FULLERTON LABORATORY
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-6868

SPL, INC.

REPORT APPROVAL SHEET

WORK ORDER NUMBER: *97 - 03 - 076*

Approved for release by:

Joel Grice, Laboratory Manager — *Date:* 3/21/97

Michael J. Crisostomo, Project Manager — *Date:* 3-18-97

FULLERTON LABORATORY
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CASE NARRATIVE

SPL Workorder Number: 9703076

Southern Petroleum Laboratories (SPL) Fullerton is pleased to present the following results of laboratory analyses to Montgomery Watson-Pasadena for the MDRC project, located in Torrance, CA. On Friday, March 7, 1997, fourteen (14) soil samples and one (1) trip blank were received by the laboratory courier in a cooler for sample transport. This sample delivery group was further checked by the sample receiving custodian on Monday, March 10, 1997. The samples were received intact and within the 2°C - 6°C preservation temperature range.

The samples were analyzed as initially requested on the accompanying chain of custody record.

As part of SPL Fullerton's regular quality control (QC) activities, a minimum of one set of QC samples is analyzed per batch (≤ 20) of environmental samples. This QC set consists of a laboratory method blank (LMB), a laboratory control sample (LCS), a matrix spike (MS), and a matrix spike duplicate (MSD). Analysis of the MS and MSD samples yielded low recoveries for antimony. Because the LMB and LCS recoveries were well within the acceptability criteria, it was deduced that the poor recoveries from the MS & MSD analyses were a result of matrix interferences affecting the selected QC sample.

Also, coeluting interferences were observed for the MS & MSD recoveries of the surrogate, Dibromofluoromethane (DBFM). The other surrogate recoveries for the MS & MSD analyses were within the acceptability range.

If you have any questions regarding information presented in this report please call me at (714) 447-6868. Please refer to workorder 9703076 to expedite service.

Michael J. Crisostomo
Project Manager

Certificate of Analysis No. 9703076

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1511 E. ORANGETHORPE AVE.
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PHONE (714) 447-6868

Client: Montgomery Watson
Client Address: 250 N. Madison Avenue
Pasadena CA 91101
Attention: Nancy Matsumoto

Report Date: 3/18/97
Date(s) Received: 3/7/97
Date(s) Sampled: 3/7/97
Date(s) Analyzed: 3/10/97

Project Name: MDRC C-6 Facility Building 37
Site: Torrance, CA
Method: 418.1*

Project Number: 120603501090010
Matrix: SOIL

Units: mg/Kg

Sample ID	Petroleum Extractables
B37-RE4-SP1	1200
B37-RE4-SP2	660
B37-RE4-SP3	280
B37-RE4-SP4	150
B37-RE4-SP5	1200
B37-RE4-SP6	1100
B37-RE4-SP7	170
B37-RE4-SP8	690
B37-RE2-SP1	160
B37-RE3-SP1	1100
B37-RE1-SP1	200
B37-RE4-SP9	ND<10
B37-RE4-SP10	420
B37-RE4-SP11	220

Results reported at Practical Quantitation Limits unless otherwise specified.

* Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
** Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd ed.

SPL California License Number 2178

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Client: Montgomery Watson
Client Address: 250 N. Madison Avenue
Pasadena, CA 91101
Attention: Nancy Matsumoto
Project Name: MDRC C-6 Facility Building 37
Site: Torrance, CA

Report Date: 3/18/97
Date(s) Received: 3/7/97
Date(s) Sampled: 3/7/97
Date(s) Analyzed: 3/13/97,3/12/97,3/11/97
Project Number: 120603501090010
Matrix: SOIL

Analyte	Units	EPA Method	B37-RE4-SP1	B37-RE4-SP2	B37-RE4-SP3	B37-RE4-SP4	B37-RE4-SP5
Antimony, Total	mg/Kg	6010A***	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<0.500
Arsenic, Total	mg/Kg	6010A***	ND<0.11	ND<0.11	ND<0.11	ND<0.11	ND<0.11
Barium, Total	mg/Kg	6010A***	104	103	136	158	116
Beryllium, Total	mg/Kg	6010A***	ND<0.06	ND<0.06	ND<0.06	ND<0.06	ND<0.06
Cadmium, Total	mg/Kg	6010A***	0.13	ND<0.05	0.21	0.39	0.25
Chromium, Total	mg/Kg	6010A***	22.8	17.5	23.2	19.2	19.4
Cobalt, Total	mg/Kg	6010A***	8.25	9.66	11.5	13.5	10.7
Copper, Total	mg/Kg	6010A***	19.9	23.8	28.6	23.9	21.0
Digestion-Solids 3050A	N/A	3050A***	03/12/97	03/12/97	03/12/97	03/12/97	03/12/97
Lead, Total	mg/Kg	6010A***	8.93	6.73	7.04	7.10	8.26
Mercury Digestion in Soil	N/A	7471A***	03/11/97	03/11/97	03/11/97	03/11/97	03/11/97
Mercury, Total	mg/Kg	7471A***	ND<0.200	ND<0.200	ND<0.200	ND<0.200	ND<0.200
Molybdenum,Total	mg/Kg	6010A***	ND<2.50	ND<2.50	ND<2.50	ND<2.50	ND<2.50
Nickel, Total	mg/Kg	6010A ***	11.5	12.3	13.9	12.2	13.7
Selenium, Total	mg/Kg	6010A***	ND<5.00	ND<5.00	ND<5.00	ND<5.00	ND<5.00
Silver, Total	mg/Kg	6010A***	ND<5.00	ND<5.00	ND<5.00	ND<5.00	ND<5.00
Thallium, Total	mg/Kg	6010A***	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<0.500
Ultrasonic Extraction 3550A	N/A	3550A	03/13/97	03/13/97	03/13/97	03/13/97	03/13/97
Vanadium, Total	mg/Kg	6010A***	33.8	36.2	40.6	38.0	37.7
Zinc, Total	mg/Kg	6010A***	61.9	56.7	83.5	72.6	75.1

Results reported at Practical Quantitation Limits unless otherwise specified.

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Results for Arsenic, Beryllium, Cadmium, and total Chromium are presented using the MDL as a reference.

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Client: Montgomery Watson
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Pasadena, CA 91101
Attention: Nancy Matsumoto
Project Name: MDRC C-6 Facility Building 37
Site: Torrance, CA

Report Date: 3/18/97
Date(s) Received: 3/7/97
Date(s) Sampled: 3/7/97
Date(s) Analyzed: 3/13/97,3/12/97,3/11/97
Project Number: 120603501090010
Matrix: SOIL

Analyte	Units	EPA Method	B37-RE4-SP6	B37-RE4-SP7	B37-RE4-SP8	B37-RE2-SP1	B37-RE3-SP1
Antimony, Total	mg/Kg	6010A***	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<0.500
Arsenic, Total	mg/Kg	6010A***	ND<0.11	ND<0.11	ND<0.11	ND<0.11	ND<0.11
Barium, Total	mg/Kg	6010A***	131	144	101	77.5	129
Beryllium, Total	mg/Kg	6010A***	ND<0.06	ND<0.06	ND<0.06	ND<0.06	ND<0.06
Cadmium, Total	mg/Kg	6010A***	0.36	0.24	0.10	0.17	0.13
Chromium, Total	mg/Kg	6010A***	18.0	18.9	20.7	13.6	20.1
Cobalt, Total	mg/Kg	6010A***	16.4	13.9	8.76	6.35	10.6
Copper, Total	mg/Kg	6010A***	30.2	30.3	17.2	10.8	19.3
Digestion-Solids 3050A	N/A	3050A***	03/12/97	03/12/97	03/12/97	03/12/97	03/12/97
Lead, Total	mg/Kg	6010A***	7.59	6.93	7.24	5.35	17.7
Mercury Digestion in Soil	N/A	7471A***	03/11/97	03/11/97	03/11/97	03/11/97	03/11/97
Mercury, Total	mg/Kg	7471A***	ND<0.200	ND<0.200	ND<0.200	ND<0.200	ND<0.200
Molybdenum,Total	mg/Kg	6010A***	ND<2.50	ND<2.50	ND<2.50	ND<2.50	ND<2.50
Nickel, Total	mg/Kg	6010A ***	11.8	11.7	10.5	7.99	14.3
Selenium, Total	mg/Kg	6010A***	ND<5.00	ND<5.00	ND<5.00	ND<5.00	ND<5.00
Silver, Total	mg/Kg	6010A***	ND<5.00	ND<5.00	ND<5.00	ND<5.00	ND<5.00
Thallium, Total	mg/Kg	6010A***	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<0.500
Ultrasonic Extraction 3550A	N/A	3550A	03/13/97	03/13/97	03/13/97	03/13/97	03/13/97
Vanadium, Total	mg/Kg	6010A***	37	37.6	31.0	23.9	43.0
Zinc, Total	mg/Kg	6010A***	72.8	71.6	64.2	37.5	74.1

Results reported at Practical Quantitation Limits unless otherwise specified.

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Pasadena, CA 91101
Attention: Nancy Matsumoto
Project Name: MDRC C-6 Facility Building 37
Site: Torrance, CA

Report Date: 3/18/97
Date(s) Received: 3/7/97
Date(s) Sampled: 3/7/97
Date(s) Analyzed: 3/13/97,3/12/97,3/11/97
Project Number: 120603501090010
Matrix: SOIL

Analyte	Units	EPA Method	B37-RE1-SP1	B37-RE4-SP9	B37-RE4-SP10	B37-RE4-SP11
Antimony, Total	mg/Kg	6010A***	ND<0.500	ND<0.500	ND<0.500	ND<0.500
Arsenic, Total	mg/Kg	6010A***	ND<0.11	ND<0.11	ND<0.11	ND<0.11
Barium, Total	mg/Kg	6010A***	304	112	104	98.6
Beryllium, Total	mg/Kg	6010A***	ND<0.06	ND<0.06	ND<0.06	ND<0.06
Cadmium, Total	mg/Kg	6010A***	0.38	0.38	0.14	0.25
Chromium, Total	mg/Kg	6010A***	19.8	21.1	15.6	22.8
Cobalt, Total	mg/Kg	6010A***	6.05	10.3	8.14	7.64
Copper, Total	mg/Kg	6010A***	13.8	25.5	17.6	18.0
Digestion-Solids 3050A	N/A	3050A***	03/12/97	03/12/97	03/12/97	03/12/97
Lead, Total	mg/Kg	6010A***	25.6	6.65	6.21	8.38
Mercury Digestion in Soil	N/A	7471A***	03/11/97	03/11/97	03/11/97	03/11/97
Mercury, Total	mg/Kg	7471A***	ND<0.200	ND<0.200	ND<0.200	ND<0.200
Molybdenum,Total	mg/Kg	6010A***	ND<2.50	ND<2.50	ND<2.50	ND<2.50
Nickel, Total	mg/Kg	6010A ***	10.1	11.8	9.51	10.4
Selenium, Total	mg/Kg	6010A***	ND<5.00	ND<5.00	ND<5.00	ND<5.00
Silver, Total	mg/Kg	6010A***	ND<5.00	ND<5.00	ND<5.00	ND<5.00
Thallium, Total	mg/Kg	6010A***	ND<0.500	ND<0.500	ND<0.500	ND<0.500
Ultrasonic Extraction 3550A	N/A	3550A	03/13/97	03/13/97	03/13/97	03/13/97
Vanadium, Total	mg/Kg	6010A***	26	39.4	30.9	29.7
Zinc, Total	mg/Kg	6010A***	187	59.8	51.1	54.5

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Date(s) Received: 3/7/97
Date(s) Sampled: 3/7/97
Date(s) Analyzed: 3/12/97
Project Number: 120603501090010
Matrix: WATER

Method: 8260 Water, Volatile Organics

Units: UG/L

Analyte	Trip Blank
Dichlorodifluoromethane	ND<5
Chloromethane	ND<5
Vinyl chloride	ND<5
Bromomethane	ND<5
Chloroethane	ND<5
Trichlorofluoromethane	ND<5
1,1-Dichloroethene	ND<5
Methylene chloride	ND<5
trans-1,2-Dichloroethene	ND<5
1,1-Dichloroethane	ND<5
2,2-Dichloropropane	ND<5
cis-1,2-Dichloroethene	ND<5
Chloroform	ND<5
Bromochloromethane	ND<5
1,1,1-Trichloroethane	ND<5
1,1-Dichloropropene	ND<5
Carbon tetrachloride	ND<5
1,2-Dichloroethane	ND<5
Benzene	ND<5
Trichloroethene	ND<5
1,2-Dichloropropane	ND<5
Bromodichloromethane	ND<5
Dibromomethane	ND<5
cis-1,3-Dichloropropene	ND<5
Toluene	ND<5
trans-1,3-Dichloropropene	ND<5
1,1,2-Trichloroethane	ND<5
1,2-Dibromoethane	ND<5
1,3-Dichloropropane	ND<5
Tetrachloroethene	ND<5
Dibromochloromethane	ND<5
Chlorobenzene	ND<5
1,1,1,2-Tetrachloroethane	ND<5
Ethylbenzene	ND<5
m,p-Xylene	ND<5
o-Xylene	ND<5
Styrene	ND<5
Bromoform	ND<5

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Site: Torrance, CA

Report Date: 3/18/97
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Date(s) Sampled: 3/7/97
Date(s) Analyzed: 3/12/97
Project Number: 120603501090010
Matrix: WATER

Method: 8260 Water, Volatile Organics

Units: UG/L

Analyte	Trip Blank
Isopropylbenzene	ND<5
1,1,2,2-Tetrachloroethane	ND<5
1,2,3-Trichloropropane	ND<5
n-Propylbenzene	ND<5
Bromobenzene	ND<5
1,3,5-Trimethylbenzene	ND<5
2-Chlorotoluene	ND<5
4-Chlorotoluene	ND<5
tert-Butylbenzene	ND<5
1,2,4-Trimethylbenzene	ND<5
sec-Butylbenzene	ND<5
p-Isopropyltoluene	ND<5
1,3-Dichlorobenzene	ND<5
1,4-Dichlorobenzene	ND<5
n-Butylbenzene	ND<5
1,2-Dichlorobenzene	ND<5
1,2-Dibromo-3-chloroprop	ND<5
1,2,4-Trichlorobenzene	ND<5
Hexachlorobutadiene	ND<5
Naphthalene	ND<5
1,2,3-Trichlorobenzene	ND<5

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Client Address:	250 N. Madison Avenue Pasadena, CA 91101	**Date(s) Received:**	3/7/97
		Date(s) Sampled:	3/7/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	3/13/97
Project Name:	MDRC C6-Facility Building 37	**Project Number:**	120603501090010
Site:	Torrance, CA	**Matrix:**	SOIL
Method:	8270 Soil, Semivolatile Organics	**Units:**	ug/Kg

Analyte	B37-RE4-SP1	B37-RE4-SP2	B37-RE4-SP3	B37-RE4-SP4	B37-RE4-SP5
Acenaphthene	ND<330	ND<330	ND<330	ND<330	ND<330
Acenaphthylene	ND<330	ND<330	ND<330	ND<330	ND<330
Aniline	ND<330	ND<330	ND<330	ND<330	ND<330
Anthracene	ND<330	ND<330	ND<330	ND<330	ND<330
Benzo (a) Anthracene	ND<330	ND<330	400	ND<330	ND<330
Benzo (b) Fluoranthene	350	ND<330	460	ND<330	ND<330
Benzo (k) Fluoranthene	ND<330	ND<330	390	ND<330	ND<330
Benzo (a) Pyrene	ND<330	ND<330	460	ND<330	ND<330
Benzoic Acid	ND<1600	ND<1600	ND<1600	ND<1600	ND<1600
Benzo (g,h,i) Perylene	400	ND<330	430	ND<330	ND<330
Benzyl alcohol	ND<330	ND<330	ND<330	ND<330	ND<330
4-Bromophenylphenyl ether	ND<330	ND<330	ND<330	ND<330	ND<330
Butylbenzylphthalate	ND<330	ND<330	ND<330	ND<330	ND<330
di-n-Butyl phthalate	ND<330	ND<330	ND<330	ND<330	ND<330
Carbazole	ND<330	ND<330	ND<330	ND<330	ND<330
4-Chloroaniline	ND<330	ND<330	ND<330	ND<330	ND<330
bis (2-Chloroethoxy) Methane	ND<330	ND<330	ND<330	ND<330	ND<330
bis (2-Chloroethyl) Ether	ND<330	ND<330	ND<330	ND<330	ND<330
bis (2-Chloroisopropyl) Ether	ND<330	ND<330	ND<330	ND<330	ND<330
4-Chloro-3-Methylphenol	ND<330	ND<330	ND<330	ND<330	ND<330
2-Chloronaphthalene	ND<330	ND<330	ND<330	ND<330	ND<330
2-Chlorophenol	ND<330	ND<330	ND<330	ND<330	ND<330
4-Chlorophenylphenyl ether	ND<330	ND<330	480	ND<330	ND<330
Chrysene	360	ND<330	480	ND<330	ND<330
Dibenz (a,h) Anthracene	ND<330	ND<330	ND<330	ND<330	ND<330
Dibenzofuran	ND<330	ND<330	ND<330	ND<330	ND<330
1,2-Dichlorobenzene	ND<330	ND<330	ND<330	ND<330	ND<330
1,3-Dichlorobenzene	ND<330	ND<330	ND<330	ND<330	ND<330
1,4-Dichlorobenzene	ND<330	ND<330	ND<330	ND<330	ND<330
3,3'-Dichlorobenzidine	ND<330	ND<330	ND<330	ND<330	ND<330
2,4-Dichlorophenol	ND<330	ND<330	ND<330	ND<330	ND<330
Diethylphthalate	ND<330	ND<330	ND<330	ND<330	ND<330
2,4-Dimethylphenol	ND<330	ND<330	ND<330	ND<330	ND<330
Dimethyl Phthalate	ND<330	ND<330	ND<330	ND<330	ND<330
4,6-Dinitro-2-Methylphenol	ND<800	ND<800	ND<800	ND<800	ND<800
2,4-Dinitrophenol	ND<800	ND<800	ND<800	ND<800	ND<800
2,4-Dinitrotoluene	ND<330	ND<330	ND<330	ND<330	ND<330
2,6-Dinitrotoluene	ND<330	ND<330	ND<330	ND<330	ND<330

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Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	3/13/97
Project Name:	MDRC C6-Facility Building 37	**Project Number:**	120603501090010
Site:	Torrance, CA	**Matrix:**	SOIL
Method:	8270 Soil, Semivolatile Organics	**Units:**	ug/Kg

Analyte	B37-RE4-SP1	B37-RE4-SP2	B37-RE4-SP3	B37-RE4-SP4	B37-RE4-SP5
1,2-Diphenylhydrazine	ND<330	ND<330	ND<330	ND<330	ND<330
bis (2-Ethylhexyl)Phthalate	1200	ND<330	ND<330	ND<330	460
Fluoranthene	430	ND<330	570	ND<330	ND<330
Fluorene	ND<330	ND<330	ND<330	ND<330	ND<330
Hexachlorobenzene	ND<330	ND<330	ND<330	ND<330	ND<330
Hexachlorobutadiene	ND<330	ND<330	ND<330	ND<330	ND<330
Hexachloroethane	ND<330	ND<330	ND<330	ND<330	ND<330
Hexachlorocyclopentadiene	ND<330	ND<330	ND<330	ND<330	ND<330
Indeno(1,2,3-cd)Pyrene	ND<330	ND<330	360	ND<330	ND<330
Isophorone	ND<330	ND<330	ND<330	ND<330	ND<330
2-Methylnaphthalene	ND<330	ND<330	ND<330	ND<330	ND<330
2-Methylphenol	ND<330	ND<330	ND<330	ND<330	ND<330
4-Methylphenol	ND<330	ND<330	ND<330	ND<330	ND<330
Napthalene	ND<330	ND<330	ND<330	ND<330	ND
2-Nitroaniline	ND<800	ND<800	ND<800	ND<800	ND
3-Nitroaniline	ND<800	ND<800	ND<800	ND<800	ND<800
4-Nitroaniline	ND<800	ND<800	ND<800	ND<800	ND<800
Nitrobenzene	ND<330	ND<330	ND<330	ND<330	ND<330
2-Nitrophenol	ND<330	ND<330	ND<330	ND<330	ND<330
4-Nitrophenol	ND<800	ND<800	ND<800	ND<800	ND<800
N-Nitrosodiphenylamine	ND<330	ND<330	ND<330	ND<330	ND<330
N-Nitroso-Di-n-Propylamine	ND<330	ND<330	ND<330	ND<330	ND<330
Di-n-Octyl Phthalate	ND<330	ND<330	ND<330	ND<330	ND<330
Pentachlorophenol	ND<800	ND<800	ND<800	ND<800	ND<800
Phenanthrene	ND<330	ND<330	ND<330	ND<330	ND<330
Phenol	ND<330	ND<330	ND<330	ND<330	ND<330
Pyrene	ND<330	ND<330	350	ND<330	ND<330
Pyridine	ND<330	ND<330	ND<330	ND<330	ND<330
1,2,4-Trichlorobenzene	ND<330	ND<330	ND<330	ND<330	ND<330
2,4,5-Trichlorophenol	ND<800	ND<800	ND<800	ND<800	ND<800
2,4,6-Trichlorophenol	ND<330	ND<330	ND<330	ND<330	ND<330

Results reported at Practical Quantitation Limits unless otherwise specified.

*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd ed.

