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

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

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

Certificate of Analysis No. 9703076

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

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<5.0
Thallium, Total	mg/Kg	6010A***	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<0.5
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.

* 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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1511 E. ORANGETHORPE AVE.
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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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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-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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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: 3/11/97
Project Number: 120603501090010
Matrix: SOIL

Method: 8260 Soil, Volatile Organics

Units: UG/KG

Analyte	B37-RE4-SP1	B37-RE4-SP2	B37-RE4-SP3	B37-RE4-SP4	B37-RE4-SP5	B37-RE4-SP6
Dichlorodifluoromethane	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
Chloromethane	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
Vinyl chloride	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
Bromomethane	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
Chloroethane	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
Trichlorofluoromethane	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
1,1-Dichloroethene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
Methylene chloride	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
trans-1,2-Dichloroethene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
1,1-Dichloroethane	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
2,2-Dichloropropane	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
cis-1,2-Dichloroethene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
Chloroform	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
Bromochloromethane	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
1,1,1-Trichloroethane	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
1,1-Dichloropropene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
Carbon tetrachloride	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
1,2-Dichloroethane	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
Benzene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
Trichloroethene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
1,2-Dichloropropane	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
Bromodichloromethane	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
Dibromomethane	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
cis-1,3-Dichloropropene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
Toluene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
trans-1,3-Dichloropropene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
1,1,2-Trichloroethane	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
1,2-Dibromoethane	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
1,3-Dichloropropane	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
Tetrachloroethene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
Dibromochloromethane	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
Chlorobenzene	ND<5	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	ND<5
Ethylbenzene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
m,p-Xylene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
o-Xylene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
Styrene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
Bromoform	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5

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Client: Montgomery Watson
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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: 3/11/97
Project Number: 120603501090010
Matrix: SOIL

Method: 8260 Soil, Volatile Organics

Units: UG/KG

Analyte	B37-RE4-SP1	B37-RE4-SP2	B37-RE4-SP3	B37-RE4-SP4	B37-RE4-SP5	B37-RE4-SP6
Isopropylbenzene	ND<5	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	ND<5
1,2,3-Trichloropropane	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
n-Propylbenzene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
Bromobenzene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
1,3,5-Trimethylbenzene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
2-Chlorotoluene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
4-Chlorotoluene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
tert-Butylbenzene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
1,2,4-Trimethylbenzene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
sec-Butylbenzene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
p-Isopropyltoluene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
1,3-Dichlorobenzene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
1,4-Dichlorobenzene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
n-Butylbenzene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
1,2-Dichlorobenzene	ND<5	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	ND<5
1,2,4-Trichlorobenzene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
Hexachlorobutadiene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
Naphthalene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5
1,2,3-Trichlorobenzene	ND<5	ND<5	ND<5	ND<5	ND<5	ND<5

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Date(s) Analyzed: 3/11/97
Project Number: 120603501090010
Matrix: SOIL

Method: 8260 Soil, Volatile Organics

Units: UG/KG

Analyte	B37-RE4-SP7	B37-RE4-SP8	B37-RE3-SP1
Dichlorodifluoromethane	ND<5	ND<5	ND<5
Chloromethane	ND<5	ND<5	ND<5
Vinyl chloride	ND<5	ND<5	ND<5
Bromomethane	ND<5	ND<5	ND<5
Chloroethane	ND<5	ND<5	ND<5
Trichlorofluoromethane	ND<5	ND<5	ND<5
1,1-Dichloroethene	ND<5	ND<5	ND<5
Methylene chloride	ND<5	ND<5	ND<5
trans-1,2-Dichloroethene	ND<5	ND<5	ND<5
1,1-Dichloroethane	ND<5	ND<5	ND<5
2,2-Dichloropropane	ND<5	ND<5	ND<5
cis-1,2-Dichloroethene	ND<5	ND<5	ND<5
Chloroform	ND<5	ND<5	ND<5
Bromochloromethane	ND<5	ND<5	ND<5
1,1,1-Trichloroethane	ND<5	ND<5	ND<5
1,1-Dichloropropene	ND<5	ND<5	ND<5
Carbon tetrachloride	ND<5	ND<5	ND<5
1,2-Dichloroethane	ND<5	ND<5	ND<5
Benzene	ND<5	ND<5	ND<5
Trichloroethene	ND<5	ND<5	ND<5
1,2-Dichloropropane	ND<5	ND<5	ND<5
Bromodichloromethane	ND<5	ND<5	ND<5
Dibromomethane	ND<5	ND<5	ND<5
cis-1,3-Dichloropropene	ND<5	ND<5	ND<5
Toluene	ND<5	ND<5	ND<5
trans-1,3-Dichloropropene	ND<5	ND<5	ND<5
1,1,2-Trichloroethane	ND<5	ND<5	ND<5
1,2-Dibromoethane	ND<5	ND<5	ND<5
1,3-Dichloropropane	ND<5	ND<5	ND<5
Tetrachloroethene	ND<5	ND<5	ND<5
Dibromochloromethane	ND<5	ND<5	ND<5
Chlorobenzene	ND<5	ND<5	ND<5
1,1,1,2-Tetrachloroethane	ND<5	ND<5	ND<5
Ethylbenzene	ND<5	ND<5	ND<5
m,p-Xylene	ND<5	ND<5	ND<5
o-Xylene	ND<5	ND<5	ND<5
Styrene	ND<5	ND<5	ND<5
Bromoform	ND<5	ND<5	ND<5

Certificate of Analysis No. 9703076

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

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Project Number: 120603501090010
Matrix: SOIL

Method: 8260 Soil, Volatile Organics

Units: UG/KG

Analyte	B37-RE4-SP7	B37-RE4-SP8	B37-RE3-SP1
Isopropylbenzene	ND<5	ND<5	ND<5
1,1,2,2-Tetrachloroethane	ND<5	ND<5	ND<5
1,2,3-Trichloropropane	ND<5	ND<5	ND<5
n-Propylbenzene	ND<5	ND<5	ND<5
Bromobenzene	ND<5	ND<5	ND<5
1,3,5-Trimethylbenzene	ND<5	ND<5	ND<5
2-Chlorotoluene	ND<5	ND<5	ND<5
4-Chlorotoluene	ND<5	ND<5	ND<5
tert-Butylbenzene	ND<5	ND<5	ND<5
1,2,4-Trimethylbenzene	ND<5	ND<5	ND<5
sec-Butylbenzene	ND<5	ND<5	ND<5
p-Isopropyltoluene	ND<5	ND<5	ND<5
1,3-Dichlorobenzene	ND<5	ND<5	ND<5
1,4-Dichlorobenzene	ND<5	ND<5	ND<5
n-Butylbenzene	ND<5	ND<5	ND<5
1,2-Dichlorobenzene	ND<5	ND<5	ND<5
1,2-Dibromo-3-chloroprop	ND<5	ND<5	ND<5
1,2,4-Trichlorobenzene	ND<5	ND<5	ND<5
Hexachlorobutadiene	ND<5	ND<5	ND<5
Naphthalene	ND<5	ND<5	ND<5
1,2,3-Trichlorobenzene	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.

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

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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-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<330
2-Nitroaniline	ND<800	ND<800	ND<1600	ND<800	NI
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

Certificate of Analysis No. 9703076

FULLERTON LABORATORY
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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: 3/12/97
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

Certificate of Analysis No. 9703076

FULLERTON LABORATORY
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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 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: 3/12/97
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

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
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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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FULLERTON, CA 92831
PHONE (714) 447-68

** 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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** 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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** 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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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 (%)
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) 447-6866

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 (%)
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) 447-68[illegible]

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) 447-6868

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) 660-090

SPL Blank QC Report

pa

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) 660-0901

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
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) 660-09

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
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	26-12

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

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.
9703523-11A	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) 528-6582

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					
B37-RE4-SP1	3/4/97	9:31		X	S	8oz sleeves		ice	2	X	X	X	X					
B37-RE4-SP2		9:46																
B37-RE4-SP3		9:57																
B37-RE4-SP4		10:55																
B37-RE4-SP5		10:30																
B37-RE4-SP6		10:19																
B37-RE4-SP7		10:39																
B37-RE4-SP8		11:00																
B37-RE2-SP1		9:23																
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

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

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

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

BOE-C6-0109032

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No: 9703076

C- 04767

Client Name: Montgomery Watson
Address/Phone: 250 N. Madison Ave., Pasadena
Client Contact: Ted Graves (818) 568-6582
Project Name: MDRC C6 Facility, Torrance, CA
Project Number: 12060035.01090010
Project Location: C6 Facility, Bldg. 357 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	THLC 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 ☐
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):

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

☐ 888[illegible] Interchange Drive, Houston, TX 77054 (713) 660-0901
☐ 450 Hughes Drive, Traverse City, MI 49684 (616) 947-5777
☐ 500 Ambassador Caffery Parkway, Scott, LA 70583 (3[illegible]) [illegible]37-4775
☐ 1511 E. Orangethorpe Avenue, Fullerton, CA 92631 (714) 447-6868

BOE-C6-0109033

F A X

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- 02473

page 1 of 2

Client Name: Montgomery Watson

Address/Phone: 7891 N. Madison Avenue, Tuscaloosa

Client Contact: Ind Chauna (AP) 704-1607

Project Name: MPPE U. Mobile, Tuscaloosa, AL

Project Number: [illegible]

Project Location: U. Mobile, [illegible] Area

Invoice To: Ind Chauna

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	Total Metals	VOCs 8260	SVOCs 8270					
MW1-MW-[illegible]	3/4/97	9:00		X	S	4 ICE VOC		ICE	2	X	X	X	X					
MW1-MW-[illegible]	↓	9:10		↓	↓	↓		↓	↓	↓	↓	↓	↓					
MW1-MW-[illegible]	↓	9:[illegible]		↓	↓	↓		↓	↓	↓	↓	↓	↓					
MW1-MW-[illegible]	↓	11:55		↓	↓	↓		↓	↓	↓	↓	↓	↓					
MW1-MW-[illegible]	↓	10:[illegible]		↓	↓	↓		↓	↓	↓	↓	↓	↓					
MW1-MW-[illegible]	↓	11:19		↓	↓	↓		↓	↓	↓	↓	↓	↓					
MW1-MW-[illegible]	↓	11:[illegible]		↓	↓	↓		↓	↓	↓	↓	↓	↓					
MW1-MW-[illegible]	↓	11:[illegible]		↓	↓	↓		↓	↓	↓	↓	↓	↓					
MW1-MW-[illegible]	↓	9:[illegible]		↓	↓	↓		↓	↓	↓	↓	↓	↓					
MW1-MW-[illegible]	↓	9:[illegible]		↓	↓	↓		↓	↓	↓	↓	↓	↓					

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 ☒ All Others

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 Johnson	date 3/7/97	time 1720	2. Received by:
3. Relinquished by:	date	time	4. Received by:
5. Relinquished by:	date	time	6. Received by Laboratory:

☐ 8 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

☐ [illegible]

MAR-14-1997 10:05 MONTGOMERY WATSON 818 796 5941 P.02

BOE-C6-0109035

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: S=soil W=water 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-SP1	3/1/97	1200		X	S	[illegible]	[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 VOA vial	"	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):

1. Relinquished by Sampler: [illegible]	date 3/7/97	time 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 5541 P.03
TOTAL P.03
BOE-C6-0109036

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	QUOTE PRICE
	3/7/97 9:37	9703076-01B	Soil	8270S/PRP6MS	$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

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: ☒ 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	QUOTED PRICE
	3/7/97 10:19	9703076-06B	Soil	8270S/PRPGMS	$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	QUOTE PRICE
	3/7/97 12:30	9703076-11B	Soil	8270S/PRPGNS	$205.00
	9:26	-12B			
	12:38	-13B			
	14:47	-14B			

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
1. [signature]	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

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
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-RE3-SPCONF

Laboratory Sample Number: 97030967
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	120	<---
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	21	<---
Cobalt	6010	80	8000	0.5	7.5	<---
Copper	6010	25	2500	0.1	10	<---
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	8.2	<---
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	23	<---
Zinc	6010	250	5000	0.1	40	<---

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-RE3-SPCONF
Laboratory Sample Number: 97030967
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-RE3-SPCONF

Laboratory Sample Number: 97030967

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	*105*
Toluene-d8	*95*
4-Bromofluorobenbzene	*109*

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-RE3-SPCONF
Laboratory Sample #: 97030967
Laboratory Reference #: MWI 8751

Sampled : 03-25-97
Received: 03-25-97
Analyzed: 03-31-97
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	100	N.D.
Acenaphthylene	208-96-8	100	N.D.
Aniline	62-53-3	100	N.D.
Anthracene	120-12-7	100	N.D.
Benzidine	92-87-5	500	N.D.
Benzoic Acid	65-85-0	250	N.D.
Benz (a)anthracene	56-55-3	100	N.D.
Benzo(b)fluoranthene	205-99-2	250	N.D.
Benzo(k)fluoranthene	207-08-9	250	N.D.
Benzo(g,h,i)perylene	191-24-2	250	N.D.
Benzo(a)pyrene	50-32-8	250	N.D.
Benzyl alcohol	100-51-6	100	N.D.
Bis(2-chloroethoxy)methane	111-91-1	100	N.D.
Bis(2-chloroethyl)ether	111-44-4	100	N.D.
Bis(2-chloroisopropyl)ether	39638-32-9	100	N.D.
Bis(2-ethylhexyl)phthalate	117-81-7	100	N.D.
4-Bromophenyl phenyl ether	101-55-3	100	N.D.
Butyl benzyl phthalate	85-68-7	100	N.D.
4-Chloroaniline	106-47-8	100	N.D.
2-Chloronaphthalene	91-58-7	100	N.D.
4-Chloro-3-methylphenol	59-50-7	100	N.D.
2-Chlorophenol	95-57-8	100	N.D.
4-Chlorophenyl phenyl ether	7005-72-3	100	N.D.
Chrysene	218-0109	100	N.D.
Dibenz(a,h)anthracene	53-70-3	100	N.D.
Dibenzofuran	132-64-9	100	N.D.
Di-n-butyl phthalate	84-74-2	250	N.D.
1,3-Dichlorobenzene	541-73-1	100	N.D.
1,4-Dichlorobenzene	106-46-7	100	N.D.
1,2-Dichlorobenzene	95-50-1	100	N.D.
3,3'-Dichlorobenzidine	91-94-1	100	N.D.
2,4-Dichlorophenol	120-83-2	100	N.D.
Diethyl phthalate	84-66-2	100	N.D.
2,4-Dimethylphenol	105-67-9	100	N.D.
Dimethyl phthalate	131-11-3	100	N.D.
4,6-Dinitro-2-methylphenol	534-52-1	100	N.D.
2,4-Dinitrophenol	51-28-5	100	N.D.

