDRO August 21, 1989 Page 3 of 9

PROJECT: ROUSE/POLVORASA /P

EPA METHOD 624: PURGEABLE ORGANICS

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QC Batch Number: 89-2307

Date analyzed: 08-07-89, 08-11-89 & 08-12-89

Sample Number: Client ID:	MA5176 T~7-039	
ctique in.	Result (ug/L)	Reporting Limit (ug/L)*
Acetone	ND	200
Benzene	ND	10
Bromodichloromethane	ND	10
Bromoform	ИD	10
Bromomethane	ND	20
2-Butanone	ND	20
Carbon disulfide	ND	10
Carbon tetrachloride	ND	10
Chlorobenzene	ND	10
Chloroethane	ND	20
2-Chloroethylvinyl ether	NO	20
Chloroform	ND	10
Chloromethane	ND	20
Dibromochloromethane	ND	10
1,1-Dichloroethane	ND	10
1,2-Dichloroethane	ND	10
1,1-Dichloroethene	ND	10
trans-1,2-Dichloroethene	ND	10
1,2-Dichloropropane	ND	10
cis-1,3-Dichloropropene	ND	10
trans-1,3-Dichloropropene	ND	10
Ethyl benzene	ND	10
2-Hexanone	ND	20
Methylene chloride	ND	10
4-Methyl-2-Pentanone	ND	20
Styrene	ND	10
1,1,2,2-Tetrachloroethane	ND	10
Tetrachloroethene	ND	10
Toluene	ДИ	10
1,1,1-Trichloroethane	ND	10
1,1,2-Trichloroethane	ND	10
Trichloroethene	ND	10
Trichlorofluoromethane	ND	10
Vinyl acetate	ND	20
Vinyl chloride	ND	20
Total Xylenes	ND	10

SURROGATE RECOVERIES:

1,2-Dichloroethane-D4 106% Toluene-D8 102% Bromofluorobenzene 104%

ND = None Detected

^{*}These reporting limits are higher than usual due to suspected contamination revealed in screening.

PROJECT: ROUSE/POLVORASA /P

QUALITY ASSURANCE REPORT

EPA METHOD 624: PURGEABLE ORGANICS

QC BATCH NUMBER: 89-2307

METHOD BLANK SUMMARY

Date:	08-07-89	08-11-89	Reporting
	<u>Result</u>	<u>Result</u>	<u>Limit</u>
	(ug/L)	(ug/L)	(ug/L)
Acetone	ND	ND	100
Benzene	ND	ND	5
Bromodichloromethane	ND	ND	5
Bromoform	ND	ND	5
Bromomethane	ND	ND .	10
2-Butanone	ND	ND	10
Carbon disulfide	ND	ND	5
Carbon tetrachloride	ND	ND	5
Chlorobenzene	ND	ND	5
Chloroethane	ND	ND .	10
2-Chloroethylvinyl ether	ND	ND	10
Chloroform	ND	ND	5
Chloromethane	ND	ND	10
Dibromochloromethane	ND	ND	5
1,1-Dichloroethane	ND	ND	5
1,2-Dichloroethane	ND	ND	5
1,1-Dichloroethene	ND	ND	5
trans-1,2-Dichloroethene	ND	ND	5
1,2-Dichloropropane	ND	ND	5
cis-1,3-Dichlaropropene	ND	ND	5
trans-1,3-Dichloropropene	ND	ND	5
Ethyl benzene	ND	ND	5
2-Hexanone	ND	ND	10
Methylene chloride	ИD	ND	5
4-Methyl-2-Pentanone	ND	ND	10
Styrene	ND	ND	5
1,1,2,2-Tetrachloroethane	ND	ND	5
Tetrachloroethene	NO	ND	5
Toluene	ND	ND	5
1,1,1-Trichloroethane	ND	ND	5
1,1,2-Trichloroethane	ND	ND	5
Trichloroethene	ИD	ND	5
Trichlorofluoromethane	ND	ND	5
Vinyl acetate	ND	ND	10
Vinyl chloride	ND	ND	10
Total Xylenes	ND	ND	5
Acrolein*	ND		1000
Acrylonitrile*	ND		500
7.0. / . 0.7. 6. 7. 0	,,,,		

^{*}The analysis for Acrolein and Acrylonitrile are qualitative screens and not intended for quantitative purposes.

ND = None Detected

(QC 624 CONTINUED)

CITY OF SAN LEANDRO August 21, 1989 Page 5 of 9

PROJECT: ROUSE/POLVORASA /P

QC BATCH NUMBER 89-2307, EPA METHOD 624 PURGEABLE ORGANICS (CON'T)

- QC CHECK SAMPLES -

- MATRIX SPIKES -

	QC Check Sample-1 Recovery	QC Check Sample-2 Recovery	RPD	Matrix Spike Recovery	Spike Duplicate Recovery	RPD
	(%)	(%)	(%)	(%)	(%)	(%)
1,1,-Dichloroethene	105	105	0	100	100	0
Trichloroethene	110	110	0	102	102	0
Chlorobenzene	110	110	0	102	108	6
Toluene	105	110	5	9 8	98	0
Benzene	105	110	5	96	100	4

This batch passes method quality control acceptance criteria.

CITY OF SAN LEANDRO August 21, 1989 Page 6 of 9

PROJECT: ROUSE/POLVORASA /P

EPA METHOD 625: BASE/NEUTRALS AND ACIDS

QC Batch Number: 89-2250 Date extracted: 08-07-89 Date analzyed: 08-11-89

SAMPLE NUMBER: MA5176 CLIENT ID: T-7-039 Results (ug/L) Reporting Limits (ug/L) Acenaph thene ND 10 Acenaph thy lene ND 10 Anthracene ND 10 Benzidine ND 10 Benzo(a)anthracene ND 10 Benzo(b)fluoranthene ND 10 Benzo(k)fluoranthene ND 10 Benzo(g,h,i)perylene ND 10 Benzo(a)pyrene ND 10 Benzoic acid ND 50 Benzyl alcohol ND 10 4-Bromophenyl phenyl ether ND 10 Butyl benzyl phthalate ND 10 Dirn-butyl phthalate 10 ND 4-Chloroaniline ND 10 bis(2-Chloroethoxy)methane ND 10 bis(2-Chloroethyl)ether ND 10 bis(2-Chloroisopropyl)ether ND 10 4-Chloro-3-methylphenol 10 ND 2-Chloronaphthalene ND 10 2-Chlorophenol ND 10 4-Chlorophenyl phenyl ether ND 10 10 Chrysene ND Dibenz(a,h)anthracene ND 10 Dibenzofuran ND 10 1,2-Dichlorobenzene ND 10 1,3-Dichlorobenzene ND 10 1,4-Dichlorobenzene 10 ND 3.3'-Dichlorobenzidine ND 20 2,4-Dichlorophenol ND 10 diethylphthalate ND 10 2.4-dimethylphenol ND 10 Dimethyl phthalate ND 10 4,6-Dinitro-2-methylphenol ND 50 2,4-Dinitrophenol ND 50 2,4-Dinitrotoluene ND 10 2,6-Dinitrotoluene ND 10 1,2-Diphenylhydrazine 10 ND bis(2-Ethylhexyl)phthalate ND 10 Fluoranthene ND 10 Fluorene ND 10

ND = None Detected

(625 ANALYSIS CONTINUED)

PROJECT: ROUSE/POLVORASA /P

EPA METHOD 625: BASE/NEUTRALS AND ACIDS (con't)

	Results (ug/L)	Reporting Limits (ug/L)
Hexachlorobutadiene	ND	10
Hexach Lorobenzene	ND	10
Hexachlorocyclopentadiene	ND	10
Hexachloroethane	NO	10
Indeno(1,2,3-cd)pyrene	ND	10
Isophorone	ND	10
2-Methylnaphthalene	ND	10
2-Methylphenol	ND	10
4-Methylphenol	ND	10
Naphthalene	ND	10
2-Nitroaniline	ИD	50
3-Nitroaniline	ND	50
4-Nitroaniline	ND	50
Nitrobenzene	ND	10
2-Nitrophenol	ND	10
4-Nitrophenol	ND	50
N-Nitrosodimethylamine	ND	10
N-Nitrosodiphenylamine	ND	10
N-Nitrosodi-n-propylamine	ND	10
di-n-Octyl phthalate	ND	10
Pentachlorophenol	ND	50
Phenanthrene	ND	10
Phenol	ND	10
Pyrene	ND	10
1,2,4-Trichlorobenzene	ND	10
2,4,5-Trīchlorophenol	ND	10
2,4,6-Trichlorophenol	ОИ	10

The analysis of this sample indicates the presence of low to medium boiling point petroleum hydrocarbons. Such hydrocarbons are typically found in gasoline, jet fuel, or mineral spirits.

SURROGATE RECOVERIES	
2-Fluorophenol	28%
Phenol d6	35%
2,4,6-Tribromophenol	74%
Nitrobenzene d5	66%
2-Fluorobiphenyl	76%
Terphenyl d14	78%

ND = None Detected

CITY OF SAN LEANDRO August 21, 1989 Page 8 of 9

PROJECT: ROUSE/POLVORASA /P

QUALITY ASSURANCE REPORT

EPA METHOD 625: GC/MS SEMIVOLATILE ORGANICS

QC BATCH NUMBER: 89-2250 DATE OF ANALYSIS: 08-11-89

METHOD BLANK SUMMARY

	hod Blank (ug/L)		Method Blank (ug/L)
Acenaphthene	ND	Di-n-octylphthalate	ND
Acenaphthylene	ND	Fluoranthene	ND
Anthracene	ND	Fluorene	NO
Benzo(a)anthracene	ND	Hexach Lorobenzene	ND
Benzo(b)fluoranthene	ND	Hexachlorobutadiene	ND
Benzo(k)fluoranthene	ND	Hexachlorethane	ND
Benzo(a)pyrene	ND	Hexachlorocyclopentadiene	ND
Benzo(g,h,i)Perylene	ND	Indeno(1,2,3-cd)pyrene	ND
Benzidine	ND	Isophorone	ND
Bis(2-chloroethyl)ether	ND	Naphthalene	ND
Bis(2-chloroethoxy)methane	ND	Nitrobenzene	ND
Bis(2-ethylhexyl)phthalate	NO	N-Nitrosodimethylamine	ND
Bis(2-chloroisopropyl)ether	ND	N-Nitrosodi-n-Propylamine	ND
4-8romophenyl phenyl ether	ND	N-Nitrosodiphenylamine	ND
Butyl benzyl phthalate	ND	Phenanthrene	ND
2-Chloronaphthalene	ND	Pyrene	ND
4-Chlorophenyl phenyl ether	ND	1,2,4-Trichlorobenzene	ND
Chrysene	ND	4-Chloro-3-methylphenol	ND
Dibenzo(a,h)anthracene	NO	2-Chlarophenal	ND
Di-n-butylphthalate	ND	2,4-Chlorophenol	ND
1,3-Dichlorobenzene	ND	2,4-Dimethylphenol	ND
1,4-Dichlorobenzene	ND	2-Methyl-4,6-Dinitropheno	L ND
1,2-Dichlorobenzene	ND	2-Nitrophenol	ND
3,3'-Dichlorbenzidine	ND	4-Nitrophenol	ND
Diethylphthalate	ND	Pentachlorophenol	ND
Dimethylphthalate	ND	Phenol	ND
2,4-Dinitrotoluene	ND	2,4,6-Trichlorophenol	ND
2,6-Dinitrotoluene	ND	2,4,5-Trichlorophenol	ND

ND = None Detected

(625 QC CONTINUED)

PROJECT: ROUSE/POLVORASA /P

QC BATCH NUMBER 89-2250, EPA METHOD 625: GC/MS SEMIVOLATILE ORGANICS (CON'T)

DATE ANALYZED: 08-09-89

	QC Check	QC Check	
	Sample-1	Sample-2	
	Recovery	Recovery	RPD
	(%)	(%)	(%)
1,2,4-Trichlorobenzene	58	64	10
Acenaphthene	62	68	9
2,4-Dinitrotaluene	60	66	10
Di-n-butylphthalate	78	84	7
Pyrene	76	78	2
n-Nitroso-Di-n-propylamine	56	62	10
1,4-Dichlorobenzene	46	52	12
Pentachlorophenol	80	85	6
Phenol	28	31	10
2-Chlorophenol	50	58	15
4-Chloro-3-Methylphenol	59	65	10
4-Nitrophenol	24	25	4

DATE ANALYZED: 08-11-89

- QC CHECK SAMPLES -

- MATRIX SPIKES -

	QC Check Sample-1 Recovery (%)	QC Check Sample-2 Recovery (%)	<u>RPD</u> (%)	Matríx Spike <u>Recovery</u> (%)	Spike Duplicate Recovery (%)	RPD (%)
	(*)	(%)	(%)	(%)	(%)	(%)
1,2,4-Trichlorobenzene	60	68	12	66	72	9
Acenaphthene	64	70	9	66	72	9
2,4-Dinitrotoluene	62	66	6	62	64	3
Di-n-butylphthalate	60	62	3	64	64	0
Pyrene	7 2	76	5	74	72	3
n-Nitroso-Di-n-propylamine	64	68	6	64	72	12
1,4-Dichlorobenzene	50	54	8	54	58	7
Pentachlorophenol	89	100	12	112	116	4
Phenol	28	30	7	28	32	13
2-Chlorophenol	52	58	11	55	63	14
4-Chloro-3-Methylphenol	62	69	11	63	69	9
4-Nitrophenol	4	0	200	4	16	120

This batch passes method quality control acceptance criteria.

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MULTI - TECH, A Division of Environmental Testing and Certification Corp. 320 Tesconi Circle, Suite G

320 Tesconi Circle, Suite G Santa Rosa, California 95401 707-544-5570



NOVEMBER 16, 1989

CLIENT:

CITY OF SAN LEANDRO

3000 DAVIS STREET SAN LEANDRO, CA 94577

ATTN:

PAUL ZOLFARELLI

ANALYSIS:

EPA METHOD 625, EPA METHOD 624, EPA METHOD 508, TOTAL METALS

QC BATCH NUMBER:

89-2828, 89-2872, 89-2829 ROUSE & ASSOC. /P

PROJECT: SAMPLE TYPE:

LIQUID

COLLECTED BY:

CLIENT

SAMPLE NO.

SAMPLE POINT

SAMPLE DATE

DATE IN LAB

MA6239

T-10-001

10-04-89

10-05-89

This report is "PROPRIETARY AND CONFIDENTIAL" and delivered to, and intended for the exclusive use of the above named client only. Environmental Testing and Certification Corp. assumes no responsibility or liability for the reliance hereon or use hereof by anyone other than the above named client.

The analyses and data interpretation that form the basis of this report were prepared under the direct supervision and control of the undersigned who is solely responsible for the contents and conclusions therein.

Reviewed and

Approved by:

Cheryl Smith Analytical Director

ETC/Multi-Tech Laboratories, Inc.

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PROJECT: ROUSE & ASSOC. /P

SAMPLE NUMBER: MA6239 CLIENT ID: T-10-001

EPA METHOD 625

Date Extracted: 10-11-89 Date Analyzed: 10-27-89 QC Batch Number: 89-2828

EPA METHOD 624

Date Analyzed: 10-16-89 10-17-89 QC Batch Number: 89-2872

EPA METHOO 508

Date Extracted: 10-12-89 Date Analyzed: 11-08-89 11-12-89

QC Batch Number: 89-2829

	EPA		EPA	
<u>Parameter</u>	Prep Method	Prep Date	Analysis Method	<u>Analysis Date</u>
Total Antimony	*	10-07-89	204.2	10-12-89
Total Arsenic	206.5	10-09-89	286.3	10-12-89
Total Barium	*	10-07-89	200.7	10-12-89
Total Beryllium	*	10-07-89	200.7	10-12-89
Total Cadmium	*	10-07-89	213.2	10-10-89
Total Chromium	*	10-07-89	218.2	10-08-89
Total Cobalt	*	10-07-89	200.7	10-12-89
Total Copper	*	10-07-89	220.2	10-18-89
Total Lead	*	10-07-89	239.2	10-07-89
Total Mercury	245.1	10-13-89	245.1	10-13-89
Total Molybdenum	*	10-07-89	200.7	10-12-89
Total Nickel	*	10-07-89	249.2	10-12-89
Total Selenium	206.5	10-09-89	270.3	10-12-89
Total Silver	*	10-07-89	272.2	10-09-89
Total Thallium	*	10-07-89	279.2	10-07-89
Total Vanadium	*	10-07-89	200.7	10-12-89
Total Zinc	*	10-07-89	200.7	10-12-89

^{*}The sample was prepared following the method outlined in metals, section 4.1.3 of EPA-600/4-79-020, March, 1983.

NOV 16, 1989

TABLE 1: QUANTITATIVE RESULTS

EPA METHOD 625: BASE/NEUTRALS AND ACID EXTRACTABLES

Chain of Custody Data Required for ETC Data Management Summary Reports

MA6239 CITY OF SAN LEANDRO

600-007

10-001

QRM00533

ETC Sample No.

Company

Facility Sample Point Date Time Hours

891004

		Results	:	
Compound	Sample Concen. ug/l	MDL ug/l	Blank Data ug/l	
Acenaphthene Acenaphthalene Anthracene Benzo(a) anthracene Benzo(b) fluoranthene Benzo(b) fluoranthene Benzo(ghi) perylene Benzo(a) pyrene Benzo(a) pyrene Benzoic acid Benzyl alcohol 4-Bromophenyl phenyl ether Butyl benzyl phthalate Di-n-butyl phthalate Di-n-butyl phthalate 4-Chloroaniline bis(2-Chloroethoxy) methane bis(2-Chloroethyl) ether bis(2-Chloroisopropyl) ether 4-Chloro-3-methylphenol 2-Chloronaphthalene 2-Chloronaphthalene 2-Chlorophenol 4-Chlorophenyl phenyl ether Chrysene Dibenzofuran 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,3-Dichlorobenzene 3,3'-Dichlorobenzidine 2,4-Dimethylphenol Diethyl phthalate 2,4-Dimethylphenol Dimethyl phthalate 4,6-Dinitro-2-methylphenol 2,4-Dinitrophenol 2,4-Dinitrophenol 2,4-Dinitrotoluene 2,6-Dinitrotoluene 1,2-Diphenylhydrazine bis(2-Ethylhexyl)phthalate	99999999999999999999999999999999999999	10 10 10 10 10 10 10 10 10 10 10 10 10 1	N/AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	ND = None Detected NA = Not Applicable

EPA Method 625: Base/Neutrals and Acid Extractables

Chain of Custody Data Required for ETC Data Management Summary Reports

MA6239 CITY OF SAN LEANDRO 600-007

10-001

891004

QRM00533

ETC Sample No.

Company

Facility Sample Point Date Time Hours

		Results			
Сотроинд	Sample Concen ug/l	MDL ug/l	Blank Data ug/l		
Fluoranthene Fluorene Hexachlorobutadiene Hexachlorocyclopentadiene Hexachloroethane Indeno(1,2,3-cd)pyrene Isophorone 2-Methylnaphthalene 2-Methylphenol 4-Methylphenol Naphthalene 2-Nitroaniline 3-Nitroaniline 4-Nitroaniline Nitrobenzene 2-Nitrophenol N-Nitrosodimethylamine N-Nitrosodinethylamine N-Nitrosodi-n-propylamine Di-n-octyl phthalate Pentachlorophenol Phenanthrene Phenol Pyrene 1,2,4-Trichlorobenzene 2,4,5-Trichlorophenol 2,4,6-Trichlorophenol	ND N	10 10 10 10 10 10 10 10 10 50 50 10 10 10 10 10 10	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A		
				ND = None Detected NA = Not Applicable	
	; 			X	

EPA Method 624: Purgeable Organics

Chain of Custody Data Required for ETC Data Management Summary Reports

MA6239 CITY OF SAN LEANDRO

600-007

10-001

ETC Sample No.

Company

Facility Sample Point Date Time Hours

891004

QRM00533

		Results		
Compound	Sample Concen. ug/l	MDL ug/l	Blank Data ug/l	
Acetone Benzene Bromodichloromethane Bromoform Bromoethane 2-Butanone Carbon disulfide Carbon tetrachloride Chlorobenzene Chloroethane 2-Chloroethylvinyl ether Chloroform Chloromethane Dibromochloromethane 1,1-Dichloroethane 1,2-Dichloroethane 1,1-Dichloroethene trans-1,2-Dichloroethene 1,2-Dichloropropane cis-1,3-Dichloropropene trans-1,3-Dichloropropene Ethylbenzene 2-Hexanone Methylene chloride 4-Methyl-2-pentanone Styrene 1,1,2,2-Tetrachloroethane Tetrachloroethene Toluene 1,1,1-Trichloroethane 1,1,2-Trichloroethane Trichlorofluoromethane Trichlorofluoromethane Vinyl acetate Vinyl chloride Xylenes	ND ND ND ND ND ND ND ND ND ND ND ND ND N	100 55550 1055550 105555555555555555555	N/A	ND = None Detected NA = Not Applicable
		<u> </u>		^

ORGANOCHLORINE PESTICIDES AND PCB'S

Chain of Custody Data Required for ETC Data Management Summary Reports

MA6239 CITY OF SAN LEANDRO

600-007

10-001

891004

QRM00533

ETC Sample No.