SPL California License Number 2178

FULLERTON LABORATORY
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-6868

Certificate of Analysis No. 9703076

Client:	Montgomery Watson	**Report Date:**	3/18/97
Client Address:	250 N. Madison Avenue Pasadena, CA 91101	**Date(s) Received:**	3/7/97
		Date(s) Sampled:	3/7/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	3/13/97
Project Name:	MDRC C6-Facility Building 37	**Project Number:**	120603501090010
Site:	Torrance, CA	**Matrix:**	SOIL
Method:	8270 Soil, Semivolatile Organics	**Units:**	ug/Kg

Analyte	B37-RE4-SP6	B37-RE4-SP7	B37-RE4-SP8	B37-RE2-SP1	B37-RE3-SP1
Acenaphthene	ND<330	ND<330	ND<660	ND<330	ND<330
Acenaphthylene	ND<330	ND<330	ND<660	ND<330	ND<330
Aniline	ND<330	ND<330	ND<660	ND<330	ND<330
Anthracene	ND<330	ND<330	ND<660	ND<330	ND<330
Benzo (a) Anthracene	ND<330	ND<330	ND<660	ND<330	ND<330
Benzo (b) Fluoranthene	ND<330	ND<330	ND<660	ND<330	ND<330
Benzo (k) Fluoranthene	ND<330	ND<330	ND<660	ND<330	ND<330
Benzo (a) Pyrene	ND<330	ND<330	ND<660	ND<330	ND<330
Benzoic Acid	ND<1600	ND<1600	ND<3200	ND<1600	ND<1600
Benzo (g,h,i) Perylene	ND<330	ND<330	ND<660	ND<330	ND<330
Benzyl alcohol	ND<330	ND<330	ND<660	ND<330	ND<330
4-Bromophenylphenyl ether	ND<330	ND<330	ND<660	ND<330	ND<330
Butylbenzylphthalate	ND<330	ND<330	ND<660	ND<330	ND<330
di-n-Butyl phthalate	ND<330	ND<330	ND<660	ND<330	ND<330
Carbazole	ND<330	ND<330	ND<660	ND<330	ND<330
4-Chloroaniline	ND<330	ND<330	ND<660	ND<330	ND<330
bis (2-Chloroethoxy) Methane	ND<330	ND<330	ND<660	ND<330	ND<330
bis (2-Chloroethyl) Ether	ND<330	ND<330	ND<660	ND<330	ND<330
bis (2-Chloroisopropyl) Ether	ND<330	ND<330	ND<660	ND<330	ND<330
4-Chloro-3-Methylphenol	ND<330	ND<330	ND<660	ND<330	ND<330
2-Chloronaphthalene	ND<330	ND<330	ND<660	ND<330	ND<330
2-Chlorophenol	ND<330	ND<330	ND<660	ND<330	ND<330
4-Chlorophenylphenyl ether	ND<330	ND<330	ND<660	ND<330	ND<330
Chrysene	ND<330	ND<330	ND<660	ND<330	ND<330
Dibenz (a,h) Anthracene	ND<330	ND<330	ND<660	ND<330	ND<330
Dibenzofuran	ND<330	ND<330	ND<660	ND<330	ND<330
1,2-Dichlorobenzene	ND<330	ND<330	ND<660	ND<330	ND<330
1,3-Dichlorobenzene	ND<330	ND<330	ND<660	ND<330	ND<330
1,4-Dichlorobenzene	ND<330	ND<330	ND<660	ND<330	ND<330
3,3'-Dichlorobenzidine	ND<330	ND<330	ND<660	ND<330	ND<330
2,4-Dichlorophenol	ND<330	ND<330	ND<660	ND<330	ND<330
Diethylphthalate	ND<330	ND<330	ND<660	ND<330	ND<330
2,4-Dimethylphenol	ND<330	ND<330	ND<660	ND<330	ND<330
Dimethyl Phthalate	ND<330	ND<330	ND<660	ND<330	ND<330
4,6-Dinitro-2-Methylphenol	ND<800	ND<800	ND<1600	ND<800	ND<800
2,4-Dinitrophenol	ND<800	ND<800	ND<1600	ND<800	ND<800
2,4-Dinitrotoluene	ND<330	ND<330	ND<660	ND<330	ND<330
2,6-Dinitrotoluene	ND<330	ND<330	ND<660	ND<330	ND<330

FULLERTON LABORATORY
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PHONE (714) 447-68

Certificate of Analysis No. 9703076

Client:	Montgomery Watson	**Report Date:**	3/18/97
Client Address:	250 N. Madison Avenue	**Date(s) Received:**	3/7/97
	Pasadena, CA 91101	**Date(s) Sampled:**	3/7/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	3/13/97
Project Name:	MDRC C6-Facility Building 37	**Project Number:**	120603501090010
Site:	Torrance, CA	**Matrix:**	SOIL
Method:	8270 Soil, Semivolatile Organics	**Units:**	ug/Kg

Analyte	B37-RE4-SP6	B37-RE4-SP7	B37-RE4-SP8	B37-RE2-SP1	B37-RE3-SP1
1,2-Diphenylhydrazine	ND<330	ND<330	ND<660	ND<330	ND<330
bis (2-Ethylhexyl)Phthalate	1100	ND<330	ND<660	5100	ND<330
Fluoranthene	ND<330	ND<330	ND<660	ND<330	ND<330
Fluorene	ND<330	ND<330	ND<660	ND<330	ND<330
Hexachlorobenzene	ND<330	ND<330	ND<660	ND<330	ND<330
Hexachlorobutadiene	ND<330	ND<330	ND<660	ND<330	ND<330
Hexachloroethane	ND<330	ND<330	ND<660	ND<330	ND<330
Hexachlorocyclopentadiene	ND<330	ND<330	ND<660	ND<330	ND<330
Indeno(1,2,3-cd)Pyrene	ND<330	ND<330	ND<660	ND<330	ND<330
Isophorone	ND<330	ND<330	ND<660	ND<330	ND<330
2-Methylnaphthalene	ND<330	ND<330	ND<660	ND<330	ND<330
2-Methylphenol	ND<330	ND<330	ND<660	ND<330	ND<330
4-Methylphenol	ND<330	ND<330	ND<660	ND<330	ND<330
Napthalene	ND<330	ND<330	ND<660	ND<330	ND
2-Nitroaniline	ND<800	ND<800	ND<1600	ND<800	ND
3-Nitroaniline	ND<800	ND<800	ND<1600	ND<800	ND<800
4-Nitroaniline	ND<800	ND<800	ND<1600	ND<800	ND<800
Nitrobenzene	ND<330	ND<330	ND<660	ND<330	ND<330
2-Nitrophenol	ND<330	ND<330	ND<660	ND<330	ND<330
4-Nitrophenol	ND<800	ND<800	ND<1600	ND<800	ND<800
N-Nitrosodiphenylamine	ND<330	ND<330	ND<660	ND<330	ND<330
N-Nitroso-Di-n-Propylamine	ND<330	ND<330	ND<660	ND<330	ND<330
Di-n-Octyl Phthalate	ND<330	ND<330	ND<660	ND<330	ND<330
Pentachlorophenol	ND<800	ND<800	ND<1600	ND<800	ND<800
Phenanthrene	ND<330	ND<330	ND<660	ND<330	ND<330
Phenol	ND<330	ND<330	ND<660	ND<330	ND<330
Pyrene	ND<330	ND<330	ND<660	ND<330	ND<330
Pyridine	ND<330	ND<330	ND<660	ND<330	ND<330
1,2,4-Trichlorobenzene	ND<330	ND<330	ND<660	ND<330	ND<330
2,4,5-Trichlorophenol	ND<800	ND<800	ND<1600	ND<800	ND<800
2,4,6-Trichlorophenol	ND<330	ND<330	ND<660	ND<330	ND<330

Results reported at Practical Quantitation Limits unless otherwise specified.

*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd ed.

SPL California License Number 2178

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Certificate of Analysis No. 9703076

Client:	Montgomery Watson	**Report Date:**	3/18/97
Client Address:	250 N. Madison Avenue Pasadena, CA 91101	**Date(s) Received:**	3/7/97
		Date(s) Sampled:	3/7/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	3/13/97
Project Name:	MDRC C6-Facility Building 37	**Project Number:**	120603501090010
Site:	Torrance, CA	**Matrix:**	SOIL
Method:	8270 Soil, Semivolatile Organics	**Units:**	ug/Kg

Analyte	B37-RE1-SP1	B37-RE4-SP9	B37-RE4-SP10	B37-RE4-SP11
Acenaphthene	ND<330	ND<330	ND<330	ND<330
Acenaphthylene	ND<330	ND<330	ND<330	ND<330
Aniline	ND<330	ND<330	ND<330	ND<330
Anthracene	ND<330	ND<330	ND<330	ND<330
Benzo (a) Anthracene	560	ND<330	ND<330	ND<330
Benzo (b) Fluoranthene	670	ND<330	ND<330	ND<330
Benzo (k) Fluoranthene	460	ND<330	ND<330	ND<330
Benzo (a) Pyrene	590	ND<330	ND<330	ND<330
Benzoic Acid	ND<1600	ND<1600	ND<1600	ND<1600
Benzo (g,h,i) Perylene	550	ND<330	ND<330	ND<330
Benzyl alcohol	ND<330	ND<330	ND<330	ND<330
4-Bromophenylphenyl ether	ND<330	ND<330	ND<330	ND<330
Butylbenzylphthalate	ND<330	ND<330	ND<330	ND<330
di-n-Butyl phthalate	ND<330	ND<330	ND<330	ND<330
Carbazole	ND<330	ND<330	ND<330	ND<330
4-Chloroaniline	ND<330	ND<330	ND<330	ND<330
bis (2-Chloroethoxy) Methane	ND<330	ND<330	ND<330	ND<330
bis (2-Chloroethyl) Ether	ND<330	ND<330	ND<330	ND<330
bis (2-Chloroisopropyl) Ether	ND<330	ND<330	ND<330	ND<330
4-Chloro-3-Methylphenol	ND<330	ND<330	ND<330	ND<330
2-Chloronaphthalene	ND<330	ND<330	ND<330	ND<330
2-Chlorophenol	ND<330	ND<330	ND<330	ND<330
4-Chlorophenylphenyl ether	ND<330	ND<330	ND<330	ND<330
Chrysene	570	ND<330	ND<330	ND<330
Dibenz (a,h) Anthracene	ND<330	ND<330	ND<330	ND<330
Dibenzofuran	ND<330	ND<330	ND<330	ND<330
1,2-Dichlorobenzene	ND<330	ND<330	ND<330	ND<330
1,3-Dichlorobenzene	ND<330	ND<330	ND<330	ND<330
1,4-Dichlorobenzene	ND<330	ND<330	ND<330	ND<330
3,3'-Dichlorobenzidine	ND<330	ND<330	ND<330	ND<330
2,4-Dichlorophenol	ND<330	ND<330	ND<330	ND<330
Diethylphthalate	ND<330	ND<330	ND<330	ND<330
2,4-Dimethylphenol	ND<330	ND<330	ND<330	ND<330
Dimethyl Phthalate	ND<330	ND<330	ND<330	ND<330
4,6-Dinitro-2-Methylphenol	ND<800	ND<800	ND<800	ND<800
2,4-Dinitrophenol	ND<800	ND<800	ND<800	ND<800
2,4-Dinitrotoluene	ND<330	ND<330	ND<330	ND<330
2,6-Dinitrotoluene	ND<330	ND<330	ND<330	ND<330

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Certificate of Analysis No. 9703076

Client:	Montgomery Watson	**Report Date:**	3/18/97
Client Address:	250 N. Madison Avenue Pasadena, CA 91101	**Date(s) Received:**	3/7/97
		Date(s) Sampled:	3/7/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	3/13/97
Project Name:	MDRC C6-Facility Building 37	**Project Number:**	120603501090010
Site:	Torrance, CA	**Matrix:**	SOIL
Method:	8270 Soil, Semivolatile Organics	**Units:**	ug/Kg

Analyte	B37-RE1-SP1	B37-RE4-SP9	B37-RE4-SP10	B37-RE4-SP11
1,2-Diphenylhydrazine	ND<330	ND<330	ND<330	ND<330
bis (2-Ethylhexyl)Phthalate	1300	ND<330	1200	ND<330
Fluoranthene	780	ND<330	ND<330	ND<330
Fluorene	ND<330	ND<330	ND<330	ND<330
Hexachlorobenzene	ND<330	ND<330	ND<330	ND<330
Hexachlorobutadiene	ND<330	ND<330	ND<330	ND<330
Hexachloroethane	ND<330	ND<330	ND<330	ND<330
Hexachlorocyclopentadiene	ND<330	ND<330	ND<330	ND<330
Indeno(1,2,3-cd)Pyrene	450	ND<330	ND<330	ND<330
Isophorone	ND<330	ND<330	ND<330	ND<330
2-Methylnaphthalene	ND<330	ND<330	ND<330	ND<330
2-Methylphenol	ND<330	ND<330	ND<330	ND<330
4-Methylphenol	ND<330	ND<330	ND<330	ND<330
Napthalene	ND<330	ND<330	ND<330	ND<330
2-Nitroaniline	ND<800	ND<800	ND<800	ND<800
3-Nitroaniline	ND<800	ND<800	ND<800	ND<800
4-Nitroaniline	ND<800	ND<800	ND<800	ND<800
Nitrobenzene	ND<330	ND<330	ND<330	ND<330
2-Nitrophenol	ND<330	ND<330	ND<330	ND<330
4-Nitrophenol	ND<800	ND<800	ND<800	ND<800
N-Nitrosodiphenylamine	ND<330	ND<330	ND<330	ND<330
N-Nitroso-Di-n-Propylamine	ND<330	ND<330	ND<330	ND<330
Di-n-Octyl Phthalate	ND<330	ND<330	ND<330	ND<330
Pentachlorophenol	ND<800	ND<800	ND<800	ND<800
Phenanthrene	ND<330	ND<330	ND<330	ND<330
Phenol	ND<330	ND<330	ND<330	ND<330
Pyrene	560	ND<330	ND<330	ND<330
Pyridine	ND<330	ND<330	ND<330	ND<330
1,2,4-Trichlorobenzene	ND<330	ND<330	ND<330	ND<330
2,4,5-Trichlorophenol	ND<800	ND<800	ND<800	ND<800
2,4,6-Trichlorophenol	ND<330	ND<330	ND<330	ND<330

Results reported at Practical Quantitation Limits unless otherwise specified.

*Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd ed.

SPL California License Number 2178

QUALITY CONTROL

DOCUMENTATION

FULLERTON LABORATOR
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-6868

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 03/12/97
Analyzed on: 03/10/97
Analyst: SB

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Petroleum Extractables
Method 418.1*

SPL Sample ID Number	Method Blank mg/Kg	Sample Result mg/Kg	Spike Added mg/Kg	Matrix Spike Result mg/Kg	Matrix Spike Recovery %	Matrix Spike Duplicate Result mg/Kg	Matrix Spike Duplicate Recovery %	RPD (%)	QC LIMITS (Advisory) RPD Max	QC LIMITS (Advisory) % REC
9703072-01A	ND	ND	500	433	86.6	458	91.6	5.6	20	80 -120

PETHS031097 -9703036

Samples in batch:

9703072-01A	9703072-02A	9703075-02A	9703075-03A
9703075-04A	9703075-05A	9703075-06A	9703075-07A
9703075-08A	9703076-01A	9703076-02A	9703076-03A
9703076-04A	9703076-05A	9703076-06A	9703076-07A
9703076-08A	9703076-09A	9703076-10A	9705076-11A

COMMENTS:

FULLERTON LABORATORY
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** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 03/12/97
Analyzed on: 03/10/97
Analyst: SB

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Petroleum Extractables
Method 418.1*

SPL Sample ID Number	Blank Value mg/Kg	LCS Concentration mg/Kg	Measured Concentration mg/Kg	% Recovery	QC Limits Recovery
LCS	ND	500	464	92.8	80 - 100

PETHS031097 -9703036

Samples in batch:

9703072-01A	9703072-02A	9703075-02A	9703075-03A
9703075-04A	9703075-05A	9703075-06A	9703075-07A
9703075-08A	9703076-01A	9703076-02A	9703076-03A
9703076-04A	9703076-05A	9703076-06A	9703076-07A
9703076-08A	9703076-09A	9703076-10A	9705076-11A

COMMENTS:

FULLERTON LABORATORY
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PHONE (714) 447-6868

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 03/12/97
Analyzed on: 03/10/97
Analyst: SB

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Petroleum Extractables
Method 418.1*

SPL Sample ID Number	Method Blank mg/Kg	Sample Result mg/Kg	Spike Added mg/Kg	Matrix Spike Result mg/Kg	Matrix Spike Recovery %	Matrix Spike Duplicate Result mg/Kg	Matrix Spike Duplicate Recovery %	RPD (%)	QC LIMITS (Advisory) RPD Max	QC LIMITS (Advisory) % REC
9703076-12A	ND	ND		500	86.6	421	86.6	0	20	80 -120

PETHS031097 -9703037

Samples in batch:

9703076-12A 9703076-13A 9703076-14A

COMMENTS:

FULLERTON LABORATORY
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** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 03/12/97
Analyzed on: 03/10/97
Analyst: SB

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Petroleum Extractables
Method 418.1*

SPL Sample ID Number	Blank Value mg/Kg	LCS Concentration mg/Kg	Measured Concentration mg/Kg	% Recovery	QC Limits Recovery
LCS	ND	500	433	86.6	80 - 120

PETHS031097 -9703037

Samples in batch:

9703076-12A 9703076-13A 9703076-14A

COMMENTS:

QUALITY CONTROL INFORMATION
METALS

FULLERTON LABORATORY
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MS/MSD Results

Date: 3/13/97
Sample ID: 9703071-2

Matrix: Soil
Includes: 9702226-9-10; 9703071-1-4; 9703076-1-14

Parameter	LMB	LCS Rec. (%)	Acceptability Range (%)	MS Rec. (%)		MSD Rec. (%)		Acceptability Range (%)	RPD	RPD Range (%)
Antimony, Sb	ND	97.6	84-117	71.7	**	59.6	**	80-120	18	20
Arsenic, As	ND	102	85-117	85.2		85.3		80-120	0.1	20
Barium, Ba	ND	97.4	62-136	93.3		103		80-120	10	20
Beryllium, Be	ND	96.8	85-111	91.1		90.7		80-120	0.4	20
Cadmium, Cd	ND	97.0	86-112	91.5		91.6		80-120	0.1	20
Chromium, Cr	ND	96.7	83-110	90.3		89.3		80-120	1.1	20
Cobalt, Co	ND	96.0	85-112	91.9		92.0		80-120	0.1	20
Copper, Cu	ND	97.4	84-111	95.3		95.1		80-120	0.3	20
Lead, Pb	ND	96.2	85-110	86.1		86.4		80-120	0.4	20
Molybdenum, Mo	ND	95.3	83-110	86.1		85.1		80-120	1.2	20
Nickel, Ni	ND	97.0	86-110	88.3		87.8		80-120	0.6	20
Selenium, Se	ND	96.5	84-111	85.0		85.1		80-120	0.2	20
Silver, Ag	ND	100	80-125	81.0		81.6		80-120	0.8	20
Thallium, Tl	ND	95.2	83-109	83.7		83.8		80-120	0.1	20
Vanadium, V	ND	97.2	84-109	93.2		92.3		80-120	0.9	20
Zinc, Zn	ND	105	88-117	105		102		80-120	2.8	20

**Matrix Effect

LMB = Laboratory Method Blank
LCS = Laboratory Control Sample
LCSD = Laboratory Control Sample Duplicate
ND = Not Detected

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference

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** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 03/14/97
Analyzed on: 03/12/97
Analyst: GQ

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Mercury, Total
METHOD 7471A***

SPL Sample ID Number	Method Blank mg/Kg	Sample Result mg/Kg	Spike Added mg/Kg	Matrix Spike Result mg/Kg	Matrix Spike Recovery %	Matrix Spike Duplicate Result mg/Kg	Matrix Spike Duplicate Recovery %	RPD (%)	QC LIMITS (Advisory) RPD Max	QC LIMITS (Advisory) % REC
9703071-02A	ND	ND	.0010	.0010	100	.00099	99.0	1.0	20	80 -120

HGS031297 -9703046

Samples in batch:

9703050-05A	9703076-01A	9703076-02A	9703076-03A
9703076-04A	9703076-05A	9703076-06A	9703076-07A
9703076-08A	9703076-09A	9703076-10A	9703076-11A
9703076-12A	9703076-13A	9703076-14A	9703097-01A
9703110-02A			

COMMENTS:

FULLERTON LABORATORY
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FULLERTON, CA 92831
PHONE (714) 447-6868

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 03/14/97
Analyzed on: 03/12/97
Analyst: GQ

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Mercury, Total
METHOD 7471A***

SPL Sample ID Number	Blank Value mg/Kg	LCS Concentration mg/Kg	Measured Concentration mg/Kg	% Recovery	QC Limits Recovery
LCS	ND	0.0010	0.00102	102	80 - 120

HGS031297 -9703046

Samples in batch:

9703050-05A 9703076-01A 9703076-02A 9703076-03A
9703076-04A 9703076-05A 9703076-06A 9703076-07A
9703076-08A 9703076-09A 9703076-10A 9703076-11A
9703076-12A 9703076-13A 9703076-14A 9703097-01A
9703110-02A

COMMENTS:

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QUALITY CONTROL INFORMATION

03/11/97

EPA 8240/8260 Compounds by EPA 8260 Method

9703076

Parameter	Laboratory Method Blank (ug/Kg)	Reporting Limits (ug/Kg)	LCS Rec. (%)	Acceptability Range (%)
Dichlorodifluoromethane	ND	5.0	82	70 - 130
Chloromethane	ND	5.0	86	70 - 130
Vinyl chloride	ND	5.0	80	70 - 130
Bromomethane	ND	5.0	90	70 - 130
Chloroethane	ND	5.0	92	70 - 130
Trichlorofluoromethane	ND	5.0	92	70 - 130
Acrolein	ND	50	88	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	50	NA	70 - 130
Acetone	ND	100	86	70 - 130
1,1-Dichloroethene	ND	5.0	88	70 - 130
Acetonitrile	ND	50	NA	70 - 130
Iodomethane	ND	5.0	92	70 - 130
Allyl chloride	ND	50	NA	70 - 130
Methylene chloride	ND	5.0	78	70 - 130
Carbon disulfide	ND	5.0	74	70 - 130
Acrylonitrile	ND	50	98	70 - 130
2-Methoxy-2-methylpropane	ND	5.0	94	70 - 130
trans-1,2-dichloroethene	ND	5.0	86	70 - 130
Vinyl acetate	ND	10	84	70 - 130
1,1-Dichloroethane	ND	5.0	80	70 - 130
2-Butanone	ND	10	96	70 - 130
Propionitrile	ND	50	NA	70 - 130
2,2-Dichloropropane	ND	5.0	86	70 - 130
cis-1,2-dichloroethene	ND	5.0	90	70 - 130
Methacrylonitrile	ND	50	NA	70 - 130
Isobutyl alcohol	ND	100	NA	70 - 130
Chloroform	ND	5.0	78	70 - 130
Bromochloromethane	ND	5.0	88	70 - 130
1,1,1-Trichloroethane	ND	5.0	80	70 - 130
1,1-Dichloropropene	ND	5.0	106	70 - 130
Carbon tetrachloride	ND	5.0	90	70 - 130
1,2-Dichloroethane	ND	5.0	86	70 - 130
Benzene	ND	5.0	94	70 - 130
Trichloroethene	ND	5.0	98	70 - 130

ND = Not Detected

FULLERTON LABORATORY
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-6868

QUALITY CONTROL INFORMATION

03/11/97

EPA 8240/8260 Compounds by EPA 8260 Method

9703076

Parameter	Laboratory Method Blank (ug/Kg)	Reporting Limits (ug/Kg)	LCS Rec. (%)	Acceptability Range (%)
Methyl methacrylate	ND	50	NA	70 - 130
1,2-Dichloropropane	ND	5.0	92	70 - 130
1,4-Dioxane	ND	100	NA	70 - 130
Bromodichloromethane	ND	5.0	86	70 - 130
Dibromomethane	ND	5.0	92	70 - 130
2-Chloroethyl vinyl ether	ND	10	NA	70 - 130
4-Methyl-2-pentanone	ND	10	120	70 - 130
cis-1,3-Dichloropropene	ND	5.0	108	70 - 130
Toluene	ND	5.0	106	70 - 130
Ethyl methacrylate	ND	50	NA	70 - 130
trans-1,3-Dichloropropene	ND	5.0	104	70 - 130
2-Hexanone	ND	10	114	70 - 130
1,1,2-trichloroethane	ND	5.0	92	70 - 130
1,2-Dibromoethane	ND	5.0	100	70 - 130
1,3-Dichloropropane	ND	5.0	98	70 - 130
Tetrachloroethene	ND	5.0	110	70 - 130
Dibromochloromethane	ND	5.0	94	70 - 130
Chlorobenzene	ND	5.0	102	70 - 130
1,1,1,2-Tetrachloroethane	ND	5.0	92	70 - 130
Ethylbenzene	ND	5.0	108	70 - 130
m,p-Xylene	ND	5.0	110	70 - 130
o-Xylene	ND	5.0	114	70 - 130
Styrene	ND	5.0	114	70 - 130
Bromoform	ND	5.0	106	70 - 130
trans-1,4-Dichloro-2-butene	ND	50	NA	70 - 130
Pentachloroethane	ND	50	NA	70 - 130
Isopropylbenzene	ND	5.0	118	70 - 130
1,1,2,2-Tetrachloroethane	ND	5.0	102	70 - 130
1,2,3-Trichloropropane	ND	5.0	106	70 - 130
n-Propylbenzene	ND	5.0	114	70 - 130

ND = Not Detected

FULLERTON LABORATORY
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-686

QUALITY CONTROL INFORMATION

03/11/ 97

EPA 8240/8260 Compounds by EPA 8260 Method

9703076

Parameter	Laboratory Method Blank (ug/Kg)	Reporting Limits (ug/Kg)	LCS Rec. (%)	Acceptability Range (%)
Bromobenzene	ND	5.0	116	70 - 130
1,3,5-Trimethylbenzene	ND	5.0	122	70 - 130
2-Chlorotoluene	ND	5.0	108	70 - 130
4-Chlorotoluene	ND	5.0	108	70 - 130
tert-Butylbenzene	ND	5.0	116	70 - 130
1,2,4-Trimethylbenzene	ND	5.0	116	70 - 130
sec-Butylbenzene	ND	5.0	114	70 - 130
p-Isopropyltoluene	ND	5.0	118	70 - 130
1,3-Dichlorobenzene	ND	5.0	110	70 - 130
1,4-Dichlorobenzene	ND	5.0	110	70 - 130
n-Butylbenzene	ND	5.0	108	70 - 130
1,2-Dichlorobenzene	ND	5.0	108	70 - 130
1,2-Dibromo-3-chloropropane	ND	5.0	102	70 - 130
1,2,4-Trichlorobenzene	ND	5.0	110	70 - 130
Hexachlorobutadiene	ND	5.0	110	70 - 130
Naphthalene	ND	5.0	114	70 - 130
1,2,3-Trichlorobenzene	ND	5.0	110	70 - 130
DBFM Surrogate Rec. (%)	81	----	73	60 - 140
Toluene-d8 Surrogate Rec. (%)	102	----	106	60 - 140
BFB Surrogate Rec. (%)	85	----	115	60 - 140