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

Sample Description: Soil, B37-RE3-SPCONF
Laboratory Sample #: 97030967

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*
2,4-Dinitrotoluene	121-14-2	250	N.D.
2,6-Dinitrotoluene	606-20-2	250	N.D.
Di-n-octyl phthalate	117-84-0	250	N.D.
Fluoranthene	206-44-0	100	N.D.
Fluorene	86-73-7	100	N.D.
Hexachlorobenzene	118-74-1	100	N.D.
Hexachlorobutadiene	87-68-3	100	N.D.
Hexachlorocyclopentadiene	77-47-4	100	N.D.
Hexachloroethane	67-72-1	100	N.D.
Indeno(1,2,3-cd)pyrene	193-39-5	250	N.D.
Isophorone	78-59-1	100	N.D.
2-Methylnaphthalene	91-57-6	100	N.D.
2-Methylphenol	95-48-7	100	N.D.
4-Methylphenol	106-44-5	100	N.D.
Naphthalene	91-20-3	100	N.D.
2-Nitroaniline	88-74-4	250	N.D.
3-Nitroaniline	99-09-2	250	N.D.
4-Nitroaniline	100-01-6	250	N.D.
Nitrobenzene	98-95-3	100	N.D.
2-Nitrophenol	88-75-5	100	N.D.
4-Nitrophenol	100-02-7	100	N.D.
N-Nitrosodiphenylamine	86-30-6	100	N.D.
N-Nitroso-di-n-propylamine	621-64-7	100	N.D.
N-Nitrosodimethylamine	62-75-9	100	N.D.
Pentachlorophenol	87-86-5	250	N.D.
Phenanthrene	85-01-8	100	N.D.
Phenol	108-95-2	100	N.D.
Pyrene	129-00-0	100	N.D.
1,2,4-Trichlorobenzene	120-82-1	100	N.D.
2,4,5-Trichlorophenol	95-95-4	100	N.D.
2,4,6-Trichlorophenol	88-06-2	100	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.
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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

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

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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: 03-27-97
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

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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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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.

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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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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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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*

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

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.

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, 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*

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

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.
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.

ORANGE COAST ANALYTICAL

Mark Noorani

ark Noorani
Laboratory Director

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

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

Mark Noorani
Laboratory Director

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

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
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

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.

ORANGE COAST ANALYTICAL

Mark Noorani

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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

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.

ORANGE COAST ANALYTICAL

Mark Noorani

Mark Noorani
Laboratory Director

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

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.

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

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

ORANGE COAST ANALYTICAL

Mark Noorani

MARK NOORANI
Laboratory Director

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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

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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	3
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

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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

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Tustin, CA 92680
(714) 832-0064, Fax (714) 832-0067

Analysis Request and Chain of Custody Record

Lab Job No: _____
Page 1 of 2

24 hr TAT on Soil TPH only
REQUIRED TAT: Standard otherwise

CUSTOMER INFORMATION

COMPANY: Montgomery Watson
SEND REPORT TO: Fred Strauss
ADDRESS: 250 N. Madison Ave.
Pasadena, CA 91109
PHONE: (818) 568-6582 FAX: (818) 796-5941

PROJECT INFORMATION

PROJECT NAME: McDonnell Douglas C-6 Facility
NUMBER: 1206035.01090010
LOCATION: BLDG 37 Area
ADDRESS: 19503 S. Normandie Ave.
Torrance, CA
SAMPLED BY: JM/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
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		0920				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-CONF	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	X				
B37-CS-2	2		1145				X	X	X	X	X				
B37-CS-3	2		1250				X	X	X	X	X	NO PCBs	JM		
B37-CS-4	2		1300				X	X	X	X	X	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 Marin	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-C6-0109077

ORANGE COAST ANALYTICAL, INC.
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(714) 832-0064, Fax (714) 832-0067

Analysis Request and Chain of Custody Record

Lab Job No: _____
Page 2 of 2

REQUIRED TAT: 24 hr. TAT on 5030 TPH only Standard otherwise

CUSTOMER INFORMATION

COMPANY: Montgomery Watson
SEND REPORT TO: Fred Strauss
ADDRESS: 250 N. Madison Ave. Pasadena, CA 91109
PHONE: (818) 568-6582 FAX: (818) 796-5941

PROJECT INFORMATION

PROJECT NAME: McDonnell-Douglas C-6 Facility
NUMBER: 1206035 01090010
LOCATION: Bldg 37 Area
ADDRESS: 19503 S. Normandie Ave Torrance CA
SAMPLED BY: JAM/AWN

ANALYSIS/METHOD REQUEST

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	TPH (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	HNO3 HCl	X	X	X	X	X	X			
Rinsate Blank	7		1615	water	Amber Poly VOAs	HNO3 HCl	X	X	X	X	X	X			
Trip Blank	2		-	water	VOAs	HCl			X						VOCs ONLY
	-														
	-														
	-														
	-														
	-														
	-														
	-														
	-														
	2														

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:
		[signature]	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-C6-0109078

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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-RE3-SPCONFA

Laboratory Sample Number: 97041007
Laboratory Reference #: MWI 8938

Sampled: 04-21-97
Received: 04-21-97
Analyzed: 04-22-97
Reported: 04-22-97

PCB'S (EPA 8080)

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT (ug/kg)*	*SAMPLE RESULTS (ug/kg)*
PCB-1016	12674-11-2	20	N.D.
PCB-1221	11104-28-2	20	N.D.
PCB-1232	11141-16-5	20	N.D.
PCB-1242	53469-21-9	20	N.D.
PCB-1248	12672-29-6	20	N.D.
PCB-1254	11097-69-1	20	N.D.
PCB-1260	11096-82-5	20	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
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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 #: 97041021
Laboratory Reference #: MWI 8938

Sampled : 04-21-97
Received: 04-21-97
Analyzed: 04-28-97
Reported: 05-05-97

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 #: 97041021

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

Mark Noorani
Laboratory Director

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 : 04-21-97
Sample Description: Water, Rinsate Blank *Received:* 04-21-97
Laboratory Sample #: 97041022 *Analyzed:* 04-28-97
Laboratory Reference #: MWI 8938 *Reported:* 05-05-97

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 #: 97041022

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.

ORANGE COAST ANALYTICAL

Mark Noorani

ark 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, Equip Blank
Laboratory Sample Number: 97041021
Laboratory Reference #: MWI 8938

Sampled: 04-21-97
Received: 04-21-97
Analyzed: 04-28-97
Reported: 05-05-97

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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Sample Description: Water, Equip Blank

Laboratory Sample Number: 97041021

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	*105*
4-Bromofluorobenzene	*107*

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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: 97041022
Laboratory Reference #: MWI 8938

Sampled: 04-21-97
Received: 04-21-97
Analyzed: 04-28-97
Reported: 05-05-97

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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Sample Description: Water, Rinsate Blank

Laboratory Sample Number: 97041022

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	*106*
Toluene-d8	*104*
4-Bromofluorobenzene	*108*

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

Sample Description: Water, Trip Blank
Laboratory Sample Number: 97041023
Laboratory Reference #: MWI 8938

Sampled: 04-21-97
Received: 04-21-97
Analyzed: 04-28-97
Reported: 05-05-97

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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Sample Description: Water, Trip Blank

Laboratory Sample Number: 97041023

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	*108*
Toluene-d8	*104*
4-Bromofluorobenzene	*110*

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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: 97041021
Laboratory Reference #: MWI 8938

Sampled: 04-21-97
Received: 04-21-97
Analyzed: 04-22-97
Reported: 05-05-97

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

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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: 97041022
Laboratory Reference #: MWI 8938

Sampled: 04-21-97
Received: 04-21-97
Analyzed: 04-22-97
Reported: 05-05-97

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

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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: 97041021
Laboratory Reference #: MWI 8938

Sampled: 04-21-97
Received: 04-21-97
Analyzed: 04-28-97
Reported: 05-05-97

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 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, Rinsate Blank

Laboratory Sample Number: 97041022
Laboratory Reference #: MWI 8938

Sampled: 04-21-97
Received: 04-21-97
Analyzed: 04-28-97
Reported: 05-05-97

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.

ORANGE COAST ANALYTICAL

Mark Noorani

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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

Analysis Method: 418.1

Sample Description: Water

Laboratory Reference #: MWI 8938

Sampled : 04-21-97
Received: 04-21-97
Analyzed: 04-22-97
Reported: 05-05-97

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Laboratory Sample Number	*Client Sample Number*	*Sample Result (mg/l)*
97041021	Equip Blank	N.D.
97041022	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

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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: 97041021
Laboratory Reference #: MWI 8938

Sampled: 04-21-97
Received: 04-21-97
Analyzed: 04-28-97
Reported: 05-05-97

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.

ORANGE COAST ANALYTICAL

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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: 97041022
Laboratory Reference #: MWI 8938

Sampled: 04-21-97
Received: 04-21-97
Analyzed: 04-28-97
Reported: 05-05-97

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.

ORANGE COAST ANALYTICAL

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Laboratory Director

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QC DATA REPORT

Analysis : Total Recoverable Petroleum Hydrocarbons (EPA 418.1)

Date of Analysis : 04/22/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8938

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Hydrocarbons	0.0	2.5	2.2	2.1	88	84	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 : Total Recoverable Petroleum Hydrocarbons (EPA 418.1)

Date of Analysis : 04/22/97
Laboratory Sample No : 97040932
Laboratory Reference No : MWI 8938

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Hydrocarbons	0.0	100	118	113	118	113	4

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
Laboratory Director

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QC DATA REPORT

Analysis : Metals

Date of Analysis : 05/05/97
Laboratory Sample No : 97041020
Laboratory Reference No : MWI 8938

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Antimony	0.00	30.00	29.00	29.00	97	97	0
Arsenic	0.00	10.00	8.40	8.10	84	81	4
Barium	8.20	10.00	16.00	17.00	78	88	6
Beryllium	0.00	1.00	0.98	0.96	98	96	2
Cadmium	0.00	1.00	0.95	0.94	95	94	1
Chromium (Total)	1.60	5.00	5.70	5.90	82	86	3
Chromium (VI)	0.00	1.00	0.97	0.87	97	87	11
Cobalt	0.30	1.00	1.25	1.28	95	98	2
Copper	0.60	1.00	1.59	1.61	99	101	1
Lead	0.00	10.00	8.60	9.20	86	92	7
Mercury	0.000	0.020	0.020	0.022	100	110	10
Molybdenum	0.00	10.00	8.40	8.20	84	82	2
Nickel	0.34	5.00	4.90	5.00	91	93	2
Selenium	0.00	10.00	8.00	8.00	80	80	0
Silver	0.00	5.00	4.20	4.00	84	80	5
Thallium	0.00	30.00	24.00	23.00	80	77	4
Vanadium	1.90	5.00	6.50	6.60	92	94	2
Zinc	1.50	5.00	6.30	6.10	96	92	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
Laboratory Director

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QC DATA REPORT

Analysis : Metals

Date of Analysis : 04/22/97
Laboratory Sample No : 97040596
Laboratory Reference No : MWI 8938

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Antimony	0.00	3.000	2.420	2.700	81	90	11
Arsenic	0.00	1.000	0.800	0.920	80	92	14
Barium	0.00	0.100	0.105	0.104	105	104	1
Beryllium	0.00	0.100	0.085	0.087	85	87	2
Cadmium	0.00	0.100	0.089	0.097	89	97	9
Chromium (VI)	0.00	0.500	0.450	0.490	90	98	9
Chromium (Total)	0.00	0.100	0.087	0.091	87	91	4
Cobalt	0.00	0.100	0.109	0.107	109	107	2
Copper	0.00	0.100	0.080	0.089	80	89	11
Lead	0.00	1.000	1.040	1.010	104	101	3
Mercury	0.000	0.020	0.020	0.022	100	110	10
Molybdenum	0.00	1.000	0.920	1.000	92	100	8
Nickel	0.00	0.500	0.500	0.480	100	96	4
Selenium	0.00	1.000	0.860	0.950	86	95	10
Silver	0.00	0.500	0.440	0.480	88	96	9
Thallium	0.00	3.000	2.460	2.650	82	88	7
Vanadium	0.00	0.500	0.450	0.470	90	94	4
Zinc	0.00	0.100	0.109	0.109	109	109	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

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

QC DATA REPORT

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

Date of Analysis : 04/28/97
Laboratory Sample No : 97041022
Laboratory Reference No : MWI 8938

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
Benzene	0.0	20	18	16	90	80	12
1,1-Dichloroethene	0.0	20	17	15	85	75	13
Trichloroethene	0.0	20	19.7	17.2	99	86	14
Toluene	0.0	20	18	17	90	85	6
Chlorobenzene	0.0	20	17	16	85	80	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 : Volatile Organics by GC/MS (EPA 8260)

Date of Analysis : 04/25/97
Laboratory Sample No : 97040920
Laboratory Reference No : MWI 8938

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
Benzene	0.0	50	43	48	86	96	11
1,1-Dichloroethene	0.0	50	42	44	84	88	5
Trichloroethene	0.0	50	51	56	102	112	9
Toluene	0.0	50	45	49	90	98	9
Chlorobenzene	0.0	50	46	46	92	92	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

ORANGE COAST ANALYTICAL

Mark Noorani

MARK NOORANI
Laboratory Director

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

QC DATA REPORT

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

Date of Analysis : 04/29/97
Laboratory Sample No : 97041020
Laboratory Reference No : MWI 8938

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
Benzene	0.0	50	45	42	90	84	7
1,1-Dichloroethene	0.0	50	44	39	88	78	12
Trichloroethene	0.0	50	52	47	104	94	10
Toluene	0.0	50	47	44	94	88	7
Chlorobenzene	0.0	50	44	42	88	84	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