Company

Facility Sample Point Date Time Hours

0

	R	Results		
Compound	Sample Concen. ug/l	MDL* ug/l	Blank Data ug/l	*These detection limits are higher than usual due to matrix interferences.
Aldrin Alpha-BHC Beta-BHC Delta-BHC Gamma-BHC Chlordane 4,4'-DDD 4,4'-DDE 4,4'-DDT Dieldrin Endosulfan II Endosulfan II Endosulfan sulfate Endrin Endrin aldehyde Heptachlor Heptachlor Heptachlor epoxide Methoxychlor Toxaphene PCB-1016 PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1260	ND N	100 100 100 100 100 100 100 100 100 100	N/A	
			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ND = None Detected NA = Not Applicable

TABLE 2: METHOD PERFORMANCE DATA

SURROGATE RECOVERY

Chain of Custody Data Required for ETC Data Management Summary Reports

MA6239 CITY OF SAN LEANDRO 600-007 10-001 891004 0

ETC Sample No. Company Facility Sample Point Date Time Hours

	Amount added		Contr	Control Limits		
Compound	ug/l	% Recovery	Lower	Upper		
VOLATILE FRACTION (GC/MS) .						
1,2-Dichloroethane-D4	50.0	104	0	þ		
Bromofluorobenzene	50.0	100	0	þ		
Toluene-D8	50.0	98	0	þ		
BASE/NEUTRAL FRACTION (GC/MS)						
Nitrobenzene-D5	50	84	0	o		
2-Fluorobiphenyl	50	88	0	þ		
Terphenyl-D14	50	68	0	ρ.		
ACID FRACTION (GC/MS)						
Pheno1-D6	100	90	0	þ		
2-Fluorophenol	100	49	0	þ		
2,4,6-Tribromophenol	1.00	86	o	þ		
PESTICIDE/PCB FRACTION (GC)						
Dibutylchlorendate	20	110	0	þ		
Bromochloromethane	-	-	-	-		
a,a,a-Trifluorotoluene	-	-	-	-		

CAC TOTAL METALS

Chain of Custody Data Required for ETC Data Management Summary Reports

MA6239 CITY OF SAN LEANDRO 600-007

10-001 891004

ETC Sample No.

Company

Facility Sample Point Date Time Hours

QRM00533

		<i>Results</i>		
Compound	Sample Concen. mg/l	MDL mg/l	Blank Data mg/l	
Antimony, Total Arsenic, Total Barium, Total Beryllium, Total Cadmium, Total Chromium, Total Cobalt, Total Copper, Total Lead, Total Mercury, Total Molybdenum, Total Nickel, Total Selenium, Total Silver, Total Thallium, Total Vanadium, Total Zinc, Total	ND .006 .40 ND .01 .001 .001 .001 .00 ND ND ND ND ND	* .001 .001 .01 .01 .005 .005 .005 .001 .001	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	*The blank contained copper at 0.003 mg/1. This value was not subtracted from the final result. ND = None Detected NA = Not Applicable
				X

PROJECT: ROUSE & ASSOC. /P

QUALITY ASSURANCE REPORT

EPA METHOD 625: GC/MS SEMIVOLATILE ORGANICS

QC BATCH NUMBER: 89-2828 DATE OF ANALYSIS: 10-27-89

METHOD BLANK SUMMARY

	thod 8lank (ug/L)		Method Blank (ug/L)
Acenaphthene	ND	Di-n-octylphthalate	ND
Acenaphthylene	ND	Fluoranthene	ND
Anthracene	ND	Fluorene	ND
Benzo(a)anthracene	ND	Hexachlorobenzene	ND
Benzo(b) fluoranthene	ND	Hexachlorobutadiene	ND
Benzo(k)fluoranthene	ND	Hexachlorethane	ND
Benzo(a)pyrene	ND	Hexachlorocyclopentadiene	ND
Benzo(g,h,i)Perylene	ND	Indeno(1,2,3-cd)pyrene	ND
Benzidine	DM	Isophorone	ND
Bis(2-chloroethyl)ether	ND	Naphthalene	ND
Bis(2-chloroethoxy)methane	ND	Nitrobenzene	ND
Bis(2-ethylhexyl)phthalate	ND	N-Nitrosodimethylamine	ND
Bis(2-chloroisopropyl)ether	ND	N-Nitrosodi-n-Propylamine	ND
4-Bromophenyl phenyl ether	ND	N-Nitrosodiphenylamine	ND
Butyl benzyl phthalate	ND	Phenanthrene	ND
2-Chloronaphthalene	ND	Pyrene	ND
4-Chiorophenyl phenyl ether	ND	1,2,4-Trichlorobenzene	ND
Chrysene	ND	4-Chloro-3-methylphenol	ND
Dibenzo(a,h)anthracene	ND	2-Chlorophenol	ND
Di-n-butylphthalate	ND	2,4-Chlorophenol	ND
1,3-Dichlorobenzene	ND	2,4-Dimethylphenol	ND
1,4-Dichlorobenzene	ND	2-Methyl-4,6-Dinitrophenol	ND
1,2-Dichlorobenzene	NO	2-Nitrophenol	ND
3,3'-Dichlorbenzidine	ND	4-Nitrophenol	ND
Diethylphthalate	NO	Pentachlorophenol	ND
Dimethylphthalate	ND	Phenol	פא
2,4-Dinitrotoluene	ND	2,4,6-Trichlorophenol	ND
2,6-Dinitrotoluene	ND	2,4,5-Trichlorophenol	ND
1,2-Diphenylhydrazīne	ND	, ,	ND.

ND = None Detected

(625 QC CONTINUED)

PROJECT: ROUSE & ASSOC. /P

QC BATCH NUMBER 89-2828, EPA METHOD 625: GC/MS SEMIVOLATILE ORGANICS (CON'T)

	<u>- ac</u>	CHECK SAMPLES -		- MATRIX SPIK	<u>ŒS -</u>	
	QC Check Sample-1 Recovery	QC Check Sample-2 Recovery	<u> </u>	Matrix Spike Recovery	Spike Duplicate Recovery	RPD
	(%)	(%)	(%)	(%)	(%)	(%)
Pentachlorophenol Phenol	79 72	68 60	15	84	77	9
2-Chlorophenol	73	62	18 16	67 70	62 64	8 9
4-Chloro-3-Methylphenol 4-Nitrophenol	73 59	65 53	12 1 1	72 66	67 54	7 20
1,2,4-Trichlorobenzene Acenaphthene	80 72	70	13	78	72	8
2,4-Dinitrotoluene	78 78	68 68	14 14	80 80	72 74	10 8
Di-n-butylphthalate Pyrene	52 88	46 76	12	50	50	0
n-Nitroso-Di-n-propylamine	86	76 76	15 12	86 92	92 78	7 16
1,4-Dichlorobenzene	6 6	54	20	62	56	10

This batch passes method quality control acceptance criteria.

PROJECT: ROUSE & ASSOC. /P

QUALITY ASSURANCE REPORT

EPA METHOD 624: PURGEABLE ORGANICS

QC BATCH NUMBER: 89-2872 DATE ANALYZED: 10-16-89

METHOD BLANK SUMMARY

	<u>Result</u> (ug/L)	Petection <u>Limit</u> (ug/L)
Acetone	ND	100
Benzene	ND	5
Bromodichloromethane	ND	5
Bromoform	ND	5
Bromomethane	ND	10
2-Butanone	ND	10
Carbon disulfide	ND	5
Carbon tetrachloride	ND	5
Chlorobenzene	ND	5
Chloroethane	ИD	10
2-Chloroethylvinyl ether	ND	10
Chloroform	ND	5
Chloromethane	ND	10
Dibromochloromethane	МО	5
1,1-Dichloroethane	ND	5
1,2-Dichloroethane	ND	5
1,1-Dichloroethene	ND	5
trans-1,2-Dichloroethene	ND	
1,2-Dichloropropane	ND	5 5 5
cis-1,3-Dichloropropene	ND	5
trans-1,3-Dichloropropene	ND	5
Ethyl benzene	ND	5
2-Hexanone	ND	10
Methylene chloride	ND	5
4-Methyl-2-Pentanone	ND	10
Styrene	ND	5
1,1,2,2-Tetrachloroethane	ND	5
Tetrachloroethene	ND	5
Toluene	ND	5
1,1,1-Trichloroethane	ND	5
1,1,2-Trichloroethane	ND	5
Trichloroethene	ND	5
Trichlorofluoromethane	ND	5
Vinyl acetate	ND	10
Vinyl chloride	ND	10
Total Xylenes	ND	5
Acrolein	ND	1000
Acrylonitrile	ND	500

^{*}The analysis for Acrolein and Acrylonitrile are qualitative screens and not intended for quantitative purposes.

ND = None Detected

(QC 624 CONTINUED)

PROJECT: ROUSE & ASSOC. /P

QC BATCH NUMBER 89-2872, EPA METHOD 624 PURGEABLE ORGANICS (CON'T)

- QC CHECK SAMPLES -

- MATRIX SPIKES -

	QC Check Sample-1 Recovery	QC Check Sample-2 Recovery	RPD	Matrix Spike Recovery	Spike Duplicate Recovery	RPD
	(%)	(%)	(%)	(%)	(%)	(%)
1,1,-Dichloroethene	110	105	5	70	84	18
Trichloroethene	110	105	5	76	94	21
Chlorobenzene	115	110	4	80	96	18
Toluene	110	105	5	72	88	20
Benzene	115	105	9	72	84	15

This batch passes method quality control acceptance criteria.

PROJECT: ROUSE & ASSOC. /P

QUALITY ASSURANCE REPORT

EPA METHOD 508

QC BATCH NUMBER: 89-2829
DATE ANALYZED: 11-09-89

-MATRIX SPIKES-

<u>Analyte</u>	Method <u>Blank</u> (ug/l)	QC CHECK Sample <u>Recovery</u> (%)	Sample Result (ug/l)	Matrix Spike Recovery (%)	Spike Duplicate Recovery (%)	RPD (%)
Alpha-BHC	ND	147	ND	**	**	**
Beta-BHC	ND	47	ND	**	**	**
Gamma-BHC	NO	160	ND	**	**	**
Delta-BHC	ND	120	ND	**	**	**
Heptachlor	ND	193	ND	**	**	**
Aldrin	ND	147	ND	**	**	**
Heptachlor Epoxide	ND	153	ND	**	**	**
Endosulfan I	ND	160	MD	**	**	**
Dieldrin	ND	140	ND	**	**	**
DDE	ND	133	ND	**	**	**
Endrin	ND	227	ND	**	**	**
Endosulfan II	ND	153	ND	**	**	**
DDD	ND	140	ND	**	**	**
Endrin Aldehyde	ND	107	MD	**	**	**
DDT	ND	227	ND	**	**	**
Endosulfan Sulfate	ND	127	ND	**	**	**
Methoxychlor	ND	*	ND	**	**	**
Chlordane	ND	*	ND	**	**	**
Toxaphene	ND	*	ND	××	**	**

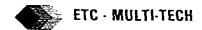
ND = None Detected

This batch passes method quality control acceptance criteria.

^{*}These compounds were not part of the QC check sample or the matrix spiking solution.

^{**}There was insufficient sample available to follow our standard quality control procedures.

MULTI - TECH, A Division of Environmental Testing and Certification Corp. 320 Tesconi Circle, Suite G Santa Rosa, California 95401 707-544-5570



FEBRUARY 27, 1990

CLIENT:

CITY OF SAN LEANDRO

3000 DAVIS STREET

SAN LEANDRO, CA 94577

ATTN:

PAUL ZOLFARELLI

ANALYSIS:

TILC, HSL SEMI VOLATILES, PRIORITY POLLUTANT VOLATILES, EPA METHOD 8080: ORGANOCHLORINE

PESTICIDES AND PCB'S

QC BATCH NUMBER:

90-0120, 90-0113, 90-0145, 89-3498, 90-0079, 89-3499

PROJECT:

ROUSSE & ASSOC./P

SAMPLE TYPE: COLLECTED BY: LIQUID

SAMPLE NO.

SAMPLE POINT

SAMPLE DATE

DATE IN LAB

MA8935

T-1-004

01-04-90

01-05-90

This report is "PROPRIETARY AND CONFIDENTIAL" and delivered to, and intended for the exclusive use of the above named client only. Environmental Testing and Certification Corp. assumes no responsibility or liability for the reliance hereon or use hereof by anyone other than the above named client.

The analyses and data interpretation that form the basis of this report were prepared under the direct supervision and control of the undersigned who is solely responsible for the contents and conclusions therein.

Reviewed and

Approved by:

Thomas FACullen Jr., Laboratory Director ETC/Multi-Tech Laboratories, Inc.

1128 191

CITY OF SAN LEANDRO FEBRUARY 27, 1990

PROJECT: ROUSSE & ASSOC./P

SAMPLE NUMBER: MA8935

	EPA		EPA	
Parameter	Prep Method	Prep Date	Analysis Method	<u>Analysis Date</u>
Total Antimony	*	01-15-90	200.7	01-17-90
Total Arsenic	*	01-15-90	200.7	01-13-90
Total Barium	*	01-15-90	200.7	01-17-90
Total Cadmium	*	01-15-90	200.7	01-17-90
Total Chromium	*	01-15-90	200.7	01-17-90
Total Cobalt	*	01-15-90	200.7	01-17-90
Total Copper	*	01-15-90	200.7	01-17-90
Total Lead	*	01-15-90	200.7	01-17-90
Total Mercury	*	01-18-90	245.1	01-18-90
Total Molybdenum	*	01-15-90	200.7	01-17-90
Total Nickel	*	01-15-90	200.7	01-17-90
Total Selenium	*	01-15-90	200.7	01-27-90
Total Silver	*	01-15-90	200.7	01-17-90
Total Thallium	*	01-15-90	200.7	01-25-90
Total Vanadium	*	01-15-90	200.7	01-17-90
Total Zinc	*	01-15-90	200.7	01-17-90

^{*} The sample was prepared following the method outlined in metals, section 4.1.3 of EPA-600/4-79-020, March, 1983.

HSL SEMI VOLATILES

Date Analyzed: 01-14-90 QC Batch Number: 89-3498

PRIORITY POLLUTANT VOLATILES

Date Analzyed: 01-10-90 QC Batch Number: 90-0079

EPA METHOD 8080: ORGANOCHLORINE PESTICIDES AND PCB4S

Date Extracted: 01-11-90
Date Analyzed: 01-14-90
QC Batch Number: 89-3499

TABLE 1: QUANTITATIVE RESULTS CAC TOTAL METALS (ZR33)

Chain of Custody Data Required for ETC Data Management Summary Reports

MA9835 CHEVRON U.S.A. INC. 600-103 4-8866 900212

ETC Sample No. Company Facility Sample Point Date Time Hours

		Results		
Compound	Sample Concen. mg/l	MDL Blank Data mg/l mg/l	Batch #	
Antimony, Total Arsenic, Total Barium, Total Beryllium, Total Cadmium, Total Chromium, Total Cobalt, Total Copper, Total Lead, Total Mercury, Total Molybdenum, Total Nickel, Total Selenium, Total Silver, Total Thallium, Total Vanadium, Total Zinc, Total	ND N	.001 ND .001 ND .001 ND .001 ND .005 ND .005 ND .005 ND	Q900120 Q900120 Q900120 Q900120 Q900120 Q900120 Q900120 Q900120 Q900120 Q900120 Q900120 Q900120 Q900120 Q900120 Q900120	

HSL SEMI-VOLATILES - (ZRO6)

Chain of Custody Data Required for ETC Data Management Summary Reports

MA8935 CITY OF SAN LEANDRO 600-007

1-004 900104 0

ETC Sample No.

Company

Facility Sample Point Date Time Hours

		Re	sults		
Compound	Sample Concen. ug/l	MDL ug/l	Blank Data ug/l	Batch #	
N-Nitrosodimethylamine Phenol bis(2-Chloroethyl) ether 2-Chlorophenol 1,3-Dichlorobenzene 1,4-Dichlorobenzene Benzyl alcohol 1,2-Dichlorobenzene 2-Methylphenol bis(2-Chloroisopropyl)ether 4-Methylphenol N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone 2-Nitrophenol 2,4-Dimethylphenol Benzoic acid bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 1,2,4-Trichlorobenzene Naphthalene 4-Chloroaniline Hexachlorocyclopentadiene 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol 2-Chloronaphthalene 2-Nitroaniline Dimethyl phthalate Acenaphthylene 3-Nitroaniline Acenaphthene 2,4-Dinitrophenol Dibenzofuran 2,4-Dinitrotoluene	ND N	20.0 20.0		Q893498 Q893498	

HSL SEMI-VOLATILES - (ZRO6)

Chain of Custody Data Required for ETC Data Management Summary Reports

MA8935 CITY OF SAN LEANDRO

600-007

1-004 900104 0

ETC Sample No.

Company

Facility Sample Point Date Time Hours

	Results							
Compound	Sample Concen. ug/l	. MDL ug/1	Blank Data ug/l	Batch #				
2,6-Dinitrotoluene Diethyl phthalate 4-Chlorophenyl phenyl ether Fluorene 4-Nitroaniline 4,6-Dinitro-o-cresol N-Nitrosodiphenylamine 4-Bromophenyl phenyl ether Hexachlorobenzene Pentachlorophenol Phenanthrene Anthracene Di-n-butyl phthalate Fluoranthene Pyrene Benzidine Butyl benzyl phthalate 3,3'-Dichlorobenzidine Benzo(a)anthracene bis(2-Ethylhexyl)phthalate Chrysene Di-n-octyl phthalate Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz[a,h]anthracene Benzo(ghi)perylene		20.0 20.0 20.0 20.0 100 20.0 20.0 20.0 2	ND N	Q893498 Q893498				

TABLE 2: METHOD PERFORMANCE DATA

SURROGATE RECOVERY

Chain of Custody Data Required for ETC Data Management Summary Reports

MA8935 CITY OF SAN LEANDRO 600-007 1-004 900104 0

ETC Sample No. Company Facility Sample Point Date Time Hours

Q893498

	Amount added		Control Limits		
Compound	ug	% Recovery	Lower	Upper	
VOLATILE FRACTION (GC/MS)				<u> </u>	
1,2-Dichloroethane-D4	.250	104	76	114	
Bromofluorobenzene	.250	107	86	115	
Toluene-D8	.250	101	88	110	
BASE/NEUTRAL FRACTION (GC/MS)					
Nitrobenzene-D5	50	89	35	114	
2-Fluorobiphenyl	50	95	43	116	
Terphenyl-D14	50	97	33	141	
ACID FRACTION (GC/MS)					
Phenol-D6	100	85	10	94	
2-Fluorophenol	100	79	21	100	
2,4,6-Tribromophenol	100	106	10	. 123	
PESTICIDE/PGB FRACTION (GC)		•	l		
Dibutylchlorendate	-	-	-	•	
Bromochloromethane	-	- ;	-	-	
a,a,a-Trifluorotoluene	_	-	· -		

TABLE 1: QUANTITATIVE RESULTS PRIORITY POLLUTANT VOLATILES

Chain of Custody Data Required for ETC Data Management Summary Reports

MA8935 CITY OF SAN LEANDRO

600-007

900104

ETC Sample No.

Company

Facility Sample Point Date Time Hours

1-004

	Results						
Compound	Sample Concen. ug/l	MDL ug/l	Blank Data ug/l	Batch ∦			
Chloromethane Bromomethane Vinyl chloride Chloroethane Methylene chloride Acetone Carbon disulfide Trichlorofluoromethane 1,1-Dichloroethane 1,1-Dichloroethane trans-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon tetrachloride Vinyl acetate Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane 8enzene trans-1,3-Dichloropropene 2-Chloroethylvinyl ether Bromoform 2-Hexanone 4-Methyl-2-pentanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene m-Xylene o+p-Xylenes		10.0 10.0 10.0 10.0 10.0 5.00 10.0 5.00 5.0		Q900079 Q900079			

TABLE 2: METHOD PERFORMANCE DATA

SURROGATE RECOVERY

Chain of Custody Data Required for ETC Data Management Summary Reports

MA8935 CITY OF SAN LEANDRO

600-007 1-004 900104

Q900079

ETC Sample No.

Company

Facility Sample Point Date Time Hours

Compound	Amount added ug		Control Limits		
		% Recovery	Lower	Upper	
VOLATILE FRACTION (GC/MS)			. 		
1,2-Dichloroethane-D4	.250	104	76	114	
Bromofluorobenzene	.250	107	86	115	
Toluene-D8	.250	101	88	110	
BASE/NEUTRAL FRACTION (GC/MS)]			
Nitrobenzene-D5	-		-	_	
2-Fluorobiphenyl	-		-	-	
Terphenyl-D14	-		_	_	
ACID FRACTION (GC/MS)					
Phenol-D6	-	-		-	
2-Fluorophenol	-		_		
2,4,6-Tribromophenol .	_	_	_	_	
PESTICIDE/PCB FRACTION (GC)]			
Dibutylchlorendate	-	_	_	-	
Bromochloromethane		_	_	_	
a,a,a-Trifluorotoluene	_	_	_	_	

EPA Method 8080: Organochlorine Pesticides and PCB's (ZR45)

Chain of Custody Data Required for ETC Data Management Summary Reports

MA8935 CITY OF SAN LEANDRO

600-007

1-004 900104

ETC Sample No.