LCS = Laboratory Control Sample
ND = Not Detected

FULLERTON LABORATORY
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-6868

QUALITY CONTROL INFORMATION

03/11/97

EPA 8240/8260 Compounds by EPA 8260 Method

9703076

Sample Spiked: 9703076-02A

Parameter	MS Recovery (%)	MSD Recovery (%)	RPD	Acceptability Range (%)	RPD Range (%)
1,1-Dichloroethene	100	98	2.0	70 - 130	30
Benzene	105	110	4.7	70 - 130	30
Trichloroethene	100	106	5.8	70 - 130	30
Toluene	100	97	3.0	70 - 130	30
Chlorobenzene	97	102	5.0	70 - 130	30
DBFM Surrogate Rec. (%)	107	106	---	60 - 140	---
Toluene-d8 Surrogate Rec. (%)	107	102	---	60 - 140	---
BFB Surrogate Rec. (%)	108	117	---	60 - 140	---

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference

FULLERTON LABORATORY
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-6868

QUALITY CONTROL INFORMATION

03/12/97

EPA 8240/8260 Compounds by EPA 8260 Method

9703076, 9703067

Parameter	Laboratory Method Blank (ug/L)	Reporting Limits (ug/L)	LCS Rec. (%)	Acceptability Range (%)
Dichlorodifluoromethane	ND	5	92	70 - 130
Chloromethane	ND	5	106	70 - 130
Vinyl chloride	ND	5	96	70 - 130
Bromomethane	ND	5	110	70 - 130
Chloroethane	ND	5	112	70 - 130
Trichlorofluoromethane	ND	5	114	70 - 130
Acrolein	ND	20	88	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5	NA	70 - 130
Acetone	ND	100	98	70 - 130
1,1-Dichloroethene	ND	5	92	70 - 130
Acetonitrile	ND	10	NA	70 - 130
Iodomethane	ND	5	88	70 - 130
Allyl chloride	ND	10	NA	70 - 130
Methylene chloride	ND	5	86	70 - 130
Carbon disulfide	ND	5	86	70 - 130
Acrylonitrile	ND	20	120	70 - 130
2-Methoxy-2-methylpropane	ND	5	102	70 - 130
trans-1,2-dichloroethene	ND	5	90	70 - 130
Vinyl acetate	ND	10	86	70 - 130
1,1-Dichloroethane	ND	5	90	70 - 130
2-Butanone	ND	10	92	70 - 130
Propionitrile	ND	10	NA	70 - 130
2,2-Dichloropropane	ND	5	92	70 - 130
cis-1,2-dichloroethene	ND	5	96	70 - 130
Methacrylonitrile	ND	10	NA	70 - 130
Isobutyl alcohol	ND	100	NA	70 - 130
Chloroform	ND	5	88	70 - 130
Bromochloromethane	ND	5	92	70 - 130
1,1,1-Trichloroethane	ND	5	88	70 - 130
1,1-Dichloropropene	ND	5	98	70 - 130
Carbon tetrachloride	ND	5	92	70 - 130
1,2-Dichloroethane	ND	5	88	70 - 130
Benzene	ND	5	96	70 - 130
Trichloroethene	ND	5	96	70 - 130

ND = Not Detected

FULLERTON LABORATORY
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-6868

QUALITY CONTROL INFORMATION

03/12/97

EPA 8240/8260 Compounds by EPA 8260 Method

9703076, 9703067

Parameter	Laboratory Method Blank (ug/L)	Reporting Limits (ug/L)	LCS Rec. (%)	Acceptability Range (%)
Bromobenzene	ND	5	100	70 - 130
1,3,5-Trimethylbenzene	ND	5	112	70 - 130
2-Chlorotoluene	ND	5	106	70 - 130
4-Chlorotoluene	ND	5	106	70 - 130
tert-Butylbenzene	ND	5	102	70 - 130
1,2,4-Trimethylbenzene	ND	5	110	70 - 130
sec-Butylbenzene	ND	5	106	70 - 130
p-Isopropyltoluene	ND	5	106	70 - 130
1,3-Dichlorobenzene	ND	5	96	70 - 130
1,4-Dichlorobenzene	ND	5	96	70 - 130
n-Butylbenzene	ND	5	106	70 - 130
1,2-Dichlorobenzene	ND	5	94	70 - 130
1,2-Dibromo-3-chloropropane	ND	5	90	70 - 130
1,2,4-Trichlorobenzene	ND	5	82	70 - 130
Hexachlorobutadiene	ND	5	92	70 - 130
Naphthalene	ND	5	84	70 - 130
1,2,3-Trichlorobenzene	ND	5	88	70 - 130
DBFM Surrogate Rec. (%)	114	----	89	60 - 140
Toluene-d8 Surrogate Rec. (%)	100	----	101	60 - 140
BFB Surrogate Rec. (%)	76	----	119	60 - 140

LCS = Laboratory Control Sample
ND = Not Detected

FULLERTON LABORATORY
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-6f

QUALITY CONTROL INFORMATION

03/12/97

EPA 8240/8260 Compounds by EPA 8260 Method

9703076, 9703067

Sample Spiked: 9703076-15A

Parameter	MS Recovery (%)	MSD Recovery (%)	RPD	Acceptability Range (%)	RPD Range (%)
1,1-Dichloroethene	120	120	0.0	70 - 130	30
Benzene	130	130	0.0	70 - 130	30
Trichloroethene	115	115	0.0	70 - 130	30
Toluene	110	115	4.4	70 - 130	30
Chlorobenzene	115	110	4.4	70 - 130	30
DBFM Surrogate Rec. (%)	CI	CI	---	60 - 140	---
Toluene-d8 Surrogate Rec. (%)	104	104	---	60 - 140	---
BFB Surrogate Rec. (%)	120	120	---	60 - 140	---

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

SPL Blank QC Report

Matrix: Soil
Sample ID: BLANK
Batch: E970313044703

Reported on: 03/15/97 10:0
Analyzed on: 03/13/97 13:0
Analyst: LH

METHOD 8270 BLANK H072B02

Compound	Result	Detection Limit	Units
Pyridine	ND	330	ug/Kg
Phenol	ND	330	ug/Kg
Aniline	ND	330	ug/Kg
bis(2-Chloroethyl)ether	ND	330	ug/Kg
2-Chlorophenol	ND	330	ug/Kg
1,3-Dichlorobenzene	ND	330	ug/Kg
1,4-Dichlorobenzene	ND	330	ug/Kg
Benzyl alcohol	ND	330	ug/Kg
1,2-Dichlorobenzene	ND	330	ug/Kg
2-Methylphenol	ND	330	ug/Kg
bis(2-chloroisopropyl)ethe	ND	330	ug/Kg
4-Methylphenol	ND	330	ug/Kg
N-Nitroso-di-n-propylamine	ND	330	ug/Kg
Hexachloroethane	ND	330	ug/Kg
Nitrobenzene	ND	330	ug/Kg
Isophorone	ND	330	ug/Kg
2-Nitrophenol	ND	330	ug/Kg
2,4-Dimethylphenol	ND	330	ug/Kg
Benzoic acid	ND	1600	ug/Kg
bis(2-Chloroethoxy)methane	ND	330	ug/Kg
2,4-Dichlorophenol	ND	330	ug/Kg
1,2,4-Trichlorobenzene	ND	330	ug/Kg
Naphthalene	ND	330	ug/Kg
4-Chloroaniline	ND	330	ug/Kg
Hexachlorobutadiene	ND	330	ug/Kg
4-Chloro-3-methylphenol	ND	330	ug/Kg
2-Methylnaphthalene	ND	330	ug/Kg
Hexachlorocyclopentadiene	ND	330	ug/Kg
2,4,6-Trichlorophenol	ND	330	ug/Kg
2,4,5-Trichlorophenol	ND	800	ug/Kg
2-Chloronaphthalene	ND	330	ug/Kg
2-Nitroaniline	ND	800	ug/Kg
Dimethylphthalate	ND	330	ug/Kg
2,6-Dinitrotoluene	ND	330	ug/Kg

Notes
ND - Not detected.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-09

pa

SPL Blank QC Report

Matrix: Soil
Sample ID: BLANK
Batch: E970313044703

Reported on: 03/15/97 10:0
Analyzed on: 03/13/97 13:0
Analyst: LH

METHOD 8270 BLANK H072B02

Compound	Result	Detection Limit	Units
Acenaphthylene	ND	330	ug/Kg
3-Nitroaniline	ND	800	ug/Kg
Acenaphthene	ND	330	ug/Kg
2,4-Dinitrophenol	ND	800	ug/Kg
4-Nitrophenol	ND	800	ug/Kg
Dibenzofuran	ND	330	ug/Kg
2,4-Dinitrotoluene	ND	330	ug/Kg
Diethylphthalate	ND	330	ug/Kg
4-Chlorophenyl-phenylether	ND	330	ug/Kg
Fluorene	ND	330	ug/Kg
4-Nitroaniline	ND	800	ug/Kg
4,6-Dinitro-2-methylphenol	ND	800	ug/Kg
n-Nitrosodiphenylamine	ND	330	ug/Kg
1,2-Diphenylhydrazine	ND	330	ug/Kg
4-Bromophenyl-phenylether	ND	330	ug/Kg
Hexachlorobenzene	ND	330	ug/Kg
Pentachlorophenol	ND	800	ug/Kg
Phenanthrene	ND	330	ug/Kg
Anthracene	ND	330	ug/Kg
Carbazole	ND	330	ug/Kg
Di-n-butylphthalate	ND	330	ug/Kg
Fluoranthene	ND	330	ug/Kg
Pyrene	ND	330	ug/Kg
Butylbenzylphthalate	ND	330	ug/Kg
3,3'-Dichlorobenzidine	ND	330	ug/Kg
Benzo[a]anthracene	ND	330	ug/Kg
Chrysene	ND	330	ug/Kg
bis(2-Ethylhexyl)phthalate	ND	330	ug/Kg
Di-n-octylphthalate	ND	330	ug/Kg
Benzo[b]fluoranthene	ND	330	ug/Kg
Benzo[k]fluoranthene	ND	330	ug/Kg
Benzo[a]pyrene	ND	330	ug/Kg
Indeno[1,2,3-cd]pyrene	ND	330	ug/Kg
Dibenz[a,h]anthracene	ND	330	ug/Kg

Notes
ND - Not detected.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

SPL Blank QC Report

Matrix: Soil
Sample ID: BLANK
Batch: E970313044703

Reported on: 03/15/97 10:0
Analyzed on: 03/13/97 13:0
Analyst: LH

METHOD 8270 BLANK H072B02

Compound	Result	Detection Limit	Units
Benzo[g,h,i]perylene	ND	330	ug/Kg

Surrogate	Result	QC Criteria	Units
Nitrobenzene-d5	100	23-120	% Recovery
2-Fluorobiphenyl	88	30-115	% Recovery
Terphenyl-d14	88	18-137	% Recovery
Phenol-d5	80	24-113	% Recovery
2-Fluorophenol	74	25-121	% Recovery
2,4,6-Tribromophenol	120	19-122	% Recovery

Samples in Batch 9703523-01 9703523-02 9703523-03 9703523-04
9703523-05 9703523-06 9703523-07 9703523-08
9703523-09 9703523-10 9703523-11 9703523-12
9703523-13 9703523-14

Notes
ND - Not detected.

SPL Houston Labs

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: LCS
Level: LOW
Data Type: MS DATA
SpikeList File: 8270s.spk
Method File: /chem1/h.i/h970313.b/h8270sQ.m
Misc Info: E072S1/H072B02/H072CC1

Client SDG: h970313
Fraction: SV

Operator: LH
SampleType: MS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMIT
5 Phenol	2500	1600	64.19	12-11
9 2-Chlorophenol	2500	1700	68.43	27-12
12 1,4-Dichlorobenzen	1600	1200	73.72	36-97
21 N-Nitroso-di-n-pro	1600	1400	88.44	41-11
31 1,2,4-Trichloroben	1600	1500	95.87	39-98
36 4-Chloro-3-methylp	2500	2100	83.21	23-97
49 Acenaphthene	1600	1200	73.82	46-11
51 4-Nitrophenol	2500	2200	86.17	30-15
53 2,4-Dinitrotoluene	1600	1400	89.05	50-15
64 Pentachlorophenol	2500	1900	76.63	9-10
71 Pyrene	1600	750	47.16	2[illegible]-12

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 23 Nitrobenzene-d5	1600	1500	92.98	23-12
$ 41 2-Fluorobiphenyl	1600	1200	78.19	30-11
$ 72 Terphenyl-d14	1600	1300	83.05	18-13
$ 3 2-Fluorophenol	2500	1700	68.87	25-12
$ 4 Phenol-d5	2500	1700	69.22	24-11
$ 61 2,4,6-Tribromophen	2500	2800	111.46	19-12

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPL Contract:

Lab Code: Case No.: 9703523 SAS No.: SDG No.:

Matrix Spike - EPA Sample No.: 9703076-03B Level(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Phenol	2500	0	1900	76	12-110
2-Chlorophenol	2500	0	2000	80	27-123
1,4-Dichlorobenzene	1600	0	1400	88	36- 97
N-Nitroso-di-n-prop.(1)	1600	0	1800	113	41-116
1,2,4-Trichlorobenzene	1600	0	1800	113*	39- 98
4-Chloro-3-methylphenol	2500	0	2600	104*	23- 97
Acenaphthene	1600	0	1400	88	46-118
4-Nitrophenol	2500	0	2500	100	30-150
2,4-Dinitrotoluene	1600	0	1700	106	50-150
Pentachlorophenol	2500	0	2500	100	9-103
Pyrene	1600	350	1100	47	26-127

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	2500	1800	72	5	42	12-110
2-Chlorophenol	2500	2000	80	0	40	27-123
1,4-Dichlorobenzene	1600	1400	88	0	28	36- 97
N-Nitroso-di-n-prop.(1)	1600	1700	106	6	38	41-116
1,2,4-Trichlorobenzene	1600	1800	113*	0	28	39- 98
4-Chloro-3-methylphenol	2500	2500	100*	4	42	23- 97
Acenaphthene	1600	1400	88	0	31	46-118
4-Nitrophenol	2500	2600	104	4	50	30-150
2,4-Dinitrotoluene	1600	1700	106	0	50	50-150
Pentachlorophenol	2500	2400	96	4	50	9-103
Pyrene	1600	1000	41	14	31	26-127

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 4 out of 22 outside limits

BOE-C6-0108442

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-09

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 03/14/97
Analyzed on: 03/12/97
Analyst: DPP

This sample was randomly selected for use in the SPL quality control program. The results are as follows:

Solids
CLP Inorganics SOW

-- DUPLICATE ANALYSIS --

SPL Sample ID	Original Sample Concentration % wt	Duplicate Sample % wt	RPD	RPD Max.
9703523-11A	89	89	0	20

-9703509

Samples in batch:

9703523-11A 9703523-12A 9703523-13A 9703523-14A
9703528-01A

COMMENTS:

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 03/14/97
Analyzed on: 03/12/97
Analyst: DPP

This sample was randomly selected for use in the SPL quality control program. The results are as follows:

Solids
CLP Inorganics SOW

-- DUPLICATE ANALYSIS --

SPL Sample ID	Original Sample Concentration % wt	Duplicate Sample % wt	RPD	RPD Max.
9703523-01A	88	88	0	20

-9703508

Samples in batch:

9703523-01A 9703523-02A 9703523-03A 9703523-04A
9703523-05A 9703523-06A 9703523-07A 9703523-08A
9703523-09A 9703523-10A

COMMENTS:

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No: 9703076

C- 02473

page 1 of 2

Client Name: Montgomery Watson

Address/Phone: 250 N. Madison Avenue, Pasadena

Client Contact: Fred Strauss (818) 568-6582

Project Name: MDRC C6 Facility, Torrance, CA

Project Number: 12060035.01090010

Project Location: C6 Facility, Bldg. 37 Area, Stockpile Area

Invoice To: Fred Strauss

matrix: W=water S=soil SL=sludge O=other:

bottle: P=plastic A=amber glass G=glass V=vial

size: 1=1 liter 4=4oz 40=vial 8=8oz 16=16oz

pres.: 1=HCl 2=HNO3 3=H2SO4 O=other:

Requested Analysis

	SAMPLE ID	DATE	TIME	comp	grab	matrix	bottle	size	pres.	Number of Containers	TRPH 418.1	Title 22 Metals	VOCs - 8260	SVOCs - 8270					
X	B37-RE4-SP1	3/7/97	9:37		X	S	2 oz sleeves		ice	2	X	X	X	X					
1	B37-RE4-SP2		9:46																
1	B37-RE4-SP3		9:57																
1	B37-RE4-SP4		10:55																
1	B37-RE4-SP5		10:30																
1	B37-RE4-SP6		10:19																
1	B37-RE4-SP7		10:39																
X	B37-RE4-SP8		11:00																
1	B37-RE2-SP1		9:23																
X	B37-RE3-SP1		9:31																

Client/Consultant Remarks: 24 hr TAT on TRPH; Standard TAT otherwise

Laboratory remarks:

Intact? ☐ Y ☐ N

Temp:

Requested TAT

TRPH Only

24hr ☒ 72hr ☐

All others

48hr ☐ Standard ☒

Other ☐ _____

Special Reporting Requirements: Fax Results ☐ Raw Data ☐ Standard QC ☐ Level 3 QC ☐ Level 4 QC ☐

Special Detection Limits (specify):

PM review (initial):

1. Relinquished by Sampler: Adam W. Norris	date 3/7/97	time 1720	2. Received by: [signature] 3/10/97
3. Relinquished by:	date	time	4. Received by:
5. Relinquished by:	date	time	6. Received by Laboratory:

☐ 8880 Interchange Drive, Houston, TX 77054 (713) 660-0901

☐ 459 Hughes Drive, Traverse City, MI 49684 (616) 947-5777

☐ 500 Ambassador Caffery Parkway, Scott, LA 70583 (318) 237-4775

☐ 1511 E. Orangethorpe Avenue, Fullerton, CA 92631 (714) 447-6868

BOE-C6-0108446

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No: 9703076

C- 04767

page 2 of 2

Client Name: Montgomery Watson

Address/Phone: 250 N. Madison Ave., Pasadena

Client Contact: Fred Graunn (818) 568-6582

Project Name: MDRC C6 Facility, Torrance, CA

Project Number: 12060035.01090010

Project Location: C6 Facility, Bldg. 37 Area, Stockpile

Invoice To:

matrix: W=water S=soil SL=sludge O=other:

bottle: P=plastic A=amber glass G=glass V=vial

size: 1=1 liter 4=4oz 40=vial 8=8oz 16=16oz

pres.: 1=HCl 2=HNO3 3=H2SO4 O=other:

Requested Analysis

SAMPLE ID	DATE	TIME	comp	grab	matrix	bottle	size	pres.	Number of Containers	TRPH 418.1	Title 22 Metals	VOCs - 8260	SVOCs - 8270					
B37-RE1-SP1	3/7/97	1230		X	S	2"x6" sleeves	Approx 12oz.	ice	2	X	X	X	X					
B37-RE4-SP9	3/7/97	0926		X	S	"	"	"	2	X	X	X	X					
B37-RE4-SP10	3/7/97	1238		X	S	"	"	"		X	X	X	X					
B37-RE4-SP11	3/7/97	1447		X	S	"	"	"		X	X	X	X					
Trip Blank	3/7/97				W	40ml VOA	40ml VOA VIAL	"				X						

Client/Consultant Remarks: 24 hr TAT on TRPH; Standard TAT otherwise

Laboratory remarks:

Intact? ☐ Y ☐ N

Temp:

Requested TAT

TRPH only

24hr ☒ 72hr ☐

48hr ☐ All others Standard ☒

Other ☐ _____

Special Reporting Requirements: Fax Results ☐ Raw Data ☐ Standard QC ☐ Level 3 QC ☐ Level 4 QC ☐

Special Detection Limits (specify):

PM review (initial):

1. Relinquished by Sampler: Adam W. Vanis	date 3/7/97	time 1720	2. Received by: [signature] 3/10/97
3. Relinquished by:	date	time	4. Received by:
5. Relinquished by:	date	time	6. Received by Laboratory:

☐ 8880 Interchange Drive, Houston, TX 77054 (713) 660-0901

☐ 500 Ambassador Caffery Parkway, Scott, LA 70583 (31 37-4775

☐ 1511 E. Orangethorpe Avenue, Fullerton, CA 92631 (714) 447-6868

BOE-C6-0108447

FAX

MONTGOMERY WATSON

250 N. Madison Avenue
Pasadena, California 91101

Tel: 818 568 6508
Fax: 818 796 5941

Date: 3/14/97

To: Mike Crisostomo

Fax No: (714) 447-6800

From: Nancy Matsumoto

Reference: MDRC

Subject: Additional Analyses

No. of Pages: 3
(including cover)

Comments:

Please change the turn-around time to RUSH for all analyses previously requested on the following samples:

B37-RE1-SP1
B37-RE2-SP1
B37-RE3-SP1
B37-RE4-SP1
B37-RE4-SP2
B37-RE4-SP3
B37-RE4-SP4
B37-RE4-SP5
B37-RE4-SP6
B37-RE4-SP7
B37-RE4-SP8
B37-RE4-SP9
B37-RE4-SP10
B37-RE4-SP11

COC follows. Please call me at (818) 568-6508 to confirm your receipt of this fax.
Thanks!

If you do not receive all pages, or if there are any problems with this transmission, please call Brenda Whitney at 818-568-6514.

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No: C- 04767

page 2 of 2

Client Name: [illegible]

Address/Phone: [illegible]

Client Contact: [illegible]

Project Name: [illegible]

Project Number: [illegible]

Project Location: [illegible]

Invoice To:

matrix: W=water S=soil SL=sludge O=other:

bottle: P=plastic A=amber glass G=glass V=vial

size: 1=1 liter 4=4oz 40=vial 8=8oz 16=16oz

pres.: 1=HCl 2=HNO3 3=H2SO4 O=other:

Requested Analysis

SAMPLE ID	DATE	TIME	comp	grab	matrix	bottle	size	pres.	Number of Containers	[illegible]	[illegible]	[illegible]	[illegible]					
B37-RE1-SP9	3/7/97	1203		X	S	[illegible]	Approx [illegible]	[illegible]	2	X	X	X	X					
B37-RE4-SP9	3/7/97	0926		X	S	"	"	"	2	X	X	X	X					
B37-RE4-SP10	3/7/97	1238		X	S	"	"	"	2	X	X	X	X					
B37-RE4-SP11	3/7/97	1447		X	S	"	"	"	2	X	X	X	X					
Trip Blank	3/7/97				W	40ml VOA	40ml	"	2			X						

Client/Consultant Remarks: 24 hr TAT on TRPH; Standard TAT otherwise

Laboratory remarks:

Intact? ☐ Y ☐ N

Temp:

Requested TAT

TRPH Only 24hr ☒ 72hr ☐

48hr ☐ Standard ☒

Other ☐

Special Reporting Requirements: Fax Results ☐ Raw Data ☐ Standard QC ☐ Level 3 QC ☐ Level 4 QC ☐

Special Detection Limits (specify):

PM review (initial):

	date	time		
1. Relinquished by Sampler: [illegible]	3/7/97	1720	2. Received by:	
3. Relinquished by:	date	time	4. Received by:	
5. Relinquished by:	date	time	6. Received by Laboratory:	

☐ 8880 Interchange Drive, Houston, TX 77054 (713) 660-0901 ☐ 500 Ambassador Caffery Parkway, Scott, LA 70583 (318) 237-4775

MAR-14-1997 10:06 MONTGOMERY WATSON 818 796 5941 P.03
TOTAL P.03
BOE-C6-0108449

9703523

SPL

8880 Interchange Drive, Houston, Texas 77054 713/660-0901

INTEROFFICE SAMPLE TRANSFER
CHAIN-OF-CUSTODY FORM

PAGE 1 OF 3

ORIGINATING LAB: Fullerton RECEIVING LAB: TX/MI/LA DATE: 3/10/97

ATTENTION: Brent Barron/Gary Byar REPORT RESULTS TO: Mike Crisostomo -Diane Suzuki

REPORT RESULTS BY: [X] VERBAL [ ] WRITTEN [X] FAX FAX# EDT

CLIENT NAME: Montgomery PROJECT #: 9703076 DATE NEEDED: 3/13/97

HEADING FOR ANALYSIS:	INVOICE TO:
COMPANY: Montgomery Water	COMPANY: SPL-Fullerton
ADDRESS:	ADDRESS:
ATTN:	ATTN: Mike Crisostomo Diane Suzuki

SAMPLE NO. IDENTIFICATION	DATE/TIME COLLECTED	LAB SAMPLE NUMBER	SAMPLE MATRIX	ANALYSES REQUESTED	QUOTED PRICE
	3/7/97 9:37	9703076-01B	Soil	8270S/PRPGMS	$205.00
	9:46	-02B			
	9:57	-03B			
	10:55	-04B			
	10:30	-05B			

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
1. [signature]	3/10/97	09:27	S. West	3/12/97	1100
2.					