ORANGE COAST ANALYTICAL

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QC DATA REPORT

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

Date of Analysis : 04/25/97
Laboratory Sample No : 97040857
Laboratory Reference No : MWI 8938

Analyte	R1 (ng)	SP (ng)	MS (ng)	MSD (ng)	PR1 %	PR2 %	RPD %
1,4-Dichlorobenzene	0.0	50	45	46	90	92	2
n-Nitroso-di-n-propylamine	0.0	50	50	51	100	102	2
1,2,4-Trichlorobenzene	0.0	50	45	46	90	92	2
Acenaphthene	0.0	50	49	48	98	96	2
Pyrene	0.0	50	45	45	90	90	0
Pentachlorophenol	0.0	100	80	81	80	81	1
4-Chloro-3-Methylphenol	0.0	100	72	70	72	70	3
2-Chlorophenol	0.0	100	86	86	86	86	0
Phenol	0.0	100	77	72	77	72	7

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

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Laboratory Director

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

QC DATA REPORT

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

Date of Analysis : 04/28/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8938

Analyte	R1 (ng)	SP (ng)	MS (ng)	MSD (ng)	PR1 %	PR2 %	RPD %
1,4-Dichlorobenzene	0.0	50	39	39	78	78	0
n-Nitroso-di-n-propylamine	0.0	50	42	49	84	98	15
1,2,4-Trichlorobenzene	0.0	50	39	39	78	78	0
Acenaphthene	0.0	50	47	46	94	92	2
Pyrene	0.0	50	43	41	86	82	5
Pentachlorophenol	0.0	100	72	76	72	76	5
4-Chloro-3-Methylphenol	0.0	100	56	60	56	60	7
2-Chlorophenol	0.0	100	77	79	77	79	3
Phenol	0.0	100	25	27	25	27	8

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

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

QC DATA REPORT

Analysis : Organochlorine Pesticides (EPA 8080)

Date of Analysis : 04/28/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8938

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
4,4'-DDT	0.0	1.00	1.10	1.00	110	100	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

Mark Noorani

MARK NOORANI
Laboratory Director

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

QC DATA REPORT

Analysis : PCB 'S (EPA 8080)

Date of Analysis : 04/28/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8938

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
PCB-1260	0.0	20	11	9.2	55	46	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

ORANGE COAST ANALYTICAL

MARK NOORANI
Laboratory Director

F A X

MONTGOMERY WATSON

250 N. Madison Avenue
Pasadena, California 91101

Tel: 818 568 6508
Fax: 818 796 5941

Date: 4/22/97

To: Mark Noorani

Fax No: (714) 832-0067

From: Steve Reiners

Reference: MDRC

Subject: Additional Analyses

No. of Pages: 1
(including cover)

Comments:

Please run the following samples for VOCs (8260) and SVOCs (8270) on standard turn-around time:

B37-GS-143-6'
B37-GS-145-6'
B37-GS-147-4'
B37-GS-149-5.5'
B37-GS-151-5.5'
B37-GS-153-5.5'

Also please change the sample names on the following two samples from yesterday (4/21):

B37-RE3-SPCONF changes to B37-RE3-SPCONFA
B37-RE4-SPCONF changes to B37-RE4-SPCONFA

Please call me at (818) 568-6334 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.

TOTAL P.01

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 1 of 2

24 hr TAT on Soil PCBs & TRPH only. 5 day TAT otherwise

CUSTOMER INFORMATION

COMPANY: Montgomery Watson
SEND REPORT TO: Fred Strauss
ADDRESS: 250 N. Madison Ave. Pasadena, CA 91101
PHONE: (818) 568-6582 FAX: (818) 796-5941

PROJECT INFORMATION

PROJECT NAME: Mc Donnell Douglas
NUMBER: 1206035.01090010
LOCATION: C-6 Facility - Bldg. 37 Area
ADDRESS: 19503 S. Normandie Ave. Los Angeles, CA
SAMPLED BY: AWN/IV/JAM

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRESERVATIVE	TRPH 418.1	Title 22 Metals	VOCs 8260	SVOCs 8270	PCBs 8080	Pesticides 8080	REMARKS/PRECAUTIONS
B37-RE3-SPCONF	2	4/21/97	1325	SOIL	2"x6" SS Sleeve	ICE				X			Rush 24 hr TAT
B37-RE4-SPCONF	2		1335							X			Rush 24 hr TAT
B37-GS-142-6'	2		1036				X	X					
B37-GS-143-6'	2		1044				X	X					
B37-GS-144-6'	2		1052				X	X					
B37-GS-145-6'	2		1058				X	X					
B37-GS-146-6'	2		1106				X	X					
B37-GS-147-4'	2		1115				X	X					
B37-GS-148-6'	2		1121				X	X					
B37-GS-149-5.5'	2		1528				X	X					
B37-GS-150-5.5'	2		1535				X	X					
B37-GS-151-5.5'	2		1542				X	X					
B37-GS-152-5.5'	2		1552				X	X					
B37-GS-153-5.5'	2		1600				X	X					

Total No. of Samples: 17

Method of Shipment: 2 coolers via Orange Coast Courier

Relinquished By: Adam W. Varnio Date/Time: 4/21/97 1700

Received By: Date/Time:

Relinquished By: Date/Time:

Received By: Date/Time:

Relinquished By: Date/Time:

Received For Lab By: Sergei Hatkin Date/Time: 04-21-97 5:00 PM (MH)

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 dispo[illegible] A disposal fee may be imposed if client fails to pickup samples.

BOE-C6-0109109

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 PCBs & pH only.
REQUIRED TAT: Standard TAT Otherwise

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: Montgomery Watson	PROJECT NAME: Mc Donnell Douglas
SEND REPORT TO: Fred Strauss	NUMBER: 1206035.01090010
ADDRESS: 250 N. Madison Ave. Pasadena, CA 91101	LOCATION: C-6 Facility - Bldg. 37 Area
	ADDRESS: 19503 S. Normandie Ave. Los Angeles, CA
PHONE: (818) 568-6582 FAX: (818) 796-5941	SAMPLED BY: IV/JAM

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	4/21/97	1615	Water	40ml Vial 1 poly 2 VOAs	HNO3 HCl	X	X	X	X	X	X			
Rinsate Blank	7	↓	1630	↓	↓	↓	X	X	X	X	X	X			
Trip Blank	2	↓	—	↓	2VOAs	HCl			X						

Total No. of Samples: 17

Method of Shipment: 2 coolers via Orange Coast Courier

Relinquished By:	Date/Time:	Received By:	Date/Time:
Adam W. Vernia	4/21/97 1700		
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received For Lab By: [signature]	Date/Time: 04.22.97 5:00 PM

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-C6-0109110

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

SPL, INC.

REPORT APPROVAL SHEET

WORK ORDER NUMBER: *97 - 02 - 080*

Approved for release by:

Joel Grice, Laboratory Manager — *Date:* 2/27/97

Michael J. Crisostomo, Project Manager — *Date:* 2-21-97

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

CASE NARRATIVE

SPL Workorder Number: 9702080

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 February 11, 1997, one (1) soil sample was received by the laboratory. The sample was received intact and within the 2°C - 6°C preservation temperature range.

The sample was analyzed as initially requested on the accompanying chain of custody record. On February 17, 1997, instructions to analyze sample B37-GS-27 for Carbon Chain Identification by Simulated Distillation. The results of this additional analysis are presented under this SPL workorder.

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 the following elements: antimony, thallium and zinc. 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.

If you have any questions regarding information presented in this report please call me at (714) 447-6868. Please refer to workorder 9702080 to expedite service.

Michael J. Crisostomo
Project Manager

Certificate of Analysis No. 9702080

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
Site: Bldg. 37 Area, Torrance, CA
Method: 418.1*

Report Date: 2/21/97
Date(s) Received: 2/11/97
Date(s) Sampled: 2/11/97
Date(s) Analyzed: 2/12/97
Project Number: 120603501090010
Matrix: SOIL

Units: mg/Kg

Sample ID	Petroleum Extractables
B37-GS-27	28000

Results reported at Practical Quantitation Limit 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.

Certificate of Analysis No. 9702080

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

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

Report Date: 2/21/97
Date(s) Received: 2/11/97
Date(s) Sampled: 2/11/97
Date(s) Analyzed: 2/18/97,2/17/97,2/12/9
Project Number: 12060350109001
Matrix: SOIL

Analyte	Units	EPA Method	B37-GS-27
Antimony, Total	mg/Kg	6010A***	ND<0.500
Arsenic, Total	mg/Kg	6010A***	ND<0.11
Barium, Total	mg/Kg	6010A***	81.7
Beryllium, Total	mg/Kg	6010A***	ND<0.06
Cadmium, Total	mg/Kg	6010A***	ND<0.05
Chromium, Total	mg/Kg	6010A***	12.7
Cobalt, Total	mg/Kg	6010A***	7.35
Copper, Total	mg/Kg	6010A***	11.8
Digestion-Solids 3050A	N/A	3050A***	02/17/97
Lead, Total	mg/Kg	6010A***	4.07
Mercury Digestion in Soil	N/A	7471A***	02/12/97
Mercury, Total	mg/Kg	7471A***	ND<0.200
Molybdenum,Total	mg/Kg	6010A***	ND<2.50
Nickel, Total	mg/Kg	6010A ***	8.52
Selenium, Total	mg/Kg	6010A***	ND<5.00
Silver, Total	mg/Kg	6010A***	ND<5.00
Soil extraction	N/A	California LUFT Manual, Appendix D	02/18/97
Thallium, Total	mg/Kg	6010A***	ND<0.500
Vanadium, Total	mg/Kg	6010A***	29.4
Zinc, Total	mg/Kg	6010A***	33.4

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.

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

SPL California License Number 2178

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

Certificate of Analysis No. 9702080

Client:	Montgomery Watson	**Report Date:**	2/21/97
Client Address:	250 N. Madison Avenue	**Date(s) Received:**	2/11/97
	Pasadena, CA 91101	**Date(s) Sampled:**	2/11/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	2/14/97
Project Name	MDRC C-6 Facility	**Project Number:**	120603501090010
Site:	Bldg. 37 Area, Torrance, CA	**Matrix:**	SOIL
Method:	8260 Soil, Volatile Organics	**Units:**	UG/KG

Analyte	B37-GS-27
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

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
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FULLERTON, CA 92831
PHONE (714) 447-686[illegible]

Certificate of Analysis No. 9702080

Client:	Montgomery Watson	**Report Date:**	2/21/97
Client Address:	250 N. Madison Avenue	**Date(s) Received:**	2/11/97
	Pasadena, CA 91101	**Date(s) Sampled:**	2/11/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	2/14/97
Project Name	MDRC C-6 Facility	**Project Number:**	120603501090010
Site:	Bldg. 37 Area, Torrance, CA	**Matrix:**	SOIL
Method:	8260 Soil, Volatile Organics	**Units:**	UG/KG

Analyte	B37-GS-27
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
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-chloropropa	ND<5
1,2,4-Trichlorobenzene	ND<5
Hexachlorobutadiene	ND<5
Naphthalene	ND<5
1,2,3-Trichlorobenzene	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

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

Certificate of Analysis No. 9702080

Client:	Montgomery Watson	**Report Date:**	2/26/97
Client Address:	250 N. Madison Avenue Pasadena, CA 91101	**Date(s) Received:**	2/11/97
		Date(s) Sampled:	2/11/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	2/18/97
Project Name:	MDRC C6-Facility	**Project Number:**	120603501090010
Site:	Bldg. 37 Area, Torrance, CA	**Matrix:**	SOIL
Method:	Simulated Distillation	**Units:**	mg/Kg

Carbon Chain Range	**B37-GS-27**
C08-C09	ND < 200
C10-C11	ND < 200
C12-C13	ND < 200
C14-C15	ND < 200
C16-C17	790
C18-C19	1800
C20-C23	4700
C24-C27	5200
C28-C31	4400
C32-C35	2700
C36-C39	1900
C40-C43	ND < 200
C44+	ND < 200
Total	21490

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
METALS

MS/MSD Results

Date: 2/18/97
Sample ID: 9702104-1

Matrix: Soil
Includes: 9702104-1,3,4,6; 9702080-1; 9702102-1-4; 9702118-1-2; 9702111-1; 9702112-1

Parameter	LMB	LCS Recovery (%)	MS Recovery (%)		MSD Recovery (%)		*Acceptability Range (%)	RPD	RPD Range (%)
Antimony, Sb	ND	96	57	**	60	**	80-120	5.7	20
Arsenic, As	ND	98	84		88		80-120	4.4	20
Barium, Ba	ND	96	82		91		80-120	10	20
Beryllium, Be	ND	92	85		90		80-120	4.9	20
Cadmium, Cd	ND	95	85		91		80-120	5.7	20
Chromium, Cr	ND	96	84		103		80-120	20	20
Cobalt, Co	ND	94	80		86		80-120	6.9	20
Copper, Cu	ND	97	92		102		80-120	10	20
Lead, Pb	ND	92	81		86		80-120	6.3	20
Molybdenum, Mo	ND	94	84		89		80-120	5.9	20
Nickel, Ni	ND	96	82		89		80-120	7.8	20
Selenium, Se	ND	90	80		85		80-120	5.5	20
Silver, Ag	ND	106	89		98		80-120	10	20
Thallium, Tl	ND	94	77	**	80		80-120	3.8	20
Vanadium, V	ND	94	86		94		80-120	9.0	20
Zinc, Zn	ND	99	74	**	84		80-120	13	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) 447-68

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/13/97
Analyzed on: 02/12/97
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
9702060-03A	ND	ND	.0010	.00104	104	.00106	106	1.9	20	80 -120

HGSC21297 -9702023

Samples in batch:

9702080-01A

COMMENTS:

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/13/97
Analyzed on: 02/12/97
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	.0010	.00097	97.0	80 - 120

HGSC21297 -9702023

mples in batch:

9702080-01A

COMMENTS:

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/12/97
Analyzed on: 02/12/97
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
9702080-01A	ND	ND	500	500	100	495	99.0	1.0	20	80 -120

PETHS021297 -9702022

Samples in batch:

9702080-01A

COMMENTS:

** SPL BATCH QUALITY CONTROL REPORT **

M8015 - Carbon Chain ID

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

Matrix: Soil

Units: mg/Kg

Batch Id: GC_6970218101100

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Petroleum Hydrocarbons-Die	ND	200	160	80.0	70 - 140