Company

Facility Sample Point Date Time Hours

		Re.	sults	· · · · · · · · · · · · · · · · · · ·			 	· · · · · · · · · · · · · · · · · · ·
Compound	Sample Concen. ug/1	MDL ug/1	Blank Data ug/l	Batch ∦	· ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	. '
Aldrin Alpha-BHC Beta-BHC Delta-BHC Gamma-BHC Chlordane 4,4'-DDD 4,4'-DDT Dieldrin Endosulfan I Endosulfan II Endosulfan sulfate Endrin Endrin aldehyde Heptachlor Heptachlor Heptachlor PCB-1016 PCB-1221 PCB-1232 PCB-1248 PCB-1254 PCB-1260	ND N	11111111111111112222222000		Q893499 Q893499 Q893499 Q893499 Q893499 Q89334999 Q89334999 Q89334999 Q89334999 Q89334999 Q89334999 Q89334999 Q89334999 Q89334999 Q89334999 Q89334999 Q89334999 Q89334999 Q89334999 Q89334999 Q89334999 Q89334999 Q89334999				

TABLE 2: METHOD PERFORMANCE DATA

SURROGATE RECOVERY

Chain of Custody Data Required for ETC Data Management Summary Reports

MA8935 CITY OF SAN LEANDRO 600-007 1-004 900104 0

ETC Sample No. Company Facility Sample Point Date Time Hours

The state of the s	Amount added		Control Limits		
Compound	ug	% Recovery	Lower	Upper	
VOLATILE FRACTION (GC/MS)					
1,2-Dichloroethane-D4	. 250	104	76	114	
Bromofluorobenzene	.250	107	86	115	
Toluene-D8	. 250	101	88	110	
BASE/NEUTRAL FRACTION (GC/MS)					
Nitrobenzene-D5	50	89	35 ·	. 114	
2-Fluorobiphenyl	50	95 .	43	116	
Terphenyl-D14	50	97	33	141	
ACID FRACTION (GC/MS)					
Phenol-D6	100	85	10	94	
2-Fluorophenol	100	79	21	100	
2,4,6-Tribromophenol	100	106	10	123	
PESTICIDE/PCB FRACTION (GC)		•			
Dibutylchlorendate	.020	78	-	-	
Bromochloromethane	-]	-	-	-	
a,a,a-Trifluorotoluene	-	_	_ (: 	

MI PACIFIC ENVIRONMENTAL I 30RATORY

Carter Analytical Laboratory 95 Lost Lake Lane Campbell, CA 95008

May 23, 1990 MPELI ID: 9005066 Client PO: 10233 OSR

Log 00117

Page 1 of 6

Attention: Ms. Linda Dewi

Subject: Analysis of 1 Water and 1 Extract Sample, Received 5/11/90.

The water sample was analyzed for purgeable organic compounds according to U.S. EPA Method 624 (Federal Register, Volume 49 No. 209, Oct. 26, 1984; Page 141). Results are presented in Table 1. The method can be summarized as follows:

Helium is bubbled through an aliquot of sample contained in a specially designed purging chamber. The purgeable volatile organic compounds are efficiently transferred from the aqueous phase to the vapor phase. The vapor is swept through a sorbent column where the purgeables are trapped. After purging is completed, the trap is heated and back flushed with helium to desorb the purgeables onto a gas chromatographic column. The gas chromatograph is temperature programmed to separate the purgeables that are then detected with a mass spectrometer.

The extract sample was analyzed for semivolatile organic compounds according to U.S. EPA Method 625 (Federal Register, Volume 49 No. 209, Oct. 26, 1984; Page 153). Results are presented in Table 2. The method can be summarized as follows:

A measured volume of water is serially extracted with methylene chloride at pH >11 and again at pH <2. The resulting base/neutral and acid extracts are each concentrated to 1 mL. Just prior to injection into a Gas Chromatograph/Mass Spectrometer (GC/MS), the acid and base/neutral extracts are combined and internal standards are added. The GC/MS is equipped with a fused silica capillary column and is set up for the analysis of semivolatile priority pollutants.

Qualitative identification of the priority pollutants is performed initially using the relative retention times and the relative abundance of three unique ions. The entire mass spectrum is checked before any final identifications are recorded. Quantitative analysis is performed by the internal standard method using a single characteristic ion and response factors obtained from a daily calibration standard. In the tables, an entry such as "<5" means that the compound was not found at a level above the laboratory's reporting limit. The reporting limit, which is based on EPA reporting levels, has been corrected for any sample dilution.

Prior to analysis, every sample is spiked with surrogate compounds as part of Mid-Pacific's Quality Control Program. These compounds simulate the behavior of compounds of interest and confirm that acceptable recoveries are being achieved on every sample. The results of surrogate recoveries are reported with the sample results.

If you should have any technical questions, please contact the undersigned at (415)964-0844.

Approved by:

Daniel L. Middleton

Client Services Manager

These results were obtained by following standard laboratory procedures; the liability of Mid-Pacific Environmental Laboratory, Inc. shall not exceed the amount paid for this report. In no event shall Mid-Pacific be liable for special or consequential damages.

Table 1. Volatile Organic Results

Carter Analytical Sample ID

	9372-L6	Method Blank	Storage Blank	Spike	Dup Spike
624 Compounds	ug/L	ug/L	ug/L	% Recov	% Recov
Chloromethane	<10	<10	<10	ns	NS
Vinyl chloride	<10	<10	<10	ns	ns
Bromomethane	<10		<10	NS	NS
Chloroethane	<10	<10	<10	NS	NS
Trichlorofluoromethane	<5	<5	<5	NS	NS
1,1-Dichloroethene	<5	<5	<5	88	90 .
Methylene chloride	<5	` ` <5	<5	NS	· NS
trans-1,2-Dichloroethene	<5	< 5	< 5	NS	NS
1,1-Dichloroethane	<5	<5	<5	NS	NS
Chloroform	<5	<5	< 5	NS	NS
1,1,1-Trichloroethane	<5	<5	< 5	NS	ns
Carbon tetrachloride	<5	< 5	<5	ns	NS
Benzene	<5	<5	< 5	90	94
1,2-Dichloroethane	<5	<5	< 5`	NS	ns
Trichloroethene	≺ 5	<5	<5	87	90
1,2-Dichloropropane	<5	<5	<5	NS	NS
Bromodichloromethane	<5	<5	< 5	NS	ns
2-Chloroethylvinylether	<10	<10	<10	NS	ns
cis-1,3-Dichloropropene	< 5	<5	<5	NS	ns
Toluene	<5	<5	<5	85	86
trans-1,3-Dichloropropene	<5	<5	<5	NS	ns
1,1,2-Trichloroethane	<5	<5	<5	ns	NS
Tetrachloroethene	<5	<5	<5	NS	NS
Dibromochloromethane	<5	<5	<5	NS	NS
Chlorobenzene	<5	<5	<5	81	84
Ethylbenzene	<5	<5	<5	NS	NS
Bromoform	< 5	<5	<5	NS	ns
1,1,2,2-Tetrachloroethane	<5	<5	<5	NS	ns
1,3-Dichlorobenzene	<5	<5	<5	NS	ns
1,4-Dichlorobenzene	≺ 5	<5	<5	NS	ns
1,2-Dichlorobenzene	<5	<5	<5	NS	ns
Date Analyzed	5/14/90	5/14/90	5/14/90	5/14/90	5/14/90
Surrogates]	Percent R	ecoveries	(%)	
1,2-Dichloroethane-d4	95	96	96	93	92
Toluene-d8	93	94	95	92	8 <i>9</i>
p-Bromofluorobenzene	90	91	93	90	88

Table 1. Volatile Organic Results Carter Analytical Sample ID

Method Reporting Limit

624 Compounds	ug/L
Chloromethane	10
Vinyl chloride	10
Bromomethane	10
Chloroethane	10
Trichlorofluoromethane	5
1,1-Dichloroethene	5
Methylene chloride	5
trans-1,2-Dichloroethene	5
1,1-Dichloroethane	5
Chloroform	5
1,1,1-Trichloroethane	5 5 5 5 5 5
Carbon tetrachloride	5
Benzene	5
1,2-Dichloroethane	\$
Trichloroethene	5
1,2-Dichloropropane	5
Bromodichloromethane	5
2-Chloroethylvinylether	10
cis-1,3-Dichloropropene	5
Toluene	5
trans-1,3-Dichloropropene	5
1,1,2-Trichloroethane	5
Tetrachloroethene	5 5 5
Dibromochloromethane	
Chlorobenzene	5
Ethylbenzene	5
Bromoform	5
1,1,2,2-Tetrachloroethane	5
1,3-Dichlorobenzene	5.
1,4-Dichlorobenzene	5
1,2-Dichlorobenzene	5

Table 2. Semivolatile Organic Results

Carter Analytical Sample ID

	9372 WATER EXTRACT	Method Reporting Limit
625 Compounds	ug/mL	ug/mL
Phenol	<10	5
Bis(2-chloroethyl)ether	<10	5
2-Chlorophenol	<10	· 5
1,3-Dichlorobenzene	<10	5
1,4-Dichlorobenzene	<10	5
1,2-Dichlorobenzene	<10	555555555
Bis(2-chloroisopropyl)ether	<10	, 5
N-Nitroso-di-n-propylamine	<10	5
Hexachloroethane	<10	5
Nitrobenzene	<1.0	Š
Isophorone	<10	5
2-Nîtrophenol .	<10	5
2,4-Dimethylphenol	<10	5
Bis(2-chloroethoxy)methane	<10	5
2,4-Dichlorophenol	<10	5
1,2,4-Trichlorobenzene	<10	5 5 5
Naphthalene	<10	5
Hexachlorobutadiene	<10	5 5
4-Chloro-3-methylphenol	<10	5
Hexachlorocyclopentadiene -	<10	5
2,4,6-Trichlorophenol	<10	. 5
2-Chloronaphthalene	<10	5
Dimethyl phthalate	<10	5
Acenaphthylene	<10	5 5
Acenaphthene	<10	5
2,4-Dinitrophenol	<50	25
4-Nitrophenol	<50	25
2,4-Dinitrotoluene	<10	5
2,6-Dinitrotoluene	<10	5 5
Diethyl phthalate	<10	5
4-Chlorophenyl phenylether	<10	5
Fluorene	<10	· 5
4,6-Dinitro-2-methylphenol	<50	25
N-Nitrosodiphenylamine	14	
4-Bromophenyl phenylether	<10	5 5 5
Hexachlorobenzene	<10	5
Pentachlorophenol	<50	25
Phenanthrene	<10	5
Anthracene	<10	5
Di-n-Butyl phthalate	<10	5

Table 2. Semivolatile Organic Results (Continued)

Carter Analytical Sample ID

	9372 WATER EXTRACT	Method Reporting Limit
625 Compounds	ug/mL	ug/mL
Fluoranthene	<10	5
Pyrene	<10	
Butyl benzyl phthalate	<10	· 5
3,3'-Dichlorobenzidine	<20	10
Benzo(a) anthracene	<10	5
Bis(2-ethylhexyl)phthalate	<10	5
Chrysene ·	<10	. 5
Di-n-octyl phthalate	<10	5
Benzo(b) fluoranthene	<10	5
Benzo(k) fluoranthene	<10	5
Benzo(a)pyrene	<10	5
Indeno(1,2,3-cd)pyrene	<10	5
Dibenzo(a,h)anthracene	<10	5
Benzo(g,h,i)perylene	<10	5
Date Analyzed	5/16/90	
Date Extracted	N/A*	
Surrogates	Percent F	Recovery (%)
2-Fluorophenol	N/A*	
Phenol-d5	N/A*	
Nitrobenzene-d5	N/A*	
2-Fluorobiphenyl	N/A*	
2,4,6-Tribromophenol	N/A*	
p-Terphenyl-d14	N/A*	

N/A - Not applicable, sample extract was prepared by customer.

95 LOST LAKE LANE • CAMPBELL, CA 95008 • (408) 866-1600

	Mr. John Camp	P.O.#09372
REPORT FOR	City of San Leandro ORDE	R NO. 9372-CD DATE 05-25-90
SUBJECT	Analysis of Water Samples	

A set of six water samples were analyzed following EPA methods 601, 602, 608, 624 and 625 using gas chromatography (GC) and for EPA waste metals by atomic absorption (AA) spectroscopy. The samples were identified as follows.

Sample	<u>Customer Label</u>	Description
L1	Rouse (625)	water
L2	Rouse (608)	water
L3	Rouse (P.P.)	water
L4	TB (601)	water
L5	Rouse BTEX	water
L6	Rouse (624)	water

<u>Metals Analysis</u>

Sample L3 was analyzed for the metals listed below using AA spectroscopy. The proper operational conditions were established for each element and the spectrophotometer was calibrated with standards. The analytical results, reported in parts per million (ppm), are as follows.

<u>Metal</u>	<u>L3 (ppm)</u>	Detection Limits (ppm)
arsenic barium cadmium chromium copper lead	< 1.0 2.0 0.03 < 0.01 0.05 0.2	1.0 1.0 0.01 0.01 0.01
mercury nickel thallium zinc silver beryllium selenium	< 1.0 0.1 < 0.1 0.02 < 0.1 < 0.1 < 1.0	1.0 0.01 0.1 0.01 0.1 0.01 1.0

<u>M R Pixton</u>

This report completes this order. If you are not completely satisfied with the results stated in this report, or the charges for services rendered, submit your detailed comments in writing to this lab within 10 days. Upon acceptance of this report, its contents and related charges, the invoice is due and payable within 30 days from the invoice date.

CARTER ANALYTICAL LABORATORY, INC.

Laboratory Supervisor

M. K. Tutos

<u>Metal</u>	<u>(maa) El</u>	<u>Detection Limits (ppm)</u>
antimony	< 0.1	0.1
cobalt	0.08	0.01
molybdenum	< 0.1	O.1
vanadium	< 0.1	O.1

Only trace levels of metals were detected in sample L3.

EPA Method 608 Analysis

Sample L2 was analyzed according to EPA Method 608 for pesticides and polychlorinated biphenyls (PCBs) using an IBM model 9630 gas chromatograph. One liter of the sample was extracted with three 30 milliliter portions of dichloromethane. The extracts were combined, solvent exchanged with hexane and evaporated down to a final weight of one gram. Two microliters of the hexane extract was injected into the GC. Sample separation was accomplished on a packed column with a bonded phase of 1.5% SP-2250/1.95% SP-2401 on Supelcoport. The eluted components were detected by an electron capture detector (ECD) and the output recorded on an HP digital plotter/recorder. The results, given as parts per billion (ppb), are as follows.

<u>Compound</u>	<u>L2 (ppb)</u>	Detection Limit (ppb)
aldrin	< 50.	50.
dieldrin	< 50.	50.
chlordane	< 50.	50.
p,p'-DDT	< 50.	50.
p,p'-DDE	< 50.	50.
p,p'-DDD	< 50.	50.
alpha-endosulfan	< 50.	50.
beta-endosulfan	< 50.	50.
endosulfan sulfate	< 50.	50.
endrin aldehyde	< 50.	50.
heptachlor	< 50.	50.
heptachlor epoxide	< 50.	50.
alpha-BHC	< 50.	50.
endrin	< 50.	50.
beta-BHC	< 50.	50.
gamma-BHC (Lindane)	< 50.	50.
delta-BHC	< 50.	50.
arochlor 1242 (PCB)	< 50.	50.
arochlor 1254 (PCB)	< 50.	50.
arochlor 1221 (PCB)		50.
arochlor 1232 (PCB)	< 50.	50.
arochlor 1248 (PCB)	< 50.	50.
arochlor 1260 (PCB)	< 50.	50.
arochlor 1016 (PCB)	< 50.	50.
toxaphene	< 50.	50.
conditions	` 50.	J - 1

Any 608 compounds present in the samples were below the detection limit.

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EPA 602 Analysis

Sample L5 was analyzed for benzene, toluene, ethyl benzene and xylenes (BTEX) following EPA method 602 using an Nicolet model 9630 GC. A five milliliter portion of the sample was purged for 10 minutes at a rate of 25 ml per minute in a Tekmar liquid sample concentrator. The purged gases were trapped, concentrated, and automatically desorbed into the GC. Separation was achieved on a packed column of 5% SP-1200/1.75% Bentone-34 on Supelcoport. The eluted components were detected by a photo ionization detector (PID) followed by a flame ionization detector (FID). The results of this analysis are reported in parts per billion (ppb) as follows.

Compound	<u>L5 (ppb)</u>	Detection Limit (ppb)
benzene	< 50	50
toluene	< 50	50
ethyl benzene	< 50	50
×ylene	< 50	50

Any benzene, toluene, ethyl benzene or xylenes present in the sample were below the detection limit.

EPA Method 601 Analysis

Sample L4 was analyzed for volatile halogenated organic compounds according to EPA method 601 using an HP model 5890 GC. Five milliliters of the sample was purged for 11 minutes at a rate of 40 ml per minute in a Tekmar liquid sample concentrator. The purged gases were trapped, concentrated, and automatically desorbed into the GC. Separation of the various sample components was accomplished on a packed column with a bonded phase of 1% SP-1000 on 60/80 Carbopack B. The eluted components were detected by a Hall electrolytic conductivity detector (ElCD) and the output recorded on an HP digital plotter/recorder. The results, given as parts per billion (ppb) are as follows.

Compound	L4 (ppm)	Detection Limit (ppm)
<pre>benzyl chloride bis(2-chloroethoxy)methane bis(2-chloroisopropyl)ether</pre>	< 0.005 < 0.1 < 0.1	0.005 0.1 0.1
bromobenzene	< 0.1	0.01
bromodichloromethane	< 0.005	0.005
bromoform .	< 0.01	0.01

Compound	L4 (ppm)	Detection Limit (ppm)
bromomethane	< 5.	5.
carbon tetrachloride	< 0.005	0.005
chloroacetaldehyde	< 2.	2.
chlorobenzene	< 0.005	0.005
chloroethane	< 5.	5.
2-chloroethylvinyl ether	< 0.1	0.1
chloroform	< 0.005	0.005
1-chlorohexane	< 0.005	0.005
chloromethane	< 5.	5.
chloromethyl methyl ether	< 5.	5.
2-chlorotoluene	< 0.005	0.005
3-chlorotoluene	< 0.005	0.005
4-chlorotoluene	< 0.005	0.005
dibromochloromethane	< 0.005	0.005
dibromomethane	< 0.005	0.005
1,2-dichlorobenzene	< 0.01	0.01
1,3-dichlorobenzene	< 0.01	0.01
1,4-dichlorobenzene	< 0.01	0.01
dichlorodifluoromethane	< 5.	5.
1,1-dichloroethane	< 0.005	0.005
1,2-dichloroethane	< 0.005	0.005
1,1-dichloroethene	< 0.005	0.005
trans-1,2-dichloroethene	< 0.005	0.005
dichloromethane	< 2.000	2.000
1,2-dichloropropane	< 0.005	0.005
trans-1,3-dichloropropene	< 5.	5.
1,1,1,2-tetrachloroethane	< 0.005	0.005
1,1,2,2-tetrachloroethane	< 0.005	0.005
tetrachloroethene	< 0.005	0.005
1,1,1-trichloroethane	< 0.005	0.005
1,1,2-trichloroethane	< 0.005	0.005
trichloroethene	< 0.005	0.005
trichlorofluoromethane	< 5.	5.
1,2,3-trichloropropane	< 0.005	0.005
vinyl chloride	< 5.	5.

Any 601 compounds present in sample L4 are below the detection limit.

EPA 624 and 625 analysis

The results the EPA methods 624 and 625 analyses are enclosed with this report.

Page 5 of 5 Order 9372

Conclusion

Any EPA methods 601, 602, 608 or 624 compounds that are present in the samples are below the detection limits. Low levels of N-nitrosodiphenylamine were detected in the EPA method 625 analysis of sample L6.

Samples submitted for analyses must be collected within a two week period following the completion of the analyses. Any samples remaining after the designated period of time will be discarded.

Should you have any questions please call. We look forward to serving you again in the near future.

Table 1. Pesticide & PCB Results

City Of San Leandro Sample ID Rouse & Assoc.