NOTES: FEDEX#3825303925

4°C

BOE-C6-0108450

9703523

8880 Interchange Drive, Houston, Texas 77054 713/660-0901

INTEROFFICE SAMPLE TRANSFER
CHAIN-OF-CUSTODY FORM

ORIGINATING LAB: Fullerton RECEIVING LAB: TX/MI/LA DATE: 3/10/97

ATTENTION: Brent Barron/Gary Byar REPORT RESULTS TO: -Mike Crisostomo -Diane Suzuki

REPORT RESULTS BY: ☒ VERBAL ☐ WRITTEN ☒ FAX FAX# EDT

CLIENT NAME: Montgomery Watson PROJECT #: 9703076 DATE NEEDED: 3/13/97

HEADING FOR ANALYSIS:	INVOICE TO:
COMPANY: Montgomery	COMPANY: SPL-Fullerton
ADDRESS:	ADDRESS:
ATTN:	ATTN: Mike Crisostomo Diane Suzuki

SAMPLE NO. IDENTIFICATION	DATE/TIME COLLECTED	LAB SAMPLE NUMBER	SAMPLE MATRIX	ANALYSES REQUESTED	QUOTE PRICE
	3/7/97 10:19	9703076-06B	Soil	8270S/PRP6MS	$205.00
	10:39	-07B			
	11:00	-08B			
	9:23	-09B			
	9:31	-10B			

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
1.	3/10/97	09:27	S. West	3/12/97	1100
2.					

NOTES: 4°C

9703523

SPL

8880 Interchange Drive, Houston, Texas 77054 713/660-0901

INTEROFFICE SAMPLE TRANSFER CHAIN-OF-CUSTODY FORM

ORIGINATING LAB: Fullerton RECEIVING LAB: TX/MI/LA DATE: 3/10/97

ATTENTION: Brent Barron/Gary Byar REPORT RESULTS TO: -Mike Crisostomo -Diane Suzuki

REPORT RESULTS BY: [X] VERBAL [ ] WRITTEN [X] FAX FAX# EDT

CLIENT NAME: Montgomery Watson PROJECT #: 9703076 DATE NEEDED: 3/13/97

HEADING FOR ANALYSIS:	INVOICE TO:
COMPANY: Montgomery	COMPANY: SPL-Fullerton
ADDRESS:	ADDRESS:
ATTN:	ATTN: Mike Crisostomo ~~Diane Suzuki~~

SAMPLE NO. IDENTIFICATION	DATE/TIME COLLECTED	LAB SAMPLE NUMBER	SAMPLE MATRIX	ANALYSES REQUESTED	QUOTED PRICE
	3/7/97 12:30	9703076-11B	Soil	8270S/PRPGMS	$205.00
	9:26	-12B			
	12:38	-13B			
	14:47	-14B			

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
1.	3/10/97	0930	S. West	3/12/97	1100
2.					

NOTES: 4°C

SPL Houston Environmental Laboratory

Sample Login Checklist

Date: 3/12/97	Time: 1100

SPL Sample ID:
9703523

			Yes	No
1	Chain-of-Custody (COC) form is present.		✓	
2	COC is properly completed.		✓	
3	If no, Non-Conformance Worksheet has been completed.			
4	Custody seals are present on the shipping container.		✓	
5	If yes, custody seals are intact.		✓	
6	All samples are tagged or labeled.		✓	
7	If no, Non-Conformance Worksheet has been completed.			
8	Sample containers arrived intact		✓	
9	Temperature of samples upon arrival:		4° C	
10	Method of sample delivery to SPL:	SPL Delivery		
		Client Delivery		
		FedEx Delivery (airbill #)	3925303925	
		Other:		
11	Method of sample disposal:	SPL Disposal	✓	
		HOLD		
		Return to Client		

Name: S. West	Date: 3/12/97

FULLERTON LABORATORY
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-6868

SPL, INC.

REPORT APPROVAL SHEET

WORK ORDER NUMBER: *97 - 03 - 167*

Approved for release by:

Joel Grice, Laboratory Manager — *Date:* 3/18/97

Michael J. Crisostomo, Project Manager — *Date:* 3-18-97

FULLERTON LABORATORY
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-6868

CASE NARRATIVE

SPL Workorder Number: 9703167

Southern Petroleum Laboratories (SPL) Fullerton is pleased to present the following results of laboratory analyses to Montgomery Watson-Pasadena for the MDRC project, located in Torrance, CA. On Friday, March 7, 1997, fourteen (14) soil samples and one (1) trip blank were received by the laboratory courier in a cooler for sample transport. This sample delivery group was further checked by the sample receiving custodian on Monday, March 10, 1997. The samples were received intact and within the 2°C - 6°C preservation temperature range.

The samples were analyzed as initially requested on the accompanying chain of custody record, however, five samples required reruns for internal standard and surrogate recovery verification. The samples affected are: B37-RE2-SP1, B37-RE1-SP1, B37-RE4-SP9, B37-RE4-SP10, B37-RE4-SP11. The analyses from these reruns are presented in this SPL workorder.

Note that coeluting interferences were observed for the MS & MSD recoveries of the surrogate, Dibromofluoromethane (DBFM). The other surrogate recoveries for the MS & MSD analyses were within the acceptability range.

If you have any questions regarding information presented in this report please call me at (714) 447-6868. Please refer to workorder 9703167 to expedite service.

Michael J. Crisostomo
Project Manager

Certificate of Analysis No. 9703167

FULLERTON LABORATORY
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-6868

Client: Montgomery Watson
Client Address: 250 N. Madison Avenue
Pasadena, CA 91101
Attention: Nancy Matsumoto
Project Name: MDRC C-6 Facility Building 37
Site: Torrance, CA

Report Date: 3/18/97
Date(s) Received: 3/7/97
Date(s) Sampled: 3/7/97
Date(s) Analyzed: 3/18/97
Project Number: 120603501090010
Matrix: SOIL

Method: 8260 Soil, Volatile Organics

Units: UG/KG

Analyte	B37-RE2-SP1	B37-RE1-SP1	B37-RE4-SP9	B37-RE4-SP10	B37-RE4-SP11
Dichlorodifluoromethane	ND<5	ND<5	ND<5	ND<5	ND<5
Chloromethane	ND<5	ND<5	ND<5	ND<5	ND<5
Vinyl chloride	ND<5	ND<5	ND<5	ND<5	ND<5
Bromomethane	ND<5	ND<5	ND<5	ND<5	ND<5
Chloroethane	ND<5	ND<5	ND<5	ND<5	ND<5
Trichlorofluoromethane	ND<5	ND<5	ND<5	ND<5	ND<5
1,1-Dichloroethene	ND<5	ND<5	ND<5	ND<5	ND<5
Methylene chloride	ND<5	ND<5	ND<5	ND<5	ND<5
trans-1,2-Dichloroethene	ND<5	ND<5	ND<5	ND<5	ND<5
1,1-Dichloroethane	ND<5	ND<5	ND<5	ND<5	ND<5
2,2-Dichloropropane	ND<5	ND<5	ND<5	ND<5	ND<5
cis-1,2-Dichloroethene	ND<5	ND<5	ND<5	ND<5	ND<5
Chloroform	ND<5	ND<5	ND<5	ND<5	ND<5
Bromochloromethane	ND<5	ND<5	ND<5	ND<5	ND<5
1,1,1-Trichloroethane	ND<5	ND<5	ND<5	ND<5	ND<5
1,1-Dichloropropene	ND<5	ND<5	ND<5	ND<5	ND<5
Carbon tetrachloride	ND<5	ND<5	ND<5	ND<5	ND<5
1,2-Dichloroethane	ND<5	ND<5	ND<5	ND<5	ND<5
Benzene	ND<5	ND<5	ND<5	ND<5	ND<5
Trichloroethene	ND<5	ND<5	ND<5	ND<5	ND<5
1,2-Dichloropropane	ND<5	ND<5	ND<5	ND<5	ND<5
Bromodichloromethane	ND<5	ND<5	ND<5	ND<5	ND<5
Dibromomethane	ND<5	ND<5	ND<5	ND<5	ND<5
cis-1,3-Dichloropropene	ND<5	ND<5	ND<5	ND<5	ND<5
Toluene	ND<5	ND<5	ND<5	ND<5	ND<5
trans-1,3-Dichloropropene	ND<5	ND<5	ND<5	ND<5	ND<5
1,1,2-Trichloroethane	ND<5	ND<5	ND<5	ND<5	ND<5
1,2-Dibromoethane	ND<5	ND<5	ND<5	ND<5	ND<5
1,3-Dichloropropane	ND<5	ND<5	ND<5	ND<5	ND<5
Tetrachloroethene	ND<5	ND<5	ND<5	ND<5	ND<5
Dibromochloromethane	ND<5	ND<5	ND<5	ND<5	ND<5
Chlorobenzene	ND<5	ND<5	ND<5	ND<5	ND<5
1,1,1,2-Tetrachloroethane	ND<5	ND<5	ND<5	ND<5	ND<5
Ethylbenzene	ND<5	ND<5	ND<5	ND<5	ND<5
m,p-Xylene	ND<5	ND<5	ND<5	ND<5	ND<5
o-Xylene	ND<5	ND<5	ND<5	ND<5	ND<5
Styrene	ND<5	ND<5	ND<5	ND<5	ND<5
Bromoform	ND<5	ND<5	ND<5	ND<5	ND<5

Certificate of Analysis No. 9703167

FULLERTON LABORATORY
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-6866

Client: Montgomery Watson
Client Address: 250 N. Madison Avenue
Pasadena, CA 91101
Attention: Nancy Matsumoto
Project Name: MDRC C-6 Facility Building 37
Site: Torrance, CA

Report Date: 3/18/97
Date(s) Received: 3/7/97
Date(s) Sampled: 3/7/97
Date(s) Analyzed: 3/18/97
Project Number: 120603501090010
Matrix: SOIL

Method: 8260 Soil, Volatile Organics

Units: UG/KG

Analyte	B37-RE2-SP1	B37-RE1-SP1	B37-RE4-SP9	B37-RE4-SP10	B37-RE4-SP11
Isopropylbenzene	ND<5	ND<5	ND<5	ND<5	ND<5
1,1,2,2-Tetrachloroethane	ND<5	ND<5	ND<5	ND<5	ND<5
1,2,3-Trichloropropane	ND<5	ND<5	ND<5	ND<5	ND<5
n-Propylbenzene	ND<5	ND<5	ND<5	ND<5	ND<5
Bromobenzene	ND<5	ND<5	ND<5	ND<5	ND<5
1,3,5-Trimethylbenzene	ND<5	ND<5	ND<5	ND<5	ND<5
2-Chlorotoluene	ND<5	ND<5	ND<5	ND<5	ND<5
4-Chlorotoluene	ND<5	ND<5	ND<5	ND<5	ND<5
tert-Butylbenzene	ND<5	ND<5	ND<5	ND<5	ND<5
1,2,4-Trimethylbenzene	ND<5	ND<5	ND<5	ND<5	ND<5
sec-Butylbenzene	ND<5	ND<5	ND<5	ND<5	ND<5
p-Isopropyltoluene	ND<5	ND<5	ND<5	ND<5	ND<5
1,3-Dichlorobenzene	ND<5	ND<5	ND<5	ND<5	ND<5
1,4-Dichlorobenzene	ND<5	ND<5	ND<5	ND<5	ND<5
n-Butylbenzene	ND<5	ND<5	ND<5	ND<5	ND<5
1,2-Dichlorobenzene	ND<5	ND<5	ND<5	ND<5	ND<5
1,2-Dibromo-3-chloroprop	ND<5	ND<5	ND<5	ND<5	ND<5
1,2,4-Trichlorobenzene	ND<5	ND<5	ND<5	ND<5	ND<5
Hexachlorobutadiene	ND<5	ND<5	ND<5	ND<5	ND<5
Naphthalene	ND<5	ND<5	ND<5	ND<5	ND<5
1,2,3-Trichlorobenzene	ND<5	ND<5	ND<5	ND<5	ND<5

Results reported at Practical Quantitation Limits unless otherwise specified.

* Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
** Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

SPL California License Number 2178.

QUALITY CONTROL

DOCUMENTATION

FULLERTON LABORATORY
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-6868

QUALITY CONTROL INFORMATION

03/12/97

EPA 8240/8260 Compounds by EPA 8260 Method

9703076, 9703067

Parameter	Laboratory Method Blank (ug/L)	Reporting Limits (ug/L)	LCS Rec. (%)	Acceptability Range (%)
Dichlorodifluoromethane	ND	5	92	70 - 130
Chloromethane	ND	5	106	70 - 130
Vinyl chloride	ND	5	96	70 - 130
Bromomethane	ND	5	110	70 - 130
Chloroethane	ND	5	112	70 - 130
Trichlorofluoromethane	ND	5	114	70 - 130
Acrolein	ND	20	88	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5	NA	70 - 130
Acetone	ND	100	98	70 - 130
1,1-Dichloroethene	ND	5	92	70 - 130
Acetonitrile	ND	10	NA	70 - 130
Iodomethane	ND	5	88	70 - 130
Allyl chloride	ND	10	NA	70 - 130
Methylene chloride	ND	5	86	70 - 130
Carbon disulfide	ND	5	86	70 - 130
Acrylonitrile	ND	20	120	70 - 130
2-Methoxy-2-methylpropane	ND	5	102	70 - 130
trans-1,2-dichloroethene	ND	5	90	70 - 130
Vinyl acetate	ND	10	86	70 - 130
1,1-Dichloroethane	ND	5	90	70 - 130
2-Butanone	ND	10	92	70 - 130
Propionitrile	ND	10	NA	70 - 130
2,2-Dichloropropane	ND	5	92	70 - 130
cis-1,2-dichloroethene	ND	5	96	70 - 130
Methacrylonitrile	ND	10	NA	70 - 130
Isobutyl alcohol	ND	100	NA	70 - 130
Chloroform	ND	5	88	70 - 130
Bromochloromethane	ND	5	92	70 - 130
1,1,1-Trichloroethane	ND	5	88	70 - 130
1,1-Dichloropropene	ND	5	98	70 - 130
Carbon tetrachloride	ND	5	92	70 - 130
1,2-Dichloroethane	ND	5	88	70 - 130
Benzene	ND	5	96	70 - 130
Trichloroethene	ND	5	96	70 - 130

ND = Not Detected

FULLERTON LABORATORY
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-686

QUALITY CONTROL INFORMATION

03/12/97

EPA 8240/8260 Compounds by EPA 8260 Method

9703076, 9703067

Parameter	Laboratory Method Blank (ug/L)	Reporting Limits (ug/L)	LCS Rec. (%)	Acceptability Range (%)
Methyl methacrylate	ND	10	NA	70 - 130
1,2-Dichloropropane	ND	5	96	70 - 130
1,4-Dioxane	ND	50	NA	70 - 130
Bromodichloromethane	ND	5	90	70 - 130
Dibromomethane	ND	5	94	70 - 130
2-Chloroethyl vinyl ether	ND	10	126	70 - 130
4-Methyl-2-pentanone	ND	10	118	70 - 130
cis-1,3-Dichloropropene	ND	5	100	70 - 130
Toluene	ND	5	102	70 - 130
Ethyl methacrylate	ND	10	NA	70 - 130
trans-1,3-Dichloropropene	ND	5	100	70 - 130
2-Hexanone	ND	10	108	70 - 130
1,1,2-trichloroethane	ND	5	98	70 - 130
1,2-Dibromoethane	ND	5	100	70 - 130
1,3-Dichloropropane	ND	5	98	70 - 130
Tetrachloroethene	ND	5	102	70 - 130
Dibromochloromethane	ND	5	94	70 - 130
Chlorobenzene	ND	5	102	70 - 130
1,1,1,2-Tetrachloroethane	ND	5	96	70 - 130
Ethylbenzene	ND	5	110	70 - 130
m,p-Xylene	ND	5	110	70 - 130
o-Xylene	ND	5	106	70 - 130
Styrene	ND	5	112	70 - 130
Bromoform	ND	5	98	70 - 130
trans-1,4-Dichloro-2-butene	ND	10	NA	70 - 130
Pentachloroethane	ND	10	NA	70 - 130
Isopropylbenzene	ND	5	106	70 - 130
1,1,2,2-Tetrachloroethane	ND	5	100	70 - 130
1,2,3-Trichloropropane	ND	5	98	70 - 130
n-Propylbenzene	ND	5	108	70 - 130

ND = Not Detected

FULLERTON LABORATORY
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-6868

QUALITY CONTROL INFORMATION

03/12/97

EPA 8240/8260 Compounds by EPA 8260 Method

9703076, 9703067

Parameter	Laboratory Method Blank (ug/L)	Reporting Limits (ug/L)	LCS Rec. (%)	Acceptability Range (%)
Bromobenzene	ND	5	100	70 - 130
1,3,5-Trimethylbenzene	ND	5	112	70 - 130
2-Chlorotoluene	ND	5	106	70 - 130
4-Chlorotoluene	ND	5	106	70 - 130
tert-Butylbenzene	ND	5	102	70 - 130
1,2,4-Trimethylbenzene	ND	5	110	70 - 130
sec-Butylbenzene	ND	5	106	70 - 130
p-Isopropyltoluene	ND	5	106	70 - 130
1,3-Dichlorobenzene	ND	5	96	70 - 130
1,4-Dichlorobenzene	ND	5	96	70 - 130
n-Butylbenzene	ND	5	106	70 - 130
1,2-Dichlorobenzene	ND	5	94	70 - 130
1,2-Dibromo-3-chloropropane	ND	5	90	70 - 130
1,2,4-Trichlorobenzene	ND	5	82	70 - 130
Hexachlorobutadiene	ND	5	92	70 - 130
Naphthalene	ND	5	84	70 - 130
1,2,3-Trichlorobenzene	ND	5	88	70 - 130
DBFM Surrogate Rec. (%)	114	----	89	60 - 140
Toluene-d8 Surrogate Rec. (%)	100	----	101	60 - 140
BFB Surrogate Rec. (%)	76	----	119	60 - 140

LCS = Laboratory Control Sample
ND = Not Detected

FULLERTON LABORATORY
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-686

QUALITY CONTROL INFORMATION

03/12/97

EPA 8240/8260 Compounds by EPA 8260 Method

9703076, 9703067

Sample Spiked: 9703076-15A

Parameter	MS Recovery (%)	MSD Recovery (%)	RPD	Acceptability Range (%)	RPD Range (%)
1,1-Dichloroethene	120	120	0.0	70 - 130	30
Benzene	130	130	0.0	70 - 130	30
Trichloroethene	115	115	0.0	70 - 130	30
Toluene	110	115	4.4	70 - 130	30
Chlorobenzene	115	110	4.4	70 - 130	30
DBFM Surrogate Rec. (%)	CI	CI	---	60 - 140	---
Toluene-d8 Surrogate Rec. (%)	104	104	---	60 - 140	---
BFB Surrogate Rec. (%)	120	120	---	60 - 140	---

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No: 9703076

C- 02473

page 1 of 2

Client Name: Montgomery Watson

Address/Phone: 250 N. Madison Avenue, Pasadena

Client Contact: Fred Strauss (818) 528-6582

Project Name: MDRC C6 Facility, Torrance, CA

Project Number: 12060035.01090010

Project Location: C6 Facility, Bldg. 31 Area, Stockpile Area

Invoice To: Fred Strauss

Requested Analysis

9703167 for 8260 analyses of samples indicated (*).

SAMPLE ID	DATE	TIME	comp	grab	matrix (W=water S=soil SL=sludge O=other:)	bottle (P=plastic A=amber glass G=glass V=vial)	size (1=1 liter 4=4oz 40=vial 8=8oz 16=16oz)	pres. (1=HCl 2=HNO3 3=H2SO4 O=other:)	Number of Containers	TRPH 418.1	Title 22 Metals	VOCs - 8260	SVOCs - 8270					
B31-RE4-SP1	3/7/97	9:31		X	S	2 x 2 oz sleeves		iw	2	X	X	X	X					
B31-RE4-SP2		9:46																
B31-RE4-SP3		9:57																
B31-RE4-SP4		10:55																
B31-RE4-SP5		10:30																
B31-RE4-SP6		10:19																
B31-RE4-SP7		10:39																
B31-RE4-SP8		11:00																
B31-RE2-SP1		9:23												(*)				
B31-RE3-SP1		9:31																

Client/Consultant Remarks: 24 hr TAT on TRPH; Standard TAT otherwise

Laboratory remarks:

Intact? ☐ Y ☐ N

Temp:

Requested TAT

TRPH Only

24hr ☒ 72hr ☐

48hr ☐ All others Standard ☒

Other ☐ _____

Special Reporting Requirements: Fax Results ☐ Raw Data ☐ Standard QC ☐ Level 3 QC ☐ Level 4 QC ☐

Special Detection Limits (specify):

PM review (initial):

1. Relinquished by Sampler: Adam Zi-Venis	date 3/7/97	time 1720	2. Received by: [signature] 3/10/97
3. Relinquished by:	date	time	4. Received by:
5. Relinquished by:	date	time	6. Received by Laboratory:

☐ 8880 Interchange Drive, Houston, TX 77054 (713) 660-0901

☐ 459 Hughes Drive, Traverse City, MI 49684 (616) 947-5777

☐ 500 Ambassador Caffery Parkway, Scott, LA 70583 (318) 237-4775

☐ 1511 E. Orangethorpe Avenue, Fullerton, CA 92631 (714) 447-6868

BOE-C6-0108464

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No: 9703076

C- 04767

page 2 of 2

Client Name: Montgomery Watson

Address/Phone: 250 N. Madison Ave., Pasadena

Client Contact: Fred Graunis (818) 568-6582

Project Name: MDPC C6 Facility, Torrance, CA

Project Number: 12060035.01090010

Project Location: C6 Facility, Bldg. 37 Area, Stockpile

Invoice To:

9703167 for 8260 analyses of samples indicated (*)

SAMPLE ID	DATE	TIME	comp	grab	matrix (W=water S=soil SL=sludge O=other:)	bottle (P=plastic A=amber glass G=glass V=vial)	size (1=1 liter 4=4oz 40=vial 8=8oz 16=16oz)	pres. (1=HCl 2=HNO3 3=H2SO4 O=other:)	Number of Containers	TRPH 418.1	Title 22 Metals	VOCs - 8260	SVOCs - 8270					
B37-RE1-SP1	3/7/97	1230		X	S	2"x6" sleeves	Approx 12 oz.	ice	2	X	X	X	X	(*)				
B37-RE4-SP9	3/7/97	0926		X	S	"	"	"	2	X	X	X	X	(*)				
B37-RE4-SP10	3/7/97	1238		X	S	"	"	"		X	X	X	X	(*)				
B37-RE4-SP11	3/7/97	1447		X	S	"	"	"		X	X	X	X	(*)				
Trip Blank	3/7/97				W	40ml VOA	40ml VOA VIAL	"				X						

Client/Consultant Remarks: 24 hr TAT on TRPH; Standard TAT otherwise

Laboratory remarks:

Intact? ☐ Y ☐ N

Temp:

Requested TAT

TRPH only

24hr ☒ 72hr ☐

48hr ☐ All others Standard ☒

Other ☐ _____

Special Reporting Requirements: Fax Results ☐ Raw Data ☐ Standard QC ☐ Level 3 QC ☐ Level 4 QC ☐

Special Detection Limits (specify):

PM review (initial):

1. Relinquished by Sampler: Adam W. Varnis	date 3/7/97	time 1720	2. Received by: [signature] 3/10/97
3. Relinquished by:	date	time	4. Received by:
5. Relinquished by:	date	time	6. Received by Laboratory:

☐ 8880 I[illegible]hange Drive, Houston, TX 77054 (713) 660-0901

☐ 500 Ambassador Caffery Parkway, Scott, LA 70583 (318, [illegible]7-4775

☐ 459 Hughes Drive, Traverse City, MI 49684 (616) 947-5777

☐ 1511 E. Orangethorpe Ave., Fullerton, CA 92631 (714) 447-6960

BOE-C6-0108465

SPL Fullerton Environmental Laboratory
Sample Receiving Checklist

SPL Workorder Number: 9703167 (Resubmit of select sample from 9703076)

Date: _____ Time: _____

	Yes	No	N/A
1. Chain of Custody Record Present?		*	
2. Chain of Custody Record Properly Completed?		*	
3. Custody Seals on Shipping Container?			
4. Custody Seals on Sample Container?			
5. All Custody Seals Intact?		*	
6. All Samples Received Intact?		*	
7. All Samples Labeled Correctly?		*	
8. Samples are Chilled at 2°C - 6°C		*	

* See Non-Conformance / Sample Condition Notification Form only if box with "*" is checked.