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
PETROLEUM HYDROCARBONS-DIE	25	200	210	92.5	210	92.5	0	20	50 - 150

Analyst: RTC

Sequence Date: 02/18/97

SPL ID of sample spiked: 9702134-04A

Sample File ID: GC6B213.TX0

Method Blank File ID:

Blank Spike File ID: GC6B211.TX0

Matrix Spike File ID: GC6B216.TX0

Matrix Spike Duplicate File ID: GC6B217.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: SPL Internal Limits

(***) = Source:

SAMPLES IN BATCH(SPL ID): 9702102-01A 9702080-01A 9702134-01A 9702134-04A 9702134-03A 9702134-02A

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

QUALITY CONTROL INFORMATION

02/13/97

EPA 8240/8260 Compounds by EPA 8260 Method

9702103, 9702101, 9702057, 9702074, 9702080

Parameter	Laboratory Method Blank (ug/Kg)	Reporting Limits (ug/Kg)	LCS Rec. (%)	Acceptability Range (%)
Dichlorodifluoromethane	ND	5.0	98	70 - 130
Chloromethane	ND	5.0	94	70 - 130
Vinyl chloride	ND	5.0	84	70 - 130
Bromomethane	ND	5.0	86	70 - 130
Chloroethane	ND	5.0	86	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	92	70 - 130
1,1-Dichloroethene	ND	5.0	98	70 - 130
Acetonitrile	ND	50	NA	70 - 130
Iodomethane	ND	5.0	96	70 - 130
Allyl chloride	ND	50	NA	70 - 130
Methylene chloride	ND	5.0	86	70 - 130
Carbon disulfide	ND	5.0	84	70 - 130
Acrylonitrile	ND	50	NA	70 - 130
2-Methoxy-2-methylpropane	ND	5.0	92	70 - 130
trans-1,2-dichloroethene	ND	5.0	98	70 - 130
Vinyl acetate	ND	10	92	70 - 130
1,1-Dichloroethane	ND	5.0	88	70 - 130
2-Butanone	ND	10	92	70 - 130
Propionitrile	ND	50	NA	70 - 130
2,2-Dichloropropane	ND	5.0	92	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	88	70 - 130
Bromochloromethane	ND	5.0	96	70 - 130
1,1,1-Trichloroethane	ND	5.0	90	70 - 130
1,1-Dichloropropene	ND	5.0	106	70 - 130
Carbon tetrachloride	ND	5.0	102	70 - 130
1,2-Dichloroethane	ND	5.0	94	70 - 130
Benzene	ND	5.0	102	70 - 130
Trichloroethene	ND	5.0	102	70 - 130

ND = Not Detected

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QUALITY CONTROL INFORMATION

02/13/97

EPA 8240/8260 Compounds by EPA 8260 Method

9702103, 9702101, 9702057, 9702074, 9702080

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	96	70 - 130
1,4-Dioxane	ND	100	NA	70 - 130
Bromodichloromethane	ND	5.0	96	70 - 130
Dibromomethane	ND	5.0	100	70 - 130
2-Chloroethyl vinyl ether	ND	10	NA	70 - 130
4-Methyl-2-pentanone	ND	10	116	70 - 130
cis-1,3-Dichloropropene	ND	5.0	104	70 - 130
Toluene	ND	5.0	110	70 - 130
Ethyl methacrylate	ND	50	NA	70 - 130
trans-1,3-Dichloropropene	ND	5.0	104	70 - 130
2-Hexanone	ND	10	102	70 - 130
1,1,2-trichloroethane	ND	5.0	102	70 - 130
1,2-Dibromoethane	ND	5.0	108	70 - 130
1,3-Dichloropropane	ND	5.0	104	70 - 130
Tetrachloroethene	ND	5.0	112	70 - 130
Dibromochloromethane	ND	5.0	104	70 - 130
Chlorobenzene	ND	5.0	110	70 - 130
1,1,1,2-Tetrachloroethane	ND	5.0	102	70 - 130
Ethylbenzene	ND	5.0	114	70 - 130
m,p-Xylene	ND	5.0	115	70 - 130
o-Xylene	ND	5.0	118	70 - 130
Styrene	ND	5.0	122	70 - 130
Bromoform	ND	5.0	114	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	98	70 - 130
1,2,3-Trichloropropane	ND	5.0	98	70 - 130
n-Propylbenzene	ND	5.0	112	70 - 130

ND = Not Detected

FULLERTON LABORATORY
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PHONE (714) 447-686

QUALITY CONTROL INFORMATION

02/13/ 97

EPA 8240/8260 Compounds by EPA 8260 Method

9702103, 9702101, 9702057, 9702074, 9702080

Parameter	Laboratory Method Blank (ug/Kg)	Reporting Limits (ug/Kg)	LCS Rec. (%)	Acceptability Range (%)
Bromobenzene	ND	5.0	108	70 - 130
1,3,5-Trimethylbenzene	ND	5.0	118	70 - 130
2-Chlorotoluene	ND	5.0	102	70 - 130
4-Chlorotoluene	ND	5.0	102	70 - 130
tert-Butylbenzene	ND	5.0	110	70 - 130
1,2,4-Trimethylbenzene	ND	5.0	114	70 - 130
sec-Butylbenzene	ND	5.0	110	70 - 130
p-Isopropyltoluene	ND	5.0	114	70 - 130
1,3-Dichlorobenzene	ND	5.0	108	70 - 130
1,4-Dichlorobenzene	ND	5.0	106	70 - 130
n-Butylbenzene	ND	5.0	114	70 - 130
1,2-Dichlorobenzene	ND	5.0	108	70 - 130
1,2-Dibromo-3-chloropropane	ND	5.0	94	70 - 130
1,2,4-Trichlorobenzene	ND	5.0	118	70 - 130
Hexachlorobutadiene	ND	5.0	104	70 - 130
Naphthalene	ND	5.0	118	70 - 130
1,2,3-Trichlorobenzene	ND	5.0	114	70 - 130
DBFM Surrogate Rec. (%)	93	----	85	60 - 140
Toluene-d8 Surrogate Rec. (%)	99	----	105	60 - 140
BFB Surrogate Rec. (%)	80	----	109	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

02/13/97

EPA 8240/8260 Compounds by EPA 8260 Method

9702103, 9702101, 9702057, 9702074, 9702080

Sample Spiked: 9702103-01A

Parameter	MS Recovery (%)	MSD Recovery (%)	RPD	Acceptability Range (%)	RPD Range (%)
1,1-Dichloroethene	102	106	3.8	70 - 130	30
Benzene	107	110	2.8	70 - 130	30
Trichloroethene	105	110	4.7	70 - 130	30
Toluene	103	104	1.0	70 - 130	30
Chlorobenzene	100	102	2.0	70 - 130	30
DBFM Surrogate Rec. (%)	109	102	---	60 - 140	---
Toluene-d8 Surrogate Rec. (%)	102	102	---	60 - 140	---
BFB Surrogate Rec. (%)	103	102	---	60 - 140	---

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

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

FAX

MONTGOMERY WATSON

250 North Madison Avenue
Pasadena, CA 91101
P.O. Box 7009
Pasadena, CA 91109-7009

Tel: 818-568-6521
Fax: 818-568-6515

Date 2/17/97

To: MIKE CALOSTOMO

Fax No: (714) 447-6800

Reference: MPRC

From: STEVE REINERS/ NANCY MATSUMOTO

No. of Pages: 3

(including cover)

Subject: CARBON CHAIN ANALYSIS

PLEASE RUN THE FOLLOWING SOIL SAMPLES FOR CARBON CHAIN RANGE (SIMULATED DISTILLATION):

- B37-G5-27
- B37-G5-28

COCs FOLLOW. PLEASE CALL STEVE @ 818/568-6334 TO CONFIRM RECEIPT OF THIS FAX. THANKS,

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No: 9702080

C- 2403

page 1 of 1

Client Name: Montgomery Watson

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

Client Contact: Fred Strauss (818) 568-6582

Project Name: MDRC C-6 Facility, Torrance, CA

Project Number: 1206035.01090010

Project Location: C-6 Facility, Torrance, CA

Invoice To: Fred Strauss

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	CAM Metals	VOCs 8260						
B37-GS-27	2/11/97	1530		X	S	2"x6" SS sleeve	Approx 12oz.	ICE	2	X	X	X						

Requested Analysis

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 Standard ☒

48hr ☐

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 L. Verrio	date 2/11/97	time 1645	2. Received by: [signature] 2/11/97 1645
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-C6-0109130

SPL Fullerton Environmental Laboratory
Sample Receiving Checklist

SPL Workorder Number: 9702080

Date: 2-11-97 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 2.0 °C

Samples Were Delivered by:

SPL Courier	G. Nolan
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:

I:\data\forms\loginchk.wpd

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 8745

Sampled : 03-21-97
Received: 03-21-97
Analyzed: 03-24-97
Reported: 03-24-97

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Laboratory Sample Number	*Client Sample Number*	*Sample Result (mg/kg)*
97030926	B37-RE4-SP26	N.D.
97030927	B37-GS-91-6.5'	N.D.
97030928	B37-GS-92-6.5'	38
97030929	B37-GS-93-6.5'	N.D.
97030930	B37-GS-94-6.5'	N.D.
97030931	B37-GS-95-6.5'	N.D.
97030932	B37-GS-96-6.5'	N.D.
97030933	B37-GS-97-6.5'	N.D.
97030934	B37-GS-98-6.5'	N.D.
97030935	B37-GS-99-6'	N.D.
97030936	B37-GS-100-6.5'	N.D.
97030937	B37-GS-101-6.5'	N.D.
97030938	B37-GS-102-7'	210
97030939	B37-GS-103-9'	N.D.
97030940	B37-GS-104-9'	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
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-RE4-SP26

Laboratory Sample Number: 97030926
Laboratory Reference #: MWI 8745

Sampled: 03-21-97
Received: 03-21-97
Analyzed: 03-28-97
Reported: 04-01-97

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	86	<---
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	16	<---
Cobalt	6010	80	8000	0.5	5.4	<---
Copper	6010	25	2500	0.1	9.4	<---
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	6.6	<---
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	23	<---
Zinc	6010	250	5000	0.1	29	<---

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-RE4-SP26
Laboratory Sample Number: 97030926
Laboratory Reference #: MWI 8745

Sampled: 03-21-97
Received: 03-21-97
Analyzed: 03-27-97
Reported: 04-01-97

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-RE4-SP26

Laboratory Sample Number: 97030926

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	*104*
Toluene-d8	*97*
4-Bromofluorobenbzene	*102*

ORANGE COAST ANALYTICAL, INC.
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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-RE4-SP26
Laboratory Sample #: 97030926
Laboratory Reference #: MWI 8745

Sampled : 03-21-97
Received: 03-21-97
Analyzed: 03-26-97
Reported: 04-01-97

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

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*
Acenaphthene	83-32-9	100	N.D.
Acenaphthylene	208-96-8	100	N.D.
Aniline	62-53-3	100	N.D.
Anthracene	120-12-7	100	N.D.
Benzidine	92-87-5	500	N.D.
Benzoic Acid	65-85-0	250	N.D.
Benz (a)anthracene	56-55-3	100	N.D.
Benzo(b)fluoranthene	205-99-2	250	N.D.
Benzo(k)fluoranthene	207-08-9	250	N.D.
enzo(g,h,i)perylene	191-24-2	250	N.D.
enzo(a)pyrene	50-32-8	250	N.D.
Benzyl alcohol	100-51-6	100	N.D.
Bis(2-chloroethoxy)methane	111-91-1	100	N.D.
Bis(2-chloroethyl)ether	111-44-4	100	N.D.
Bis(2-chloroisopropyl)ether	39638-32-9	100	N.D.
Bis(2-ethylhexyl)phthalate	117-81-7	100	N.D.
4-Bromophenyl phenyl ether	101-55-3	100	N.D.
Butyl benzyl phthalate	85-68-7	100	N.D.
4-Chloroaniline	106-47-8	100	N.D.
2-Chloronaphthalene	91-58-7	100	N.D.
4-Chloro-3-methylphenol	59-50-7	100	N.D.
2-Chlorophenol	95-57-8	100	N.D.
4-Chlorophenyl phenyl ether	7005-72-3	100	N.D.
Chrysene	218-0109	100	N.D.
Dibenz(a,h)anthracene	53-70-3	100	N.D.
Dibenzofuran	132-64-9	100	N.D.
Di-n-butyl phthalate	84-74-2	250	N.D.
1,3-Dichlorobenzene	541-73-1	100	N.D.
1,4-Dichlorobenzene	106-46-7	100	N.D.
1,2-Dichlorobenzene	95-50-1	100	N.D.
3,3'-Dichlorobenzidine	91-94-1	100	N.D.
2,4-Dichlorophenol	120-83-2	100	N.D.
Diethyl phthalate	84-66-2	100	N.D.
2,4-Dimethylphenol	105-67-9	100	N.D.
Dimethyl phthalate	131-11-3	100	N.D.
6-Dinitro-2-methylphenol	534-52-1	100	N.D.
,4-Dinitrophenol	51-28-5	100	N.D.