	ROUSE/ p #1-040	Method Blank	Spike	Dup Spike
608 Compounds	ug/L	ug/L	% Recov	% Recov
alpha-BHC	<0.05	<0.05	NS	NS
beta-BHC	<0.05	<0.05	NS	NS
gamma-BHC	<0.05	<0.05	100	98
delta- BHC	<0.05	<0.05	NS	ns
Heptachlor	<0.05	<0.05	121	119
Aldrin	<0.05	<0.05	85	83
Heptachlor epoxide	<0.05	<0.05	ns	NS
Endosulfan I	<0.05	<0.05	NS	NS
Dieldrin	<0.10	<0.10	117	112
4,4'-DDE	<0.10	<0.10	NS	NS
Endrin	<0.10	<0.10	103	105
Endosulfan II	<0.10	<0.10	NS	NS
4,4'-DDD	<0.10	<0.10	ns	NS
Endosulfan Sulfate	<0.10	<0.10	NS	NS
4,4'-DDT	<0.10	<0.10	147	147
Endrin aldehyde	<0.10	<0.10	NS	ns
Endrin ketone	<0.10	<0.10	NS	NS
Methoxychlor	<0.50	<0.50	NS	NS
Chlordane	<0.50	<0.50	NS	NS -
Toxaphene	<1.00	<1.00	NS	NS
Aroclor-1016	<0.50	<0.50	NS	NS
Aroclor-1221	<0.50	<0.50	NS	ns
Aroclor-1232	<0.50	<0.50	NS	NS
Aroclor-1242	<0.50	<0.50	NS	NS
Aroclor-1248	<0.50	<0.50	NS	NS
Aroclor-1254	<1.00	<1.00	NS	ns
Aroclor-1260	<1.00	<1.00	NS	NS
Date Extracted			12/04/90	
Date Analyzed	12/13/90	12/13/90	12/13/90	12/13/90
Surrogate		Percent Re	ecoveries	(왕)
Decachlorobiphenyl	61	47	49	74
Tetrachloro-m-xylene	193	100	106	104

Table 2. Volatile Organic Results

City of San Leandro Sample ID

	ROUSE/C #11-040	TRIP BLANK	Storage Blank	Spike	Dup Spike
624 Compounds	ug/L	ug/L	ug/L	% Recov	% Recov
Chloromethane	<3	<3	<3	NS	NS
Vinyl chloride	<3	<3	<3	NS	NS
Bromomethane	<2	<2	<2	NS	ns
Chloroethane	<2	<2	<2	NS	NS
Trichlorofluoromethane	<3	<3	<3	NS	ns
1,1-Dichloroethene	<3	<3	<3	110	108
Methylene chloride	<2	<2	<2	NS	NS
trans-1,2-Dichloroethene	<2	<2	<2	NS	NS
1,1-Dichloroethane	<3	<3	<3	NS	NS
Chloroform	<2	19	<2	NS	NS
1,1,1-Trichloroethane	<3	<3	<3	NS	ns
Carbon tetrachloride	<3	<3	<3	NS	ns
Benzene	4	<2	<2	120	117
1,2-Dichloroethane	<2	<2	<2	NS	NS
Trichloroethene	<2	<2	<2	102	101
1,2-Dichloropropane	<3	<3	<3	NS	NS
Bromodichloromethane	<3	<3	<3	NS	NS
2-Chloroethylvinylether	<5	<5	<5	NS	NS
cis-1,3-Dichloropropene	<3	<3	<3	NS	NS
Toluene	<2	<2	<2	103	102
trans-1,3-Dichloropropene	<2	<2	<2	NS	NS
1,1,2-Trichloroethane	<2	<2	<2	NS	NS
Tetrachloroethene	<2	<2	<2	NS	NS
Dibromochloromethane	<2	<2	<2	NS	NS
Chlorobenzene	<2	<2	<2	110	107
Ethylbenzene	<2	<2	<2	NS	NS
Bromoform	<2	<2	<2	NS	NS
1,1,2,2-Tetrachloroethane	<3	<3	<3	NS	NS
1,3-Dichlorobenzene	<2	<2	<2	NS	NS
1,4-Dichlorobenzene	<2	<2	<2	NS	NS
1,2-Dichlorobenzene	<2	<2	<2	NS	NS
Date Analyzed	12/3/90	12/3/90	12/3/90	12/3/90	12/3/90
Surrogates	Percent R	ecoveries	(%)	,	
1,2-Dichloroethane-d4	118	113	95	110	108
Toluene-d8	100	100	81	91	92
p-Bromofluorobenzene	128	101	92	105	110

Table 3. Semivolatile Organic Results
City of San Leandro Sample ID

	ROUSE/C 11-040	Method Blank	Spike	Dup Spike
625 Compounds	ug/L	ug/L	% Recov	% Recov
Phenol	<10	<10	10	14
Bis(2-chloroethyl)ether	<10	<10	NS	NS
2-Chlorophenol	<10	<10	42	44
1,3-Dichlorobenzene	<10	<10	ns	ns
1,4-Dichlorobenzene	<10	<10	39	39
1,2-Dichlorobenzene	<10	<10	NS	ns
Bis(2-chloroisopropyl)ether	<10	<10	NS	NS
N-Nitroso-di-n-propylamine	<10	<10	56	56
Hexachloroethane	<10	<10	NS	NS
Nitrobenzene	<10	<10	NS	NS
Isophorone	<10	<10	NS	NS
2-Nitrophenol	<10	<10	NS	NS NS
2,4-Dimethylphenol	<10	<10	ns Ns	ns Ns
Bis(2-chloroethoxy) methane	<10 <10	<10 <10	ns Ns	NS NS
2,4-Dichlorophenol	<10	<10	74	71
1,2,4-Trichlorobenzene	<10	<10	NS	NS
Naphthalene Hexachlorobutadiene	<10 <10	<10	NS	NS
4-Chloro-3-methylphenol	<10	<10	78	86
Hexachlorocyclopentadiene	<10	<10	NS	NS
2,4,6-Trichlorophenol	<10	<10	NS	NS
2-Chloronaphthalene	<10	<10	NS	NS
Dimethyl phthalate	<10	<10	NS	NS
Acenaphthylene	<10	<10	NS	NS
Acenaphthene	<10	<10	68	70
2,4-Dinitrophenol	<50	<50	NS	NS
4-Nitrophenol	<50	<50	88	109
2,4-Dinitrotoluene	<10	<10	78	84
2,6-Dinitrotoluene	27	<10	NS	NS
Diethyl phthalate	<10	<10	NS	NS
4-Chlorophenyl phenylether	<10	<10	NS	NS
Fluorene	<10	<10	NS	NS
4,6-Dinitro-2-methylphenol	<50	<50	NS	NS
N-Nitrosodiphenylamine	<10	<10	NS	NS
4-Bromophenyl phenylether	<10	<10	NS	NS
Hexachlorobenzene	<10	<10	NS	NS
Pentachlorophenol	<50	<50	75	88
Phenanthrene	<10	<10	ns	NS
Anthracene	<10	<10	NS	NS
Di-n-Butyl phthalate	<10	<10	NS	NS

Table 3. Semivolatile Organic Results (Continued)

City of San Leandro Sample ID

	ROUSE/C 11-040	Method Blank	Spike	Dup Spike
625 Compounds	ug/L	ug/L	% Recov	% Recov
Fluoranthene Pyrene Butyl benzyl phthalate 3,3'-Dichlorobenzidine Benzo(a)anthracene Bis(2-ethylhexyl)phthalate Chrysene Di-n-octyl phthalate Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenzo(a,h)anthracene Benzo(g,h,i)perylene	<10 <10 <10 <20 <10 <10 <10 <10 <10 <10 <10 <10 <10 <1	<10 <10 <10 <20 <10 <10 <10 <10 <10 <10 <10 <10 <10 <1	NS 86 NS NS NS NS NS NS NS NS	NS 82 NS NS NS NS NS NS NS NS
Date Analyzed Date Extracted Surrogates	, ,	12/12/90	12/14/90 12/12/90	
2-Fluorophenol Phenol-d5 Nitrobenzene-d5 2-Fluorobiphenyl 2,4,6-Tribromophenol p-Terphenyl-d14	47 86 91 93 69 98	74 76 80 78 96 102	44 53 76 76 74 81	45 55 74 73 82 67

Table 4B. Metals Results

City of San Leandro Sample ID

	EPA	ROUSE/C #11-040	Spike	Dup Spike	Method Blank	Method Detection Limit
Parameter	Method	mg/L	% Recov	RPD	mg/L	mg/L
Antimony	200.7	<0.05	88	10	<0.05	0.05
Arsenic	206.2	<0.005	81	0.28	<0.005	0.005
Beryllium	200.7	<0.005	97	0.1	<0.005	0.005
Cadmium	200.7	0.015	82	4.4	<0.005	0.005
Chromium	200.7	<0.01	98	1.2	<0.01	0.01
Copper	200.7	<0.01	92	1.5	<0.01	0.01
Lead	239.2	0.001	97	0	<0.001	0.001
Mercury	245.1	0.001	98	0	<0.0002	0.0002
Nickel	200.7	<0.02	104	1.2	<0.02	0.02
Selenium	270.2	<0.005	40	0	<0.005	0.005
Silver	200.7	<0.01	86	0.7	<0.01	0.01
Thallium	279.2	<0.005	41	9.0	<0.005	0.005
Zinc	200.7	0.18	98	1.2	<0.01	0.01

Table 1. Pesticide & PCB Results

City of San Leandro Sample ID

Kouse & Associates

Violge, Grab

	pH=7.1	ROS/P 1-013	Me	ethod Blank	Spike	Dup Spike
608 Compounds		ug/L	LIMIT UPED	ug/L	% Recov	% Recov
alpha-BHC		0.09		<0.05	NS	NS
beta-BHC		<0.05		<0.05	NS	NS
gamma-BHC		<0.05		<0.05	101	105
delta- BHC		<0.05		<0.05	NS	NS
Heptachlor		<0.05		<0.05	114	117
Aldrin		$\rightarrow 0.13$	0.05	<0.05	108	110
Heptachlor epoxide		$\rightarrow 0.15$	0.01	<0.05	NS	NS
Endosulfan I		<0.05		<0.05	NS	NS
Dieldrin		<0.10		<0.10	111	109
4,4'-DDE		<0.10		<0.10	NS	NS
Endrin		0.14		<0.10	113	114
Endosulfan II		<0.10		<0.10	NS	NS
4,4'-DDD		0.16		<0.10	ns	NS
Endosulfan Sulfate		<0.10		<0.10	NS	NS
4,4'-DDT		<0.10		<0.10	106	106
Endrin aldehyde		<0.10		<0.10	NS	NS
Endrin ketone		<0.10		<0.10	NS	NS
Methoxychlor		<0.50		<0.50	ns	NS
Chlordane		<0.50		<0.50	NS	NS
Toxaphene		<1.00		<1.00	NS	ns
Aroclor-1016		<0.50		<0.50	NS	NS
Aroclor-1221		<0.50		<0.50		NS
Aroclor-1232		<0.50		<0.50	NS	NS
Aroclor-1242		<0.50		<0.50		NS
Aroclor-1248		<0.50		<0.50	NS	NS
Aroclor-1254		<1.00		<1.00	NS	NS
Aroclor-1260		<1.00		<1.00	NS	NS
Date Extracted		1/15/91		15/91	1/15/91	1/15/91
Date Analyzed		2/1/91	1/	25/91	1/25/91	1/25/91
Surrogate			Per	cent R	ecoveries	(%)
Decachlorobiphenyl		77		114	111	115
Tetrachloro-m-xylene		98		116	118	119



Table 2. Volatile Organic Results

City of San Leandro Sample ID

	ROS/P 1-013	Method Blank	Spike	Dup Spike
624 Compounds	ug/L	LIMMS ug/L	% Recov	% Recov
Chloromethane	<3	<3	NS	NS
Vinyl chloride	<3	<3	NS	ns
Bromomethane	<2	<2	NS	NS
Chloroethane	<2	<2	NS	NS
Trichlorofluoromethane	<3	<3	NS	ns
1,1-Dichloroethene	<3	<3	103	99
Methylene chloride	<2	<2	NS	NS
trans-1,2-Dichloroethene	<2	<2	NS	NS
1,1-Dichloroethane	<3	<3	NS	NS
Chloroform	<2	<2	NS	NS
1,1,1-Trichloroethane	<3	<3	NS	NS
Carbon tetrachloride	<3	<3	NS	NS
Benzene	→ 2	1.0 <2	103	102
1,2-Dichloroethane	<2	<2	NS	ns
Trichloroethene	<2	<2	95	96
1,2-Dichloropropane	<3	<3	NS	NS
Bromodichloromethane	<3	<3	NS	ns
2-Chloroethylvinylether	<5	<5	ns	NS
cis-1,3-Dichloropropene	<3	<3	NS	NS
Toluene	<2	<2	106	103
trans-1,3-Dichloropropene	<2	<2	NS	NS
1,1,2-Trichloroethane	<2	<2	NS	NS
Tetrachloroethene	<2	<2	ns	NS
Dibromochloromethane	<2	<2	NS	ns
Chlorobenzene	<2	<2	103	101
Ethylbenzene	<2	<2	NS	NS
Bromoform	<2	<2	ns	NS
1,1,2,2-Tetrachloroethane	<3	<3	NS	NS
1,3-Dichlorobenzene	<2	<2	ns	NS
1,4-Dichlorobenzene	<2	<2	ns	NS
1,2-Dichlorobenzene	<2	<2	NS	NS
Date Analyzed	1/14/91	1/14/91	1/14/91	1/14/91
Surrogates	Percent R	Recoveries	(%)	
1,2-Dichloroethane-d4	104	101	99	98
Toluene-d8	104	101	99	97
p-Bromofluorobenzene	96	96	86	87

Table 3. Semivolatile Organic Results
City of San Leandro Sample ID

	ROS/P 1-013	Method Blank	Method Spike	Spike	Dup Spike
625 Compounds	ug/L	ug/L	% Recov	% Recov	% Recov
Phenol	<50	<10	67	36	19
Bis(2-chloroethyl)ether	<50	<10	NS	ns	NS
2-Chlorophenol	<50	<10	73	20	11
1,3-Dichlorobenzene	<50	<10	NS	ns	NS
1,4-Dichlorobenzene	<50	<10	64	61	46
1,2-Dichlorobenzene	<50	<10	NS	NS	NS
Bis(2-chloroisopropyl)ether	<50	<10	NS	NS	NS
N-Nitroso-di-n-propylamine	<50	<10	72	71	51
Hexachloroethane	<50	<10	NS	NS	NS
Nitrobenzene	<50	<10	NS	NS	NS
Isophorone	<50	<10	NS	NS	ns
2-Nitrophenol	<50	<10	NS	NS	ns
2,4-Dimethylphenol	<50	<10	NS	ns	ns
Bis(2-chloroethoxy)methane	<50	<10	NS	NS	NS
2,4-Dichlorophenol	<50	<10	NS	NS	NS
1,2,4-Trichlorobenzene	<50	<10	66	65	47
Naphthalene	<50	<10	NS	NS	NS
Hexachlorobutadiene	<50	<10	NS	ns	NS
4-Chloro-3-methylphenol	<50	<10	72	69	50
Hexachlorocyclopentadiene	<50	<10	NS	NS	NS
2,4,6-Trichlorophenol	<50	<10	NS	NS	NS
2-Chloronaphthalene	<50	<10	NS	NS	NS
Dimethyl phthalate	<50	<10	NS	NS	NS
Acenaphthylene	<50	<10	NS	NS	NS
Acenaphthene	<50	<10	69	68	51
2,4-Dinitrophenol	<250	<50	NS	NS	NS
4-Nitrophenol	<250	<50	105	63	81
2,4-Dinitrotoluene	<50	<10	88	76	65 37.0
2,6-Dinitrotoluene	<50	<10	NS	NS	NS
Diethyl phthalate	<50	<10	NS	NS	NS
4-Chlorophenyl phenylether	<50	<10	NS	NS	NS
Fluorene	<50	<10	NS	NS	NS
4,6-Dinitro-2-methylphenol	<250	<50	NS	NS	NS
N-Nitrosodiphenylamine	<50	<10	NS	NS	NS
4-Bromophenyl phenylether	<50	<10	NS	NS	NS
Hexachlorobenzene	<50	<10	NS	NS	NS
Pentachlorophenol	<250	<50	93	3	8 NC
Phenanthrene	<50	<10	NS	NS	NS NC
Anthracene	<50	<10	NS	NS NC	NS NG
Di-n-Butyl phthalate	<50	<10	NS	NS	NS

Table 3. Semivolatile Organic Results (Continued)

City of San Leandro Sample ID

	ROS/P 1-013	Method Blank	Method Spike	Spike	Dup Spike
625 Compounds	ug/L	ug/L	% Recov	% Recov	% Recov
Fluoranthene	<50	<10	NS	NS	ns
Pyrene	<50	<10 <10	78 NC	69 NS	57 NS
Butyl benzyl phthalate 3,3'-Dichlorobenzidine	<50 <100	<20	ns ns	ns Ns	ns NS
Benzo(a) anthracene	<50	<10	ns Ns	NS NS	NS NS
Bis(2-ethylhexyl)phthalate	<50	<10	NS NS	NS NS	NS
Chrysene	<50	<10	NS	NS	NS
Di-n-octyl phthalate	<50	<10	NS	NS	NS
Benzo(b) fluoranthene	<50	<10	NS	NS	ns
Benzo(k) fluoranthene	<50	<10	NS	NS	ns
Benzo(a)pyrene	<50	<10	ns	NS	NS
Indeno(1,2,3-cd)pyrene	<50	<10	NS	NS	NS
Dibenzo(a,h)anthracene	<50	<10	NS	ns	NS
Benzo(g,h,i)perylene	<50	<10	NS	NS	NS
Date Analyzed Date Extracted	1/23/91 1/14/91	1/18/91 1/14/91	1/21/91 1/14/91	1/18/91 1/14/91	1/18/91 1/14/91
Date Extracted	1/14/91	1/14/31	1/14/91	1/14/91	1/14/31
Surrogates	Percent R	ecovery (%)		
2-Fluorophenol	5	67	79	. б	3
Phenol-d5	37	73	83	45	24
Nitrobenzene-d5	67	72	70	77	56
2-Fluorobiphenyl	76	67	76	74	53
2,4,6-Tribromophenol	12	79	113	13	7
p-Terphenyl-d14	94	85	92	82	74

Table 4D. Metals Results

City of San Leandro Sample ID

	EPA	ROS/P 1-013	Spike	Dup Spike	Method Blank	Method Detection Limit
Parameter	Method	mg/L	% Recov	RPD	mg/L	mg/L
Antimony	200.7	<0.05	99	25	<0.05	0.05
Arsenic	206.2	<0.005	72	0.8	<0.005	0.005
Beryllium	200.7	<0.005	95	0.21	<0.005	0.005
Cadmium	200.7	<0.005	114	2.4	<0.005	0.005
Chromium	200.7	<0.01	85	1.7	<0.01	0.01
Copper	200.7	<0.01	94	22	<0.01	0.01
Lead	239.2	0.0034	76	2.4	<0.001	0.001
Mercury	245.1	<0.0002	95	0	<0.0002	0.0002
Nickel	200.7	<0.02	94	0.28	<0.02	0.02
Selenium	270.2	<0.005	96	19	<0.005	0.005
Silver	200.7	<0.01	88	0.9	<0.01	0.01
Thallium	279.2	<0.005	57	13	<0.005	0.005
Zinc	200.7	<0.01	94	1.3	<0.01	0.01

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		Sa	ample Type:	Water	
Method and Constituent:	<u>Units</u>	R&A/\ Concen- tration	/ 8-010 Reporting Limit	Method Concen- tration	Blank Reporting Limit
	OHICS	CI &C IOII	LIRIC	<u>cracton</u>	
EPA Method 608:					
Aldrin	ug/l	ND	0.10	ND	0.10
Alpha-BHC	ug/l	ND	0.10	ND	0.10
Beta-BHC	ug/7	ND	0.10	ND	0.10
Delta-BHC	ug/l	ND	0.10	ND	0.10
Gamma-BHC (Lindane)	ug/l	ND	0.10	ND	0.10
Chlordane	ug/l	ND	0.10	ND	0.10
4,4'-DDD	ug/1	ND	0.10	ND	0.10
4,4'-DDE	ug/l	ND	0.10	ND	0.10
4,4'-DDT	ug/l	ND	0.10	ND	0.10
Dieldrin	ug/l	ND	0.10	ND	0.10
Endosulfan I	ug/l	ND	0.10	ND	0.10
Endosulfan II	ug/l	ND	0.10	ND	0.10
Endosulfan Sulfate	ug/l	ND	0.10	ND	0.10
Endrin	ug/l	ND	0.10	ND	0.10
Endrin Aldehyde	ug/l	ND	0.10	ND	0.10
Heptachlor	ug/l	ND	0.10	ND	0.10
Heptachlor Epoxide	ug/l	ND	0.10	ND	0.10
Methoxychlor	ug/l	ND	0.10	ND	0.10
Toxaphene	ug/l	ND	0.10	ND	0.10

LOG NO.: 1205
DATE SAMPLED: 8/08/91
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		Sample Type: Water					
Method and <pre>Constituent:</pre>	<u>Units</u>	R&A/V Concen- tration	8-010 Reporting Limit	Method Concen- tration	Blank Reporting Limit		
EPA Method 608 (Continued	l):						
Aroclor 1016	ug/1	ND	0.10	ND	0.10		
Aroclor 1221	ug/l	ND	0.10	ND	0.10		
Aroclor 1232	ug/l	ND	0.10	ND	0.10		
Aroclor 1242	ug/l	ND	0.10	ND	0.10		
Aroclor 1248	ug/l	ND	0.10	ND	0.10		
Aroclor 1254	ug/l	ND	0.10	ND	0.10		
Aroclor 1260	ug/l	ND	0.10	ND	0.10		

OC Summary:

% Recovery: 110

% RPD: 9.1

1205 LOG NO.: DATE SAMPLED: DATE RECEIVED:

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		Samp1	e Type:	Water	
Method and <pre>Constituent:</pre>	<u>Units</u>	R&A/V Concen- tration	8-010 Reporting Limit	<u>Method</u> Concen- <u>tration</u>	Blank Reporting Limit
EPA Method 624:					
Chloromethane	ug/l	ND	2.0	ND	2.0
Bromomethane	ug/l	ND	2.0	ND	2.0
Vinyl Chloride	ug/l	ND	2.0	ND	2.0
Chloroethane	ug/l	ND	2.0	ПO	2.0
Methylene Chloride	ug/l	ND	1.0	ND	1.0
Trichlorofluoromethane	ug/l	ND	1.0	ND	1.0
1,1-Dichloroethene	ug/l	ND	1.0	ND	1.0
1,1-Dichloroethane	ug/1	ND	1.0	ND	1.0
Trans-1,2-Dichloroethene	ug/l	ND	1.0	ND	1.0
Chloroform	ug/l	ND	1.0	ND	1.0
1,2-Dichloroethane	ug/l	ND	1.0	ND	1.0
1,1,1-Trichloroethane	ug/l	ND	1.0	ND	1.0
Carbon Tetrachloride	ug/l	ND	1.0	ND	1.0
Bromodichloromethane	ug/1	ND	2.0	ND	2.0
1,2-Dichloropropane	ug/l	ND	4.0	ND	4.0
Trans-1,3-Dichloropropene	ug/l	ND	4.0	ND	4.0
1,1,2-Trichloroethane	ug/l	ND	4.0	ИD	4.0
Trichloroethene	ug/1	ND	1.0	ND	1.0
Benzene	ug/l	ND	1.0	ND	1.0



LOG NO.: DATE SAMPLED: 1205

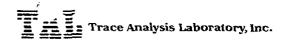
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		Samp ¹	le Type:	Water	
		R&A/\	8-010	Method	Blank _
Method and <u>Constituent</u>	<u>Units</u>	Concentration	Reporting Limit	Concen- tration	Reporting <u>Limit</u>
EPA Method 624 (Continued):				
2-Chloroethylvinyl Ether	ug/l	ND	8.0	ND	8.0
Dibromochloromethane	ug/l	ND	4.0	ND	4.0
Cis-1,3-Dichloropropene	ug/l	ND	8.0	ND	8.0
Bromoform	ug/1	ND	4.0	ND	4.0
1,1,2,2-Tetrachloroethane	ug/l	ND	4.0	ND	4.0
Tetrachloroethene	ug/1	ND	1.0	ND	1.0
Toluene	ug/1	ND	1.0	ND	1.0
Chlorobenzene	ug/1	ND	1.0	ND	1.0
Ethylbenzene	ug/l	ND	1.0	ND	1.0
1,3-Dichlorobenzene	ug/l	ND	4.0	ND	4.0
1,2-Dichlorobenzene	ug/l	ND	4.0	ND	4.0
1,4-Dichlorobenzene	ug/l	ND	4.0	ND	4.0
Surrogate % Recovery					
Bomochloromethane		9	96	g	0
1-Chloro,2-Bromopropane		•	96	10	0
1,4-Dichlorobutane		8	39	g	7

LOG NUMBER: 1248
DATE SAMPLED: 8/23/91
DATE RECEIVED: 8/23/91
DATE EXTRACTED: 8/27/91
DATE ANALYZED: 9/03/91
DATE REPORTED: 9/06/91
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		Sa	ample Type:	Water	
Method and Constituent : EPA Method 608:	<u>Units</u>	R&A/F Concen- tration	Reporting	<u>Method</u> Concen- <u>tration</u>	Blank Reporting Limit
Aldrin	ug/l	ND	0.10	ND	0.10
Alpha-BHC	ug/l	ND	0.10	ND	0.10
Beta-BHC	ug/1	ND	0.10	ND	0.10
Delta-BHC	ug/1	ND	0.10	ND	0.10
Gamma-BHC (Lindane)	ug/l	ND	0.10	ND	0.10
Chlordane	ug/l	ND	0.10	ND	0.10
4,4'-DDD	ug/l	ND	0.10	ND	0.10
4,4'-DDE	ug/l	ND	0.10	ND	0.10
4,4'-DDT	ug/l	ND	0.10	ND	0.10
Dieldrin	ug/l	ND	0.10	ND	0.10
Endosulfan I	ug/l	ND	0.10	ND	0.10
Endosulfan II	ug/l	ND	0.10	ND	0.10
Endosulfan Sulfate	ug/1	ND	0.10	ND	0.10
Endrin	ug/1	ND	0.10	ND	0.10
Endrin Aldehyde	ug/l	ND	0.10	ND	0.10
Heptachlor	ug/l	ND	0.10	ND	0.10
Heptachlor Epoxide	ug/l	ND	0.10	ND	0.10
Methoxychlor	ug/l	ND	0.10	ND	0.10
Toxaphene	ug/l	ND	0.10	ND	0.10



LOG NUMBER: 1248
DATE SAMPLED: 8/23/91
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DATE EXTRACTED: 8/27/91
DATE ANALYZED: 9/03/91
DATE REPORTED: 9/06/91

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		Samp	<u>le Type:</u>	Water	
Method and <pre>Constituent:</pre>	<u>Units</u>	R&A/I Concen- tration	P #8-037 Reporting Limit	<u>Metho</u> Concen- <u>tration</u>	d Blank Reporting Limit
EPA Method 608 (Conti	nued):				
Aroclor 1016	ug/l	ND	0.10	ND	0.10
Aroclor 1221	ug/l	ND	0.10	ND	0.10
Aroclor 1232	ug/l	ND	0.10	ND	0.10
Aroclor 1242	ug/l	ND	0.10	ND	0.10
Aroclor 1248	ug/l	ND	0.10	ND	0.10
Aroclor 1254	ug/l	МD	0.10	ND	0.10
Aroclor 1260	ug/l	ND	0.10	ND	0.10

QC Summary:

% Recovery: 110 % RPD: 13

LOG NUMBER: 1248
DATE SAMPLED: 8/23/91
DATE RECEIVED: 8/23/91
DATE ANALYZED: 8/31/91
DATE REPORTED: 9/06/91

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		Samp]	e Type:	Water	
Method and <pre>Constituent:</pre>	<u>Units</u>	R&A/F Concen- tration	Reporting	Method Concen- tration	Blank Reporting Limit
EPA Method 624:					
Chloromethane	ug/l	ND	2.0	ND	2.0
Bromomethane	ug/l	ND	2.0	ND	2.0
Vinyl Chloride	ug/l	ND	2.0	ND	2.0
Chloroethane	ug/l	ND	2.0	ND	2.0
Methylene Chloride	ug/l	ND	1.0	ND	1.0
Trichlorofluoromethane	ug/l	ND	1.0	ND	1.0
1,1-Dichloroethene	ug/l	ND	1.0	ND	1.0
1,1-Dichloroethane	ug/l	ND	1.0	ND	1.0
Trans-1,2-Dichloroethene	ug/l	ND	1.0	ND	1.0
Chloroform	ug/1	ND	1.0	ND	1.0
1,2-Dichloroethane	ug/l	ND	1.0	ND	1.0
1,1,1-Trichloroethane	ug/l	ND	1.0	ND	1.0
Carbon Tetrachloride	ug/l	ND	1.0	ND	1.0
Bromodichloromethane	ug/l	ND	2.0	ND	2.0
1,2-Dichloropropane	ug/l	ND	4.0	ND	4.0
Trans-1,3-Dichloropropene	ug/l	ND	4.0	ND	4.0
1,1,2-Trichloroethane	ug/l	ND	4.0	ND	4.0
Trichloroethene	ug/l	ND	1.0	ND	1.0
Benzene	ug/l	ND	1.0	ND	1.0

LOG NUMBER: 1248 8/23/91 8/23/91 8/31/91 9/06/91 Twenty Five DATE SAMPLED: DATE RECEIVED: DATE ANALYZED: DATE REPORTED:

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		Samp	le Type:	Water	
Method and Constituent	<u>Units</u>	R&A/F Concen- tration	Reporting	<u>Method</u> Concen- <u>tration</u>	i Blank Reporting Limit
EPA Method 624 (Continued):				
2-Chloroethylvinyl Ether	ug/1	ND	8.0	ND	8.0
Dibromochloromethane	ug/l	ND	4.0	ND	4.0
Cis-1,3-Dichloropropene	ug/1	ND	8.0	ND	8.0
Bromoform	ug/l	ND	4.0	ND	4.0
1,1,2,2-Tetrachloroethane	ug/l	ND	4.0	ND	4.0
Tetrachloroethene	ug/1	ND	1.0	ND	1.0
Toluene	ug/l	ND	1.0	ND	1.0
Chlorobenzene	ug/l	ND	1.0	ND	1.0
Ethy1benzene	ug/l	ND	1.0	ND	1.0
1,3-Dichlorobenzene	ug/l	ND	4.0	ND	4.0
1,2-Dichlorobenzene	ug/l	ND	4.0	ND	4.0
1,4-Dichlorobenzene	ug/l	ND	4.0	ND	4.0
Surrogate % Recovery					
Bomochloromethane		g	96	8	39
1-Chloro,2-Bromopropane		g	91	9	98
1,4-Dichlorobutane		8	37	ç	96

LOG NUMBER: 1248

DATE SAMPLED: 8/23/91

DATE RECEIVED: 8/23/91

DATE EXTRACTED: 8/29/91

DATE ANALYZED: 8/31/91

DATE REPORTED: 9/06/91

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		Samp	le Type:	Water	
Method and <pre>Constituent:</pre>	<u>Units</u>	R&A/I Concen- tration	P #8-037 Reporting Limit	<u>Method</u> Concen- <u>tration</u>	Blank Reporting Limit
EPA Method 625:					
N-Nitrosodimethylamine	ug/l	ND	10	ND	10
Pheno1	ug/l	ND	10	ND	10
Bis (-2-Chloroethyl) ether	ug/l	ND	10	ND	10
2-Chlorophenol	ug/l	ND	10	ND	10
1,3-Dichlorobenzene	ug/l	ND	10	ND	10
1,4-Dichlorobenzene	ug/l	ND	10	ND	10
1,2-Dichlorobenzene	ug/l	ND	10	ND	10
N-Nitroso-Di-N- Propylamine	ug/l	ND	10	ND	10
Hexachloroethane	ug/l	ND	10	ND	10
Nitrobenzene	ug/l	ND	10	ND	10
Isophorone	ug/l	ND	10	ND	10
2-Nitrophenol	ug/l	ND	10	ND	10
2,4-Dimethylphenol	ug/l	ND	10	ND	10
Bis(-2-Chloroethoxy) Methane	ug/l	ND	10	ND	10
2,4-Dichlorophenol	ug/1	ND	10	ND	10
1,2,4-Trichlorobenzene	ug/l	ND	10	ND	10

Concentrations reported as ND were not detected at or above the reporting limit.

10

ND

ND

10

ug/l

Naphthalene

LOG NUMBER:

1248 8/23/91

DATE SAMPLED: DATE RECEIVED: DATE EXTRACTED:

8/23/91 8/29/91

DATE ANALYZED: DATE REPORTED: 8/31/91 9/06/91

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Twenty Seven

		Samp]	e Type:	Water	,
Method and Constituent:	<u>Units</u>	R&A/F Concen- tration	#8-037 Reporting Limit	Method Concen- tration	Blank Reporting Limit
EPA Method 625 (Continue	d):				
Hexachlorobutadiene	ug/l	ND	10	ND	10
4-Chloro-3-Methyl- phenol	ug/l	ND	10	ND	10
Hexachlorocyclo- pentadiene	ug/1	ND	10	ND	10
2,4,6-Trichlorophenol	ug/l	ND	10	ND	10
2-Chloronaphthalene	ug/l	ND	10	ND	10
Dimethyl Phthalate	ug/l	ND	10	ND	10
Acenaphthylene	ug/l	ND	10	ND	10
Acenaphthene	ug/7	ND	10	ND	10
2,4-Dinitrophenol	ug/l	ND	10	ND	10
4-Nitrophenol	ug/l	ND	10	ND	10
2,4-Dinitrotoluene	ug/1	ND	10	ND	10
2,6-Dinitrotoluene	ug/l	ND	10	ND	10
Diethylphthalate	ug/l	ND	10	ND	10
4-Chlorophenylphenyl Ether	ug/l	ND	10	ND	10
Fluorene	ug/l	ND	10	ND	10
N-Nitrosodiphenylamine	ug/l	ND	10	ND	10
4-Bromophenylphenyl Ether	ug/l	ND	10	ND	10
Hexachlorobenzene	ug/l	ND	10	ND	10
Pentachlorophenol	ug/l	ND	10	ND	10
Phenanthrene	ug/l	ND	10	ND	10
Anthracene	ug/l	ND	10	ND	10
Di-N-Butylphthalate	ug/l	ND	10	ND	10
Fluoranthene	ug/l	ND	10	ND	10

LOG NUMBER: 1248
DATE SAMPLED: 8/23/91
DATE RECEIVED: 8/23/91
DATE EXTRACTED: 8/29/91
DATE ANALYZED: 8/31/91
DATE REPORTED: 9/06/91

PAGE:

Twenty Eight

	-	Samp	le Type:	Water	
Method and Constituent:	<u>Units</u>	R&A/F Concen- tration	P #8-037 Reporting Limit	<u>Method</u> Concen- <u>tration</u>	Blank Reporting Limit
EPA Method 625 (Continued	d):				
Benzidine	ug/l	ND	10	ND	10
Pyrene	ug/1	ND	10	ND	10
Butylbenzylphthalate	ug/l	ND	10	ND	10
3,3'-Dichlorobenzidine	ug/l	ND	10	ND	10
Benzo(a)Anthracene	ug/l	ND	10	ND	10
Bis(2-Ethylhexyl) Phthalate	ug/l	ND	10	ND	10
Chrysene	ug/l	ND	10	ND	10
Di-N-Octyl Phthalate	ug/l	ND	10	ND	10
Benzo(b)Fluoranthene	ug/l	ND	10	ND	10
Benzo(k)Fluoranthene	ug/l	ND	10	ND	10
Benzo(a)Pyrene	ug/1	ND	10	ND	10
<pre>Indeno(1,2,3-cd)Pyrene</pre>	ug/l	ND	10	ND	10
Dibenzo(a,h)Anthracene	ug/l	ND	10	ND	10
Benzo(g,h,i)Perylene	ug/l	ND	10	ND	10
Surrogate % Recovery:					
Pentaflurophenol		9	93	5	0
4-Fluroaniline		12	20	3	0
Decaflurobiphenol		12	20	15	0

LOG NUMBER:

1248

DATE SAMPLED:

8/23/91 8/23/91

DATE RECEIVED: DATE EXTRACTED:

8/27/91, 8/28/91 and 9/03/91 8/28/91, 8/29/91, 8/30/91

DATE ANALYZED:

and 9/03/91

DATE REPORTED:

9/06/91

PAGE:

Twenty Nine

Sample Type: Water

Method and		R&A/P	#8-037 Reporting	<u>Method</u> Concen-	l Blank Reporting	OC Sun	mary %
Constituent:	<u>Units</u>	<u>tration</u>	Limit	<u>tration</u>	Limit	Recovery	<u>RPD</u>
EPA Method 7061:	(7	ND.		4/0		70	
Arsenic	mg/l	ND	0.0050	ND	0.0050	73	*
EPA Method 7130:							
Cadmium	mg/l	ND	0.0057	ND	0.0057	94	*
EPA Method 7190:							
Chromium	mg/l	ND	0.050	ND	0.050	100	*
EPA Method 7210:							
Copper	mg/l	ND	0.20	ND	0.20	94	*
EPA Method 7420:							
Lead	mg/1	ND	0.10	ND	0.10	90	*
EPA Method 7471:							
Mercury	mg/l	ND	0.00020	ND	0.00020	83	*
EPA Method 7520:							
Nickel	mg/l	ND	0.30	ND	0.30	97	*
EPA Method 7760:	57 .			,,,,		<i>31</i>	
Silver	mg/l	ND	0.010	ND	0.010	90	*
	mg/ i	NU	0.010	ND	0.010	30	••
EPA Method 7950:	/7	0.060	0.050	MO	0.050	o ==	2.2
Zinc	mg/l	0.060	0.050	ND	0.050	97	3.3
EPA Method 9010:							
Cyanide	mg/l	ND	0.020	ND	0.020	93	< 1

Concentrations reported as ND were not detected at or above reporting limit. * The RPD is not reportable since the sample prepared in duplicate was not detectable.

Louis W. DuPuis

Quality Assurance/Quality Control Manager

LOG NUMBER:

DATE SAMPLED:

1750 01/30/92

DATE RECEIVED:

01/31/92

DATE EXTRACTED: DATE ANALYZED:

02/05/92 and 02/06/92 02/06/92, 02/07/92, 02/10/92 and 02/11/92

DATE REPORTED:

02/14/92 Nine

PAGE:

			Sample	Type:	Water		
Method and		ROUSE/I	P #1-033 Reporting	Metho	d Blank Reporting	QC Summ	ary
Constituent:	<u>Units</u>	<u>tration</u>	<u>Limit</u>	<u>tration</u>	Limit	Recovery	RPD_
EPA Method 7061:							
Arsenic	mg/l	ND	0.0050	ND	0.0050	87	6.5
EPA Method 7130:							
Cadmium	mg/l	ND	0.010	ND	0.010	96	*
EPA Method 7190:							
Chromium	mg/l	ND	0.050	ND	0.050	93	3.5
EPA Method 7210:							
Copper	mg/l	ND	0.20	ND	0.20	97	4.1
EPA Method 7420:							
Lead	mg/l	ND	0.10	ND	0.10	78	1.4
EPA Method 7471:							
Mercury	mg/l	ND	0.0010	ND	0.0010	120	*
EPA Method 7520:	4-					0.5	
Nickel	mg/l	ND	0.30	ND	0.30	96	*
EPA Method 7760:	47					0.7	
Silver	mg/l	ND	0.010	ND	0.010	97	*
EPA Method 7950:	/=	t in	0.550	NO.	0.000	07	0 7
Zinc	mg/l	ND	0.050	ND	0.050	97	0.7

^{*} The RPD is not reportable since the sample prepared in duplicate was not detectable.

LOG NUMBER:

1750

DATE SAMPLED:

01/30/92

DATE RECEIVED:

01/31/92

DATE ANALYZED: DATE REPORTED: 02/10/92 02/14/92

PAGE:

Ten

Sample Type:

Water

ROUSE/P #1-033

Method and

Concen- Reporting

Constituent:

Units tration Limit

EPA Method 335.2:

Cyanide

mg/1

ND

0.020

OC Summary:

% Recovery: 88

% RPD:

< 1

Concentrations reported as ND were not detected at or above the reporting limit.

Louis W. DuPuis

Quality Assurance/Quality Control Manager

LOG NUMBER:

1750

DATE SAMPLED: DATE RECEIVED: DATE EXTRACTED: 01/30/92 01/31/92 02/03/92

DATE ANALYZED: DATE REPORTED: 02/11/92 02/14/92

PAGE:

Two

		Sample Type: Wat			Water
Method and Constituent:	<u>Units</u>	ROUSE/ Concen- tration	<u>P #1-033</u> Reporting <u>Limit</u>	Metho Concen- tration	d Blank Reporting Limit
EPA Method 608					
Aldrin .	ug/l	ND	0.10	ND	0.10
Alpha-BHC	ug/l	ND	0.10	ND	0.10
Beta-BHC	ug/l	ND	0.10	ND 1	0.10
Delta-BHC	ug/l	ND	0.10	ND	0.10
Gamma-BHC (Lindane)	ug/l	ND	0.10	ND	0.10
Chlordane	ug/l	ND	0.10	ND	0.10
4,4'-DDD	ug/l	ND	0.10	ND	0.10
4,4'-DDE	ug/l	ND	0.10	ND	0.10
4,4'-DDT	ug/l	ND	0.10	ND	0.10
Dieldrin	ug/l	ND	0.10	ND	0.10
Endosulfan I	ug/l	ND	0.10	ND	0.10
Endosulfan II	ug/l	ND	0.10	ND	0.10
Endosulfan Sulfate	ug/l	ND	0.10	ND	0.10
Endrin	ug/l	ND	0.10	ND	0.10
Endrin Aldehyde	ug/1	ND	0.10	ND	0.10
Heptachlor	ug/l	ND	0.10	ND	0.10
Heptachlor Epoxide	ug/1	ND	0.10	ND	0.10
Methoxychlor	ug/l	ND	0.10	ND	0.10
Toxaphene	ug/l	ND	0.10	ND	0.10

LOG NUMBER: 1750
DATE SAMPLED: 01/30/92
DATE RECEIVED: 01/31/92
DATE EXTRACTED: 02/03/92
DATE ANALYZED: 02/11/92
DATE REPORTED: 02/14/92
PAGE: Three

	 -	Sample Type:		Type:	<u>Water</u>
Method and Constituent:	<u>Units</u>	ROUSE/ Concen- tration	P #1-033 Reporting Limit	Metho Concen- tration	d Blank Reporting Limit
EPA Method 608 (Conti	nued):				
Aroclor 1016	ug/l	ND	0.10	ND	0.10
Aroclar 1221	ug/l	ND	0.10	ND	0.10
Aroclor 1232	ug/l	ND	0.10	ND	0.10
Aroclor 1242	ug/l	ND	0.10	ND	0.10
Aroclor 1248	ug/1	ND	0.10	ND	0.10
Aroclor 1254	ug/l	ND	0.10	ND	0.10
Aroclor 1260	ug/l	ND	0.10	ND	0.10

QC Summary:

% Recovery: 114

% RPD: 5.3

LOG NUMBER:

1750

DATE SAMPLED:

01/30/92 01/31/92

DATE RECEIVED: DATE ANALYZED:

02/03/92 and 02/06/92

DATE REPORTED:

02/14/92

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Four

Sample Type: Water ROUSE/P #1-033 Method Blank Concen-Method and Reporting Concen-Reporting Constituent: Units tration Limit tration Limit EPA Method 624: Chloromethane ug/1ND 1.0 ND 1.0 Bromomethane uq/l ND 1.0 ND 1.0 Vinyl Chloride 1.0 1.0 ug/l ИD ND Chloroethane ug/l ND 1.0 ND 1.0 9.1 9.1 Methylene Chloride ug/1 ND ND Trichlorofluoromethane 1.0 1.0 ug/1 ND ND 1,1-Dichloroethene uq/11.0 1.0 ND ND 1,1-Dichloroethane ND 1.0 ND 1.0 uq/l Trans-1,2-Dichloroethene uq/l ND 1.0 ND 1.0 Chloroform ug/1ND 1.0 ND 1.0 1.2-Dichloroethane uq/l ND 1.0 ND 1.0 1.0 1.0 1,1,1-Trichloroethane uq/l ND ND Carbon Tetrachloride 1.0 1.0 ug/1 ND ND Bromodichloromethane uq/l ND 1.0 ND 1.0 1,2-Dichloropropane ug/l ND 1.0 ND 1.0 Trans-1,3-Dichloropropene ug/l 1.0 ND 1.0 ND 1,1,2-Trichloroethane ug/1 1.0 1.0 ND ND Trichloroethene 1.0 ug/1 ND 1.0 ND

Concentrations reported as ND were not detected at or above the reporting limit.