Internal Temperature of Shipping Container _____ °C

Samples Were Delivered by:

SPL Courier	
Client Representative	
Federal Express	
UPS	
DHL	
Other:	

All samples will be disposed 30 days from the report date for this workorder, unless otherwise specified by the client.

Samples Checked by: _____

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ORANGE COAST ANALYTICAL, INC.
3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (602) 736-0960 Fax (602) 736-0970

Montgomery Watson
ATTN: Mr. Fred Strauss
250 N. Madison Ave.
Pasadena, CA 91101

Client Project ID: McDonnell Douglas
Client Project #: 1206035-01090010

Analysis Method: 418.1

Sample Description: Soil

Laboratory Reference #: MWI 8751

Sampled : 03-25-97
Received: 03-25-97
Analyzed: 03-26-97
Reported: 03-26-97

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Laboratory Sample Number	*Client Sample Number*	*Sample Result (mg/kg)*
97030965	B37-RE4-SPCONF	1,400
97030966	B37-RE2-SPCONF	30
97030967	B37-RE3-SPCONF	96
97030968	B37-RE1-SPCONF	1,800
97030969	VSS-CONF	850
97030970	B37-GS-105-3'	77
97030971	B37-GS-106-9'	N.D.
97030976	B37-RE4-SP28	N.D.
Detection Limit:		8.0

Analyte reported as N.D. was not present above the stated limit of detection.

ORANGE COAST ANALYTICAL

Mark Noorani
Laboratory Director

ORANGE COAST ANALYTICAL, INC.
3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
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Montgomery Watson
ATTN: Mr. Fred Strauss
250 N. Madison Ave.
Pasadena, CA 91101

Client Project ID: McDonnell Douglas
Client Project #: 1206035-01090010

Sample Description: Soil, B37-RE1-SPCONF

Laboratory Sample Number: 97030968
Laboratory Reference #: MWI 8751

Sampled: 03-25-97
Received: 03-25-97
Analyzed: 03-28-97
Reported: 04-04-97

CCR - METALS

Analyte	*EPA Method*	*STLC Limits mg/l*	*TTLC Limits mg/kg*	*Detection Limit mg/kg*	*Analysis Result mg/kg*	
Antimony	6010	15	500	5.0	N.D.	
Arsenic	6010	5.0	500	1.0	N.D.	
Barium	6010	100	10000	0.1	110	<---
Beryllium	6010	0.75	75	0.1	N.D.	
Cadmium	6010	1.0	100	0.1	N.D.	
Chromium (VI)	7196	5.0	500	0.5	N.D.	
Chromium Total	6010	560	2500	0.05	24	<---
Cobalt	6010	80	8000	0.5	6.9	<---
Copper	6010	25	2500	0.1	15	<---
Lead	6010	5.0	1000	1.0	N.D.	
Mercury	7471	0.2	20	0.01	N.D.	
Molybdenum	6010	350	3500	0.5	N.D.	
Nickel	6010	20	2000	0.5	13	<---
Selenium	6010	1.0	100	1.0	N.D.	
Silver	6010	5.0	500	0.1	N.D.	
Thallium	6010	7.0	700	5.0	N.D.	
Vanadium	6010	24	2400	0.5	26	<---
Zinc	6010	250	5000	0.1	67	<---

Analytes reported as N.D. were not present above the stated limit of detection.

ORANGE COAST ANALYTICAL

Mark Noorani
Laboratory Director

ORANGE COAST ANALYTICAL, INC.
3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (602) 736-0960 Fax (602) 736-0970

Montgomery Watson
ATTN: Mr. Fred Strauss
250 N. Madison Ave.
Pasadena, CA 91101

Client Project ID: McDonnell Douglas
Client Project #: 1206035-01090010

Sample Description: Soil, B37-RE1-SPCONF
Laboratory Sample Number: 97030968
Laboratory Reference #: MWI 8751

Sampled: 03-25-97
Received: 03-25-97
Analyzed: 03-31-97
Reported: 04-04-97

Volatile Organics by GC/MS (EPA 8260)

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT (ug/kg)*	*SAMPLE RESULT (ug/kg)*
Benzene	71-43-2	2.5	N.D.
Bromodichloromethane	75-27-4	2.5	N.D.
Bromoform	75-25-2	2.5	N.D.
Bromomethane	74-83-9	2.5	N.D.
Carbon Disulfide	75-15-0	5.0	N.D.
Carbon tetrachloride	56-23-5	2.5	N.D.
Chlorobenzene	108-90-7	2.5	N.D.
Chlorodibromomethane	124-48-1	2.5	N.D.
Chloroethane	75-00-3	2.5	N.D.
2-Chloroethyl vinyl ether	110-75-8	5.0	N.D.
Chloroform	67-66-3	2.5	N.D.
Chloromethane	74-87-3	2.5	N.D.
1,1-Dichloroethane	75-35-3	2.5	N.D.
1,2-Dichloroethane	107-06-2	2.5	N.D.
1,1-Dichloroethene	75-35-4	2.5	N.D.
Trans 1,2-Dichloroethene	156-60-5	2.5	N.D.
1,2-Dichloropropane	78-87-5	2.5	N.D.
cis-1,3-Dichloropropene	10061-01-5	2.5	N.D.
trans-1,3-Dichloropropene	10061-02-6	2.5	N.D.
Ethylbenzene	100-41-4	2.5	N.D.
Methylene chloride	75-09-2	5.0	N.D.
Styrene	100-42-5	2.5	N.D.
1,1,2,2-Tetrachloroethane	79-34-5	2.5	N.D.
Tetrachloroethene	127-18-4	2.5	N.D.
Toluene	108-88-3	2.5	N.D.
1,1,1-Trichloroethane	71-55-6	2.5	N.D.
1,1,2-Trichloroethane	79-00-5	2.5	N.D.
Trichloroethene	79-01-6	2.5	N.D.
Trichlorofluoromethane	75-69-4	5.0	N.D.
Vinyl acetate	108-05-4	5.0	N.D.
Vinyl chloride	75-01-4	2.5	N.D.
Total Xylenes	1330-20-7	2.5	N.D.
Dichlorofluoromethane	75-71-8	2.5	N.D.
cis-1-2,-Dichloroethane	156-59-4	2.5	N.D.
2,2-Dichloropropane	590-20-7	2.5	N.D.
Bromochloromethane	74-97-5	2.5	N.D.
1,1-Dichloropropene	563-58-6	2.5	N.D.
1,2-Dichloropropane	78-87-5	2.5	N.D.
Dibromomethane	74-95-3	2.5	N.D.
trans-1,3-Dichloropropane	10061-02-6	2.5	N.D.
1,1,2-Trichloroethane	79-00-5	2.5	N.D.
1,2-Dibromoethane	106-93-4	2.5	N.D.

ORANGE COAST ANALYTICAL, INC.
3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (602) 736-0960 Fax (602) 736-0970

Sample Description: Soil, B37-RE1-SPCONF

Laboratory Sample Number: 97030968

Volatile Organics by GC/MS (EPA 8260)

ANALYTE	CAS NUMBER	DETECTION LIMIT (ug/kg)	SAMPLE RESULT (ug/kg)
1,3-Dichloropropane	142-28-9	2.5	N.D.
Dibromochloromethane	124-48-1	2.5	N.D.
Isopropylbenzene	98-82-8	2.5	N.D.
1,1,2,2-Tetrachloroethane	79-34-5	2.5	N.D.
1,2,3-Trichloropropane	96-18-4	2.5	N.D.
Bromobenzene	108-86-1	2.5	N.D.
n-Propylbenzene	103-65-1	2.5	N.D.
2-Chlorotoluene	95-49-8	2.5	N.D.
1,3,5-Trimethylbenzene	108-67-8	2.5	N.D.
4-Chlorotoluene	106-43-4	2.5	N.D.
tert-Butylbenzene	98-06-6	2.5	N.D.
1,2,4-Trimethylbenzene	95-63-6	2.5	N.D.
sec-Butylbenzene	135-98-8	2.5	N.D.
4-Isopropyltoluene	99-87-6	2.5	N.D.
1,3-Dichlorobenzene	541-73-1	2.5	N.D.
1,4-Dichlorobenzene	106-46-7	2.5	N.D.
n-Butylbenzene	104-51-8	2.5	N.D.
1,2-Dichlorobenzene	95-50-1	2.5	N.D.
1-2-Dibromo-2-CPA	96-12-8	5.0	N.D.
1,2,4-Trichlorobenzene	120-82-1	2.5	N.D.
Hexachlorobutadiene	87-68-3	2.5	N.D.
Naphthalene	91-20-3	2.5	N.D.
1,2,3-Trichlorobenzene	87-61-6	2.5	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

ORANGE COAST ANALYTICAL

Mark Noorani
Laboratory Director

Surrogate Recoveries	*%*
Dibromofluoromethane	*110*
Toluene-d8	*95*
4-Bromofluorobenbzene	*106*

ORANGE COAST ANALYTICAL, INC.
3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (602) 736-0960 Fax (602) 736-0970

)ontgomery Watson
ATTN: Mr. Fred Strauss
250 N. Madison Ave.
Pasadena, CA 91101

Client Project ID: McDonnell Douglas
Client Project #: 1206035-01090010

Sample Description: Soil, B37-RE1-SPCONF
Laboratory Sample #: 97030968
Laboratory Reference #: MWI 8751

Sampled : 03-25-97
Received: 03-25-97
Analyzed: 04-02-97
Reported: 04-04-97

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*
Acenaphthene	83-32-9	800	N.D.
Acenaphthylene	208-96-8	800	N.D.
Aniline	62-53-3	800	N.D.
Anthracene	120-12-7	800	N.D.
Benzidine	92-87-5	4000	N.D.
Benzoic Acid	65-85-0	2000	N.D.
Benz (a)anthracene	56-55-3	800	N.D.
Benzo(b)fluoranthene	205-99-2	2000	N.D.
Benzo(k)fluoranthene	207-08-9	2000	N.D.
Benzo(g,h,i)perylene	191-24-2	2000	N.D.
)enzo(a)pyrene	50-32-8	2000	N.D.
Benzyl alcohol	100-51-6	800	N.D.
Bis(2-chloroethoxy)methane	111-91-1	800	N.D.
Bis(2-chloroethyl)ether	111-44-4	800	N.D.
Bis(2-chloroisopropyl)ether	39638-32-9	800	N.D.
Bis(2-ethylhexyl)phthalate	117-81-7	800	1,000 <---
4-Bromophenyl phenyl ether	101-55-3	800	N.D.
Butyl benzyl phthalate	85-68-7	800	N.D.
4-Chloroaniline	106-47-8	800	N.D.
2-Chloronaphthalene	91-58-7	800	N.D.
4-Chloro-3-methylphenol	59-50-7	800	N.D.
2-Chlorophenol	95-57-8	800	N.D.
4-Chlorophenyl phenyl ether	7005-72-3	800	N.D.
Chrysene	218-0109	800	N.D.
Dibenz(a,h)anthracene	53-70-3	800	N.D.
Dibenzofuran	132-64-9	800	N.D.
Di-n-butyl phthalate	84-74-2	2000	N.D.
1,3-Dichlorobenzene	541-73-1	800	N.D.
1,4-Dichlorobenzene	106-46-7	800	N.D.
1,2-Dichlorobenzene	95-50-1	800	N.D.
3,3'-Dichlorobenzidine	91-94-1	800	N.D.
2,4-Dichlorophenol	120-83-2	800	N.D.
Diethyl phthalate	84-66-2	800	N.D.
2,4-Dimethylphenol	105-67-9	800	N.D.
Dimethyl phthalate	131-11-3	800	N.D.
',6-Dinitro-2-methylphenol	534-52-1	800	N.D.
2,4-Dinitrophenol	51-28-5	800	N.D.

ORANGE COAST ANALYTICAL, INC.
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4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (602) 736-0960 Fax (602) 736-0970

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270) (continued)

Sample Description: Soil, B37-RE1-SPCONF
Laboratory Sample #: 97030968

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*
2,4-Dinitrotoluene	121-14-2	2000	N.D.
2,6-Dinitrotoluene	606-20-2	2000	N.D.
Di-n-octyl phthalate	117-84-0	2000	N.D.
Fluoranthene	206-44-0	800	N.D.
Fluorene	86-73-7	800	N.D.
Hexachlorobenzene	118-74-1	800	N.D.
Hexachlorobutadiene	87-68-3	800	N.D.
Hexachlorocyclopentadiene	77-47-4	800	N.D.
Hexachloroethane	67-72-1	800	N.D.
Indeno(1,2,3-cd)pyrene	193-39-5	2000	N.D.
Isophorone	78-59-1	800	N.D.
2-Methylnaphthalene	91-57-6	800	N.D.
2-Methylphenol	95-48-7	800	N.D.
4-Methylphenol	106-44-5	800	N.D.
Naphthalene	91-20-3	800	N.D.
2-Nitroaniline	88-74-4	2000	N.D.
3-Nitroaniline	99-09-2	2000	N.D.
4-Nitroaniline	100-01-6	2000	N.D.
Nitrobenzene	98-95-3	800	N.D.
2-Nitrophenol	88-75-5	800	N.D.
4-Nitrophenol	100-02-7	800	N.D.
N-Nitrosodiphenylamine	86-30-6	800	N.D.
N-Nitroso-di-n-propylamine	621-64-7	800	N.D.
N-Nitrosodimethylamine	62-75-9	800	N.D.
Pentachlorophenol	87-86-5	2000	N.D.
Phenanthrene	85-01-8	800	N.D.
Phenol	108-95-2	800	N.D.
Pyrene	129-00-0	800	N.D.
1,2,4-Trichlorobenzene	120-82-1	800	N.D.
2,4,5-Trichlorophenol	95-95-4	800	N.D.
2,4,6-Trichlorophenol	88-06-2	800	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

ORANGE COAST ANALYTICAL

Mark Noorani
Laboratory Director

ORANGE COAST ANALYTICAL, INC.
3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (602) 736-0960 Fax (602) 736-0970

Montgomery Watson
ATTN: Mr. Fred Strauss
250 N. Madison Ave.
Pasadena, CA 91101

Client Project ID: McDonnell Douglas
Client Project #: 1206035.01090010

Analysis Method: 418.1

Sample Description: Water

Laboratory Reference #: MWI 8751

Sampled : 03-25-97
Received: 03-25-97
Analyzed: 03-28-97
Reported: 04-04-97

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Laboratory Sample Number	*Client Sample Number*	*Sample Result (mg/l)*
97030977	Equip Blank	N.D.
97030978	Rinsate Blank	N.D.
Detection Limit:		0.5

Analyte reported as N.D. was not present above the stated limit of detection.

ORANGE COAST ANALYTICAL

Mark Noorani
Laboratory Director

ORANGE COAST ANALYTICAL, INC.
3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (602) 736-0960 Fax (602) 736-0970

Montgomery Watson
ATTN: Mr. Fred Strauss
250 N. Madison Ave.
Pasadena, CA 91101

Client Project ID: McDonnell Douglas
Client Project #: 1206035.01090010

Sample Description: Water, Equip Blank

Laboratory Sample Number: 97030977
Laboratory Reference #: MWI 8751

Sampled: 03-25-97
Received: 03-25-97
Analyzed: 03-27-97
Reported: 04-04-97

CCR - METALS

Analyte	*EPA Method*	*Detection Limit mg/l*	*Analysis Result mg/l*
Antimony	6010	0.5	N.D.
Arsenic	6010	0.1	N.D.
Barium	6010	0.01	N.D.
Beryllium	6010	0.01	N.D.
Cadmium	6010	0.01	N.D.
Chromium (VI)	7196	0.01	N.D.
Chromium (Total)	6010	0.01	N.D.
Cobalt	6010	0.05	N.D.
Copper	6010	0.01	N.D.
Lead	6010	0.1	N.D.
Mercury	7471	0.002	N.D.
Molybdenum	6010	0.1	N.D.
Nickel	6010	0.05	N.D.
Selenium	6010	0.1	N.D.
Silver	6010	0.05	N.D.
Thallium	6010	0.5	N.D.
Vanadium	6010	0.1	N.D.
Zinc	6010	0.01	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

ORANGE COAST ANALYTICAL

Mark Noorani
Laboratory Director

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Montgomery Watson
ATTN: Mr. Fred Strauss
250 N. Madison Ave.
Pasadena, CA 91101

Client Project ID: McDonnell Douglas
Client Project #: 1206035.01090010

Sample Description: Water, Rinsate Blank

Laboratory Sample Number: 97030978
Laboratory Reference #: MWI 8751

Sampled: 03-25-97
Received: 03-25-97
Analyzed: 03-27-97
Reported: 04-04-97

CCR - METALS

Analyte	*EPA Method*	*Detection Limit mg/l*	*Analysis Result mg/l*
Antimony	6010	0.5	N.D.
Arsenic	6010	0.1	N.D.
Barium	6010	0.01	N.D.
Beryllium	6010	0.01	N.D.
Cadmium	6010	0.01	N.D.
Chromium (VI)	7196	0.01	N.D.
Chromium (Total)	6010	0.01	N.D.
Cobalt	6010	0.05	N.D.
Copper	6010	0.01	N.D.
Lead	6010	0.1	N.D.
Mercury	7471	0.002	N.D.
Molybdenum	6010	0.1	N.D.
Nickel	6010	0.05	N.D.
Selenium	6010	0.1	N.D.
Silver	6010	0.05	N.D.
Thallium	6010	0.5	N.D.
Vanadium	6010	0.1	N.D.
Zinc	6010	0.01	N.D.

Analytes reported as N.D. were not present above the stated limit of detection

ORANGE COAST ANALYTICAL

Mark Noorani
Laboratory Director

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4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (602) 736-0960 Fax (602) 736-0970

Montgomery Watson
ATTN: Mr. Fred Strauss
250 N. Madison Ave.
Pasadena, CA 91101

Client Project ID: McDonnell Douglas
Client Project #: 1206035-01090010

Sample Description: Water, Equip Blank
Laboratory Sample Number: 97030977
Laboratory Reference #: MWI 8751

Sampled: 03-24-97
Received: 03-24-97
Analyzed: 04-01-97
Reported: 04-04-97

Volatile Organics by GC/MS (EPA 8260)

ANALYTE	***CAS NUMBER***	***DETECTION LIMIT (ug/l)***	***SAMPLE RESULT (ug/l)***
Benzene	71-43-2	0.5	N.D.
Bromodichloromethane	75-27-4	0.5	N.D.
Bromoform	75-25-2	0.5	N.D.
Bromomethane	74-83-9	1.0	N.D.
Carbon Disulfide	75-15-0	0.5	N.D.
Carbon tetrachloride	56-23-5	0.5	N.D.
Chlorobenzene	108-90-7	0.5	N.D.
Chlorodibromomethane	124-48-1	0.5	N.D.
Chloroethane	75-00-3	0.5	N.D.
2-Chloroethyl vinyl ether	110-75-8	1.0	N.D.
Chloroform	67-66-3	0.5	N.D.
Chloromethane	74-87-3	0.5	N.D.
1,1-Dichloroethane	75-35-3	0.5	N.D.
1,2-Dichloroethane	107-06-2	0.5	N.D.
1,1-Dichloroethene	75-35-4	0.5	N.D.
Trans 1,2-Dichloroethene	156-60-5	0.5	N.D.
1,2-Dichloropropane	78-87-5	0.5	N.D.
cis-1,3-Dichloropropene	10061-01-5	0.5	N.D.
trans-1,3-Dichloropropene	10061-02-6	0.5	N.D.
Ethylbenzene	100-41-4	0.5	N.D.
Methylene chloride	75-09-2	2.5	N.D.
Styrene	100-42-5	0.5	N.D.
1,1,2,2-Tetrachloroethane	79-34-5	0.5	N.D.
Tetrachloroethene	127-18-4	0.5	N.D.
Toluene	108-88-3	0.5	N.D.
1,1,1-Trichloroethane	71-55-6	0.5	N.D.
1,1,2-Trichloroethane	79-00-5	0.5	N.D.
Trichloroethene	79-01-6	0.5	N.D.
Trichlorofluoromethane	75-69-4	0.5	N.D.
Vinyl acetate	108-05-4	1.0	N.D.
Vinyl chloride	75-01-4	0.5	N.D.
Total Xylenes	1330-20-7	1.0	N.D.
Dichlorofluoromethane	75-71-8	0.5	N.D.
cis-1-2,-Dichloroethane	156-59-4	0.5	N.D.
2,2-Dichloropropane	590-20-7	0.5	N.D.
Bromochloromethane	74-97-5	0.5	N.D.
1,1-Dichloropropene	563-58-6	0.5	N.D.
1,2-Dichloropropane	78-87-5	0.5	N.D.
Dibromomethane	74-95-3	0.5	N.D.
trans-1,3-Dichloropropane	10061-02-6	0.5	N.D.
1,1,2-Trichloroethane	79-00-5	0.5	N.D.
1,2-Dibromoethane	106-93-4	0.5	N.D.

ORANGE COAST ANALYTICAL, INC.
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4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (602) 736-0960 Fax (602) 736-0970

Sample Description: Water, Equip Blank

Laboratory Sample Number: 97030977

Volatile Organics by GC/MS (EPA 8260)

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT (ug/l)*	*SAMPLE RESULT (ug/l)*
1,3-Dichloropropane	142-28-9	0.5	N.D.
Dibromochloromethane	124-48-1	0.5	N.D.
Isopropylbenzene	98-82-8	0.5	N.D.
1,1,2,2-Tetrachloroethane	79-34-5	0.5	N.D.
1,2,3-Trichloropropane	96-18-4	0.5	N.D.
Bromobenzene	108-86-1	0.5	N.D.
n-Propylbenzene	103-65-1	0.5	N.D.
2-Chlorotoluene	95-49-8	0.5	N.D.
1,3,5-Trimethylbenzene	108-67-8	0.5	N.D.
4-Chlorotoluene	106-43-4	0.5	N.D.
tert-Butylbenzene	98-06-6	0.5	N.D.
1,2,4-Trimethylbenzene	95-63-6	0.5	N.D.
sec-Butylbenzene	135-98-8	0.5	N.D.
4-Isopropyltoluene	99-87-6	0.5	N.D.
1,3-Dichlorobenzene	541-73-1	0.5	N.D.
1,4-Dichlorobenzene	106-46-7	0.5	N.D.
n-Butylbenzene	104-51-8	0.5	N.D.
1,2-Dichlorobenzene	95-50-1	0.5	N.D.
1-2-Dibromo-2-CPA	96-12-8	1.0	N.D.
1,2,4-Trichlorobenzene	120-82-1	0.5	N.D.
Hexachlorobutadiene	87-68-3	0.5	N.D.
Naphthalene	91-20-3	0.5	N.D.
1,2,3-Trichlorobenzene	87-61-6	0.5	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

ORANGE COAST ANALYTICAL

Mark Noorani
Laboratory Director

Surrogate Recoveries	*%*
Dibromofluoromethane	*102*
Toluene-d8	*91*
4-Bromofluorobenbzene	*104*

ORANGE COAST ANALYTICAL, INC.
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4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (602) 736-0960 Fax (602) 736-0970

Montgomery Watson
ATTN: Mr. Fred Strauss
250 N. Madison Ave.
Pasadena, CA 91101

Client Project ID: McDonnell Douglas
Client Project #: 1206035-01090010

Sample Description: Water, Rinsate Blank
Laboratory Sample Number: 97030978
Laboratory Reference #: MWI 8751

Sampled: 03-24-97
Received: 03-24-97
Analyzed: 04-01-97
Reported: 04-04-97

Volatile Organics by GC/MS (EPA 8260)

ANALYTE	***CAS NUMBER***	***DETECTION LIMIT (ug/l)***	***SAMPLE RESULT (ug/l)***
Benzene	71-43-2	0.5	N.D.
Bromodichloromethane	75-27-4	0.5	N.D.
Bromoform	75-25-2	0.5	N.D.
Bromomethane	74-83-9	1.0	N.D.
Carbon Disulfide	75-15-0	0.5	N.D.
Carbon tetrachloride	56-23-5	0.5	N.D.
Chlorobenzene	108-90-7	0.5	N.D.
Chlorodibromomethane	124-48-1	0.5	N.D.
Chloroethane	75-00-3	0.5	N.D.
2-Chloroethyl vinyl ether	110-75-8	1.0	N.D.
Chloroform	67-66-3	0.5	N.D.
Chloromethane	74-87-3	0.5	N.D.
1,1-Dichloroethane	75-35-3	0.5	N.D.
1,2-Dichloroethane	107-06-2	0.5	N.D.
1,1-Dichloroethene	75-35-4	0.5	N.D.
Trans 1,2-Dichloroethene	156-60-5	0.5	N.D.
1,2-Dichloropropane	78-87-5	0.5	N.D.
cis-1,3-Dichloropropene	10061-01-5	0.5	N.D.
trans-1,3-Dichloropropene	10061-02-6	0.5	N.D.
Ethylbenzene	100-41-4	0.5	N.D.
Methylene chloride	75-09-2	2.5	N.D.
Styrene	100-42-5	0.5	N.D.
1,1,2,2-Tetrachloroethane	79-34-5	0.5	N.D.
Tetrachloroethene	127-18-4	0.5	N.D.
Toluene	108-88-3	0.5	N.D.
1,1,1-Trichloroethane	71-55-6	0.5	N.D.
1,1,2-Trichloroethane	79-00-5	0.5	N.D.
Trichloroethene	79-01-6	0.5	N.D.
Trichlorofluoromethane	75-69-4	0.5	N.D.
Vinyl acetate	108-05-4	1.0	N.D.
Vinyl chloride	75-01-4	0.5	N.D.
Total Xylenes	1330-20-7	1.0	N.D.
Dichlorofluoromethane	75-71-8	0.5	N.D.
cis-1-2,-Dichloroethane	156-59-4	0.5	N.D.
2,2-Dichloropropane	590-20-7	0.5	N.D.
Bromochloromethane	74-97-5	0.5	N.D.
1,1-Dichloropropene	563-58-6	0.5	N.D.
1,2-Dichloropropane	78-87-5	0.5	N.D.
Dibromomethane	74-95-3	0.5	N.D.
trans-1,3-Dichloropropane	10061-02-6	0.5	N.D.
1,1,2-Trichloroethane	79-00-5	0.5	N.D.
1,2-Dibromoethane	106-93-4	0.5	N.D.