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

Sample Description: Soil, B37-RE4-SP26
Laboratory Sample #: 97030926

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*
2,4-Dinitrotoluene	121-14-2	250	N.D.
2,6-Dinitrotoluene	606-20-2	250	N.D.
Di-n-octyl phthalate	117-84-0	250	N.D.
Fluoranthene	206-44-0	100	N.D.
Fluorene	86-73-7	100	N.D.
Hexachlorobenzene	118-74-1	100	N.D.
Hexachlorobutadiene	87-68-3	100	N.D.
Hexachlorocyclopentadiene	77-47-4	100	N.D.
Hexachloroethane	67-72-1	100	N.D.
Indeno(1,2,3-cd)pyrene	193-39-5	250	N.D.
Isophorone	78-59-1	100	N.D.
2-Methylnaphthalene	91-57-6	100	N.D.
2-Methylphenol	95-48-7	100	N.D.
4-Methylphenol	106-44-5	100	N.D.
Naphthalene	91-20-3	100	N.D.
2-Nitroaniline	88-74-4	250	N.D.
3-Nitroaniline	99-09-2	250	N.D.
4-Nitroaniline	100-01-6	250	N.D.
Nitrobenzene	98-95-3	100	N.D.
2-Nitrophenol	88-75-5	100	N.D.
4-Nitrophenol	100-02-7	100	N.D.
N-Nitrosodiphenylamine	86-30-6	100	N.D.
N-Nitroso-di-n-propylamine	621-64-7	100	N.D.
N-Nitrosodimethylamine	62-75-9	100	N.D.
Pentachlorophenol	87-86-5	250	N.D.
Phenanthrene	85-01-8	100	N.D.
Phenol	108-95-2	100	N.D.
Pyrene	129-00-0	100	N.D.
1,2,4-Trichlorobenzene	120-82-1	100	N.D.
2,4,5-Trichlorophenol	95-95-4	100	N.D.
2,4,6-Trichlorophenol	88-06-2	100	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.
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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

Analysis Method: 418.1

Sample Description: Water

Laboratory Reference #: MWI 8745

Sampled : 03-21-97
Received: 03-21-97
Analyzed: 03-25-97
Reported: 04-01-97

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Laboratory Sample Number	*Client Sample Number*	*Sample Result (mg/l)*
97030941	Equip Blank	N.D.
97030942	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.
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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: 97030941
Laboratory Reference #: MWI 8745

Sampled: 03-21-97
Received: 03-21-97
Analyzed: 03-28-97
Reported: 04-01-97

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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Sample Description: Water, Equip Blank

Laboratory Sample Number: 97030941

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	*100*
4-Bromofluorobenbzene	*113*

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: 97030942
Laboratory Reference #: MWI 8745

Sampled: 03-21-97
Received: 03-21-97
Analyzed: 03-28-97
Reported: 04-01-97

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: 97030942

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	*106*
Toluene-d8	*94*
4-Bromofluorobenbzene	*106*

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

Sample Description: Water, Trip Blank
Laboratory Sample Number: 97030943
Laboratory Reference #: MWI 8745

Sampled: 03-21-97
Received: 03-21-97
Analyzed: 03-28-97
Reported: 04-01-97

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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Sample Description: Water, Trip Blank

Laboratory Sample Number: 97030943

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	*106*
Toluene-d8	*97*
4-Bromofluorobenbzene	*115*

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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 #: 97030941
Laboratory Reference #: MWI 8745

Sampled : 03-21-97
Received: 03-21-97
Analyzed: 03-28-97
Reported: 04-01-97

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 #: 97030941

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.
-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.

ORANGE COAST ANALYTICAL

Mark Noorani
Laboratory Director

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

Sample Description: Water, Rinsate Blank
Laboratory Sample #: 97030942
Laboratory Reference #: MWI 8745

Sampled : 03-21-97
Received: 03-21-97
Analyzed: 03-28-97
Reported: 04-01-97

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 #: 97030942

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.
-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.

ORANGE COAST ANALYTICAL

Mark Noorani

Mark Noorani
Laboratory Director

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

Sample Description: Water, Equip Blank

Laboratory Sample Number: 97030941
Laboratory Reference #: MWI 8745

Sampled: 03-21-97
Received: 03-21-97
Analyzed: 03-26-97
Reported: 04-01-97

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.

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: 97030942
Laboratory Reference #: MWI 8745

Sampled: 03-21-97
Received: 03-21-97
Analyzed: 03-26-97
Reported: 04-01-97

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.

ORANGE COAST ANALYTICAL

Mark Noorani
Laboratory Director

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

Sample Description: Water, Equip Blank

Laboratory Sample Number: 97030941
Laboratory Reference #: MWI 8745

Sampled: 03-21-97
Received: 03-21-97
Analyzed: 03-26-97
Reported: 04-01-97

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.

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, Rinsate Blank

Laboratory Sample Number: 97030942
Laboratory Reference #: MWI 8745

Sampled: 03-21-97
Received: 03-21-97
Analyzed: 03-26-97
Reported: 04-01-97

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.

ORANGE COAST ANALYTICAL

Mark Noorani
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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 8745

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

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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 8745

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 : Total Recoverable Petroleum Hydrocarbons (EPA 418.1)

Date of Analysis : 03/25/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8745

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Hydrocarbons	0.0	2.5	2.5	2.6	100	104	4

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 : 03/24/97
Laboratory Sample No : 97030931
Laboratory Reference No : MWI 8745

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Hydrocarbons	0.0	100	129	126	129	126	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 : Metals

Date of Analysis : 03/27/97
Laboratory Sample No : 97030700
Laboratory Reference No : MWI 8745

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 : Metals

Date of Analysis : 03/28/97
Laboratory Sample No : 97030938
Laboratory Reference No : MWI 8745

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Antimony	0.00	30.00	32.90	30.80	110	103	7
Arsenic	0.00	10.00	8.80	9.30	88	93	6
Barium	14.00	10.00	25.90	24.50	119	105	6
Beryllium	0.00	1.00	1.11	1.16	111	116	4
Cadmium	0.00	1.00	1.01	1.03	101	103	2
Chromium (Total)	4.10	5.00	9.60	9.00	110	98	6
Chromium (VI)	0.00	1.00	0.97	0.84	97	84	14
Cobalt	1.00	1.00	1.99	2.13	99	113	7
Copper	1.60	1.00	2.67	2.66	107	106	0
Lead	0.00	10.00	8.60	8.10	86	81	6
Mercury	0.000	0.020	0.023	0.021	115	105	9
Molybdenum	0.00	10.00	9.70	9.90	97	99	2
Nickel	1.20	5.00	5.90	5.90	94	94	0
Selenium	0.00	10.00	9.70	9.60	97	96	1
Silver	0.00	5.00	5.20	4.90	104	98	6
Thallium	0.00	30.00	31.10	30.10	104	100	3
Vanadium	4.10	5.00	9.20	9.00	102	98	2
Zinc	7.20	10.00	16.80	16.20	96	90	4

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 : 03/28/97
Laboratory Sample No : 97030840
Laboratory Reference No : MWI 8745

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
Benzene	0.0	20	18	19	90	95	5
1,1-Dichloroethene	0.0	20	18	18	90	90	0
Trichloroethene	0.0	20	17	17	85	85	0
Toluene	0.0	20	18	20	90	100	11
Chlorobenzene	0.0	20	17	17	85	85	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 : 03/28/97
Laboratory Sample No : 97030935
Laboratory Reference No : MWI 8745

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
Benzene	0.0	50	52	49	104	98	6
1,1-Dichloroethene	0.0	50	53	52	106	104	2
Trichloroethene	0.0	50	50	47	100	94	6
Toluene	0.0	50	52	49	104	98	6
Chlorobenzene	0.0	50	47	47	94	94	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

ORANGE COAST ANALYTICAL

Mark Noorani

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

QC DATA REPORT

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

Date of Analysis : 03/26/97
Laboratory Sample No : 97030802
Laboratory Reference No : MWI 8745

Analyte	R1 (ng)	SP (ng)	MS (ng)	MSD (ng)	PR1 %	PR2 %	RPD %
1,4-Dichlorobenzene	0.0	50	48	49	96	98	2
n-Nitroso-di-n-propylamine	0.0	50	43	50	86	100	15
1,2,4-Trichlorobenzene	0.0	50	49	51	98	102	4
Acenaphthene	0.0	50	50	52	100	104	4
Pyrene	0.0	50	45	49	90	98	9
Pentachlorophenol	0.0	100	87	87	87	87	0
4-Chloro-3-Methylphenol	0.0	100	90	88	90	88	2
2-Chlorophenol	0.0	100	88	86	88	86	2
Phenol	0.0	100	80	81	80	81	1

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
Laboratory Director

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

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 8745

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

MARK NOORANI
Laboratory Director

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 1 of 2

REQUIRED TAT: 24hr TAT on Soil TRPH only / standard TAT otherwise

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: Montgomery Watson	PROJECT NAME: Mc Donnell Douglas Cl facility
SEND REPORT TO: Fred Strauss.	NUMBER: 1206035.01090010
ADDRESS: 250 N Madison Ave	LOCATION: Bldg 37 area
Pasadena, CA 91109.	ADDRESS: 19503 S Normandie Ave
	Torrance
PHONE: (818) 568 6582 FAX: (818) 796-5941	SAMPLED BY: AWN / IV

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
B37-RE4-SP26	2	3/21/97	13:36	Soil	2"x4" SS sleeve	Ice	X	X	X	X					
B37-GS-91-6.5'	2	3/21/97	~~1350~~ 1410 AWN				X	X							
B37-GS-92-6.5'	2	3/21/97	1420				X	X							
B37-GS-93-6.5'	2	3/21/97	1430				X	X							
B37-GS-94-6.5'	2	3/21/97	1435				X	X							
B37-GS-95-6.5'	2	3/21/97	1440				X	X							
B37-GS-96-6.5'	2	3/21/97	1445				X	X							
B37-GS-97-6.5'	2	3/21/97	1450				X	X							
B37-GS-98-6.5'	2	3/21/97	1530				X	X							
B37-GS-99-6'	2	3/21/97	1535				X	X							
B37-GS-100-6.5'	2	3/21/97	1540				X	X							
B37-GS-101-6.5'	2	3/21/97	1545				X	X							
B37-GS-102-7'	2	3/21/97	1550				X	X							
B37-GS-103-9'	2	3/21/97	1555				X	X							

Total No. of Samples: 14

Method of Shipment: Custody sealed cooler via Orange Coast Courier

Relinquished By:	Date/Time:	Received By:	Date/Time:
Ivan Vargas	3/21/97 17:30		
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received For Lab By: [signature]	Date/Time: 3/21/97 17:30 PM

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-C6-0109163

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

REQUIRED TAT: 24 hr TAT on SOIL TRPH only; Standard TAT Otherwise

CUSTOMER INFORMATION

COMPANY: Montgomery Watson
SEND REPORT TO: Fred Strauss
ADDRESS: 250 N. Madison Ave.
Pasadena, CA 91109
PHONE: (818) 568-6582 FAX: (818) 796-5941

PROJECT INFORMATION

PROJECT NAME: McDonnell Douglas C-6 Facility
NUMBER: 1206035-01090010
LOCATION: Bldg. 37 Area
ADDRESS: 19503 S. Normandie Ave.
Torrance, CA
SAMPLED BY: AWN/IV

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	Pesticides			REMARKS/PRECAUTIONS
B37-GS-104-9'	2	3/21/97	1600	Soil	2"x6" ss sleeve	ICE	X	X							
Equipment Blank	7	3/21/97	1630	water	4 amber 3 Poly 500ml	HNO3 HCl	X	X	X	X	X	X			
Rinsate Blank	7	3/21/97	1645	↓	↓	↓	X	X	X	X	X	X			
Trip Blank	2	3/21/97	—	↓	2 VOAs	HCl			X						

Total No. of Samples: 4

Method of Shipment: Custody sealed cooler via Orange Coast Courier

Relinquished By:	Date/Time:	Received By:	Date/Time:
Ivan Vargas	3/21/97 17:30		
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received For Lab By:	Date/Time:
		[illegible]	3/21/97 5:30PM

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-C6-0109164

F A X

MONTGOMERY WATSON

250 N. Madison Avenue
Pasadena, California 91101

Tel: 818 568 6508
Fax: 818 796 5941

Date: 3/26/97

To: Mark Noorani

Fax No: (714) 832-0067

From: Steve Reiners

Reference: MDRC

Subject: Additional Analyses

No. of Pages: 1
(including cover)

Comments:

Please run the following samples for VOCs (8260) and SVOCs (8270) on standard turn-around time:

B37-GS-95-6.5'
B37-GS-97-6.5'
B37-GS-99-6'
B37-GS-105-3'
B37-GS-106-9'

Please also analyze the following sample for carbon chain range:

B37-CS-4

Please call me at (818) 568-6334 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.

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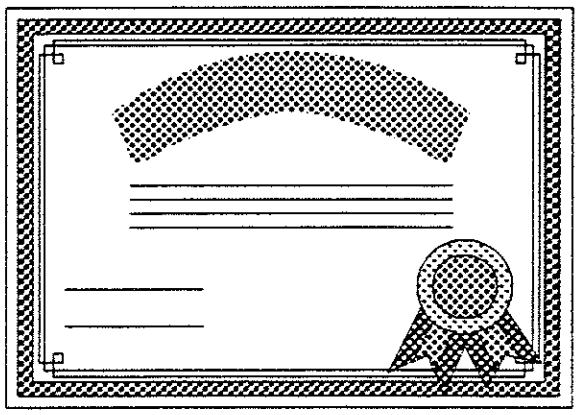

ORANGE COAST ANALYTICAL THANKS YOU FOR YOUR BUSINESS

THE FOLLOWING PAGES ARE THE ANALYSIS REPORT

ON THE SAMPLES YOU REQUESTED.

IF YOU HAVE ANY QUESTIONS REGARDING THIS REPORT

PLEASE FEEL FREE TO CONTACT US.

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

Analysis Method: 418.1

Sample Description: Soil

Laboratory Reference #: MWI 8748

Sampled : 03-24-97
Received: 03-24-97
Analyzed: 03-25-97
Reported: 03-25-97

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Laboratory Sample Number	*Client Sample Number*	*Sample Result (mg/kg)*
97030957	B37-RE4-SP27	11
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

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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: Soil, B37-RE4-SP27

Laboratory Sample Number: 97030957
Laboratory Reference #: MWI 8748

Sampled: 03-24-97
Received: 03-24-97
Analyzed: 03-28-97
Reported: 04-02-97

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	120	<---
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	25	<---
Cobalt	6010	80	8000	0.5	8.7	<---
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	9.8	<---
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	31	<---
Zinc	6010	250	5000	0.1	43	<---

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-RE4-SP27
Laboratory Sample Number: 97030957
Laboratory Reference #: MWI 8748

Sampled: 03-24-97
Received: 03-24-97
Analyzed: 03-28-97
Reported: 04-02-97

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.