ND

ug/1

1.7

ND

1.7

Benzene

LOG NUMBER:

1750

DATE SAMPLED: DATE RECEIVED: 01/30/92 01/31/92 02/05/92 and 02/06/92 02/14/92

DATE ANALYZED: DATE REPORTED:

PAGE:

Five

			Sample	Type:	Water
		ROUSE/	P_#1-033	Metho	d Blank
Method and <u>Constituent</u> :	<u>Units</u>	Concen- tration	ReportingLimit	Concen- tration	Reporting Limit
EPA Method 624 (Continued):				
2-Chloroethylvinyl Ether	ug/l	ND	1.0	ND	1.0
Dibromochloromethane	ug/l	ND	1.0	ND	1.0
Cis-1,3-Dichloropropene	ug/l	ND	1.0	ND	1.0
Bromoform	ug/l	ND	1.0	ND	1.0
1,1,2,2-Tetrachloroethane	ug/l	ND	1.0	ND	1.0
Tetrachloroethene	ug/l	ND	1.0	ND	1.0
Toluene	ug/l	ND	1.0	ND	1.0
Chlorobenzene	ug/l	ND	1.0	ND	1.0
Ethylbenzene	ug/l	ND	1.0	ND	1.0
1,3-Dichlorobenzene	ug/l	МD	1.0	ND	1.0
1,2-Dichlorobenzene	ug/l	ND	1.0	ND	1.0
1,4-Dichlorobenzene	ug/l	ND	1.0	ND	1.0
Surrogate % Recovery					
Bromochloromethane		1	11		102
1-Chloro,2-Bromopropane		1	16		105
1,4-Dichlorobutane		1	35		62

1750 01/30/92 01/31/92 02/05/92 02/12/92 02/14/92 LOG NUMBER: DATE SAMPLED: DATE RECEIVED: DATE EXTRACTED: DATE ANALYZED:

DATE REPORTED: PAGE:

Six

			Sample	Type:	Water	
Method and <pre>Constituent:</pre>	<u>Units</u>	<u>ROUSE/</u> Concen- tration	<u>P #1-033</u> Reporting Limit	<u>Metho</u> Concen- tration	d Blank Reporting Limit	
EPA Method 625:						
N-Nitrosodimethylamine	ug/l	ND	10	ND	10	
Pheno1	ug/l	ND	10	ND	10	
Bis (-2-Chloroethyl) ether	ug/1	ND	10	ND	10	
2-Chlorophenol	ug/l	ND	10	ND	10	
1,3-Dichlorobenzene	ug/l	ND	10	ND	10	
1,4-Dichlorobenzene	ug/l	ND	10	ND	10	
1,2-Dichlorobenzene	ug/l	ND	10	ND	10	
N-Nitroso-Di-N- Propylamine	ug/l	ND	10	ND	10	
Hexachloroethane	ug/l	ND	10	ND	10	
Nitrobenzene	ug/l	ND	10	ND	10	
Isophorone	ug/l	ND	10	ND	10	
2-Nitrophenol	ug/l	ND	10	ND	10	
2,4-Dimethylphenol	ug/l	ND	10	ND	10	
Bis(-2-Chloroethoxy) Methane	ug/l	ND	10	ND	10	
2,4-Dichlorophenol	ug/l	ND	10	ND	10	
1,2,4-Trichlorobenzene	ug/l	ND	10	ND	10	•
Naphthalene	ug/l	ND	10	ND	10	

LOG NUMBER: 1750
DATE SAMPLED: 01/30/92
DATE RECEIVED: 01/31/92
DATE EXTRACTED: 02/05/92
DATE ANALYZED: 02/12/92
DATE REPORTED: 02/14/92
PAGE: Seven

			Sample	Type:	Water
Method and Constituent:	<u>Units</u>	ROUSE/ Concen- tration	P #1-033 Reporting Limit	Metho Concen- tration	d <u>Blank</u> Reporting <u>Limit</u>
EPA Method 625 (Continued) :				
Hexachlorobutadiene	ug/l	ND	10	ND	10
4-Chloro-3-Methyl- phenol	ug/l	ND	10	ND	10
Hexachlorocyclo- pentadiene	ug/l	ND	10	ND	10
2,4,6-Trichlorophenol	ug/l	ND	10	ND	10
2-Chloronaphthalene	ug/l	ND	10	ND	10
Dimethyl Phthalate	ug/l	ND	10	ND	10
Acenaphthylene	ug/l	ND	10	ND	10
Acenaphthene	ug/l	ND	10	ND	10
2,4-Dinitrophenol	ug/l	ND	10	ND	10
4-Nitrophenol	ug/l	ND	10	ND	10
2,4-Dinitrotoluene	ug/l	ND	10	'ND	10
2,6-Dinitrotoluene	ug/l	ND	10	ND	10
Diethylphthalate	ug/l	ND	10	ND	10
4-Chlorophenylphenyl Ether	ug/l	ND	10	ND	10
Fluorene	ug/l	ND	10	ND	10
N-Nitrosodiphenylamine	ug/l	ND	10	ND	10
4-Bromophenylphenyl Ether	ug/l	ND	10	ND	10
Hexachlorobenzene	ug/l	ND	10	ND	10
Pentachlorophenol	ug/l	ND	10	ND	10
Phenanthrene	ug/l	ND	10	ND	10

LOG NUMBER:

1750

DATE SAMPLED:

01/29/92 and 01/30/92

DATE RECEIVED: DATE EXTRACTED: 01/31/92 02/05/92

DATE ANALYZED: DATE REPORTED: 02/12/92 02/14/92

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Eight

			Sample	Type:	Water
		ROUSE/	P #1-033	- •	d Blank
Method and <pre>Constituent:</pre>	<u>Units</u>	Concen- tration	Reporting Limit	Concen- tration	Reporting Limit
EPA Method 625 (Continued	d):				
Anthracene	ug/l	ND	10	ND	10
Di-N-Butylphthalate	ug/l	ND	10	ND	10
Fluoranthene	ug/l	ND	10	ND	10
Benzidine	ug/l	ND	10	ND	10
Pyrene	ug/l	ND	10	ND	10
Butylbenzylphthalate	ug/l	ND	10	ND	10
3,3'-Dichlorobenzidine	ug/l	ND	10	ND	10
Benzo(a)Anthracene	ug/l	ND	10	ND	10
Bis(2-Ethylhexyl) Phthalate	ug/l	ND	10	ND	10
Chrysene	ug/l	ND	10	ND	10
Di-N-Octyl Phthalate	ug/l	ND	10	ND	10
Benzo(b)Fluoranthene	ug/l	ND	10	ND	10
Benzo(k)Fluoranthene	ug/l	ND	10	ND	10
Benzo(a)Pyrene	ug/l	ND	10	ND	10
<pre>Indeno(1,2,3-cd)Pyrene</pre>	ug/l	ND	10	ND	10
Dibenzo(a,h)Anthracene	ug/l	ND	10	ND	10
Benzo(g,h,i)Perylene	ug/l	ND	10	ND	10
Surrogate % Recovery:					
Pentafluorophenol		1	20	1	12
4-Fluoroaniline		1	11		90

Concentrations reported as ND were not detected at or above the reporting limit.

98

123

Decafluorobiphenyl

LOG NUMBER:

2101

DATE SAMPLED:

05/07/92 05/08/92

DATE RECEIVED: DATE EXTRACTED:

05/17/92

DATE ANALYZED:

05/17/92, 05/18/92 and 05/19/92

DATE REPORTED:

05/21/92

PAGE:

Ten

ROUSC & ASSOCIMES

5/1/92

			Sample	Type:	Water		
Marke dand		ROUSE/P			d Blank	OC Summa	ry
Method and Constituent:	<u>Units</u>	Concen- <u>tration</u>	Reporting Limit	Concen- <u>tration</u>	Reporting <u>Limit</u>	% <u>Recovery</u>	RPD
EPA Method 7060:	/1	ND	0 0050	MD	0.0050	65	*
Arsenic	mg/l	ND	0.0050	ND	0.0050	05	^
EPA Method 7130:	/l	MD	0.010	MD	0.010	0.4	*
Cadmium	mg/l	ND	0.010	ND	0.010	84	^
EPA Method 7190: Chromium	mg/l	ND	0.050	ND	0.050	88	2.1
	mg/ i	ND	0.030	NU	0.030	00	2.1
EPA Method 7210: Copper	mg/l	ND	0.20	ND	0.20	100	*
• •	mg/ i	ΝD	0.20	110	0.20	100	
EPA Method 7420: Lead	mg/l	ND	0.10	ND	0.10	71	*
EPA Method 7471:	, /e	110	0.10	115	****	, <u>-</u>	
Mercury	mg/l	0.0011	0.0010	ND	0.0010	111	*
EPA Method 7520:	3,						
Nickel	mg/l	ND	0.30	ND	0.30	91	*
EPA Method 7760:	•						
Silver	mg/l	ND	0.010	ND	0.010	94	*
EPA Method 7950:							
Zinc	mg/l	ND	0.050	ND	0.050	97	*

^{*} The RPD is not reportable since the sample prepared in duplicate was not detectable.

LOG NUMBER:

2101

DATE SAMPLED: DATE RECEIVED: 05/07/92 05/08/92

DATE ANALYZED: DATE REPORTED: 05/20/92

05/21/92

PAGE:

Eleven

Sample Type:

Water

Method and

ROUSE/P # 5-005 Concen- Reporting

Constituent:

Units tration __Limit__

EPA Method 335.2:

Cyanide

mg/1

ND

0.020

QC Summary:

% Recovery: 87 % RPD: < 1

2101 05/07/92 05/08/92 05/13/92 05/21/92 LOG NUMBER: DATE SAMPLED: DATE RECEIVED: DATE ANALYZED: DATE REPORTED:

PAGE:

Three

Sample Type: Water

			<u>/P #5-005</u>		d Blank
Method and Constituent:	Un <u>its</u>	Concen- tration	Reporting Limit	Concen- tration	Reporting Limit
EPA Method 624:				***************************************	
Chloromethane	ug/l	ND	10	ND	10
Bromomethane	ug/l	ND	2.0	ND	2.0
Vinyl Chloride	ug/l	ND	10	ND	10
Chloroethane	ug/l	ND	2.0	ND	2.0
Methylene Chloride	ug/l	ND	3.8	6.1	3.8
Trichlorofluoromethane	ug/l	ИD	2.0	ND	2.0
1,1-Dichloroethene	ug/l	ND	2.0	ND	2.0
1,1-Dichloroethane	ug/l	ND	2.0	ND	2.0
Trans-1,2-Dichloroethene	ug/l	ND	2.0	ND	2.0
Chloroform	ug/l	ND	2.0	ND	2.0
1,2-Dichloroethane	ug/l	ND	2.0	ND	2.0
1,1,1-Trichloroethane	ug/l	ND	2.0	ND	2.0
Carbon Tetrachloride	ug/l	ND	2.0	ND	2.0
Bromodichloromethane	ug/l	ND	2.0	ND	2.0
1,2-Dichloropropane	ug/l	ND	2.0	ND	2.0
Trans-1,3-Dichloropropene	ug/l	ND	2.0	ND	2.0
1,1,2-TrichToroethane	ug/l	ND	3.0	ND	3.0
Trichloroethene	ug/l	ND	2.0	ND	2.0
Benzene	ug/l	ND	2.0	ND	2.0

LOG NUMBER: 2101 05/07/92 DATE SAMPLED: DATE RECEIVED: 05/08/92 05/13/92 05/21/92 Four DATE ANALYZED: DATE REPORTED:

PAGE:

			Sample	Type:	Water	
Method and <u>Constituent</u>	<u>Units</u>	ROUSE Concen- tration	/P #5-005 Reporting Limit	Metho Concen- tration	d Blank Reporting Limit	
EPA Method 624 (Continued):					
2-Chloroethylvinyl Ether	ug/l	ND	10	ND	10	
Dibromochloromethane	ug/l	ND	2.0	ND	2.0	
Cis-1,3-Dichloropropene	ug/l	ND	2.0	ND	2.0	
Bromoform	ug/l	ND	2.0	ND	2.0	
1,1,2,2-Tetrachloroethane	ug/l	ND	3.0	ND	3.0	
Tetrachloroethene	ug/l	ND	2.0	ND	2.0	
Toluene	ug/1	ND	2.0	ND	2.0	
Chlorobenzene	ug/l	ND	2.0	ND	2.0	
Ethylbenzene	ug/l	ND	2.0	ND	2.0	
1,3-Dichlorobenzene	ug/l	ND	3.0	ND	3.0	
1,2-Dichlorobenzene	ug/l	ND	3.0	ND	3.0	
1,4-Dichlorobenzene	ug/l	ND	3.0	ND	3.0	
Surrogate % Recovery						
Bromochloromethane			85		88	
1-Chloro,2-Bromopropane		1	14	1	13	
1,4-Dichlorobutane			84		97	



LOG NUMBER: 2101
DATE SAMPLED: 05/07/92
DATE RECEIVED: 05/08/92
DATE EXTRACTED: 05/14/92
DATE ANALYZED: 05/15/92
DATE REPORTED: 05/21/92
PAGE: Five

			Sample	Type:	Water
Method and Constituent:	<u>Units</u>	ROUSE/ Concen- tration	P #5-005 Reporting Limit	<u>Method</u> Concen- <u>tration</u>	Blank Reporting Limit
EPA Method 608					
Aldrin	ug/l	ND	0.10	ND	0.10
Alpha-BHC	ug/l	ND	0.10	ND	0.10
Beta-BHC	ug/l	ND	0.10	ND	0.10
Delta-BHC	ug/l	ND	0.10	ND	0.10
Gamma-BHC (Lindane)	ug/l	ND	0.10	ND	0.10
Chlordane	ug/l	ND	0.10	ND	0.10
4,4'-DDD	ug/l	ND	0.10	ND	0.10
4,4'-DDE	ug/l	ND	0.10	ND	0.10
4,4'-DDT	ug/l	ND	0.10	ND	0.10
Dieldrin	ug/l	ND	0.10	ND	0.10
Endosulfan I	ug/l	ND	0.10	ND	0.10
Endosulfan II	ug/l	ND	0.10	ND	0.10
Endosulfan Sulfate	ug/l	ND	0.10	ND	0.10
Endrin	ug/l	ND	0.10	ND	0.10
Endrin Aldehyde	ug/l	ND	0.10	ND	0.10
Heptachlor	ug/l	ND	0.10	ND	0.10
Heptachlor Epoxide	ug/l	ND	0.10	ND	0.10
Methoxychlor	ug/l	ND	0.10	ND	0.10
Toxaphene	ug/l	ND	0.10	ND	0.10



LOG NUMBER: 2101
DATE SAMPLED: 05/07/92
DATE RECEIVED: 05/08/95
DATE EXTRACTED: 05/14/92
DATE ANALYZED: 05/15/92
DATE REPORTED: 05/21/92
PAGE: Six

			<u>Sample</u>	Type:	Water
Method and Constituent:	<u>Units</u>	ROUSE Concen- tration	/P #5-005 Reporting Limit	Metho Concen- tration	d Blank Reporting Limit
EPA Method 608	(Continued):				
Aroclor 1016	ug/l	ND	0.10	ND	0.10
Aroclor 1221	ug/l	ND	0.10	ND	0.10
Aroclor 1232	ug/l	ND	0.10	ND	0.10
Aroclor 1242	ug/l	ND	0.10	ND	0.10
Aroclor 1248	ug/l	ND	0.10	ND	0.10
Aroclor 1254	ug/l	ND	0.10	ND	0.10
Aroclor 1260	ug/l	ND	0.10	ND	0.10

OC Summary:

% Recovery: 116 % RPD: 0.9

LOG NUMBER: 2101
DATE SAMPLED: 05/07/92
DATE RECEIVED: 05/08/92
DATE EXTRACTED: 05/13/92
DATE ANALYZED: 05/17/92
DATE REPORTED: 05/21/92
PAGE: Seven

			Sample_	Type:	Water	
Method and Constituent:	<u>Units</u>	ROUSE/P Concen- tration	# 5-005 Reporting Limit	<u>Metho</u> Concen- tration	d Blank Reporting Limit	
EPA Method 625:						
N-Nitrosodimethylamine	ug/l	ND	10	ND	10	
Phenol	ug/l	ND	10	ND	10	
Bis (-2-Chloroethyl) ether	ug/l	ND	10	ND	10	
2-Chlorophenol	ug/l	ND	10	ND	10	
1,3-Dichlorobenzene	ug/l	ND	10	ND	10	
1,4-Dichlorobenzene	ug/l	ND	10	ND	10	
1,2-Dichlorobenzene	ug/l	ND	10	ND	10	
N-Nitroso-Di-N- Propylamine	ug/l	ND	10	ND	10	
Hexachloroethane	ug/l	ND	10	ND	10	
Nitrobenzene	ug/l	ND	10	ND	10	
Isophorone	ug/l	ND	10	ND	10	
2-Nitrophenol	ug/l	ND	10	ND	10	
2,4-Dimethylphenol	ug/l	ND	10	ND	10	
Bis(-2-Chloroethoxy) Methane	ug/l	ND	10	ND	10	
2,4-Dichlorophenol	ug/l	ND	10	ND	10	
1,2,4-Trichlorobenzene	ug/l	ND	10	ND	10	
Naphthalene	ug/l	ND	10	ND	10	

LOG NUMBER:

2101

DATE SAMPLED: DATE RECEIVED: DATE EXTRACTED:

05/07/92 05/08/92 05/15/92

DATE ANALYZED: DATE REPORTED: 05/17/92 05/21/92

PAGE:

Eight

			Sample	Type:	Water
Method and Constituent	<u>Units</u>	<u>ROUSE/P</u> Concen- tration	# 5-005 Reporting Limit	Metho Concen- tration	d Blank Reporting Limit
EPA Method 625 (Continue	ed):				
Hexachlorobutadiene	ug/l	ND	10	ND	10
4-Chloro-3-Methyl- phenol	ug/l	ND	10	ND	10
Hexachlorocyclo- pentadiene	ug/l	ND	10	ND	10
2,4,6-Trichlorophenol	ug/l	ND	10	ND	10
2-Chloronaphthalene	ug/l	ND	10	ND	10
Dimethyl Phthalate	ug/l	ND	10	ND	10
Acenaphthylene	ug/l	ND	10	ИD	10
Acenaphthene	ug/l	ND	10	ND	10
2,4-Dinitrophenol	ug/l	ND	10	ND	10
4-Nitrophenol	ug/l	ND	10	ND	10
2,4-Dinitrotoluene	ug/1	ND	10	ND	10
2,6-Dinitrotoluene	ug/1	ND	10	ND	10
Diethylphthalate	ug/l	ND	10	ND	10
4-Chlorophenylphenyl Ether	ug/l	ND	10	ND	10
Fluorene	ug/l	ND	10	ND	10
N-Nitrosodiphenylamine	ug/l	ND	10	ND	10
4-Bromophenylphenyl Ether	ug/l	ND	10	ND	10
Hexachlorobenzene	ug/l	ND	10	ND	10
Pentachlorophenol	ug/l	ND	10	ND	10
Phenanthrene	ug/l	ND	10	ND	10
Anthracene	ug/l	ND	10	ND	10



LOG NUMBER: 2101
DATE SAMPLED: 05/07/92
DATE RECEIVED: 05/08/92
DATE EXTRACTED: 05/13/92
DATE ANALYZED: 05/17/92
DATE REPORTED: 05/21/92
PAGE: Nine

			Sample	Type:	Water
Method and Constituent:	<u>Units</u>	ROUSE/P Concen- tration	# 5-005 Reporting Limit	Metho Concen- tration	d Blank Reporting Limit
EPA Method 625 (Continue	ed):				
Di-N-Butylphthalate	ug/l	ND	10	ND	10
Fluoranthene	ug/l	ND	10	ND	10
Benzidine	ug/l	ND	10	ND	10
Pyrene	ug/l	ND	10	ND	10
Butylbenzylphthalate	ug/l	ND	10	ND	10
3,3'-Dichlorobenzidine	ug/l	ND	10	ND	10
Benzo(a)Anthracene	ug/l	ND	10	ND	10
Bis(2-Ethylhexyl) Phthalate	ug/l	ND	10	ND	10
Chrysene	ug/1	ND	10	ND	10
Di-N-Octyl Phthalate	ug/l	ND	10	ND	10
Benzo(b)Fluoranthene	ug/l	ND	10	ND	10
Benzo(k)Fluoranthene	ug/l	ND	10	ND	10
Benzo(a)Pyrene	ug/l	ND	10	ND	10
<pre>Indeno(1,2,3-cd)Pyrene</pre>	ug/l	ND	10	ND	10
Dibenzo(a,h)Anthracene	ug/l	ND	10	ND	10
Benzo(g,h,i)Perylene	ug/l	ND	10	ND	10
Surrogate % Recovery:					
Pentafluorophenol		į	82		99
4-Fluoroaniline			77		77
Decafluorobiphenyl		;	88		72

LOG NUMBER:

2363 07/29/92

DATE SAMPLED: DATE RECEIVED:

07/28/92 08/05/92

DATE EXTRACTED: DATE ANALYZED:

08/06/92 and 08/07/92

DATE REPORTED:

08/13/92

PAGE:

Four

			Sample	Type:	Water	<u> </u>	
		R&A/P	#7-046		d Blank	OC Summa	
Method and Constituent:	<u>Units</u>	Concen- tration	Reporting Limit	Concen- tration	Reporting <u>Limit</u>	% Recovery	% RPD
EPA Method 206.2: Arsenic	mg/l	ND	0.0050	ND	0.0050	98	*
EPA Method 215.1: Cadmium	mg/1 .	ND	0.010	ND	0.010	108	*
EPA Method 218.1: Chromium	mg/l	ND	0.050	ND	0.050	92	*
EPA Method 220.1: Copper	mg/l	ND	0.20	ND	0.20	100	*
EPA Method 239.1: Lead	mg/l	ND	0.10	ND	0.10	104	*
EPA Method 245.5: Mercury	mg/l	ND	0.0010	ND	0.0010	95	*
EPA Method 249.1: Nickel	mg/l	ND	0.30	ND	0.30	96	*
EPA Method 272.1: Silver	mg/l	ND	0.010	ND	0.010	124	*
EPA Method 289.1: Zinc	mg/l	0.050	0.050	ND	0.050	100	4.7

^{*} The RPD is not reportable since the sample prepared in duplicate was not detectable.