ORANGE COAST ANALYTICAL, INC.
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4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (602) 736-0960 Fax (602) 736-0970

Sample Description: Water, Rinsate Blank

Laboratory Sample Number: 97030978

Volatile Organics by GC/MS (EPA 8260)

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT (ug/l)*	*SAMPLE RESULT (ug/l)*
1,3-Dichloropropane	142-28-9	0.5	N.D.
Dibromochloromethane	124-48-1	0.5	N.D.
Isopropylbenzene	98-82-8	0.5	N.D.
1,1,2,2-Tetrachloroethane	79-34-5	0.5	N.D.
1,2,3-Trichloropropane	96-18-4	0.5	N.D.
Bromobenzene	108-86-1	0.5	N.D.
n-Propylbenzene	103-65-1	0.5	N.D.
2-Chlorotoluene	95-49-8	0.5	N.D.
1,3,5-Trimethylbenzene	108-67-8	0.5	N.D.
4-Chlorotoluene	106-43-4	0.5	N.D.
tert-Butylbenzene	98-06-6	0.5	N.D.
1,2,4-Trimethylbenzene	95-63-6	0.5	N.D.
sec-Butylbenzene	135-98-8	0.5	N.D.
4-Isopropyltoluene	99-87-6	0.5	N.D.
1,3-Dichlorobenzene	541-73-1	0.5	N.D.
1,4-Dichlorobenzene	106-46-7	0.5	N.D.
n-Butylbenzene	104-51-8	0.5	N.D.
1,2-Dichlorobenzene	95-50-1	0.5	N.D.
1-2-Dibromo-2-CPA	96-12-8	1.0	N.D.
1,2,4-Trichlorobenzene	120-82-1	0.5	N.D.
Hexachlorobutadiene	87-68-3	0.5	N.D.
Naphthalene	91-20-3	0.5	N.D.
1,2,3-Trichlorobenzene	87-61-6	0.5	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

ORANGE COAST ANALYTICAL

Mark Noorani
Laboratory Director

Surrogate Recoveries	*%*
Dibromofluoromethane	*99*
Toluene-d8	*93*
4-Bromofluorobenbzene	*106*

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Montgomery Watson
ATTN: Mr. Fred Strauss
250 N. Madison Ave.
Pasadena, CA 91101

Client Project ID: McDonnell Douglas
Client Project #: 1206035-01090010

Sample Description: Water, Trip Blank
Laboratory Sample Number: 97030979
Laboratory Reference #: MWI 8751

Sampled: 03-24-97
Received: 03-24-97
Analyzed: 04-01-97
Reported: 04-04-97

Volatile Organics by GC/MS (EPA 8260)

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT (ug/l)*	*SAMPLE RESULT (ug/l)*
Benzene	71-43-2	0.5	N.D.
Bromodichloromethane	75-27-4	0.5	N.D.
Bromoform	75-25-2	0.5	N.D.
Bromomethane	74-83-9	1.0	N.D.
Carbon Disulfide	75-15-0	0.5	N.D.
Carbon tetrachloride	56-23-5	0.5	N.D.
Chlorobenzene	108-90-7	0.5	N.D.
Chlorodibromomethane	124-48-1	0.5	N.D.
Chloroethane	75-00-3	0.5	N.D.
2-Chloroethyl vinyl ether	110-75-8	1.0	N.D.
Chloroform	67-66-3	0.5	N.D.
Chloromethane	74-87-3	0.5	N.D.
1,1-Dichloroethane	75-35-3	0.5	N.D.
1,2-Dichloroethane	107-06-2	0.5	N.D.
1,1-Dichloroethene	75-35-4	0.5	N.D.
Trans 1,2-Dichloroethene	156-60-5	0.5	N.D.
1,2-Dichloropropane	78-87-5	0.5	N.D.
cis-1,3-Dichloropropene	10061-01-5	0.5	N.D.
trans-1,3-Dichloropropene	10061-02-6	0.5	N.D.
Ethylbenzene	100-41-4	0.5	N.D.
Methylene chloride	75-09-2	2.5	N.D.
Styrene	100-42-5	0.5	N.D.
1,1,2,2-Tetrachloroethane	79-34-5	0.5	N.D.
Tetrachloroethene	127-18-4	0.5	N.D.
Toluene	108-88-3	0.5	N.D.
1,1,1-Trichloroethane	71-55-6	0.5	N.D.
1,1,2-Trichloroethane	79-00-5	0.5	N.D.
Trichloroethene	79-01-6	0.5	N.D.
Trichlorofluoromethane	75-69-4	0.5	N.D.
Vinyl acetate	108-05-4	1.0	N.D.
Vinyl chloride	75-01-4	0.5	N.D.
Total Xylenes	1330-20-7	1.0	N.D.
Dichlorofluoromethane	75-71-8	0.5	N.D.
cis-1-2,-Dichloroethane	156-59-4	0.5	N.D.
2,2-Dichloropropane	590-20-7	0.5	N.D.
Bromochloromethane	74-97-5	0.5	N.D.
1,1-Dichloropropene	563-58-6	0.5	N.D.
1,2-Dichloropropane	78-87-5	0.5	N.D.
Dibromomethane	74-95-3	0.5	N.D.
trans-1,3-Dichloropropane	10061-02-6	0.5	N.D.
1,1,2-Trichloroethane	79-00-5	0.5	N.D.
1,2-Dibromoethane	106-93-4	0.5	N.D.

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4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (602) 736-0960 Fax (602) 736-0970

Sample Description: Water, Trip Blank

Laboratory Sample Number: 97030979

Volatile Organics by GC/MS (EPA 8260)

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT (ug/l)*	*SAMPLE RESULT (ug/l)*
1,3-Dichloropropane	142-28-9	0.5	N.D.
Dibromochloromethane	124-48-1	0.5	N.D.
Isopropylbenzene	98-82-8	0.5	N.D.
1,1,2,2-Tetrachloroethane	79-34-5	0.5	N.D.
1,2,3-Trichloropropane	96-18-4	0.5	N.D.
Bromobenzene	108-86-1	0.5	N.D.
n-Propylbenzene	103-65-1	0.5	N.D.
2-Chlorotoluene	95-49-8	0.5	N.D.
1,3,5-Trimethylbenzene	108-67-8	0.5	N.D.
4-Chlorotoluene	106-43-4	0.5	N.D.
tert-Butylbenzene	98-06-6	0.5	N.D.
1,2,4-Trimethylbenzene	95-63-6	0.5	N.D.
sec-Butylbenzene	135-98-8	0.5	N.D.
4-Isopropyltoluene	99-87-6	0.5	N.D.
1,3-Dichlorobenzene	541-73-1	0.5	N.D.
1,4-Dichlorobenzene	106-46-7	0.5	N.D.
n-Butylbenzene	104-51-8	0.5	N.D.
1,2-Dichlorobenzene	95-50-1	0.5	N.D.
1-2-Dibromo-2-CPA	96-12-8	1.0	N.D.
1,2,4-Trichlorobenzene	120-82-1	0.5	N.D.
Hexachlorobutadiene	87-68-3	0.5	N.D.
Naphthalene	91-20-3	0.5	N.D.
1,2,3-Trichlorobenzene	87-61-6	0.5	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

ORANGE COAST ANALYTICAL

Mark Noorani
Laboratory Director

Surrogate Recoveries	*%*
Dibromofluoromethane	*96*
Toluene-d8	*93*
4-Bromofluorobenbzene	*104*

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Montgomery Watson
ATTN: Mr. Fred Strauss
250 N. Madison Ave.
Pasadena, CA 91101

Client Project ID: McDonnell Douglas
Client Project #: 1206035.01090010

Sample Description: Water, Equip Blank
Laboratory Sample #: 97030977
Laboratory Reference #: MWI 8751

Sampled : 03-25-97
Received: 03-25-97
Analyzed: 03-28-97
Reported: 04-04-97

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/l*	*SAMPLE RESULTS ug/l*
Acenaphthene	83-32-9	5.0	N.D.
Acenaphthylene	208-96-8	5.0	N.D.
Aniline	62-53-3	5.0	N.D.
Anthracene	120-12-7	5.0	N.D.
Benzidine	92-87-5	5.0	N.D.
Benzoic Acid	65-85-0	50	N.D.
Benzo(a)anthracene	56-55-3	5.0	N.D.
Benzo(b)fluoranthene	205-99-2	25	N.D.
Benzo(k)fluoranthene	207-08-9	25	N.D.
Benzo(g,h,i)perylene	191-24-2	25	N.D.
Benzo(a)pyrene	50-32-8	25	N.D.
Benzyl alcohol	100-51-6	50	N.D.
Bis(2-chloroethoxy)methane	111-91-1	5.0	N.D.
Bis(2-chloroethyl)ether	111-44-4	5.0	N.D.
Bis(2-chloroisopropyl)ether	39638-32-9	5.0	N.D.
Bis(2-ethylhexyl)phthalate	117-81-7	3.0	N.D.
4-Bromophenyl phenyl ether	101-55-3	5.0	N.D.
Butyl benzyl phthalate	85-68-7	5.0	N.D.
4-Chloroaniline	106-47-8	5.0	N.D.
2-Chloronaphthalene	91-58-7	5.0	N.D.
4-Chloro-3-methylphenol	59-50-7	5.0	N.D.
2-Chlorophenol	95-57-8	5.0	N.D.
4-Chlorophenyl phenyl ether	7005-72-3	5.0	N.D.
Chrysene	218-0109	5.0	N.D.
Dibenz(a,h)anthracene	53-70-3	25	N.D.
Dibenzofuran	132-64-9	5.0	N.D.
Di-N-butyl phthalate	84-74-2	5.0	N.D.
1,3-Dichlorobenzene	541-73-1	5.0	N.D.
1,4-Dichlorobenzene	106-46-7	5.0	N.D.
1,2-Dichlorobenzene	95-50-1	5.0	N.D.
3,3-Dichlorobenzidine	91-94-1	5.0	N.D.
2,4-Dichlorophenol	120-83-2	5.0	N.D.
Diethyl phthalate	84-66-2	5.0	N.D.
2,4-Dimethylphenol	105-67-9	5.0	N.D.
Dimethyl phthalate	131-11-3	5.0	N.D.
4,6-Dinitro-2-methylphenol	534-52-1	50	N.D.
2,4-Dinitrophenol	51-28-5	50	N.D.

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SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270) (continued)

Sample Description: Water, Equip Blank
Laboratory Sample #: 97030977

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/l*	*SAMPLE RESULTS ug/l*
2,4-Dinitrotoluene	121-14-2	5.0	N.D.
2,6-Dinitrotoluene	606-20-2	5.0	N.D.
Di-N-octyl phthalate	117-84-0	25	N.D.
Fluoranthene	206-44-0	5.0	N.D.
Fluorene	86-73-7	5.0	N.D.
Hexachlorobenzene	118-74-1	5.0	N.D.
Hexachlorobutadiene	87-68-3	5.0	N.D.
Hexachlorocyclopentadiene	77-47-4	5.0	N.D.
Hexachloroethane	67-72-1	5.0	N.D.
Indeno(1,2,3-cd)pyrene	193-39-5	25	N.D.
Isophorone	78-59-1	5.0	N.D.
2-Methylnaphthalene	91-57-6	5.0	N.D.
2-Methylphenol	95-48-7	5.0	N.D.
4-Methylphenol	106-44-5	5.0	N.D.
Naphthalene	91-20-3	50	N.D.
2-Nitroaniline	88-74-4	50	N.D.
3-Nitroaniline	99-09-2	50	N.D.
4-Nitroaniline	100-01-6	5.0	N.D.
Nitrobenzene	98-95-3	5.0	N.D.
2-Nitrophenol	88-75-5	5.0	N.D.
4-Nitrophenol	100-02-7	50	N.D.
N-Nitrosodiphenylamine	86-30-6	5.0	N.D.
N-Nitroso-di-N-propylamine	621-64-7	5.0	N.D.
N-Nitrosodimethylamine	62-75-9	5.0	N.D.
Pentachlorophenol	87-86-5	50	N.D.
Phenanthrene	85-01-8	5.0	N.D.
Phenol	108-95-2	5.0	N.D.
Pyrene	129-00-0	5.0	N.D.
1,2,4-Trichlorobenzene	120-82-1	5.0	N.D.
2,4,5-Trichlorophenol	95-95-4	5.0	N.D.
2,4,6-Trichlorophenol	88-06-2	5.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection

ORANGE COAST ANALYTICAL

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ORANGE COAST ANALYTICAL, INC.
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Montgomery Watson
ATTN: Mr. Fred Strauss
250 N. Madison Ave.
Pasadena, CA 91101

Client Project ID: McDonnell Douglas
Client Project #: 1206035.01090010

Sampled : 03-25-97
Sample Description: Water, Rinsate Blank *Received:* 03-25-97
Laboratory Sample #: 97030978 *Analyzed:* 03-28-97
Laboratory Reference #: MWI 8751 *Reported:* 04-04-97

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/l*	*SAMPLE RESULTS ug/l*
Acenaphthene	83-32-9	5.0	N.D.
Acenaphthylene	208-96-8	5.0	N.D.
Aniline	62-53-3	5.0	N.D.
Anthracene	120-12-7	5.0	N.D.
Benzidine	92-87-5	5.0	N.D.
Benzoic Acid	65-85-0	50	N.D.
Benzo(a)anthracene	56-55-3	5.0	N.D.
Benzo(b)fluoranthene	205-99-2	25	N.D.
Benzo(k)fluoranthene	207-08-9	25	N.D.
Benzo(g,h,i)perylene	191-24-2	25	N.D.
Benzo(a)pyrene	50-32-8	25	N.D.
Benzyl alcohol	100-51-6	50	N.D.
Bis(2-chloroethoxy)methane	111-91-1	5.0	N.D.
Bis(2-chloroethyl)ether	111-44-4	5.0	N.D.
Bis(2-chloroisopropyl)ether	39638-32-9	5.0	N.D.
Bis(2-ethylhexyl)phthalate	117-81-7	3.0	N.D.
4-Bromophenyl phenyl ether	101-55-3	5.0	N.D.
Butyl benzyl phthalate	85-68-7	5.0	N.D.
4-Chloroaniline	106-47-8	5.0	N.D.
2-Chloronaphthalene	91-58-7	5.0	N.D.
4-Chloro-3-methylphenol	59-50-7	5.0	N.D.
2-Chlorophenol	95-57-8	5.0	N.D.
4-Chlorophenyl phenyl ether	7005-72-3	5.0	N.D.
Chrysene	218-0109	5.0	N.D.
Dibenz(a,h)anthracene	53-70-3	25	N.D.
Dibenzofuran	132-64-9	5.0	N.D.
Di-N-butyl phthalate	84-74-2	5.0	N.D.
1,3-Dichlorobenzene	541-73-1	5.0	N.D.
1,4-Dichlorobenzene	106-46-7	5.0	N.D.
1,2-Dichlorobenzene	95-50-1	5.0	N.D.
3,3-Dichlorobenzidine	91-94-1	5.0	N.D.
2,4-Dichlorophenol	120-83-2	5.0	N.D.
Diethyl phthalate	84-66-2	5.0	N.D.
2,4-Dimethylphenol	105-67-9	5.0	N.D.
Dimethyl phthalate	131-11-3	5.0	N.D.
4,6-Dinitro-2-methylphenol	534-52-1	50	N.D.
2,4-Dinitrophenol	51-28-5	50	N.D.

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SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270) (continued)

Sample Description: Water, Rinsate Blank
Laboratory Sample #: 97030978

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/l*	*SAMPLE RESULTS ug/l*
2,4-Dinitrotoluene	121-14-2	5.0	N.D.
2,6-Dinitrotoluene	606-20-2	5.0	N.D.
Di-N-octyl phthalate	117-84-0	25	N.D.
Fluoranthene	206-44-0	5.0	N.D.
Fluorene	86-73-7	5.0	N.D.
Hexachlorobenzene	118-74-1	5.0	N.D.
Hexachlorobutadiene	87-68-3	5.0	N.D.
Hexachlorocyclopentadiene	77-47-4	5.0	N.D.
Hexachloroethane	67-72-1	5.0	N.D.
Indeno(1,2,3-cd)pyrene	193-39-5	25	N.D.
Isophorone	78-59-1	5.0	N.D.
2-Methylnaphthalene	91-57-6	5.0	N.D.
2-Methylphenol	95-48-7	5.0	N.D.
4-Methylphenol	106-44-5	5.0	N.D.
aphthalene	91-20-3	50	N.D.
2-Nitroaniline	88-74-4	50	N.D.
3-Nitroaniline	99-09-2	50	N.D.
4-Nitroaniline	100-01-6	5.0	N.D.
Nitrobenzene	98-95-3	5.0	N.D.
2-Nitrophenol	88-75-5	5.0	N.D.
4-Nitrophenol	100-02-7	50	N.D.
N-Nitrosodiphenylamine	86-30-6	5.0	N.D.
N-Nitroso-di-N-propylamine	621-64-7	5.0	N.D.
N-Nitrosodimethylamine	62-75-9	5.0	N.D.
Pentachlorophenol	87-86-5	50	N.D.
Phenanthrene	85-01-8	5.0	N.D.
Phenol	108-95-2	5.0	N.D.
Pyrene	129-00-0	5.0	N.D.
1,2,4-Trichlorobenzene	120-82-1	5.0	N.D.
2,4,5-Trichlorophenol	95-95-4	5.0	N.D.
2,4,6-Trichlorophenol	88-06-2	5.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Montgomery Watson
ATTN: Mr. Fred Strauss
250 N. Madison Ave.
Pasadena, CA 91101

Client Project ID: McDonnell Douglas
Client Project #: 1206035.01090010

Sample Description: Water, Equip Blank

Laboratory Sample Number: 97030977
Laboratory Reference #: MWI 8751

Sampled: 03-25-97
Received: 03-25-97
Analyzed: 03-26-97
Reported: 04-04-97

PCB'S (EPA 8080)

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT (ug/l)*	*SAMPLE RESULTS (ug/l)*
PCB-1016	12674-11-2	5.0	N.D.
PCB-1221	11104-28-2	5.0	N.D.
PCB-1232	11141-16-5	5.0	N.D.
PCB-1242	53469-21-9	5.0	N.D.
PCB-1248	12672-29-6	5.0	N.D.
PCB-1254	11097-69-1	5.0	N.D.
PCB-1260	11096-82-5	5.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Montgomery Watson
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Pasadena, CA 91101

Client Project ID: McDonnell Douglas
Client Project #: 1206035.01090010

Sample Description: Water, Rinsate Blank

Laboratory Sample Number: 97030978
Laboratory Reference #: MWI 8751

Sampled: 03-25-97
Received: 03-25-97
Analyzed: 03-26-97
Reported: 04-04-97

PCB'S (EPA 8080)

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT (ug/l)*	*SAMPLE RESULTS (ug/l)*
PCB-1016	12674-11-2	5.0	N.D.
PCB-1221	11104-28-2	5.0	N.D.
PCB-1232	11141-16-5	5.0	N.D.
PCB-1242	53469-21-9	5.0	N.D.
PCB-1248	12672-29-6	5.0	N.D.
PCB-1254	11097-69-1	5.0	N.D.
PCB-1260	11096-82-5	5.0	N.D.

Analytes reported as N.D. were not present above the stated limit o detection.

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Montgomery Watson
ATTN: Mr. Fred Strauss
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Pasadena, CA 91101

Client Project ID: McDonnell Dougla
Client Project #: 1206035.01090010

Sample Description: Water, Equip Blank

Laboratory Sample Number: 97030977
Laboratory Reference #: MWI 8751

Sampled: 03-25-97
Received: 03-25-97
Analyzed: 03-26-97
Reported: 04-04-97

ORGANOCHLORINE PESTICIDES (EPA 8080)

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT (ug/l)*	*SAMPLE RESULTS (ug/l)*
Aldrin	309-00-2	0.1	N.D.
alpha-BHC	319-84-6	0.2	N.D.
beta-BHC	319-85-7	0.2	N.D.
delta-BHC	319-86-8	0.2	N.D.
gamma-BHC (Lindane)	58-89-9	0.2	N.D.
Chlordane	57-74-9	0.2	N.D.
4,4'-DDD	72-54-8	0.5	N.D.
4,4'-DDE	72-55-9	0.1	N.D.
4,4'-DDT	50-29-3	0.1	N.D.
Dieldrin	60-57-1	0.5	N.D.
Endosulfan I	959-98-8	0.5	N.D.
Endosulfan II	33213-65-9	0.5	N.D.
Endosulfan sulfate	1031-07-8	0.5	N.D.
Endrin	72-20-8	0.02	N.D.
Endrin aldehyde	7421-93-4	0.2	N.D.
Heptachlor	76-44-8	0.1	N.D.
Heptachlor epoxide	1024-57-3	0.2	N.D.
Methoxychlor	72-43-5	9.0	N.D.
Toxaphene	8001-35-2	0.5	N.D.

Analytes reported as N.D. were not present above the stated limit c
detection.

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Montgomery Watson
ATTN: Mr. Fred Strauss
250 N. Madison Ave.
Pasadena, CA 91101

Client Project ID: McDonnell Douglas
Client Project #: 1206035.01090010

Sample Description: Water, Rinsate Blank

Laboratory Sample Number: 97030978
Laboratory Reference #: MWI 8751

Sampled: 03-25-97
Received: 03-25-97
Analyzed: 03-26-97
Reported: 04-04-97

ORGANOCHLORINE PESTICIDES (EPA 8080)

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT (ug/l)*	*SAMPLE RESULTS (ug/l)*
Aldrin	309-00-2	0.1	N.D.
alpha-BHC	319-84-6	0.2	N.D.
beta-BHC	319-85-7	0.2	N.D.
delta-BHC	319-86-8	0.2	N.D.
gamma-BHC (Lindane)	58-89-9	0.2	N.D.
Chlordane	57-74-9	0.2	N.D.
4,4'-DDD	72-54-8	0.5	N.D.
4,4'-DDE	72-55-9	0.1	N.D.
4,4'-DDT	50-29-3	0.1	N.D.
Dieldrin	60-57-1	0.5	N.D.
Endosulfan I	959-98-8	0.5	N.D.
Endosulfan II	33213-65-9	0.5	N.D.
Endosulfan sulfate	1031-07-8	0.5	N.D.
Endrin	72-20-8	0.02	N.D.
Endrin aldehyde	7421-93-4	0.2	N.D.
Heptachlor	76-44-8	0.1	N.D.
Heptachlor epoxide	1024-57-3	0.2	N.D.
Methoxychlor	72-43-5	9.0	N.D.
Toxaphene	8001-35-2	0.5	N.D.