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Sample Description: Soil, B37-RE4-SP27

Laboratory Sample Number: 97030957

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	*100*
Toluene-d8	*96*
4-Bromofluorobenbzene	*102*

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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 : 03-24-97
Received: 03-24-97
Analyzed: 04-02-97
Reported: 04-02-97

Sample Description: Soil, B37-RE4-SP27
Laboratory Sample #: 97030957
Laboratory Reference #: MWI 8748

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

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*	
Acenaphthene	83-32-9	100	N.D.	
Acenaphthylene	208-96-8	100	N.D.	
Aniline	62-53-3	100	N.D.	
Anthracene	120-12-7	100	N.D.	
Benzidine	92-87-5	500	N.D.	
Benzoic Acid	65-85-0	250	N.D.	
Benz (a)anthracene	56-55-3	100	250	<---
Benzo(b)fluoranthene	205-99-2	250	320	<---
Benzo(k)fluoranthene	207-08-9	250	N.D.	
Benzo(g,h,i)perylene	191-24-2	250	N.D.	
Benzo(a)pyrene	50-32-8	250	N.D.	
Benzyl alcohol	100-51-6	100	N.D.	
Bis(2-chloroethoxy)methane	111-91-1	100	N.D.	
Bis(2-chloroethyl)ether	111-44-4	100	N.D.	
Bis(2-chloroisopropyl)ether	39638-32-9	100	N.D.	
Bis(2-ethylhexyl)phthalate	117-81-7	100	N.D.	
4-Bromophenyl phenyl ether	101-55-3	100	N.D.	
Butyl benzyl phthalate	85-68-7	100	N.D.	
4-Chloroaniline	106-47-8	100	N.D.	
2-Chloronaphthalene	91-58-7	100	N.D.	
4-Chloro-3-methylphenol	59-50-7	100	N.D.	
2-Chlorophenol	95-57-8	100	N.D.	
4-Chlorophenyl phenyl ether	7005-72-3	100	N.D.	
Chrysene	218-0109	100	310	<---
Dibenz(a,h)anthracene	53-70-3	100	N.D.	
Dibenzofuran	132-64-9	100	N.D.	
Di-n-butyl phthalate	84-74-2	250	N.D.	
1,3-Dichlorobenzene	541-73-1	100	N.D.	
1,4-Dichlorobenzene	106-46-7	100	N.D.	
1,2-Dichlorobenzene	95-50-1	100	N.D.	
3,3'-Dichlorobenzidine	91-94-1	100	N.D.	
2,4-Dichlorophenol	120-83-2	100	N.D.	
Diethyl phthalate	84-66-2	100	N.D.	
2,4-Dimethylphenol	105-67-9	100	N.D.	
Dimethyl phthalate	131-11-3	100	N.D.	
4,6-Dinitro-2-methylphenol	534-52-1	100	N.D.	
2,4-Dinitrophenol	51-28-5	100	N.D.	

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

Sample Description: Soil, B37-RE4-SP27
Laboratory Sample #: 97030957

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*	
2,4-Dinitrotoluene	121-14-2	250	N.D.	
2,6-Dinitrotoluene	606-20-2	250	N.D.	
Di-n-octyl phthalate	117-84-0	250	N.D.	
Fluoranthene	206-44-0	100	300	<---
Fluorene	86-73-7	100	N.D.	
Hexachlorobenzene	118-74-1	100	N.D.	
Hexachlorobutadiene	87-68-3	100	N.D.	
Hexachlorocyclopentadiene	77-47-4	100	N.D.	
Hexachloroethane	67-72-1	100	N.D.	
Indeno(1,2,3-cd)pyrene	193-39-5	250	N.D.	
Isophorone	78-59-1	100	N.D.	
2-Methylnaphthalene	91-57-6	100	N.D.	
2-Methylphenol	95-48-7	100	N.D.	
4-Methylphenol	106-44-5	100	N.D.	
Naphthalene	91-20-3	100	N.D.	
2-Nitroaniline	88-74-4	250	N.D.	
3-Nitroaniline	99-09-2	250	N.D.	
4-Nitroaniline	100-01-6	250	N.D.	
Nitrobenzene	98-95-3	100	N.D.	
2-Nitrophenol	88-75-5	100	N.D.	
4-Nitrophenol	100-02-7	100	N.D.	
N-Nitrosodiphenylamine	86-30-6	100	N.D.	
N-Nitroso-di-n-propylamine	621-64-7	100	N.D.	
N-Nitrosodimethylamine	62-75-9	100	N.D.	
Pentachlorophenol	87-86-5	250	N.D.	
Phenanthrene	85-01-8	100	120	<---
Phenol	108-95-2	100	N.D.	
Pyrene	129-00-0	100	280	<---
1,2,4-Trichlorobenzene	120-82-1	100	N.D.	
2,4,5-Trichlorophenol	95-95-4	100	N.D.	
2,4,6-Trichlorophenol	88-06-2	100	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

Analysis Method: 418.1

Sample Description: Water

Laboratory Reference #: MWI 8748

Sampled : 03-24-97
Received: 03-24-97
Analyzed: 03-25-97
Reported: 04-02-97

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Laboratory Sample Number	*Client Sample Number*	*Sample Result (mg/l)*
97030958	Equip Blank	N.D.
97030959	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
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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: 97030958
Laboratory Reference #: MWI 8748

Sampled: 03-24-97
Received: 03-24-97
Analyzed: 03-27-97
Reported: 04-02-97

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: 97030959
Laboratory Reference #: MWI 8748

Sampled: 03-24-97
Received: 03-24-97
Analyzed: 03-27-97
Reported: 04-02-97

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, Equip Blank
Laboratory Sample Number: 97030958
Laboratory Reference #: MWI 8748

Sampled: 03-24-97
Received: 03-24-97
Analyzed: 03-29-97
Reported: 04-02-97

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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Sample Description: Water, Equip Blank

Laboratory Sample Number: 97030958

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	*105*
Toluene-d8	*97*
4-Bromofluorobenbzene	*108*

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, Rinsate Blank
Laboratory Sample Number: 97030959
Laboratory Reference #: MWI 8748

Sampled: 03-24-97
Received: 03-24-97
Analyzed: 03-28-97
Reported: 04-02-97

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, Rinsate Blank

Laboratory Sample Number: 97030959

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	*105*
Toluene-d8	*95*
4-Bromofluorobenbzene	*108*

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

Sample Description: Water, Trip Blank
Laboratory Sample Number: 97030960
Laboratory Reference #: MWI 8748

Sampled: 03-24-97
Received: 03-24-97
Analyzed: 03-28-97
Reported: 04-02-97

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: 97030960

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	*112*
Toluene-d8	*95*
4-Bromofluorobenbzene	*111*

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 : 03-24-97
Sample Description: Water, Equip Blank *Received:* 03-24-97
Laboratory Sample #: 97030958 *Analyzed:* 03-28-97
Laboratory Reference #: MWI 8748 *Reported:* 04-02-97

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.
enzo(g,h,i)perylene	191-24-2	25	N.D.
enzo(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.
imethyl phthalate	131-11-3	5.0	N.D.
,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 #: 97030958

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

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

Sampled : 03-24-97
Sample Description: Water, Rinsate Blank *Received:* 03-24-97
Laboratory Sample #: 97030959 *Analyzed:* 03-28-97
Laboratory Reference #: MWI 8748 *Reported:* 04-02-97

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 #: 97030959

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

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, Equip Blank

Laboratory Sample Number: 97030958
Laboratory Reference #: MWI 8748

Sampled: 03-24-97
Received: 03-24-97
Analyzed: 03-26-97
Reported: 04-02-97

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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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: 97030959
Laboratory Reference #: MWI 8748

Sampled: 03-24-97
Received: 03-24-97
Analyzed: 03-26-97
Reported: 04-02-97

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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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: 97030958
Laboratory Reference #: MWI 8748

Sampled: 03-24-97
Received: 03-24-97
Analyzed: 03-26-97
Reported: 04-02-97

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
250 N. Madison Ave.
Pasadena, CA 91101

Client Project ID: McDonnell Douglas
Client Project #: 1206035.01090010

Sample Description: Water, Rinsate Blank

Laboratory Sample Number: 97030959
Laboratory Reference #: MWI 8748

Sampled: 03-24-97
Received: 03-24-97
Analyzed: 03-26-97
Reported: 04-02-97

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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QC DATA REPORT

Analysis : Total Recoverable Petroleum Hydrocarbons (EPA 418.1)

Date of Analysis : 03/25/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8748

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Hydrocarbons	0.0	2.5	2.5	2.6	100	104	4

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 : 03/25/97
Laboratory Sample No : 97030932
Laboratory Reference No : MWI 8748

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Hydrocarbons	0.0	100	100	110	100	110	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

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QC DATA REPORT

Analysis : Metals

Date of Analysis : 03/27/97
Laboratory Sample No : 97030700
Laboratory Reference No : MWI 8748

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 : Metals

Date of Analysis : 03/28/97
Laboratory Sample No : 97030976
Laboratory Reference No : MWI 8748

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

Date of Analysis : 03/29/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8748

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 : PCB 'S (EPA 8080)

Date of Analysis : 03/26/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8748

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 8748

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

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QC DATA REPORT

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

Date of Analysis : 03/28/97
Laboratory Sample No : 97030840
Laboratory Reference No : MWI 8748

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
Benzene	0.0	20	18	19	90	95	5
1,1-Dichloroethene	0.0	20	18	18	90	90	0
Trichloroethene	0.0	20	17	17	85	85	0
Toluene	0.0	20	18	20	90	100	11
Chlorobenzene	0.0	20	17	17	85	85	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 : 03/28/97
Laboratory Sample No : 97030935
Laboratory Reference No : MWI 8748

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
Benzene	0.0	50	52	49	104	98	6
1,1-Dichloroethene	0.0	50	53	52	106	104	2
Trichloroethene	0.0	50	50	47	100	94	6
Toluene	0.0	50	52	49	104	98	6
Chlorobenzene	0.0	50	47	47	94	94	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 : 04/03/97
Laboratory Sample No : 97031110
Laboratory Reference No : MWI 8748

Analyte	R1 (ng)	SP (ng)	MS (ng)	MSD (ng)	PR1 %	PR2 %	RPD %
1,4-Dichlorobenzene	0.0	50	48	47	96	94	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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Analysis Request and Chain of Custody Record

Lab Job No: _____
Page 1 of 1

24hr. TAT on soil TRPH analysis only
REQUIRED TAT: STANDARD TAT otherwise

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: Montgomery Watson	PROJECT NAME: McDonnell Douglas C6 Facility
SEND REPORT TO: Fred Strauss	NUMBER: 12060035.010 90010
ADDRESS: 250 N. Madison Ave. Pasadena, CA 91101	LOCATION: BLDG 37 Area
	ADDRESS: 19503 S. Normandie Ave. Torrance CA
PHONE (818) 568-6582 FAX (818) 796-5941	SAMPLED BY: JAM / EV

ANALYSIS/METHOD REQUEST

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	TRPH 418.1	Title 22 Metals	VOCs 8260	SVOCs 8270	Pesticides 8080	PCBs 8080			REMARKS/PRECAUTIONS
B37-RE4-SP27	2	3/24/97	1115	Soil	2 x 6" sleeve	ICE	X	X	X	X					
Equipment Blank	7	3/24/97	1545	Water	4 1L Amb Poly 3 VOAs	HNO3 HCl	X	X	X	X	X	X			
Rinsate Blank	7	↓	1600	Water	↓	↓	X	X	X	X	X	X			
Trip Blank	2	↓	—	Water	2 VOAS	HCl			X						

Total No. of Samples: 4

Method of Shipment: Custody-sealed Courier

Relinquished By:	Date/Time:	Received By:	Date/Time:
Ivan Vargas	3/24/97 - 16:35		
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received For Lab By: [signature]	Date/Time: 3/24/97 16:35

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-C6-0109200

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.
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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-RE4-SP28

Laboratory Sample Number: 97030976
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	120	<---
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	5.7	<---
Copper	6010	25	2500	0.1	12	<---
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	7.7	<---
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	24	<---
Zinc	6010	250	5000	0.1	55	<---

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: Soil, B37-RE4-SPCONF

Laboratory Sample Number: 97030965
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	130	<---
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	29	<---
Cobalt	6010	80	8000	0.5	8.9	<---
Copper	6010	25	2500	0.1	16	<---
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	12	<---
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	33	<---
Zinc	6010	250	5000	0.1	56	<---

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

ORANGE COAST ANALYTICAL

Mark Noorani

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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-RE4-SP28
Laboratory Sample Number: 97030976
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.

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Sample Description: Soil, B37-RE4-SP28

Laboratory Sample Number: 97040976

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	*106*
Toluene-d8	*96*
4-Bromofluorobenbzene	*102*

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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-RE4-SPCONF
Laboratory Sample Number: 97030965
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.

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Sample Description: Soil, B37-RE4-SPCONF

Laboratory Sample Number: 97030965

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	*105*
Toluene-d8	*94*
4-Bromofluorobenbzene	*99*

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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-RE4-SP28
Laboratory Sample #: 97030976
Laboratory Reference #: MWI 8751

Sampled : 03-25-97
Received: 03-25-97
Analyzed: 03-31-97
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	100	N.D.
Acenaphthylene	208-96-8	100	N.D.
Aniline	62-53-3	100	N.D.
Anthracene	120-12-7	100	N.D.
Benzidine	92-87-5	500	N.D.
Benzoic Acid	65-85-0	250	N.D.
Benz (a)anthracene	56-55-3	100	N.D.
Benzo(b)fluoranthene	205-99-2	250	N.D.
Benzo(k)fluoranthene	207-08-9	250	N.D.
Benzo(g,h,i)perylene	191-24-2	250	N.D.
Benzo(a)pyrene	50-32-8	250	N.D.
Benzyl alcohol	100-51-6	100	N.D.
Bis(2-chloroethoxy)methane	111-91-1	100	N.D.
Bis(2-chloroethyl)ether	111-44-4	100	N.D.
Bis(2-chloroisopropyl)ether	39638-32-9	100	N.D.
Bis(2-ethylhexyl)phthalate	117-81-7	100	N.D.
4-Bromophenyl phenyl ether	101-55-3	100	N.D.
Butyl benzyl phthalate	85-68-7	100	N.D.
4-Chloroaniline	106-47-8	100	N.D.
2-Chloronaphthalene	91-58-7	100	N.D.
4-Chloro-3-methylphenol	59-50-7	100	N.D.
2-Chlorophenol	95-57-8	100	N.D.
4-Chlorophenyl phenyl ether	7005-72-3	100	N.D.
Chrysene	218-0109	100	N.D.
Dibenz(a,h)anthracene	53-70-3	100	N.D.
Dibenzofuran	132-64-9	100	N.D.
Di-n-butyl phthalate	84-74-2	250	N.D.
1,3-Dichlorobenzene	541-73-1	100	N.D.
1,4-Dichlorobenzene	106-46-7	100	N.D.
1,2-Dichlorobenzene	95-50-1	100	N.D.
3,3'-Dichlorobenzidine	91-94-1	100	N.D.
2,4-Dichlorophenol	120-83-2	100	N.D.
Diethyl phthalate	84-66-2	100	N.D.
2,4-Dimethylphenol	105-67-9	100	N.D.
Dimethyl phthalate	131-11-3	100	N.D.
4,6-Dinitro-2-methylphenol	534-52-1	100	N.D.
2,4-Dinitrophenol	51-28-5	100	N.D.