LOG NUMBER:

2363

DATE SAMPLED: DATE RECEIVED:

DATE ANALYZED:

07/29/92 07/30/92 08/10/92 08/13/92 Twelve

DATE REPORTED:

PAGE:

	 	Sample Type: Water
Method and Constituent:	<u>Units</u>	R&A/P #7-046 Concen- Reporting tration Limit
EPA Method 223.2 Cyanide	mg/l	ND 0.020

OC Summary:

% Recovery: % RPD: < 1

Concentrations reported as ND were not detected at or above the reporting limit.

Louis W. DuPuis

Quality Assurance/Quality Control Manager

LOG NUMBER: 2363
DATE SAMPLED: 07/29/92
DATE RECEIVED: 07/28/92
DATE EXTRACTED: 07/31/92
DATE ANALYZED: 08/05/92
DATE REPORTED: 08/13/92
PAGE: Five

			Sample T	ype:	Water
Method and <u>Constituent</u> :	<u>Units</u>	R&A/P Concen- tration	#7-046 Reporting Limit	Metho Concen- tration	d Blank Reporting <u>Limit</u>
EPA Method 608:					
Aldrin	ug/l	ND	1.0	ND	1.0
Alpha-BHC	ug/l	ND	1.0	ND	1.0
Beta-BHC	ug/l	ND	1.0	ND	1.0
Delta-BHC	ug/l	ND	1.0	ND	1.0
Gamma-BHC (Lindane)	ug/l	ND	1.0	ND	1.0
Chlordane	ug/l	ND	1.0	ND	1.0
4,4'-DDD	ug/l	ND	0.10	ND	0.10
4,4'-DDE	ug/l	ND	0.10	ND	0.10
4,4'-DDT	ug/l	ND	0.10	ND	0.10
Dieldrin	ug/l	ND	0.10	ND	0.10
Endosulfan I	ug/l	ND	0.10	ND	0.10
Endosulfan II	ug/l	ND	0.10	ND	0.10
Endosulfan Sulfate	ug/l	ND	0.10	ND	0.10
Endrin	ug/l	ND	0.10	ND	0.10
Endrin Aldehyde	ug/l	ND	0.10	ND	0.10
Heptachlor	ug/l	ND	1.0	ND	1.0
Heptachlor Epoxide	ug/l	ND	1.0	ND	1.0
Methoxychlor	ug/l	ND	0.10	ND	0.10
Toxaphene	ug/l	ND	1.0	ND	1.0

LOG NUMBER: 2363

DATE SAMPLED: 07/29/92

DATE RECEIVED: 07/28/92

DATE EXTRACTED: 07/31/92

DATE ANALYZED: 08/05/92

DATE REPORTED: 08/13/92

PAGE: Six

		Sample Type: Water					
Method and <pre>Constituent:</pre>	<u>Units</u>	R&A/P Concen- tration	#7-046 Reporting Limit	<u>Metho</u> Concen- <u>tration</u>	d Blank Reporting _Limit		
EPA Method 608 (Continued):						
Aroclor 1016	ug/1	ND	1.0	ND	1.0		
Aroclor 1221	ug/l	ND	1.0	ND	1.0		
Aroclor 1232	ug/l	ND	1.0	ND	1.0		
Aroclor 1242	ug/l	ND	1.0	ND	1.0		
Aroclor 1248	ug/l	ND	1.0	ND	1.0		
Aroclor 1254	ug/l	ND	1.0	ND	1.0		
Aroclor 1260	ug/1	ND	1.0	ND	1.0		

QC Summary:

% Recovery: 90

% RPD:

3.4

Concentrations reported as ND were not detected at or above the reporting limit.

This sample contained an interfering compound which caused an increase in the reporting limits for the PCBs and some pesticides.

LOG NUMBER: 2363A

DATE SAMPLED: 07/29/92

DATE RECEIVED: 07/30/92

DATE ANALYZED: 08/01/92

DATE REPORTED: 08/06/92

PAGE: Seven

			Sample Type:		Water
Method and Constituent:	<u>Units</u>	R&A/P Concen- tration	#7-046 Reporting Limit	Metho Concen- tration	d Blank Reporting Limit
EPA Method 624:					
Chloromethane	ug/l	ND	10	ND	10
Bromomethane	ug/l	ND	2.0	ND	2.0
Vinyl Chloride	ug/l	ND	10	ND	10
Chloroethane	ug/l	ND	2.0	ND	2.0
Methylene Chloride	ug/1	ND	2.0	ND	2.0
Trichlorofluoromethane	ug/l	ND	2.0	ND	2.0
1,1-Dichloroethene	ug/l	ND	2.0	ND	2.0
1,1-Dichloroethane	ug/l	ND	2.0	ND	2.0
Trans-1,2-Dichloroethene	ug/l	ND	2.0	ND	2.0
Chloroform	ug/l	ND	2.0	ND	2.0
1,2-Dichloroethane	ug/l	ND	2.0	ND	2.0
1,1,1-Trichloroethane	ug/T	ND	2.0	ND	2.0
Carbon Tetrachloride	ug/l	ND	2.0	ND	2.0
Bromodichloromethane	ug/l	ND	2.0	ND	2.0
1,2-Dichloropropane	ug/l	ND	5.4	ND	5.4
Trans-1,3-Dichloropropene	ug/l	ND	2.0	ND	2.0
1,1,2-Trichloroethane	ug/l	ND	3.0	ND	3.0
Trichloroethene	ug/l	ND	2.0	ND	2.0
Benzene	ug/l	ND	2.0	ND	2.0

LOG NUMBER: 2363A
DATE SAMPLED: 07/29/92
DATE RECEIVED: 07/30/92
DATE ANALYZED: 08/01/92
DATE REPORTED: 08/06/92
PAGE: Eight

			Sample	Type:	Water
Method and Constituent	<u>Units</u>	R&A/P Concen- tration	#7-046 Reporting Limit		d Blank Reporting Limit
EPA Method 624 (Continued):				
2-Chloroethylvinyl Ether	ug/1	ND	10	ND	10
Dibromochloromethane	ug/l	ND	2.0	ND	2.0
Cis-1,3-Dichloropropene	ug/l	ND	2.0	ND	2.0
Bromoform	ug/l	ND	2.0	ND	2.0
1,1,2,2-Tetrachloroethane	ug/l	ND	3.0	ND	3.0
Tetrachloroethene	ug/l	ND	2.0	ND	2.0
Toluene	ug/l	ND	2.7	9.8	2.7
Chlorobenzene	ug/l	ND	2.0	ND	2.0
Ethylbenzene	ug/l	ND	2.0	ND	2.0
1,3-Dichlorobenzene	ug/l	ND	3.0	ND	3.0
1,2-Dichlorobenzene	ug/l	ND	3.0	ND	3.0
1,4-Dichlorobenzene	ug/l	ND	3.0	ND	3.0
Surrogate % Recovery					
Bromochloromethane		9	97		100
1-Chloro,2-Bromopropane		10	02		92
1,4-Dichlorobutane		!	92		104

LOG NUMBER: 2363
DATE SAMPLED: 07/29/92
DATE RECEIVED: 07/28/92
DATE EXTRACTED: 07/31/92
DATE ANALYZED: 08/08/92
DATE REPORTED: 08/13/92
PAGE: Nine

_			Sample T	ype:	Water
Method and Constituent:	<u>Units</u>	R&A/P Concen- tration	#7-046 Reporting Limit	Metho Concen- tration	d Blank Reporting Limit
EPA Method 625:					
N-Nitrosodimethylamine	ug/1	ND	10	ND	10
Phenol	ug/l	ND	10	ND	10
Bis (-2-Chloroethyl) ether	ug/l	ND	10	ND	10
2-Chlorophenol	ug/l	ND	10	ND	10
1,3-Dichlorobenzene	ug/l	ND	10	ND	10
1,4-Dichlorobenzene	ug/l	ND	10	ND	10
1,2-Dichlorobenzene	ug/l	ND	10	ND	10
N-Nitroso-Di-N- Propylamine	ug/l	ND	10	ND	10
Hexachloroethane	ug/l	ND	10	ND	10
Nitrobenzene	ug/l	ND	10	ND	10
Isophorone	ug/l	ND	10	ND	10
2-Nitrophenol	ug/l	ND	10	ND	10
2,4-Dimethylphenol	ug/1	ND	10	ND	10
Bis(-2-Chloroethoxy) Methane	ug/l	ND	10	ND	10
2,4-Dichlorophenol	ug/l	ND	10	ND	10
1,2,4-Trichlorobenzene	. ug/1	ND	10	ND	10
Naphthalene	ug/l	ND	10	ND	10

LOG NUMBER:

2363

DATE SAMPLED: DATE RECEIVED: DATE EXTRACTED: 07/29/92 07/28/92 07/31/92

DATE ANALYZED: DATE REPORTED: 07/31/92 08/08/92 08/13/92

PAGE:

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		Sample Type: Water			
		R&A/P	#7-0 <u>46</u>	Metho	d Blank
Method and <u>Constituent</u>	<u>Units</u>	Concen- tration	Reporting Limit	Concen- tration	ReportingLimit
EPA Method 625 (Continued	i):				
Hexachlorobutadiene	ug/l	ND	10	ND	10
4-Chloro-3-Methyl- phenol	ug/l	MD	10	ND	10
Hexachlorocyclo- pentadiene	ug/l	ND	10	ND	10
2,4,6-Trichlorophenol	ug/l	ND	10	ND	10
2-Chloronaphthalene	ug/T	ND	10	ND	10
Dimethyl Phthalate	ug/l .	ND	10	ND	10
Acenaphthylene	ug/l	ND	10	ND	10
Acenaphthene	ug/l	ND	10	ND	10
2,4-Dinitrophenol	ug/l	ND	10	ND	10
4-Nitrophenol	ug/l	ND	10	ND	10
2,4-Dinitrotoluene	ug/l	ND	10	ND	10
2,6-Dinitrotoluene	ug/l	ND	10	ND	10
Diethylphthalate	ug/l	ND	10	ND	10
4-Chlorophenylphenyl Ether	ug/l	ND	10	ND	10
Fluorene	ug/l	ND	10	ND	10
N-Nitrosodiphenylamine	ug/l	ND	10	ND	10
4-Bromophenylphenyl Ether	ug/1	ND	10	ND	10
Hexachlorobenzene	ug/l	ND	10	ND	10
Pentachlorophenol	ug/l	ND	10	ND	10
Phenanthrene	ug/l	ND	10	ND	10
Anthracene	ug/l	ND	10	ND	10

LOG NUMBER: 2363
DATE SAMPLED: 07/29/92
DATE RECEIVED: 07/28/92
DATE EXTRACTED: 07/31/92
DATE ANALYZED: 08/08/92
DATE REPORTED: 08/13/92
PAGE: Eleven

			Sample T	ype:	Water
Method and Constituent:	<u>Units</u>	R&A/P Concen- tration	#7-046 Reporting Limit	Metho Concen- tration	d Blank Reporting Limit
EPA Method 625 (Continue	ed):				
Di-N-Butylphthalate	ug/l	ND	10	ND	10
Fluoranthene	ug/l	ND	10	ND	10
Benzidine	ug/l	ND	10	ND	10
Pyrene	ug/l	ND	10	ND	10
Butylbenzylphthalate	ug/l	ND	10	ND	10
3,3'-Dichlorobenzidine	ug/l	ND	10	ND	10
Benzo(a)Anthracene	ug/l	ND	10	ND	10
Bis(2-Ethylhexyl) Phthalate	ug/l	ND	10	ND	10
Chrysene	ug/1	ND	10	ND	10
Di-N-Octyl Phthalate	ug/l	ND	10	ND	10
Benzo(b)Fluoranthene	ug/l	ND	10	ND	10
Benzo(k)Fluoranthene	ug/l	ND	10	ND	10
Benzo(a)Pyrene	ug/l	ND	10	ND	10
<pre>Indeno(1,2,3-cd)Pyrene</pre>	ug/l	ND	10	ND	10
Dibenzo(a,h)Anthracene	ug/l	ND	10	ND	10
Benzo(g,h,i)Perylene	ug/1	ND	10	ND	10
Surrogate % Recovery:					
Pentafluorophenol		1	05	1	25
4-Fluoroaniline		1	26	1	29
Decafluorobiphenyl			71		77

3423 Investment Boulevard, #8 • Hayward, California 94545

LOG NUMBER: 2680

DATE SAMPLED: 11/16/92

DATE RECEIVED: 11/16/92

DATE EXTRACTED: 11/19/92

DATE ANALYZED: 11/24/92

DATE REPORTED: 12/16/92

CUSTOMER:

Water Pollution Control Plant

REQUESTER:

Sue Cheng

PROJECT:

City of San Leandro, Samples received 11/16/92

pH = 7.2

,			Sample	Type:	Water
		R&A/P	#11-025	Metho	d Blank
Method and Constituent:	<u>Units</u>	Concen- tration	Reporting Limit	Concen- tration	Reporting Limit
	onres	<u>crue ton</u>	LIMITO	<u>tration</u>	
EPA Method 608:					
Aldrin	ug/l	ND	0.10	ND	0.10
Alpha-BHC	ug/l	ND	0.10	ND	0.10
Beta-BHC	ug/l	ND	0.10	ND	0.10
Delta-BHC	ug/l	ND	0.10	ND	0.10
Gamma-BHC (Lindane)	ug/l	ND	0.10	ND	0.10
Chlordane Chlordane	ug/l	ND	0.10	ND	0.10
4,4'-DDD	ug/l	ND	0.10	ND	0.10
4,4'-DDE	ug/l	ND	0.10	ND	0.10
4,4'-DDT	ug/l	ND	0.10	ND	0.10
Dieldrin	ug/l	ND	0.10	ND	0.10
Endosulfan I	ug/l	ND	0.10	ND	0.10
Endosulfan II	ug/l	ND	0.10	ND	0.10
Endosulfan Sulfate	ug/l	ND	0.10	ND	0.10
Endrin	ug/l	ND	0.10	ND	0.10
Endrin Aldehyde	ug/l	ND	0.10	ND	0.10
Heptachlor	ug/l	ND	0.10	ND	0.10
Heptachlor Epoxide	ug/1	ND	0.10	ND	0.10
Methoxychlor	ug/l	ND	0.10	ND	0.10
Toxaphene	ug/l	ND	0.10	ND	0.10

LOG NUMBER: 2680
DATE SAMPLED: 11/16/92
DATE RECEIVED: 11/16/92
DATE EXTRACTED: 11/19/92
DATE ANALYZED: 11/24/92
DATE REPORTED: 12/16/92
PAGE: Two

	Sample Type:			Water
<u>Units</u>	R&A/P Concen- tration	#11-025 Reporting Limit	Meth Concen- tration	od Blank Reporting Limit
):				
ug/l	ND	0.10	ND	0.10
ug/l	ND	0.10	ND	0.10
ug/l	ND	0.10	ND	0.10
ug/l	ND	0.10	ND	0.10
ug/l	ND	0.10	ND	0.10
ug/l	ND	0.10	ND	0.10
ug/l	ND	0.10	ND	0.10
	ug/l ug/l ug/l ug/l ug/l ug/l	Concen- Units tration): ug/l ND ug/l ND	R&A/P #11-025 Concentration Concentratio	R&A/P #11-025 Meth Concentration Limit Concentration Limit tration

QC Summary:

% Recovery: 109 % RPD: 11

LOG NUMBER: 2680A
DATE SAMPLED: 11/16/92
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DATE ANALYZED: 11/18/92
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			Sample	Type:	Water
Method and Constituent:	<u>Units</u>	R&A/P Concen- tration	#11-025 Reporting Limit	Metho Concen- tration	d Blank Reporting Limit
EPA Method 624:					
Chloromethane	ug/l	ND	10	ND	10
Bromomethane	ug/l	ND	2.0	ND	2.0
Vinyl Chloride	ug/l	ND	10	ND	10
Chloroethane	ug/l	ND	2.0	ND	2.0
Methylene Chloride	ug/l	ND	2.0	12	2.0
Trichlorofluoromethane	ug/l	ND	2.0	ND	2.0
1,1-Dichloroethene	ug/l	ND	2.0	ND	2.0
1,1-Dichloroethane	ug/1	ND	2.0	ND	2.0
Trans-1,2-Dichloroethene	ug/l	ND	2.0	ND	2.0
Chloroform	ug/l	ND	2.0	ND	2.0
1,2-Dichloroethane	ug/l	ND	2.0	ND	2.0
1,1,1-Trichloroethane	ug/l	ND	2.0	ND	2.0
Carbon Tetrachloride	ug/l	ND	2.0	ND	2.0
Bromodichloromethane	ug/l	ND	2.0	ND	2.0
1,2-Dichloropropane	ug/l	ND	2.0	ND	2.0
Trans-1,3-Dichloropropene	ug/l	ND	2.0	ND	2.0
1,1,2-Trichloroethane	ug/l	ND	3.0	ND	3.0
Trichloroethene	ug/l	ND	2.0	ND	2.0
Benzene	ug/l	ND	2.0	2.1	2.0

2680A 11/16/92 11/16/92 11/18/92 11/23/92 Four LOG NUMBER: DATE SAMPLED: DATE RECEIVED: DATE ANALYZED: DATE REPORTED:

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		Sample T		Type:	Water
Method and Constituent	<u>Units</u>	R&A/P Concen- tration	#11-025 Reporting Limit	Meth Concen- tration	od Blank Reporting Limit
EPA Method 624 (Continue		<u> </u>	<u> </u>	01401011	
2-Chloroethylvinyl Ether	ug/1	ND	10	ND	10
Dibromochloromethane	ug/l	ND	2.0	ND	2.0
Cis-1,3-Dichloropropene	ug/1	ND	2.0	ND	2.0
Bromoform	ug/l	ND	2.0	ND	2.0
1,1,2,2-Tetrachloroethane	ug/1	ND	3.0	ND	3.0
Tetrachloroethene	ug/l	ND	2.0	ND	2.0
Toluene	ug/l	ND	2.0	14	2.0
Chlorobenzene	ug/1	ND	2.0	ND	2.0
Ethylbenzene	ug/l	ND	2.0	ND	2.0
1,3-Dichlorobenzene	ug/l	ND	3.0	ND	3.0
1,2-Dichlorobenzene	ug/l	ND	3.0	ND	3.0
1,4-Dichlorobenzene	ug/1	ND	3.0	ND	3.0
Surrogate % Recovery					
Bromochloromethane		1	06		96
1-Chloro,2-Bromopropane		1	10	1	44
1,4-Dichlorobutane		1	08		78

LOG NUMBER: 2680 11/16/92 DATE SAMPLED: 11/16/92 11/19/92 12/11/92 12/16/92 DATE RECEIVED: DATE EXTRACTED:

DATE ANALYZED: DATE REPORTED:

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			Sample Type:		Water
Method and Constituent:	<u>Units</u>	R&A/P Concen- tration	#11-025 Reporting Limit	Meth Concen- tration	od Blank Reporting Limit
EPA Method 625:					
N-Nitrosodimethylamine	ug/1	ND	10	ND	10
Pheno1	ug/l	ND	10	ND	10
Bis (-2-Chloroethyl) ether	ug/l	ND	10	ND	10
2-Chlorophenol	ug/l	ND	10	ND	10
1,3-Dichlorobenzene	ug/l	ND	10	ND	10
1,4-Dichlorobenzene	ug/l	ND	10	ND	10
1,2-Dichlorobenzene	ug/l	ND	10	ND	10
N-Nitroso-Di-N- Propylamine	ug/l	ND	10	ND	10
Hexachloroethane	ug/1	ND	10	ND	10
Nitrobenzene	ug/l	ND	10	ND	10
Isophorone	ug/l	ND	10	ND	10
2-Nitrophenol	ug/l	ND	10	ND	10
2,4-Dimethylphenol	ug/l	ND	10	ND	10
Bis(-2-Chloroethoxy) Methane	ug/l	ND	10	ND	10
2,4-Dichlorophenol	ug/l	ND	10	ND	10
1,2,4-Trichlorobenzene	ug/l	ND	10	ND	10
Naphthalene	ug/l	ND	10	ND	10

LOG NUMBER: 2680

DATE SAMPLED: 11/16/92

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DATE EXTRACTED: 11/19/92

DATE ANALYZED: 12/11/92

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			<u>Sample</u>	Water_	
Method and <u>Constituent</u>	<u>Units</u>	R&A/P Concen- tration	#11-025 Reporting Limit	Metho Concen- tration	d Blank Reporting Limit
EPA Method 625 (Continue	d):				
Hexachlorobutadiene	ug/l	ND	10	ND	10
4-Chloro-3-Methyl- phenol	ug/1	ND	10	ND	10
Hexachlorocyclo- pentadiene	ug/l	ND	10	ND	10
2,4,6-Trichlorophenol	ug/l	ND	10	ND	10
2-Chloronaphthalene	ug/l	ND	10	ND	10
Dimethyl Phthalate	ug/l	ND	10	ND	10
Acenaphthylene	ug/l	ND	10	ND	10
Acenaphthene	ug/l	ND	10	ND	10
2,4-Dinitrophenol	ug/l	ND	10	ND	10
4-Nitrophenol	ug/l	ND	10	ND	10
2,4-Dinitrotoluene	ug/l	ND	10	ND	10
2,6-Dinitrotoluene	ug/l	ND	10	ND	10
Diethylphthalate	ug/l	ND	10	ND	10
4-Chlorophenylphenyl Ether	ug/l	ND	. 10	ND	10
Fluorene	ug/l	ND	10	ND	10
N-Nitrosodiphenylamine	ug/l	ND	10	ND	10
4-Bromophenylphenyl Ether	ug/1	ND	10	ND	10
Hexachlorobenzene	ug/l	ND	10	ND	10
Pentachlorophenol	ug/l	ND	10	ND	10
Phenanthrene	ug/l	ND	10	ND	10
Anthracene	ug/l	ND	10	ND	10

LOG NUMBER: 2680 11/16/92 DATE SAMPLED:

DATE RECEIVED: 11/16/92
DATE EXTRACTED: 11/19/92
DATE ANALYZED: 12/11/92
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Sample Type: Water

		R&A/P	#11-025	Method_Blank		
Method and		Concen-	Reporting	Concen-	Reporting	
<u>Constituent</u> :	<u>Units</u>	<u>tration</u>	<u>Limit</u>	<u>tration</u>	<u>Limit</u>	
EPA Method 625 (Continued) :					
Di-N-Butylphthalate	ug/l	ND	10	ND	10	
Fluoranthene	ug/l	ND	10	ОИ	10	
Benzidine	ug/l	ND	10	ND	10	
Pyrene	ug/l	ND	10	ND	10	
Butylbenzylphthalate	ug/1	ND	10	ND	10	
3,3'-Dichlorobenzidine	ug/l	ND	10	ND	10	
Benzo(a)Anthracene	ug/1	ND	10	ND	10	
Bis(2-Ethylhexyl) Phthalate	ug/l	ND	10	ND	10	
Chrysene	ug/l	ND	10	ND	10	
Di-N-Octyl Phthalate	ug/l	ND	10	ND	10	
Benzo(b)Fluoranthene	ug/l	ND	10	ND	10	
Benzo(k)Fluoranthene	ug/l	ND	10	ND	10	
Benzo(a)Pyrene	ug/l	ND	10	ND	10	
<pre>Indeno(1,2,3-cd)Pyrene</pre>	ug/1	ND	10	ND	10	
Dibenzo(a,h)Anthracene	ug/l	ND	10	ND	10	
Benzo(g,h,i)Perylene	ug/l	ND	10	ND	10	
Surrogate % Recovery:						
Pentafluorophenol			7 7		80	
4-Fluoroaniline			56		56	
Decafluorobiphenyl		1	04	1	08	

LOG NUMBER:

2680

DATE SAMPLED: DATE RECEIVED:

11/16/92 11/16/92

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			Sample	Туре:	Water		
			#11-025		d Blank	QC Sum	
Method and <pre>Constituent:</pre>	<u>Units</u>	Concen- tration	Reporting Limit	Concen- tration	Reporting Limit	% <u>Recovery</u>	% RPD
EPA Method 206.2:							
Arsenic	mg/1	ND	0.0050	ND	0.0050	90	*
EPA Method 213.1:							
Cadmium	mg/l	ND	0.010	ND	0.010	94	*
EPA Method 218.1:							
Chromium	mg/1	ND	0.050	ND	0.050	96	1.0
EPA Method 220.1:							
Copper	mg/l	ND	0.20	ND	0.20	94	*
EPA Method 239.1:							
Lead	mg/l	ND	0.10	ND	0.10	92	*
EPA Method 242.1:							
Mercury	mg/l	ND	0.0010	ND	0.0010	94	*
EPA Method 249.1:							
Nickel	mg/l	ND	0.30	ND	0.30	93	*
EPA Method 272.1:							
Silver	mg/l	ND	0.010	ND	0.010	93	*
EPA Method 289.1:							
Zinc	mg/l	ND	0.050	ND	0.050	91	2.4

Concentrations reported as ND were not detected at or above the reporting limit.

* The RPD is not reportable since the sample prepared in duplicate was not detectable.



LOG NUMBER:

2680

DATE SAMPLED: DATE RECEIVED: 11/16/92 11/16/92

DATE ANALYZED:

11/30/92 12/16/92

DATE REPORTED: PAGE:

Nine

Sample Type:

Water

Method and **Constituent:**

R&A/P #11-025 Concen- Reporting OC Summary

Units tration Limit

% Recovery

__RPD

EPA Method 335.2:

Cyanide

mg/1

ND

0.020

97

< 1

2977A LOG NUMBER: DATE SAMPLED:

02/25/93 and 02/23/93

DATE RECEIVED: 02/26/93 DATE ANALYZED: DATE REPORTED:

03/08/93 03/16/93

CUSTOMER:

Water Pollution Control Plant

REQUESTER:

John Camp

PROJECT:

City of San Leandro, Samples received 02/26/93

		·	Sample	Type:	Water	
Method and Constituent:	<u>Units</u>	R&A/P Concen- tration	#2-041 Reporting Limit	Meth Concen- tration	od Blank Reporting Limit	
EPA Method 624:						
Chloromethane	ug/l	ND	10	ND	10	
Bromomethane	ug/l	ND	2.0	ND	2.0	
Vinyl Chloride	ug/l	ND	10	ND	10	
Chloroethane	ug/1	ND	2.0	ND	2.0	
Methylene Chloride	ug/1	ND	10	ND	10	
Trichlorofluoromethane	ug/l	ND	2.0	ND	2.0	
1,1-Dichloroethene	ug/l	ND	2.0	ND	2.0	
1,1-Dichloroethane	ug/l	ND	2.0	ND	2.0	
Trans-1,2-Dichloroethene	ug/l	ND	2.0	ND	2.0	
Chloroform	ug/l	29	2.0	ND	2.0	
1,2-Dichloroethane	ug/l	ND	2.0	ND	2.0	
1,1,1-Trichloroethane	ug/1	ND	2.0	ND	2.0	
Carbon Tetrachloride	ug/l	ND	2.0	ND	2.0	
Bromodichloromethane	ug/l	ND	2.0	ND	2.0	
1,2-Dichloropropane	ug/l	ND	2.0	ND	2.0	-
Trans-1,3-Dichloropropene	ug/l	ND	2.0	ND	2.0	
1,1,2-Trichloroethane	ug/l	ND	2.0	ND	2.0	
Trichloroethene	ug/l	ND	2.0	ND	2.0	
Benzene	ug/l	ND	2.0	ND	2.0	

LOG NUMBER:

DATE SAMPLED:

DATE RECEIVED: DATE ANALYZED: DATE REPORTED: 2977A 02/25/93 and 02/23/93 02/26/93 03/08/93 03/16/93

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		····	Sample	Type:	Water
		R&A/P	#2-041	Meth	od_Blank
Method and		Concen-	Reporting	Concen-	Reporting
Constituent	<u>Units</u>	<u>tration</u>	<u>Limit</u>	<u>tration</u>	<u>Limit</u>
EPA Method 624 (Continued):				
2-Chloroethylvinyl Ether	ug/1	ND	10	ND	10
Dibromochloromethane	ug/l	ND	2.0	ND	2.0
Cis-1,3-Dichloropropene	ug/l	ND	2.0	ND	2.0
Bromoform	ug/l	ND	2.0	ND	2.0
1,1,2,2-Tetrachloroethane	ug/l	ND	3.0	ND	3.0
Tetrachloroethene	ug/l	ND	2.0	ND	2.0
Toluene	ug/l	ND	2.0	ND	2.0
Chlorobenzene	ug/1	ND	2.0	ND	2.0
Ethylbenzene	ug/l	ND	2.0	ND	2.0
1,3-Dichlorobenzene	ug/l	ND	3.0	ND	3.0
1,2-Dichlorobenzene	ug/l	ND	3.0	ND	3.0
1,4-Dichlorobenzene	ug/1	ND	3.0	ND	3.0
Surrogate % Recovery					
Bromochloromethane		10	0		
1-Chloro,2-Bromopropane		9	2		
1,4-Dichlorobutane		9	14		

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03/25/93 Three

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Thre

		Sample Type:			Water
Method and Constituent:	<u>Units</u>	R&A/P Concen- tration	#2-041 Reporting Limit	Meth Concen- tration	od Blank Reporting <u>Limit</u>
EPA Method 608:					
Aldrin	ug/l	ND	0.10	ND	0.10
Alpha-BHC	ug/l	ND	0.10	ND	0.10
Beta-BHC	ug/l	ND	0.10	ND	0.10
Delta-BHC	ug/1	ND	0.10	ND	0.10
Gamma-BHC (Lindane)	ug/l	ND	0.10	ND	0.10
Chlordane	ug/l	ND	0.10	ND	0.10
4,4'-DDD	ug/l	ND	0.10	ND	0.10
4,4'-DDE	ug/l	ND	0.10	ND	0.10
4,4'-DDT	ug/ĭ	ND	0.10	ND	0.10
Dieldrin	ug/l	ND	0.10	ND	0.10
Endosulfan I	ug/1	ND	0.10	ND	0.10
Endosulfan II	ug/l	ND	0.10	ND	0.10
Endosulfan Sulfate	ug/l	ND	0.10	ND	0.10
Endrin	ug/l	ND	0.10	ND	0.10
Endrin Aldehyde	ug/l	ND	0.10	ND	0.10
Heptachlor	ug/l	ND	0.10	ND	0.10
Heptachlor Epoxide	ug/l	ND	0.10	ND	0.10
Methoxychlor	ug/l	ND	0.10	ND	0.10
Toxaphene	ug/l	ND	0.10	ND	0.10

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		Sample Type: Water						
Method and Constituent:	<u>Units</u>	R&A/ Concen- tration	P #2-041 Reporting Limit	Meth Concen- tration	od Blank Reporting <u>Limit</u>			
EPA Method 608 (Continued) :							
Aroclor 1016	ug/l	ND	0.16	ND	0.16			
Aroclor 1221	ug/l	ND	0.16	ND	0.16			
Aroclor 1232	ug/l	ND	0.16	ND	0.16			
Aroclor 1242	ug/l	ND	0.16	ND	0.16			
Aroclor 1248	ug/1	ND	0.16	ND	0.16			
Aroclor 1254	ug/l	ND	0.16	ND	0.16			
Aroclor 1260	ug/l	ND	0.16	ND	0.16			

OC Summary:

% Recovery:

135

% RPD:

6.1

LOG NUMBER: 2977
DATE SAMPLED: 02/25/93
DATE RECEIVED: 02/26/93
DATE EXTRACTED: 03/03/93
DATE ANALYZED: 03/09/93
DATE REPORTED: 03/16/93

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			Sample	Type:	Water
Method and Constituent:	<u>Units</u>	R&A/P Concen- tration	#2-041 Reporting Limit	Meth Concen- tration	od Blank Reporting Limit
EPA Method 625:	<u> </u>	<u> </u>		<u>5.401011</u>	
N-Nitrosodimethylamine	ug/l	ND	10	ND	10
Pheno1	ug/l	ND	10	ND	10
Bis (-2-Chloroethyl) ether	ug/1	ND	10	ND	10
2-Chlorophenol	ug/l	ND	10	ND	10
1,3-Dichlorobenzene	ug/l	ND	10	ND	10
1,4-Dichlorobenzene	ug/l	ND	10	ND	10
1,2-Dichlorobenzene	ug/l	ND	10	ND	10
N-Nitroso-Di-N- Propylamine	ug/1	ND	10	ND	10
Hexachloroethane	ug/l	ND	10	ND	10
Nitrobenzene	ug/l	ND	10	ND	10
Isophorone	ug/l	ND	10	ND	10
2-Nitrophenol	ug/l	ND	10	ND	10
2,4-Dimethylphenol	ug/l	ND	10	ND	10
Bis(-2-Chloroethoxy) Methane	ug/1	ND	10	ND	10
2,4-Dichlorophenol	ug/l	ND	10	ND	10
1,2,4-Trichlorobenzene	ug/l	ND	10	ND	10
Naphthalene	ug/l	ND	10	ND	10

LOG NUMBER: 2977
DATE SAMPLED: 02/25/93
DATE RECEIVED: 02/26/93
DATE EXTRACTED: 03/03/93
DATE ANALYZED: 03/09/93
DATE REPORTED: 03/16/93
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			Sample	Type:	Water
Method and Constituent	<u>Units</u>	R&A/P Concen- tration	#2-041 Reporting Limit	Meth Concen- tration	od Blank Reporting Limit
EPA Method 625 (Continued	i):				
Hexachlorobutadiene	ug/1	ND	10	ND	10
4-Chloro-3-Methyl- phenol	ug/l	ND	20	ND	20
Hexachlorocyclo- pentadiene	ug/l	ND	10	ND	10
2,4,6-Trichlorophenol	ug/l	ND	10	ND	10
2-Chloronaphthalene	ug/l	ND	10	ND	10
Dimethyl Phthalate	ug/l	ND	10	ND	10
Acenaphthylene	ug/l	ND	10	ND	10
Acenaphthene	ug/l	ND	10	ND	10
2,4-Dinitrophenol	ug/1	ND	50	ND	50
4-Nitrophenol	ug/l	ND	50	ND	50
2,4-Dinitrotoluene	ug/l	ND	10	ND	10
2,6-Dinitrotoluene	ug/l	ND	10	ND	10
Diethylphthalate	ug/l	ND	10	ND	10
4-Chlorophenylphenyl Ether	ug/l	ND	10	ND	10
Fluorene	ug/l	ND	10	ND	10
N-Nitrosodiphenylamine	ug/1	ND	10	ND	10
4-Bromophenylphenyl Ether	ug/l	ND	10	ND	10
Hexachlorobenzene	ug/1	ND	10	ND	10
Pentachlorophenol	ug/1	ND	50	ND	50
Phenanthrene	ug/1	ND	10	ND	10
Anthracene	ug/1	ND	10	ND	10

LOG NUMBER: 2977
DATE SAMPLED: 02/25/93
DATE RECEIVED: 02/26/92
DATE EXTRACTED: 03/03/93
DATE ANALYZED: 03/09/93
DATE REPORTED: 03/16/93
PAGE: Seven

Sample Type: Water R&A/P #2-041 Method Blank Method and Concen-Reporting Concen-Reporting Constituent: <u>Units</u> <u>tration</u> <u>Limit</u> <u>tration</u> Limit EPA Method 625 (Continued): Di-N-Butylphthalate ug/l ND 10 ND 10 Fluoranthene ug/l ND 10 ND 10 Benzidine ug/1 ND 10 ND 10 Pyrene ug/1 ND 10 ND 10 Butylbenzylphthalate uq/1 ND 10 ND 10 3,3'-Dichlorobenzidine ug/l ND 20 ND 20 Benzo(a)Anthracene uq/l ND 10 ND 10 Bis(2-Ethylhexyl) ug/1ND 10 ND 10 Phthalate Chrysene ug/l ND 10 ND 10 Di-N-Octyl Phthalate uq/l ND 10 ND 10 Benzo(b)Fluoranthene ug/l ND 10 ND 10 Benzo(k)Fluoranthene ug/l ND 10 ND 10 Benzo(a)Pyrene uq/l ND 10 ND 10 Indeno(1,2,3-cd)Pyrene ug/1ND 10 ND 10 Dibenzo(a,h)Anthracene ug/1 ND 10 ND 10 Benzo(g,h,i)Perylene ug/1 ND 10 ND 10 Surrogate % Recovery: 2 Fluorophenol 122 98 Pheno1-d6 109 95 Nitrolbenzene d5 101 80 2-Fluorobiphenyl 113 108 2,4,6 Tribromophenol 80 30 p-Terphenyl-d14 115 105

LOG NUMBER:

2977

DATE SAMPLED:

DATE RECEIVED: DATE EXTRACTED: DATE ANALYZED:

02/25/93 02/26/93 03/03/93 and 03/04/93 03/04/93 and 03/11/93 03/16/93

DATE REPORTED:

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		· · · · · · · · · · · · · · · · · · ·	Sample	Type:	Water		
			#2-041		od Blank	QC Sum	mary
Method and Constituent:	<u>Units</u>	Concen- <u>tration</u>	Reporting <u>Limit</u>	Concen- <u>tration</u>	Reporting <u>Limit</u>	% Recovery	% RPD
EPA Method 7060: Arsenic	mg/l	ND	0.0050	ND	0.0050	113	*
EPA Method 7130: Cadmium	mg/l	ND	0.010	ND	0.010	105	*
EPA Method 7190: Chromium	mg/l	ND	0.050	ND	0.050	95	*
EPA Method 7210: Copper	mg/l	ND	0.020	ND	0.020	100	*
EPA Method 7420: Lead	mg/l	ND	0.10	ND	0.10	90	*
EPA Method 7470: Mercury	mg/l	ND	0.0010	ND	0.0010	91	*
EPA Method 7520: Nickel	mg/l	ND	0.30	ND	0.30	89	*
EPA Method 7760: Silver	mg/l	0.053	0.011	ND	0.011	86	18
EPA Method 7950: Zinc	mg/l	ND	0.050	ND	0.050	102	*

^{*} The RPD is not reportable since the sample prepared in duplicate was not detectable.

LOG NUMBER: 2977
DATE SAMPLED: 02/25/93
DATE RECEIVED: 02/26/93
DATE ANALYZED: 03/05/93

DATE REPORTED: 03/05/93

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Sample Type: Water R&A/P #2-041 Method Blank QC Summary Method and Reporting Concen- Reporting % Constituent: <u>Units</u> <u>tration</u> <u>Limit</u> <u>tration</u> __Limit Recovery EPA Method 335.1: Cyanide mg/1ND 0.02 ND 0.02 99 < 1

Concentrations reported as ND were not detected at or above the reporting limit.

1

Louis W. DuPuis

Quality Assurance/Quality Control Manager

3423 Investment Boulevard, #8 . Hayward, California 94545

LOG NUMBER:

2977R 02/25/93

DATE SAMPLED: DATE RECEIVED: DATE EXTRACTED:

02/26/93 03/22/93

DATE ANALYZED:

03/22/93

DATE REPORTED:

03/26/93

CUSTOMER:

Water Pollution Control Plant

REQUESTER:

John Camp

PROJECT:

City of San Leandro, Samples Received 02/26/93

	Sample Type: Water						
Method and Constituent:	<u>Units</u>	Concen-	P #2-041 Reporting Limit		od Blank Reporting Limit	QC Sum % Recovery	mary % _RPD
EPA Method 7760: Silver	mg/1	ND	0.011	ND	0.011	96	*

Concentrations reported as ND were not detected at or above the reporting limit.

* The RPD is not reportable since the sample prepared in duplicate was not detectable.

This result is based on a new digestion and analysis of the sample. The result of the original analysis was 0.053~mg/l of Silver. There is no information in our documentation of these analyses that indicates an error of explains the variation in results.

Louis W. DuPuis

Quality Assurance/Quality Control Manager