Analytes reported as N.D. were not present above the stated limit o
detection.

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QC DATA REPORT

Analysis : Metals

Date of Analysis : 03/28/97
Laboratory Sample No : 97030976
Laboratory Reference No : MWI 8751

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Antimony	0.00	30.00	31.40	30.60	105	102	3
Arsenic	0.00	10.00	8.60	9.10	86	91	6
Barium	12.00	10.00	24.00	21.00	120	90	13
Beryllium	0.00	1.00	0.95	0.99	95	99	4
Cadmium	0.00	1.00	1.00	1.00	100	100	0
Chromium (Total)	2.40	5.00	7.30	7.10	98	94	3
Chromium (VI)	0.00	1.00	0.96	1.03	96	103	7
Cobalt	0.57	1.00	1.48	1.53	91	96	3
Copper	1.20	1.00	2.13	2.06	93	86	3
Lead	0.00	10.00	9.80	9.80	98	98	0
Mercury	0.000	0.020	0.018	0.016	90	80	12
Molybdenum	0.00	10.00	9.40	9.60	94	96	2
Nickel	0.77	5.00	5.60	5.30	97	91	6
Selenium	0.00	10.00	9.30	9.10	93	91	2
Silver	0.00	5.00	5.10	5.40	102	108	6
Thallium	0.00	30.00	30.50	30.90	102	103	1
Vanadium	2.40	5.00	7.30	7.10	98	94	3
Zinc	5.50	5.00	9.80	10.40	86	98	6

Definition of Terms :

R1	Results Of First Analysis
SP	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
PR1	Percent Recovery Of MS: {(MS-R1) / SP} x100
PR2	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2

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QC DATA REPORT

Analysis : Metals

Date of Analysis : 03/27/97
Laboratory Sample No : 97030700
Laboratory Reference No : MWI 8751

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Antimony	0.00	3.000	3.160	3.210	105	107	2
Arsenic	0.00	1.000	1.020	1.040	102	104	2
Barium	0.00	0.100	0.087	0.085	87	85	2
Beryllium	0.00	0.100	0.104	0.103	104	103	1
Cadmium	0.00	0.100	0.120	0.110	120	110	9
Chromium (VI)	0.00	0.500	0.460	0.420	92	84	9
Chromium (Total)	0.00	0.100	0.095	0.110	95	110	15
Cobalt	0.00	0.100	0.109	0.097	109	97	12
Copper	0.00	0.100	0.110	0.100	110	100	10
Lead	0.00	1.000	1.150	1.160	115	116	1
Mercury	0.000	0.020	0.021	0.019	105	95	10
Molybdenum	0.00	1.000	1.020	1.020	102	102	0
Nickel	0.00	0.500	0.530	0.540	106	108	2
Selenium	0.00	1.000	1.160	1.180	116	118	2
Silver	0.00	0.500	0.530	0.480	106	96	10
Thallium	0.00	3.000	2.970	2.850	99	95	4
Vanadium	0.00	0.500	0.570	0.600	114	120	5
Zinc	0.00	0.100	0.112	0.106	112	106	6

Definition of Terms :

R1	Results Of First Analysis
SP	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
PR1	Percent Recovery Of MS: {(MS-R1) / SP} x100
PR2	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2

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QC DATA REPORT

Analysis : Total Recoverable Petroleum Hydrocarbons (EPA 418.1)

Date of Analysis : 03/28/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8751

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Hydrocarbons	0.0	2.5	1.8	1.8	72	72	0

Definition of Terms :

R1	Results Of First Analysis
SP	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
PR1	Percent Recovery Of MS: {(MS-R1) / SP} x100
PR2	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2

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QC DATA REPORT

Analysis : Total Recoverable Petroleum Hydrocarbons (EPA 418.1)

Date of Analysis : 03/26/97
Laboratory Sample No : 97030934
Laboratory Reference No : MWI 8751

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Hydrocarbons	0.0	100	114	118	114	118	3

Definition of Terms :

R1	Results Of First Analysis
SP	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
PR1	Percent Recovery Of MS: {(MS-R1) / SP} x100
PR2	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2

ORANGE COAST ANALYTICAL

Mark Noorani

MARK NOORANI
Laboratory Director

ORANGE COAST ANALYTICAL, INC.
3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (602) 736-0960 Fax (602) 736-0970

QC DATA REPORT

Analysis : Extractable Fuel Hydrocarbons (EPA 8015m)

Date of Analysis : 03/27/97
Laboratory Sample No : 97030995
Laboratory Reference No : MWI 8751

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Hydrocarbons	0.0	100	82	86	82	86	5

Definition of Terms :

R1	Results Of First Analysis
SP	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
PR1	Percent Recovery Of MS: {(MS-R1) / SP} x100
PR2	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2

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QC DATA REPORT

Analysis : Semi-Volatile Organics by GC/MS (EPA 8270)

Date of Analysis : 03/29/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8751

Analyte	R1 (ng)	SP (ng)	MS (ng)	MSD (ng)	PR1 %	PR2 %	RPD %
1,4-Dichlorobenzene	0.0	50	34	37	68	74	8
n-Nitroso-di-n-propylamine	0.0	50	44	43	88	86	2
1,2,4-Trichlorobenzene	0.0	50	34	40	68	80	16
Acenaphthene	0.0	50	43	47	86	94	9
Pyrene	0.0	50	45	48	90	96	6
Pentachlorophenol	0.0	100	75	79	75	79	5
4-Chloro-3-Methylphenol	0.0	100	62	76	62	76	20
2-Chlorophenol	0.0	100	71	76	71	76	7
Phenol	0.0	100	25	25	25	25	0

Definition of Terms :

R1	Results Of First Analysis
SP	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
PR1	Percent Recovery Of MS: {(MS-R1) / SP} x100
PR2	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2

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QC DATA REPORT

Analysis : Semi-Volatile Organics by GC/MS (EPA 8270)

Date of Analysis : 03/31/97
Laboratory Sample No : 97030933
Laboratory Reference No : MWI 8751

Analyte	R1 (ng)	SP (ng)	MS (ng)	MSD (ng)	PR1 %	PR2 %	RPD %
1,4-Dichlorobenzene	0.0	50	41	37	82	74	10
n-Nitroso-di-n-propylamine	0.0	50	45	34	90	68	28
1,2,4-Trichlorobenzene	0.0	50	37	32	74	64	14
Acenaphthene	0.0	50	43	38	86	76	12
Pyrene	0.0	50	42	36	84	72	15
Pentachlorophenol	0.0	100	69	47	69	47	38
4-Chloro-3-Methylphenol	0.0	100	69	56	69	56	21
2-Chlorophenol	0.0	100	75	65	75	65	14
Phenol	0.0	100	70	59	70	59	17

Definition of Terms :

R1	Results Of First Analysis
SP	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
PR1	Percent Recovery Of MS: {(MS-R1) / SP} x100
PR2	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2

ORANGE COAST ANALYTICAL

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QC DATA REPORT

Analysis : Semi-Volatile Organics by GC/MS (EPA 8270)

Date of Analysis : 04/03/97
Laboratory Sample No : 970301110
Laboratory Reference No : MWI 8751

Analyte	R1 (ng)	SP (ng)	MS (ng)	MSD (ng)	PR1 %	PR2 %	RPD %
1,4-Dichlorobenzene	0.0	50	47	48	94	96	2
n-Nitroso-di-n-propylamine	0.0	50	50	49	100	98	2
1,2,4-Trichlorobenzene	0.0	50	50	49	100	98	2
Acenaphthene	0.0	50	50	50	100	100	0
Pyrene	0.0	50	43	44	86	88	2
Pentachlorophenol	0.0	100	85	88	85	88	3
4-Chloro-3-Methylphenol	0.0	100	79	78	79	78	1
2-Chlorophenol	0.0	100	85	86	85	86	1
Phenol	0.0	100	76	76	76	76	0

Definition of Terms :

R1	Results Of First Analysis
SP	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
PR1	Percent Recovery Of MS: {(MS-R1) / SP} x100
PR2	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2

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QC DATA REPORT

Analysis : Volatile Organics by GC/MS (EPA 8260)

Date of Analysis : 03/31/97
Laboratory Sample No : OCA 200
Laboratory Reference No : MWI 8751

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
Benzene	0.0	50	47	48	94	96	2
1,1-Dichloroethene	0.0	50	44	44	88	88	0
Trichloroethene	0.0	50	46	48	92	96	4
Toluene	0.0	50	48	52	96	104	8
Chlorobenzene	0.0	50	46	47	92	94	2

Definition of Terms :

R1	Results Of First Analysis
SP	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
PR1	Percent Recovery Of MS: {(MS-R1) / SP} x100
PR2	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2

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QC DATA REPORT

Analysis : Volatile Organics by GC/MS (EPA 8260)

Date of Analysis : 04/01/97
Laboratory Sample No : 97030979
Laboratory Reference No : MWI 8739

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
Benzene	0.0	20	16	17	80	85	6
1,1-Dichloroethene	0.0	20	13	14	65	70	7
Trichloroethene	0.0	20	15	16	75	80	6
Toluene	0.0	20	17	18	85	90	6
Chlorobenzene	0.0	20	16	18	80	90	12

Definition of Terms :

R1	Results Of First Analysis
SP	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
PR1	Percent Recovery Of MS: {(MS-R1) / SP} x100
PR2	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2

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QC DATA REPORT

Analysis : PCB 'S (EPA 8080)

Date of Analysis : 03/27/97
Laboratory Sample No : 97031012
Laboratory Reference No : MWI 8751

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
PCB-1260	0.0	500	490	410	98	82	18

Definition of Terms :

R1	Results Of First Analysis
SP	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
PR1	Percent Recovery Of MS: {(MS-R1) / SP} x100
PR2	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2

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QC DATA REPORT

Analysis : PCB 'S (EPA 8080)

Date of Analysis : 03/26/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8751

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
PCB-1260	0.0	50	38	37	76	74	3

Definition of Terms :

R1	Results Of First Analysis
SP	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
PR1	Percent Recovery Of MS: {(MS-R1) / SP} x100
PR2	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2

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QC DATA REPORT

Analysis : Organochlorine Pesticides (EPA 8080)

Date of Analysis : 03/26/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8751

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
4,4'-DDE	0.0	1.00	0.65	0.72	65	72	10

Definition of Terms :

R1	Results Of First Analysis
SP	Spike Concentration Added to Sample
MS	Matrix Spike Results
MSD	Matrix Spike Duplicate Results
PR1	Percent Recovery Of MS: {(MS-R1) / SP} x100
PR2	Percent Recovery Of MSD: {(MSD-R1) / SP} x 100
RPD	Relative Percent Difference: {(MS-MSD) / (MS+MSD)} x 100 x 2

ORANGE COAST ANALYTICAL

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Laboratory Director

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Analy Request and Chain of Custody Record

Lab Job No: _____
Page 1 / 2

REQUIRED TAT: 24 hr TAT on Soil TPPH only / Standard otherwise

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: Montgomery Watson	PROJECT NAME: McDonnell-Douglas C-6 Facility
SEND REPORT TO: Fred Strauss	NUMBER: 1236035, 01090010
ADDRESS: 250 N. Madison Ave.	LOCATION: BLDG 37 Area
Pasadena, CA 91109	ADDRESS: 19503 S. Normandie Ave.
	Torrance CA
PHONE: (818) 568-6582 FAX: (818) 796-5941	SAMPLED BY: JM/AWN

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	TPPH (418.1)	Title 22 Metals	VOCs (8260)	SVOCs (8270)	PCBs (8080)	Pesticides (8080)			REMARKS/PRECAUTIONS
B37-RE4-SPCONF	2	3/25/97	0800	Soil	2"x6" SS Sleeve	ICE	X	X	X	X					Split Sample with
B37-RE2-SPCONF	2		0820				X	X	X	X					Water Board & MW
B37-RE3-SPCONF	2		0845				X	X	X	X					
B37-RE1-SPCONF	2		0920				X	X	X	X					
VSS-COMP	2		0955				X	X	X	X					
B37-GS-105-3'	2		1120				X	X	X	X					
B37-GS-106-9'	2		1135				X	X	X	X					
B37-CS-1	2		1130	Concrete	glass Jar		X	X	X	X					
B37-CS-2	2		1145				X	X	X	X	X				
B37-CS-3	2		1250				X	X	X	X	~~ICE~~	No PCBs	JM		
B37-CS-4	2		1300				X	X	X	X	~~ICE~~	No PCBs			
B37-RE4-SP28	2		1352	Soil	2"x6" SS Sleeve		X	X	X	X					

Total No. of Samples: 15

Method of Shipment: Courier (Orange Coast)

Relinquished By:	Date/Time:	Received By:	Date/Time:
Joshua Martin	3-25-97 1620		
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received For Lab By:	Date/Time:
		[illegible]	3/25/97 16:20PM

Reporting Format: (check)
NORMAL _____ S.D. HMMD _____
RWQCB _____ OTHER _____

Sample Integrity: (check)
intact _____ on ice _____

All samples remain the property of the client who is responsible for disposal. A disposal fee may be imposed if client fails to pickup samples.

BOE-C6-0108503

ORANGE COAST ANALYTICAL, INC.
3002 Dow, Suite 532
Tustin, CA 92680
(714) 832-0064, Fax (714) 832-0067

Analysis Request and Chain of Custody Record

Lab Job No: _____
Page 2 of 2

24 hr. TAT on soil TPH only
REQUIRED TAT: Standard otherwise

CUSTOMER INFORMATION		PROJECT INFORMATION	
COMPANY:	Montgomery Watson	PROJECT NAME:	McDonnell-Douglas C-6 Facility
SEND REPORT TO:	Fred Strauss	NUMBER:	1206035 01090010
ADDRESS:	250 N. Madison Ave. Pasadena, CA 91109	LOCATION:	BLDG 37 Area
		ADDRESS:	19503 S. Normandie Ave Torrance CA
PHONE:	(818) 568-6582 FAX: (818) 796-5941	SAMPLED BY:	JAM/AWN

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	TRPH (418.1)	Title 22 metals	VOCs (8260)	SVOCs (8270)	PCBs (8080)	Pesticides (8080)			REMARKS/PRECAUTIONS
Equipment Blank	7	3/25/97	1600	Water	Amber Poly VOAs	1 Amb. 1 HCl	X	X	X	X	X	X			
Rinsate Blank	7		1615	Water	Amber Poly VOAs	1 Amb. 1 HCl	X	X	X	X	X	X			
Trip Blank	2			Water	VOAs	HCl			X						VOCs ONLY

Total No. of Samples: 15

Method of Shipment: Courier (Orange Coast)

Relinquished By:	Date/Time:	Received By:	Date/Time:
Joshua Mann	3/25/97 1620		
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received For Lab By:	Date/Time:
		[illegible]	3/25/97 16:20PM

Reporting Format: (check)
NORMAL _____ S.D. HMMD _____
RWQCB _____ OTHER _____

Sample Integrity: (check)
intact _____ on ice _____

All samples remain the property of the client who is responsible for disposal. A disposal fee may be imposed if client fails to pickup samples.

BOE-C6-0108504

FULLERTON LABORATORY
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-6868

SPL, INC.

REPORT APPROVAL SHEET

WORK ORDER NUMBER: *97 - 01 - 110*

Approved for release by:

Joel Grice, Laboratory Manager — *Date:* 2/4/97

Michael J. Crisostomo, Project Manager — *Date:* 2-3-97

FULLERTON LABORATORY
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-68

CASE NARRATIVE

SPL Workorder Number: 9701110

Southern Petroleum Laboratories (SPL) Fullerton is pleased to present the following results of laboratory analyses to Montgomery Watson for the MDRC project in Torrance, CA. On January 20, 1997, three (3) soil samples were received by the laboratory. All samples were received intact and within the prescribed 2°C - 6°C temperature preservation range.

The samples were analyzed as requested on the associated chain of custody record; no deviations to these methodologies were required. Subsequent conversation regarding this sample group resulted in the addition of analysis of sample B37-GS-4A by EPA 8080 for polychlorinated biphenyls (PCBs). Likewise, an additional analysis was requested for sample B37-GS-5 by EPA 8260 for volatile organic carbons.

As part of its regular quality control (QC) activities, SPL arbitrarily selects samples for matrix spike (MS) and matrix spike duplicate (MSD) evaluation. Note that during the analyses of the MS and MSD samples for trace elements, poor recoveries of the reportable elements were obtained. Analysis of the method blank and laboratory control sample for these elements, however, generated results well within the acceptability range. Based on these results, therefore, this anomaly of spike recoveries observed in the MS and MSD were attributed to matrix interferences caused by the unspiked sample.

If you have any questions regarding information presented in this report please call me at (714) 447-6868. Please refer to workorder 9701110 to expedite service.

Michael J. Crisostomo
Project Manager

FULLERTON LABORATORY
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FULLERTON, CA 92831
PHONE (714) 447-6868

Certificate of Analysis No. 9701110

Client:	Montgomery Watson	**Report Date:**	1/31/97
Client Address:	250 N. Madison Avenue	**Date(s) Received:**	1/20/97
	Pasadena, CA 91101	**Date(s) Sampled:**	1/20/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	1/24/97
Project Name	MDRC C6-Facility, Bldg. 37	**Project Number:**	MDRC C-6
Site:	Torrance, CA	**Matrix:**	SOIL
Method:	8080, Polychlorinated biphenyls	**Units:**	µg/Kg

Analyte	B37-GS-4A
PCB-1016	ND<51
PCB-1221	ND<51
PCB-1232	ND<51
PCB-1242	ND<51
PCB-1248	ND<51
PCB-1254	ND<51
PCB-1260	ND<51

* Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
** Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd ed.

FULLERTON LABORATORY
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FULLERTON, CA 92831
PHONE (714) 447-68

Certificate of Analysis No. 9701110

Client: Montgomery Watson
Client Address: 250 N. Madison Avenue
Pasadena, CA 91101
Attention: Nancy Matsumoto
Project Name MDRC C6-Facility, Bldg. 37
Site: Torrance, CA

Report Date: 1/31/97
Date(s) Received: 1/20/97
Date(s) Sampled: 1/20/97
Date(s) Analyzed: 1/24/97,1/22/97
Project Number: MDRC C-6
Matrix: SOIL

Method: 8260 Soil, Volatile Organics

Units: UG/KG

Analyte	B37-GS-4A	B37-GS-5
Dichlorodifluoromethane	ND<5	ND<5
Chloromethane	ND<5	ND<5
Vinyl chloride	ND<5	ND<5
Bromomethane	ND<5	ND<5
Chloroethane	ND<5	ND<5
Trichlorofluoromethane	ND<5	ND<5
1,1-Dichloroethene	ND<5	ND<5
Methylene chloride	ND<5	ND<5
trans-1,2-Dichloroethene	ND<5	ND<5
1,1-Dichloroethane	5.3	ND<5
2,2-Dichloropropane	ND<5	ND<5
cis-1,2-Dichloroethene	ND<5	ND<5
Chloroform	ND<5	ND<5
Bromochloromethane	ND<5	ND<5
1,1,1-Trichloroethane	ND<5	ND<5
1,1-Dichloropropene	ND<5	ND<5
Carbon tetrachloride	ND<5	ND<5
1,2-Dichloroethane	ND<5	ND<5
Benzene	ND<5	ND<5
Trichloroethene	ND<5	ND<5
1,2-Dichloropropane	ND<5	ND<5
Bromodichloromethane	ND<5	ND<5
Dibromomethane	ND<5	ND<5
cis-1,3-Dichloropropene	ND<5	ND<5
Toluene	ND<5	ND<5
trans-1,3-Dichloropropene	ND<5	ND<5
1,1,2-Trichloroethane	ND<5	ND<5
1,2-Dibromoethane	ND<5	ND<5
1,3-Dichloropropane	ND<5	ND<5
Tetrachloroethene	ND<5	ND<5
Dibromochloromethane	ND<5	ND<5
Chlorobenzene	ND<5	ND<5
1,1,1,2-Tetrachloroethane	ND<5	ND<5
Ethylbenzene	ND<5	ND<5
m,p-Xylene	ND<5	ND<5
o-Xylene	ND<5	ND<5

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Certificate of Analysis No. 9701110

Client:	Montgomery Watson	**Report Date:**	1/31/97
Client Address:	250 N. Madison Avenue	**Date(s) Received:**	1/20/97
	Pasadena, CA 91101	**Date(s) Sampled:**	1/20/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	1/24/97,1/22/97
Project Name	MDRC C6-Facility, Bldg. 37	**Project Number:**	MDRC C-6
Site:	Torrance, CA	**Matrix:**	SOIL
Method:	8260 Soil, Volatile Organics	**Units:**	UG/KG

Analyte	B37-GS-4A	B37-GS-5
Styrene	ND<5	ND<5
Bromoform	ND<5	ND<5
Isopropylbenzene	ND<5	ND<5
1,1,2,2-Tetrachloroethane	ND<5	ND<5
1,2,3-Trichloropropane	ND<5	ND<5
n-Propylbenzene	ND<5	ND<5
Bromobenzene	ND<5	ND<5
1,3,5-Trimethylbenzene	ND<5	ND<5
2-Chlorotoluene	ND<5	ND<5
4-Chlorotoluene	ND<5	ND<5
tert-Butylbenzene	ND<5	ND<5
1,2,4-Trimethylbenzene	ND<5	ND<5
sec-Butylbenzene	ND<5	ND<5
p-Isopropyltoluene	ND<5	ND<5
1,3-Dichlorobenzene	ND<5	ND<5
1,4-Dichlorobenzene	ND<5	ND<5
n-Butylbenzene	ND<5	ND<5
1,2-Dichlorobenzene	ND<5	ND<5
1,2-Dibromo-3-chloropropa	ND<5	ND<5
1,2,4-Trichlorobenzene	ND<5	ND<5
Hexachlorobutadiene	ND<5	ND<5
Naphthalene	ND<5	ND<5
1,2,3-Trichlorobenzene	ND<5	ND<5

* Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
** Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd ed.

Certificate of Analysis No. 9701110

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FULLERTON, CA 92831
PHONE (714) 447-68

Client: Montgomery Watson
Client Address: 250 N. Madison Avenue
Pasadena, CA 91101
Attention: Nancy Matsumoto
Project Name: MDRC C6-Facility, Bldg. 37
Site: Torrance, CA

Report Date: 1/31/97
Date(s) Received: 1/20/97
Date(s) Sampled: 1/20/97
Date(s) Analyzed: 1/24/97,1/22/97,1/21/9
Project Number: MDRC C-6
Matrix: SOIL

Analyte	Units	EPA Method	B37-GS-4A	B37-GS-4B	B37-GS-5
Petroleum Extractables	mg/Kg	418.1*	30600	23200	99.0

Certificate of Analysis No. 9701110

FULLERTON LABORATORY
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-6868

Client: Montgomery Watson
Client Address: 250 N. Madison Avenue
Pasadena, CA 91101
Attention: Nancy Matsumoto
Project Name: MDRC C6-Facility, Bldg. 37
Site: Torrance, CA

Report Date: 1/31/97
Date(s) Received: 1/20/97
Date(s) Sampled: 1/20/97
Date(s) Analyzed: 1/24/97,1/22/97,1/21/9
Project Number: MDRC C-6
Matrix: SOIL

Analyte	Units	EPA Method	B37-GS-4A	B37-GS-5
Antimony, Total	mg/Kg	6010A***	ND<0.500	ND<0.500
Arsenic, Total	mg/Kg	6010A***	ND<0.11	ND<0.11
Barium, Total	mg/Kg	6010A***	46.1	135
Beryllium, Total	mg/Kg	6010A***	ND<0.06	ND<0.06
Cadmium, Total	mg/Kg	6010A***	2.88	0.482
Chromium, Total	mg/Kg	6010A***	17.0	18.2
Cobalt, Total	mg/Kg	6010A***	17.3	9.56
Copper, Total	mg/Kg	6010A***	15.2	18.7
Digestion-Solids 3050A		3050A***	01/21/97	01/21/97
Lead, Total	mg/Kg	6010A***	3.30	6.13
Mercury Digestion in Soil	N/A	7471A***	01/21/97	01/21/97
Mercury, Total	mg/Kg	7471A***	ND<0.200	ND<0.200
Molybdenum,Total	mg/Kg	6010A***	6.97	ND<2.50
Nickel, Total	mg/Kg	6010A ***	21.0	14.0
Selenium, Total	mg/Kg	6010A***	ND<5.00	ND<5.00
Silver, Total	mg/Kg	6010A***	ND<5.00	ND<5.00
Thallium, Total	mg/Kg	6010A***	1.37	ND<0.500
Vanadium, Total	mg/Kg	6010A***	23.8	39.4
Zinc, Total	mg/Kg	6010A***	139	59.1

* Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
** Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd ed.