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

Sample Description: Soil, B37-RE4-SP28
Laboratory Sample #: 97030976

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*
2,4-Dinitrotoluene	121-14-2	250	N.D.
2,6-Dinitrotoluene	606-20-2	250	N.D.
Di-n-octyl phthalate	117-84-0	250	N.D.
Fluoranthene	206-44-0	100	N.D.
Fluorene	86-73-7	100	N.D.
Hexachlorobenzene	118-74-1	100	N.D.
Hexachlorobutadiene	87-68-3	100	N.D.
Hexachlorocyclopentadiene	77-47-4	100	N.D.
Hexachloroethane	67-72-1	100	N.D.
Indeno(1,2,3-cd)pyrene	193-39-5	250	N.D.
Isophorone	78-59-1	100	N.D.
2-Methylnaphthalene	91-57-6	100	N.D.
2-Methylphenol	95-48-7	100	N.D.
4-Methylphenol	106-44-5	100	N.D.
Naphthalene	91-20-3	100	N.D.
2-Nitroaniline	88-74-4	250	N.D.
3-Nitroaniline	99-09-2	250	N.D.
4-Nitroaniline	100-01-6	250	N.D.
Nitrobenzene	98-95-3	100	N.D.
2-Nitrophenol	88-75-5	100	N.D.
4-Nitrophenol	100-02-7	100	N.D.
N-Nitrosodiphenylamine	86-30-6	100	N.D.
N-Nitroso-di-n-propylamine	621-64-7	100	N.D.
N-Nitrosodimethylamine	62-75-9	100	N.D.
Pentachlorophenol	87-86-5	250	N.D.
Phenanthrene	85-01-8	100	N.D.
Phenol	108-95-2	100	N.D.
Pyrene	129-00-0	100	N.D.
1,2,4-Trichlorobenzene	120-82-1	100	N.D.
2,4,5-Trichlorophenol	95-95-4	100	N.D.
2,4,6-Trichlorophenol	88-06-2	100	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: Soil, B37-RE4-SPCONF
Laboratory Sample #: 97030965
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	200	N.D.
Acenaphthylene	208-96-8	200	N.D.
Aniline	62-53-3	200	N.D.
Anthracene	120-12-7	200	N.D.
Benzidine	92-87-5	1000	N.D.
Benzoic Acid	65-85-0	500	N.D.
Benz (a)anthracene	56-55-3	200	N.D.
Benzo(b)fluoranthene	205-99-2	500	N.D.
Benzo(k)fluoranthene	207-08-9	500	N.D.
Benzo(g,h,i)perylene	191-24-2	500	N.D.
Benzo(a)pyrene	50-32-8	500	N.D.
Benzyl alcohol	100-51-6	200	N.D.
Bis(2-chloroethoxy)methane	111-91-1	200	N.D.
Bis(2-chloroethyl)ether	111-44-4	200	N.D.
Bis(2-chloroisopropyl)ether	39638-32-9	200	N.D.
Bis(2-ethylhexyl)phthalate	117-81-7	200	N.D.
4-Bromophenyl phenyl ether	101-55-3	200	N.D.
Butyl benzyl phthalate	85-68-7	200	N.D.
4-Chloroaniline	106-47-8	200	N.D.
2-Chloronaphthalene	91-58-7	200	N.D.
4-Chloro-3-methylphenol	59-50-7	200	N.D.
2-Chlorophenol	95-57-8	200	N.D.
4-Chlorophenyl phenyl ether	7005-72-3	200	N.D.
Chrysene	218-0109	200	N.D.
Dibenz(a,h)anthracene	53-70-3	200	N.D.
Dibenzofuran	132-64-9	200	N.D.
Di-n-butyl phthalate	84-74-2	500	N.D.
1,3-Dichlorobenzene	541-73-1	200	N.D.
1,4-Dichlorobenzene	106-46-7	200	N.D.
1,2-Dichlorobenzene	95-50-1	200	N.D.
3,3'-Dichlorobenzidine	91-94-1	200	N.D.
2,4-Dichlorophenol	120-83-2	200	N.D.
Diethyl phthalate	84-66-2	200	N.D.
2,4-Dimethylphenol	105-67-9	200	N.D.
Dimethyl phthalate	131-11-3	200	N.D.
4,6-Dinitro-2-methylphenol	534-52-1	200	N.D.
2,4-Dinitrophenol	51-28-5	200	N.D.

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

Sample Description: Soil, B37-RE4-SPCONF
Laboratory Sample #: 97030965

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*
2,4-Dinitrotoluene	121-14-2	500	N.D.
2,6-Dinitrotoluene	606-20-2	500	N.D.
Di-n-octyl phthalate	117-84-0	500	N.D.
Fluoranthene	206-44-0	200	N.D.
Fluorene	86-73-7	200	N.D.
Hexachlorobenzene	118-74-1	200	N.D.
Hexachlorobutadiene	87-68-3	200	N.D.
Hexachlorocyclopentadiene	77-47-4	200	N.D.
Hexachloroethane	67-72-1	200	N.D.
Indeno(1,2,3-cd)pyrene	193-39-5	500	N.D.
Isophorone	78-59-1	200	N.D.
2-Methylnaphthalene	91-57-6	200	N.D.
2-Methylphenol	95-48-7	200	N.D.
1-Methylphenol	106-44-5	200	N.D.
Naphthalene	91-20-3	200	N.D.
2-Nitroaniline	88-74-4	500	N.D.
3-Nitroaniline	99-09-2	500	N.D.
4-Nitroaniline	100-01-6	500	N.D.
Nitrobenzene	98-95-3	200	N.D.
2-Nitrophenol	88-75-5	200	N.D.
4-Nitrophenol	100-02-7	200	N.D.
N-Nitrosodiphenylamine	86-30-6	200	N.D.
N-Nitroso-di-n-propylamine	621-64-7	200	N.D.
N-Nitrosodimethylamine	62-75-9	200	N.D.
Pentachlorophenol	87-86-5	500	N.D.
Phenanthrene	85-01-8	200	N.D.
Phenol	108-95-2	200	N.D.
Pyrene	129-00-0	200	N.D.
1,2,4-Trichlorobenzene	120-82-1	200	N.D.
2,4,5-Trichlorophenol	95-95-4	200	N.D.
2,4,6-Trichlorophenol	88-06-2	200	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.
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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

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

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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, 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

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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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.

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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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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.

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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*

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

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.

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, 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

Mark Noorani
Laboratory Director

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.
enzo(g,h,i)perylene	191-24-2	25	N.D.
enzo(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.
imethyl phthalate	131-11-3	5.0	N.D.
,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.
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

Mark Noorani
Laboratory Director

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

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 o
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: 03-26-97
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.

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, 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 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: 03-26-97
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.

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

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

ORANGE COAST ANALYTICAL

Mark Noorani

MARK NOORANI
Laboratory Director

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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

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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

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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

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Analysis Request and Chain of Custody Record

Lab Job No: _____
Page 1 of 2

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

CUSTOMER INFORMATION

COMPANY: Montgomery Watson
SEND REPORT TO: Fred Stradiss
ADDRESS: 250 N. Madison Ave. Pasadena, CA 91109
PHONE: (818) 568-6582 FAX: (818) 796-5941

PROJECT INFORMATION

PROJECT NAME: McDonnell Douglas C6 Facility
NUMBER: 1206035.01090010
LOCATION: BLDG 37 Area
ADDRESS: 19503 S. Normandie Ave. Torrance CA
SAMPLED BY: JM/AWN

ANALYSIS/METHOD REQUEST

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
B37-RE4.SPCOMF	2	3/25/97	0800	Soil	2"x6" SS Sleeve	ICE	X	X	X	X					Split Sample with
B37-RE2-SPCOMF	2		0820				X	X	X	X					Water Board & MW
B37-RE3-SPCOMF	2		0845				X	X	X	X					
B37-RE1..SPCOMF	2		0920				X	X	X	X					
VSS-COMP	2		0935				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	X				
B37-CS-2	2		1145				X	X	X	X	X				
B37-CS-3	2		1250				X	X	X	X	~~X~~	No PCBs JM			
B37-CS-4	2		1300				X	X	X	X	~~X~~	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 Mann	3-25-97 1620		
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received For Lab By:	Date/Time:
		[signature]	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-C6-0109242

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 TRPH 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:	17060035 01090010
ADDRESS:	250 N. Madison Ave.	LOCATION:	BLDG 37 Area
	Pasadena, CA 91109	ADDRESS:	19507 S. Normandie Ave
			Torrance, CA
PHONE:	(818)568-6582 FAX: (818)796-5941	SAMPLED BY:	JAM/AWN

ANALYSIS/METHOD REQUEST

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	HNO3 Ice	X	X	X	X	X	X			
Rinsate Blank	7	↓	1615	Water	Amber Poly VOAs	HNO3 Ice	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:	Reporting Format: (check)
John Mann	3/25/97 1620			NORMAL _____ S.D. HMMD _____
Relinquished By:	Date/Time:	Received By:	Date/Time:	RWQCB _____ OTHER _____
Relinquished By:	Date/Time:	Received For Lab By:	Date/Time:	Sample Integrity: (check)
		[illegible]	3/25/97 16:20PM	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-C6-0109243

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

Analysis Method: 418.1

Sample Description: Soil

Laboratory Reference #: MWI 8767

Sampled : 03-27-97
Received: 03-27-97
Analyzed: 03-28-97
Reported: 03-28-97

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Laboratory Sample Number	*Client Sample Number*	*Sample Result (mg/kg)*
97031050	B37-RE4-SP30	54
97031051	B37-RE4-SP31	85
97031052	B37-RE4-SP32	13
Detection Limit:		8.0

Analyte reported as N.D. was 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: Soil, B37-RE4-SP30

Laboratory Sample Number: 97031050
Laboratory Reference #: MWI 8767

Sampled: 03-27-97
Received: 03-27-97
Analyzed: 04-02-97
Reported: 04-08-97

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	130	<---
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	31	<---
Cobalt	6010	80	8000	0.5	9.4	<---
Copper	6010	25	2500	0.1	20	<---
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	12	<---
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	31	<---
Zinc	6010	250	5000	0.1	59	<---

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
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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-RE4-SP31

Laboratory Sample Number: 97031051
Laboratory Reference #: MWI 8767

Sampled: 03-27-97
Received: 03-27-97
Analyzed: 04-02-97
Reported: 04-08-97

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	140	<---
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	34	<---
Cobalt	6010	80	8000	0.5	7.9	<---
Copper	6010	25	2500	0.1	18	<---
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	12	<---
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	29	<---
Zinc	6010	250	5000	0.1	52	<---

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

ORANGE COAST ANALYTICAL

Mark Noorani
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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-RE4-SP32

Laboratory Sample Number: 97031052
Laboratory Reference #: MWI 8767

Sampled: 03-27-97
Received: 03-27-97
Analyzed: 04-02-97
Reported: 04-08-97

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	130	<---
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	44	<---
Cobalt	6010	80	8000	0.5	8.2	<---
Copper	6010	25	2500	0.1	24	<---
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	15	<---
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	33	<---
Zinc	6010	250	5000	0.1	82	<---

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

ORANGE COAST ANALYTICAL

Mark Noorani
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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-RE4-SP30
Laboratory Sample Number: 97031050
Laboratory Reference #: MWI 8767

Sampled: 03-27-97
Received: 03-27-97
Analyzed: 04-02-97
Reported: 04-08-97

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.

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Sample Description: Soil, B37-RE4-SP30

Laboratory Sample Number: 97031050

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	*102*
Toluene-d8	*94*
4-Bromofluorobenzene	*98*

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

Sample Description: Soil, B37-RE4-SP31
Laboratory Sample Number: 97031051
Laboratory Reference #: MWI 8767

Sampled: 03-27-97
Received: 03-27-97
Analyzed: 04-02-97
Reported: 04-08-97

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.

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Sample Description: Soil, B37-RE4-SP31

Laboratory Sample Number: 97031051

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	*101*
Toluene-d8	*91*
4-Bromofluorobenzene	*98*

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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-RE4-SP32
Laboratory Sample Number: 97031052
Laboratory Reference #: MWI 8767

Sampled: 03-27-97
Received: 03-27-97
Analyzed: 04-02-97
Reported: 04-08-97

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.