Results for Arsenic, Beryllium, Cadmium, and total Chromium are presented using the MDL as a reference.

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Certificate of Analysis No. 9701110

Client:	Montgomery Watson	**Report Date:**	1/31/97
Client Address:	250 N. Madison Avenue Pasadena, CA 91101	**Date(s) Received:**	1/20/97
		Date(s) Sampled:	1/20/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	1/24/97
Project Name:	MDRC C6-Facility, Bldg. 37	**Project Number:**	MDRC C-6
Site:	Torrance, CA	**Matrix:**	SOIL
Method:	Simulated Distillation	**Units:**	mg/Kg

Carbon Chain Range	**B37-GS-4A**
C08-C09	ND < 100
C10-C11	53
C12-C13	1600
C14-C15	650
C16-C17	420
C18-C19	1100
C20-C23	5600
C24-C27	9500
C28-C31	10300
C32-C35	7800
C36-C39	240
C40+	1700

QUALITY CONTROL

DOCUMENTATION

FULLERTON LABORATORY
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-6868

QUALITY CONTROL INFORMATION

01/24/97

EPA 8240/8260 Compounds by EPA 8260 Method

9701110, 9701116

Parameter	Laboratory Method Blank (ug/Kg)	Reporting Limits (ug/Kg)	LCS Rec. (%)	Acceptability Range (%)
Dichlorodifluoromethane	ND	5.0	82	70 - 130
Chloromethane	ND	5.0	70	70 - 130
Vinyl chloride	ND	5.0	72	70 - 130
Bromomethane	ND	5.0	82	70 - 130
Chloroethane	ND	5.0	78	70 - 130
Trichlorofluoromethane	ND	5.0	80	70 - 130
Acrolein	ND	50	NA	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	50	NA	70 - 130
Acetone	ND	100	75	70 - 130
1,1-Dichloroethene	ND	5.0	84	70 - 130
Acetonitrile	ND	50	NA	70 - 130
Iodomethane	ND	5.0	95	70 - 130
Allyl chloride	ND	50	NA	70 - 130
Methylene chloride	ND	5.0	80	70 - 130
Carbon disulfide	ND	5.0	90	70 - 130
Acrylonitrile	ND	50	NA	70 - 130
2-Methoxy-2-methylpropane	ND	5.0	NA	70 - 130
trans-1,2-dichloroethene	ND	5.0	86	70 - 130
Vinyl acetate	ND	10	119	70 - 130
1,1-Dichloroethane	ND	5.0	84	70 - 130
2-Butanone	ND	10	86	70 - 130
Propionitrile	ND	50	NA	70 - 130
2,2-Dichloropropane	ND	5.0	100	70 - 130
cis-1,2-dichloroethene	ND	5.0	88	70 - 130
Methacrylonitrile	ND	50	NA	70 - 130
Isobutyl alcohol	ND	100	NA	70 - 130
Chloroform	ND	5.0	84	70 - 130
Bromochloromethane	ND	5.0	84	70 - 130
1,1,1-Trichloroethane	ND	5.0	88	70 - 130
1,1-Dichloropropene	ND	5.0	92	70 - 130
Carbon tetrachloride	ND	5.0	96	70 - 130
1,2-Dichloroethane	ND	5.0	80	70 - 130
Benzene	ND	5.0	86	70 - 130
Trichloroethene	ND	5.0	86	70 - 130

ND = Not Detected

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QUALITY CONTROL INFORMATION

01/24/97

EPA 8240/8260 Compounds by EPA 8260 Method

9701110, 9701116

Parameter	Laboratory Method Blank (ug/Kg)	Reporting Limits (ug/Kg)	LCS Rec. (%)	Acceptability Range (%)
Methyl methacrylate	ND	50	NA	70 - 130
1,2-Dichloropropane	ND	5.0	86	70 - 130
1,4-Dioxane	ND	100	NA	70 - 130
Bromodichloromethane	ND	5.0	82	70 - 130
Dibromomethane	ND	5.0	82	70 - 130
2-Chloroethyl vinyl ether	ND	10	NA	70 - 130
4-Methyl-2-pentanone	ND	10	105	70 - 130
cis-1,3-Dichloropropene	ND	5.0	94	70 - 130
Toluene	ND	5.0	88	70 - 130
Ethyl methacrylate	ND	50	NA	70 - 130
trans-1,3-Dichloropropene	ND	5.0	96	70 - 130
2-Hexanone	ND	10	102	70 - 130
1,1,2-trichloroethane	ND	5.0	84	70 - 130
1,2-Dibromoethane	ND	5.0	86	70 - 130
1,3-Dichloropropane	ND	5.0	92	70 - 130
Tetrachloroethene	ND	5.0	92	70 - 130
Dibromochloromethane	ND	5.0	90	70 - 130
Chlorobenzene	ND	5.0	92	70 - 130
1,1,1,2-Tetrachloroethane	ND	5.0	94	70 - 130
Ethylbenzene	ND	5.0	96	70 - 130
m,p-Xylene	ND	5.0	96	70 - 130
o-Xylene	ND	5.0	100	70 - 130
Styrene	ND	5.0	102	70 - 130
Bromoform	ND	5.0	94	70 - 130
trans-1,4-Dichloro-2-butene	ND	50	NA	70 - 130
Pentachloroethane	ND	50	NA	70 - 130
Isopropylbenzene	ND	5.0	114	70 - 130
1,1,2,2-Tetrachloroethane	ND	5.0	92	70 - 130
1,2,3-Trichloropropane	ND	5.0	86	70 - 130
n-Propylbenzene	ND	5.0	104	70 - 130

ND = Not Detected

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QUALITY CONTROL INFORMATION

01/24/ 97

EPA 8240/8260 Compounds by EPA 8260 Method

9701110, 9701116

Parameter	Laboratory Method Blank (ug/Kg)	Reporting Limits (ug/Kg)	LCS Rec. (%)	Acceptability Range (%)
Bromobenzene	ND	5.0	94	70 - 130
1,3,5-Trimethylbenzene	ND	5.0	102	70 - 130
2-Chlorotoluene	ND	5.0	96	70 - 130
4-Chlorotoluene	ND	5.0	96	70 - 130
tert-Butylbenzene	ND	5.0	108	70 - 130
1,2,4-Trimethylbenzene	ND	5.0	100	70 - 130
sec-Butylbenzene	ND	5.0	106	70 - 130
p-Isopropyltoluene	ND	5.0	108	70 - 130
1,3-Dichlorobenzene	ND	5.0	94	70 - 130
1,4-Dichlorobenzene	ND	5.0	94	70 - 130
n-Butylbenzene	ND	5.0	108	70 - 130
1,2-Dichlorobenzene	ND	5.0	94	70 - 130
1,2-Dibromo-3-chloropropane	ND	5.0	96	70 - 130
1,2,4-Trichlorobenzene	ND	5.0	104	70 - 130
Hexachlorobutadiene	ND	5.0	106	70 - 130
Naphthalene	ND	5.0	102	70 - 130
1,2,3-Trichlorobenzene	ND	5.0	104	70 - 130
DBFM Surrogate Rec. (%)	103	----	90	60 - 140
Toluene-d8 Surrogate Rec. (%)	105	----	97	60 - 140
BFB Surrogate Rec. (%)	80	----	99	60 - 140

LCS = Laboratory Control Sample
ND = Not Detected

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QUALITY CONTROL INFORMATION

01/24/97

EPA 8240/8260 Compounds by EPA 8260 Method

9701110, 9701116

Sample Spiked: 9701110-03A

Parameter	MS Recovery (%)	MSD Recovery (%)	RPD	Acceptability Range (%)	RPD Range (%)
1,1-Dichloroethene	108	113	4.5	70 - 130	30
Benzene	122	118	3.3	70 - 130	30
Trichloroethene	120	110	8.7	70 - 130	30
Toluene	100	100	0.0	70 - 130	30
Chlorobenzene	103	100	3.0	70 - 130	30
DBFM Surrogate Rec. (%)	115	131	---	60 - 140	---
Toluene-d8 Surrogate Rec. (%)	100	106	---	60 - 140	---
BFB Surrogate Rec. (%)	89	96	---	60 - 140	---

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference

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QUALITY CONTROL INFORMATION

01/22/97

EPA 8240/8260 Compounds by EPA 8260 Method

9701110

Parameter	Laboratory Method Blank (ug/Kg)	Reporting Limits (ug/Kg)	LCS Rec. (%)	Acceptability Range (%)
Dichlorodifluoromethane	ND	5.0	96	70 - 130
Chloromethane	ND	5.0	82	70 - 130
Vinyl chloride	ND	5.0	74	70 - 130
Bromomethane	ND	5.0	80	70 - 130
Chloroethane	ND	5.0	88	70 - 130
Trichlorofluoromethane	ND	5.0	92	70 - 130
Acrolein	ND	50	NA	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	50	NA	70 - 130
Acetone	ND	100	78	70 - 130
1,1-Dichloroethene	ND	5.0	90	70 - 130
Acetonitrile	ND	50	NA	70 - 130
Iodomethane	ND	5.0	95	70 - 130
Allyl chloride	ND	50	NA	70 - 130
Methylene chloride	ND	5.0	88	70 - 130
Carbon disulfide	ND	5.0	95	70 - 130
Acrylonitrile	ND	50	NA	70 - 130
2-Methoxy-2-methylpropane	ND	5.0	98	70 - 130
trans-1,2-dichloroethene	ND	5.0	92	70 - 130
Vinyl acetate	ND	10	101	70 - 130
1,1-Dichloroethane	ND	5.0	92	70 - 130
2-Butanone	ND	10	80	70 - 130
Propionitrile	ND	50	NA	70 - 130
2,2-Dichloropropane	ND	5.0	106	70 - 130
cis-1,2-dichloroethene	ND	5.0	94	70 - 130
Methacrylonitrile	ND	50	NA	70 - 130
Isobutyl alcohol	ND	100	NA	70 - 130
Chloroform	ND	5.0	92	70 - 130
Bromochloromethane	ND	5.0	90	70 - 130
1,1,1-Trichloroethane	ND	5.0	94	70 - 130
1,1-Dichloropropene	ND	5.0	92	70 - 130
Carbon tetrachloride	ND	5.0	98	70 - 130
1,2-Dichloroethane	ND	5.0	84	70 - 130
Benzene	ND	5.0	88	70 - 130
Trichloroethene	ND	5.0	86	70 - 130

ND = Not Detected

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QUALITY CONTROL INFORMATION

01/22/97

EPA 8240/8260 Compounds by EPA 8260 Method

9701110

Parameter	Laboratory Method Blank (ug/Kg)	Reporting Limits (ug/Kg)	LCS Rec. (%)	Acceptability Range (%)
Methyl methacrylate	ND	50	NA	70 - 130
1,2-Dichloropropane	ND	5.0	90	70 - 130
1,4-Dioxane	ND	100	NA	70 - 130
Bromodichloromethane	ND	5.0	86	70 - 130
Dibromomethane	ND	5.0	86	70 - 130
2-Chloroethyl vinyl ether	ND	10	93	70 - 130
4-Methyl-2-pentanone	ND	10	87	70 - 130
cis-1,3-Dichloropropene	ND	5.0	92	70 - 130
Toluene	ND	5.0	90	70 - 130
Ethyl methacrylate	ND	50	NA	70 - 130
trans-1,3-Dichloropropene	ND	5.0	92	70 - 130
2-Hexanone	ND	10	85	70 - 130
1,1,2-trichloroethane	ND	5.0	88	70 - 130
1,2-Dibromoethane	ND	5.0	86	70 - 130
1,3-Dichloropropane	ND	5.0	92	70 - 130
Tetrachloroethene	ND	5.0	94	70 - 130
Dibromochloromethane	ND	5.0	90	70 - 130
Chlorobenzene	ND	5.0	92	70 - 130
1,1,1,2-Tetrachloroethane	ND	5.0	94	70 - 130
Ethylbenzene	ND	5.0	96	70 - 130
m,p-Xylene	ND	5.0	98	70 - 130
o-Xylene	ND	5.0	96	70 - 130
Styrene	ND	5.0	98	70 - 130
Bromoform	ND	5.0	92	70 - 130
trans-1,4-Dichloro-2-butene	ND	50	NA	70 - 130
Pentachloroethane	ND	50	NA	70 - 130
Isopropylbenzene	ND	5.0	112	70 - 130
1,1,2,2-Tetrachloroethane	ND	5.0	92	70 - 130
1,2,3-Trichloropropane	ND	5.0	86	70 - 130
n-Propylbenzene	ND	5.0	104	70 - 130

ND = Not Detected

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QUALITY CONTROL INFORMATION

01/22/ 97

EPA 8240/8260 Compounds by EPA 8260 Method

9701110

Parameter	Laboratory Method Blank (ug/Kg)	Reporting Limits (ug/Kg)	LCS Rec. (%)	Acceptability Range (%)
Bromobenzene	ND	5.0	96	70 - 130
1,3,5-Trimethylbenzene	ND	5.0	102	70 - 130
2-Chlorotoluene	ND	5.0	100	70 - 130
4-Chlorotoluene	ND	5.0	100	70 - 130
tert-Butylbenzene	ND	5.0	106	70 - 130
1,2,4-Trimethylbenzene	ND	5.0	100	70 - 130
sec-Butylbenzene	ND	5.0	104	70 - 130
p-Isopropyltoluene	ND	5.0	104	70 - 130
1,3-Dichlorobenzene	ND	5.0	94	70 - 130
1,4-Dichlorobenzene	ND	5.0	94	70 - 130
n-Butylbenzene	ND	5.0	104	70 - 130
1,2-Dichlorobenzene	ND	5.0	94	70 - 130
1,2-Dibromo-3-chloropropane	ND	5.0	88	70 - 130
1,2,4-Trichlorobenzene	ND	5.0	98	70 - 130
Hexachlorobutadiene	ND	5.0	104	70 - 130
Naphthalene	ND	5.0	82	70 - 130
1,2,3-Trichlorobenzene	ND	5.0	96	70 - 130
DBFM Surrogate Rec. (%)	105	----	96	60 - 140
Toluene-d8 Surrogate Rec. (%)	104	----	91	60 - 140
BFB Surrogate Rec. (%)	74	----	93	60 - 140

LCS = Laboratory Control Sample
ND = Not Detected

FULLERTON LABORATORY
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FULLERTON, CA 92831
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QUALITY CONTROL INFORMATION

01/22/97

EPA 8240/8260 Compounds by EPA 8260 Method

9701110

Sample Spiked: 9701110-01A

Parameter	MS Recovery (%)	MSD Recovery (%)	RPD	Acceptability Range (%)	RPD Range (%)
1,1-Dichloroethene	95	98	3.1	70 - 130	30
Benzene	98	98	0.0	70 - 130	30
Trichloroethene	95	95	0.0	70 - 130	30
Toluene	90	88	2.2	70 - 130	30
Chlorobenzene	80	83	3.7	70 - 130	30
DBFM Surrogate Rec. (%)	104	103	---	60 - 140	---
Toluene-d8 Surrogate Rec. (%)	106	105	---	60 - 140	---
BFB Surrogate Rec. (%)	75	80	---	60 - 140	---

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference

FULLERTON LABORATORY
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-6868

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 01/21/97
Analyzed on: 01/21/97
Analyst: SB

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Petroleum Extractables
Method 418.1*

SPL Sample ID Number	Method Blank mg/Kg	Sample Result mg/Kg	Spike Added mg/Kg	Matrix Spike Result mg/Kg	Matrix Spike Recovery %	Matrix Spike Duplicate Result mg/Kg	Matrix Spike Duplicate Recovery %	RPD (%)	QC LIMITS (Advisory) RPD Max	QC LIMITS (Advisory) % REC
LCS_LCSD	ND	ND	500	507	101	550	110	8.5	20	80 -120

PETHS012197 -9701047

Samples in batch:

9701110-01A 9701110-02A 9701110-03A

COMMENTS:

FULLERTON LABORATORY
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-68

QUALITY CONTROL INFORMATION
METALS

MS/MSD Results

Date: 1/24/97
Sample ID: 9701110-3

Matrix: Soil
Includes: 9701110-1&3; 9701116-1-2

Parameter	LMB	LCS Recovery (%)	MS Recovery (%)		MSD Recovery (%)		*Acceptability Range (%)	RPD		RPD Range (%)
Antimony, Sb	ND	96.0	50.5	**	48.2	**	80-120	4.6		20
Arsenic, As	ND	97.5	71.3	**	71.2	**	80-120	0.2		20
Barium, Ba	ND	94.5	116.1		68.9	**	80-120	51	**	20
Beryllium, Be	ND	96.5	54.4	**	55.2	**	80-120	1.5		20
Cadmium, Cd	ND	96.4	83.3		84.0		80-120	0.8		20
Chromium, Cr	ND	95.4	83.2		83.4		80-120	0.2		20
Cobalt, Co	ND	96.0	76.5	**	76.4	**	80-120	0.1		20
Copper, Cu	ND	95.8	85.9		88.4		80-120	2.9		20
Lead, Pb	ND	95.2	75.9	**	77.0	**	80-120	1.4		20
Molybdenum, Mo	ND	95.2	76.6	**	76.5	**	80-120	0.1		20
Nickel, Ni	ND	95.8	78.6	**	78.9	**	80-120	0.4		20
Selenium, Se	ND	94.9	74.0	**	74.2	**	80-120	0.3		20
Silver, Ag	ND	97.5	65.7	**	66.3	**	80-120	1.0		20
Thallium, Tl	ND	94.5	63.9	**	64.3	**	80-120	0.6		20
Vanadium, V	ND	95.7	82.6		86.6		80-120	4.7		20
Zinc, Zn	ND	99.7	89.6		88.6		80-120	1.1		20

* Pertains to LCS, MS, and MSD.
** Matrix Effect.

LMB = Laboratory Method Blank
LCS = Laboratory Control Sample
LCSD = Laboratory Control Sample Duplicate
ND = Not Detected

MS = Matrix Spike
MSD = Matrix Spike Duplicate
RPD = Relative Percent Difference

FULLERTON LABORATORY
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-6868

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 01/23/97
Analyzed on: 01/22/97
Analyst: GQ

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Mercury, Total
METHOD 7471A***

SPL Sample ID Number	Method Blank mg/Kg	Sample Result mg/Kg	Spike Added mg/Kg	Matrix Spike Result mg/Kg	Matrix Spike Recovery %	Matrix Spike Duplicate Result mg/Kg	Matrix Spike Duplicate Recovery %	RPD (%)	QC LIMITS (Advisory) RPD Max	QC LIMITS (Advisory) % REC
9701110-03A	ND	ND	.0010	.0009	90.0	.0009	90.0	0	20	80 -120

HGS012297 -9701049

Samples in batch:

9701110-01A 9701110-03A 9701116-01A 9701116-02A

COMMENTS:

FULLERTON LABORATORY
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-68

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 01/23/97
Analyzed on: 01/22/97
Analyst: GQ

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

Mercury, Total
METHOD 7471A***

SPL Sample ID Number	Blank Value mg/Kg	LCS Concentration mg/Kg	Measured Concentration mg/Kg	% Recovery	QC Limits Recovery
LCS	ND	.0010	.0009	90.0	80 - 120

HGS012297 -9701049

Samples in batch:

9701110-01A 9701110-03A 9701116-01A 9701116-02A

COMMENTS:

** SPL BATCH QUALITY CONTROL REPORT **
METHOD 8080

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Matrix: Soil
Units: µg/Kg

Batch Id: VARB970123015200

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
PCB-1254	ND	333	314	94.3	34 - 131

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results <2>	Spike Added <3>	Matrix Spike Result <1>	Matrix Spike Recovery <4>	Matrix Spike Duplicate Result <1>	Matrix Spike Duplicate Recovery <5>	MS/MSD Relative % Difference	QC Limits(***) (Advisory) RPD Max.	QC Limits(***) (Advisory) Recovery Range
PCB-1254	ND	333	354	106	404.57	121	13.2	33	34 - 131

Analyst: LT
Sequence Date: 01/23/97
SPL ID of sample spiked: 9701537-03A
Sample File ID: B_A7251.TX0
Method Blank File ID:
Blank Spike File ID: B_A7352.TX0
Matrix Spike File ID: B_A7240R.TX0
Matrix Spike Duplicate File ID: B_A7241.TX0

* = Values Outside QC Range. « = Data outside Method Specification limits.
NC = Not Calculated (Sample exceeds spike by factor of 4 or more)
ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>] x 100
LCS % Recovery = (<1> / <3>) x 100
Relative Percent Difference = |(<4> - <5> | / [(<4> + <5>) x 0.5] x 100
(**) = Source: 8080, Table 3
(***) = Source: SPL-Houston Historical Data

SAMPLES IN BATCH(SPL ID): 9701870-01A

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No: 970110

C- 02401

page 1 of 1

Client Name: Montgomery Watson

Address/Phone: 250 N. Madison Ave., Pasadena, CA

Client Contact: Nancy Matsumoto

Project Name: MDRC C6-Facility, Torrance, CA

Project Number: 1206035.01090010

Project Location: C-6 Facility - Bldg. 37

Invoice To: Nancy Matsumoto

matrix: W=water S=soil SL=sludge O=other:
bottle: P=plastic A=amber glass G=glass V=vial
size: 1=1 liter 4=4oz 40=vial 8=8oz 16=16oz
pres.: 1=HCl 2=HNO3 3=H2SO4 O=other:

Requested Analysis

SAMPLE ID	DATE	TIME	comp	grab	matrix	bottle	size	pres.	Number of Containers	CAM Metals	TRPH 418.1	VOCs 8260	HOLD	PCBs				
B37-GS-4A	1/20/97	0855		X	S	G	9oz.	ICE	2	X	X	X		X				
B37-GS-4B	1/20/97	0900		X	S	G	9oz.	ICE	2		X							
B37-GS-5	1/20/97	1340		X	S	G	9oz.	ICE	2	X	X	X						

Client/Consultant Remarks: 24 hr TAT on TRPH only. Standard otherwise

Laboratory remarks:

Intact? ☐ Y ☐ N

Temp:

Requested TAT

TRPH only 24hr ☒ 72hr ☐

48hr ☐ All others Standard ☒

Other ☐ _____

Special Reporting Requirements: Fax Results ☐ Raw Data ☐ Standard QC ☐ Level 3 QC ☐ Level 4 QC ☐

Special Detection Limits (specify):

PM review (initial):

1. Relinquished by Sampler: Adam W. Vonio	date 1/20/97	time 1500	2. Received by: [signature] 1/20/97 1500
3. Relinquished by:	date	time	4. Received by:
5. Relinquished by:	date 1-20-97	time 16:36	6. Received by Laboratory: [signature]

☐ 8880 Interchange Drive, Houston, TX 77054 (713) 660-0901

☐ 500 Ambassador Caffery Parkway, Scott, LA 70583 (318) 237-4775

☐ 1511 E. Orangethorpe Avenue, Fullerton, CA 92631 (714) 447-6868

BOE-C6-0108528

From: Dan Harbs CONFIRMED
To: Mike Crisostomo
Subject: McDonnel Doug.

===NOTE==========1/23/97==1:42pm==
CC: Joel Grice

.....

Adam would like to add 8260s to the following samples

B37-GS-7 – 9701116-02B
B37-GS-5 — 9701110-03B

He thinks GS-5 might already have been run for 8260, but if not, please add it now.

No Pickup today, 1-23
Probably Pick up Fri. 1-24

Let me know if you have any questions.

Thanks
Dan Harbs

BOE-C6-0108529

SPL Fullerton Environmental Laboratory
Sample Receiving Checklist

SPL Workorder Number: 9701110

Date: 1-20-97 Time: 16:36

	Yes	No	N/A
1. Chain of Custody Record Present?	✓	*	
2. Chain of Custody Record Properly Completed?	✓	*	
3. Custody Seals on Shipping Container?			✓
4. Custody Seals on Sample Container?		✓	
5. All Custody Seals Intact?		*	✓
6. All Samples Received Intact?	✓	*	
7. All Samples Labeled Correctly?	✓	*	
8. Samples are Chilled at 2°C - 6°C	✓	*	

* See Non-Conformance / Sample Condition Notification Form only if box with "*" is checked.

Internal Temperature of Shipping Container 2.6 °C

Samples Were Delivered by:

SPL Courier	
Client Representative	
Federal Express	
UPS	
DHL	
Other:	

All samples will be disposed 30 days from the report date for this workorder, unless otherwise specified by the client.

Samples Checked by: [signature]

I:\data\forms\loginchk.wpd