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Sample Description: Soil, B37-RE4-SP32

Laboratory Sample Number: 97031052

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	*93*
Toluene-d8	*92*
4-Bromofluorobenzene	*89*

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

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

Sampled : 03-27-97
Received: 03-27-97
Analyzed: 04-04-97
Reported: 04-08-97

Sample Description: Soil, B37-RE4-SP30
Laboratory Sample #: 97031050
Laboratory Reference #: MWI 8767

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

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*	
Acenaphthene	83-32-9	100	N.D.	
Acenaphthylene	208-96-8	100	N.D.	
Aniline	62-53-3	100	N.D.	
Anthracene	120-12-7	100	N.D.	
Benzidine	92-87-5	500	N.D.	
Benzoic Acid	65-85-0	250	N.D.	
Benzo(a)anthracene	56-55-3	100	800	<---
Benzo(b)fluoranthene	205-99-2	250	N.D.	
Benzo(k)fluoranthene	207-08-9	250	N.D.	
Benzo(g,h,i)perylene	191-24-2	250	N.D.	
enzo(a)pyrene	50-32-8	250	N.D.	
enzyl alcohol	100-51-6	100	N.D.	
Bis(2-chloroethoxy)methane	111-91-1	100	N.D.	
Bis(2-chloroethyl)ether	111-44-4	100	N.D.	
Bis(2-chloroisopropyl)ether	39638-32-9	100	N.D.	
Bis(2-ethylhexyl)phthalate	117-81-7	100	N.D.	
4-Bromophenyl phenyl ether	101-55-3	100	N.D.	
Butyl benzyl phthalate	85-68-7	100	N.D.	
4-Chloroaniline	106-47-8	100	N.D.	
2-Chloronaphthalene	91-58-7	100	N.D.	
4-Chloro-3-methylphenol	59-50-7	100	N.D.	
2-Chlorophenol	95-57-8	100	N.D.	
4-Chlorophenyl phenyl ether	7005-72-3	100	N.D.	
Chrysene	218-0109	100	N.D.	
Dibenz(a,h)anthracene	53-70-3	100	N.D.	
Dibenzofuran	132-64-9	100	N.D.	
Di-n-butyl phthalate	84-74-2	250	N.D.	
1,3-Dichlorobenzene	541-73-1	100	N.D.	
1,4-Dichlorobenzene	106-46-7	100	N.D.	
1,2-Dichlorobenzene	95-50-1	100	N.D.	
3,3'-Dichlorobenzidine	91-94-1	100	N.D.	
2,4-Dichlorophenol	120-83-2	100	N.D.	
Diethyl phthalate	84-66-2	100	N.D.	
2,4-Dimethylphenol	105-67-9	100	N.D.	
Dimethyl phthalate	131-11-3	100	N.D.	
6-Dinitro-2-methylphenol	534-52-1	100	N.D.	
4-Dinitrophenol	51-28-5	100	N.D.	

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

Sample Description: Soil, B37-RE4-SP30
Laboratory Sample #: 97031050

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*	
2,4-Dinitrotoluene	121-14-2	250	N.D.	
2,6-Dinitrotoluene	606-20-2	250	N.D.	
Di-n-octyl phthalate	117-84-0	250	N.D.	
Fluoranthene	206-44-0	100	230	<---
Fluorene	86-73-7	100	N.D.	
Hexachlorobenzene	118-74-1	100	N.D.	
Hexachlorobutadiene	87-68-3	100	N.D.	
Hexachlorocyclopentadiene	77-47-4	100	N.D.	
Hexachloroethane	67-72-1	100	N.D.	
Indeno(1,2,3-cd)pyrene	193-39-5	250	N.D.	
Isophorone	78-59-1	100	N.D.	
2-Methylnaphthalene	91-57-6	100	N.D.	
2-Methylphenol	95-48-7	100	N.D.	
4-Methylphenol	106-44-5	100	N.D.	
Naphthalene	91-20-3	100	N.D.	
2-Nitroaniline	88-74-4	250	N.D.	
3-Nitroaniline	99-09-2	250	N.D.	
4-Nitroaniline	100-01-6	250	N.D.	
Nitrobenzene	98-95-3	100	N.D.	
2-Nitrophenol	88-75-5	100	N.D.	
4-Nitrophenol	100-02-7	100	N.D.	
N-Nitrosodiphenylamine	86-30-6	100	N.D.	
N-Nitroso-di-n-propylamine	621-64-7	100	N.D.	
N-Nitrosodimethylamine	62-75-9	100	N.D.	
Pentachlorophenol	87-86-5	250	N.D.	
Phenanthrene	85-01-8	100	100	<---
Phenol	108-95-2	100	N.D.	
Pyrene	129-00-0	100	300	<---
1,2,4-Trichlorobenzene	120-82-1	100	N.D.	
2,4,5-Trichlorophenol	95-95-4	100	N.D.	
2,4,6-Trichlorophenol	88-06-2	100	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: Soil, B37-RE4-SP31
Laboratory Sample #: 97031051
Laboratory Reference #: MWI 8767

Sampled : 03-27-97
Received: 03-27-97
Analyzed: 04-04-97
Reported: 04-08-97

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

ANALYTE	CAS NUMBER	DETECTION LIMIT ug/kg	SAMPLE RESULTS ug/kg
Acenaphthene	83-32-9	100	N.D.
Acenaphthylene	208-96-8	100	N.D.
Aniline	62-53-3	100	N.D.
Anthracene	120-12-7	100	N.D.
Benzidine	92-87-5	500	N.D.
Benzoic Acid	65-85-0	250	N.D.
Benzo(a)anthracene	56-55-3	100	N.D.
Benzo(b)fluoranthene	205-99-2	250	N.D.
Benzo(k)fluoranthene	207-08-9	250	N.D.
Benzo(g,h,i)perylene	191-24-2	250	N.D.
Benzo(a)pyrene	50-32-8	250	N.D.
Benzyl alcohol	100-51-6	100	N.D.
Bis(2-chloroethoxy)methane	111-91-1	100	N.D.
Bis(2-chloroethyl)ether	111-44-4	100	N.D.
Bis(2-chloroisopropyl)ether	39638-32-9	100	N.D.
Bis(2-ethylhexyl)phthalate	117-81-7	100	N.D.
4-Bromophenyl phenyl ether	101-55-3	100	N.D.
Butyl benzyl phthalate	85-68-7	100	N.D.
4-Chloroaniline	106-47-8	100	N.D.
2-Chloronaphthalene	91-58-7	100	N.D.
4-Chloro-3-methylphenol	59-50-7	100	N.D.
2-Chlorophenol	95-57-8	100	N.D.
4-Chlorophenyl phenyl ether	7005-72-3	100	N.D.
Chrysene	218-0109	100	N.D.
Dibenz(a,h)anthracene	53-70-3	100	N.D.
Dibenzofuran	132-64-9	100	N.D.
Di-n-butyl phthalate	84-74-2	250	N.D.
1,3-Dichlorobenzene	541-73-1	100	N.D.
1,4-Dichlorobenzene	106-46-7	100	N.D.
1,2-Dichlorobenzene	95-50-1	100	N.D.
3,3'-Dichlorobenzidine	91-94-1	100	N.D.
2,4-Dichlorophenol	120-83-2	100	N.D.
Diethyl phthalate	84-66-2	100	N.D.
2,4-Dimethylphenol	105-67-9	100	N.D.
Dimethyl phthalate	131-11-3	100	N.D.
4,6-Dinitro-2-methylphenol	534-52-1	100	N.D.
2,4-Dinitrophenol	51-28-5	100	N.D.

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

Sample Description: Soil, B37-RE4-SP31
Laboratory Sample #: 97031051

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*	
2,4-Dinitrotoluene	121-14-2	250	N.D.	
2,6-Dinitrotoluene	606-20-2	250	N.D.	
Di-n-octyl phthalate	117-84-0	250	N.D.	
Fluoranthene	206-44-0	100	220	<---
Fluorene	86-73-7	100	N.D.	
Hexachlorobenzene	118-74-1	100	N.D.	
Hexachlorobutadiene	87-68-3	100	N.D.	
Hexachlorocyclopentadiene	77-47-4	100	N.D.	
Hexachloroethane	67-72-1	100	N.D.	
Indeno(1,2,3-cd)pyrene	193-39-5	250	N.D.	
Isophorone	78-59-1	100	N.D.	
2-Methylnaphthalene	91-57-6	100	N.D.	
2-Methylphenol	95-48-7	100	N.D.	
4-Methylphenol	106-44-5	100	N.D.	
Naphthalene	91-20-3	100	N.D.	
2-Nitroaniline	88-74-4	250	N.D.	
3-Nitroaniline	99-09-2	250	N.D.	
4-Nitroaniline	100-01-6	250	N.D.	
Nitrobenzene	98-95-3	100	N.D.	
2-Nitrophenol	88-75-5	100	N.D.	
4-Nitrophenol	100-02-7	100	N.D.	
N-Nitrosodiphenylamine	86-30-6	100	N.D.	
N-Nitroso-di-n-propylamine	621-64-7	100	N.D.	
N-Nitrosodimethylamine	62-75-9	100	N.D.	
Pentachlorophenol	87-86-5	250	N.D.	
Phenanthrene	85-01-8	100	N.D.	
Phenol	108-95-2	100	N.D.	
Pyrene	129-00-0	100	280	<---
1,2,4-Trichlorobenzene	120-82-1	100	N.D.	
2,4,5-Trichlorophenol	95-95-4	100	N.D.	
2,4,6-Trichlorophenol	88-06-2	100	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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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-RE4-SP32
Laboratory Sample #: 97031052
Laboratory Reference #: MWI 8767

Sampled : 03-27-97
Received: 03-27-97
Analyzed: 04-04-97
Reported: 04-08-97

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

ANALYTE	CAS NUMBER	DETECTION LIMIT ug/kg	SAMPLE RESULTS ug/kg	
Acenaphthene	83-32-9	100	N.D.	
Acenaphthylene	208-96-8	100	N.D.	
Aniline	62-53-3	100	N.D.	
Anthracene	120-12-7	100	N.D.	
Benzidine	92-87-5	500	N.D.	
Benzoic Acid	65-85-0	250	N.D.	
Benzo(a)anthracene	56-55-3	100	190	<---
Benzo(b)fluoranthene	205-99-2	250	N.D.	
Benzo(k)fluoranthene	207-08-9	250	270	<---
Benzo(g,h,i)perylene	191-24-2	250	N.D.	
enzo(a)pyrene	50-32-8	250	N.D.	
Benzyl alcohol	100-51-6	100	N.D.	
Bis(2-chloroethoxy)methane	111-91-1	100	N.D.	
Bis(2-chloroethyl)ether	111-44-4	100	N.D.	
Bis(2-chloroisopropyl)ether	39638-32-9	100	N.D.	
Bis(2-ethylhexyl)phthalate	117-81-7	100	N.D.	
4-Bromophenyl phenyl ether	101-55-3	100	N.D.	
Butyl benzyl phthalate	85-68-7	100	N.D.	
4-Chloroaniline	106-47-8	100	N.D.	
2-Chloronaphthalene	91-58-7	100	N.D.	
4-Chloro-3-methylphenol	59-50-7	100	N.D.	
2-Chlorophenol	95-57-8	100	N.D.	
4-Chlorophenyl phenyl ether	7005-72-3	100	N.D.	
Chrysene	218-0109	100	400	<---
Dibenz(a,h)anthracene	53-70-3	100	N.D.	
Dibenzofuran	132-64-9	100	N.D.	
Di-n-butyl phthalate	84-74-2	250	N.D.	
1,3-Dichlorobenzene	541-73-1	100	N.D.	
1,4-Dichlorobenzene	106-46-7	100	N.D.	
1,2-Dichlorobenzene	95-50-1	100	N.D.	
3,3'-Dichlorobenzidine	91-94-1	100	N.D.	
2,4-Dichlorophenol	120-83-2	100	N.D.	
Diethyl phthalate	84-66-2	100	N.D.	
2,4-Dimethylphenol	105-67-9	100	N.D.	
Dimethyl phthalate	131-11-3	100	N.D.	
',6-Dinitro-2-methylphenol	534-52-1	100	N.D.	
,4-Dinitrophenol	51-28-5	100	N.D.	

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

Sample Description: Soil, B37-RE4-SP32
Laboratory Sample #: 97031052

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*
2,4-Dinitrotoluene	121-14-2	250	N.D.
2,6-Dinitrotoluene	606-20-2	250	N.D.
Di-n-octyl phthalate	117-84-0	250	N.D.
Fluoranthene	206-44-0	100	N.D.
Fluorene	86-73-7	100	N.D.
Hexachlorobenzene	118-74-1	100	N.D.
Hexachlorobutadiene	87-68-3	100	N.D.
Hexachlorocyclopentadiene	77-47-4	100	N.D.
Hexachloroethane	67-72-1	100	N.D.
Indeno(1,2,3-cd)pyrene	193-39-5	250	N.D.
Isophorone	78-59-1	100	N.D.
2-Methylnaphthalene	91-57-6	100	N.D.
2-Methylphenol	95-48-7	100	N.D.
4-Methylphenol	106-44-5	100	N.D.
Naphthalene	91-20-3	100	N.D.
2-Nitroaniline	88-74-4	250	N.D.
3-Nitroaniline	99-09-2	250	N.D.
4-Nitroaniline	100-01-6	250	N.D.
Nitrobenzene	98-95-3	100	N.D.
2-Nitrophenol	88-75-5	100	N.D.
4-Nitrophenol	100-02-7	100	N.D.
N-Nitrosodiphenylamine	86-30-6	100	N.D.
N-Nitroso-di-n-propylamine	621-64-7	100	N.D.
N-Nitrosodimethylamine	62-75-9	100	N.D.
Pentachlorophenol	87-86-5	250	N.D.
Phenanthrene	85-01-8	100	N.D.
Phenol	108-95-2	100	N.D.
Pyrene	129-00-0	100	N.D.
1,2,4-Trichlorobenzene	120-82-1	100	N.D.
2,4,5-Trichlorophenol	95-95-4	100	N.D.
2,4,6-Trichlorophenol	88-06-2	100	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

Analysis Method: 418.1

Sample Description: Water

Laboratory Reference #: MWI 8767

Sampled : 03-27-97
Received: 03-27-97
Analyzed: 03-28-97
Reported: 04-08-97

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Laboratory Sample Number	*Client Sample Number*	*Sample Result (mg/l)*
97031053	Equipment Blank	N.D.
97031054	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
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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: 97031053
Laboratory Reference #: MWI 8767

Sampled: 03-27-97
Received: 03-27-97
Analyzed: 04-01-97
Reported: 04-08-97

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: 97031054
Laboratory Reference #: MWI 8767

Sampled: 03-27-97
Received: 03-27-97
Analyzed: 04-01-97
Reported: 04-08-97

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

Sampled : 03-27-97
Sample Description: Water, Equip Blank *Received:* 03-27-97
Laboratory Sample #: 97031053 *Analyzed:* 04-02-97
Laboratory Reference #: MWI 8767 *Reported:* 04-08-97

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.

ORANGE COAST ANALYTICAL, INC.
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SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270) (continued)

Sample Description: Water, Equip Blank
Laboratory Sample #: 97031053

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.

ORANGE COAST ANALYTICAL

Mark Noorani

ark 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

Sampled : 03-27-97
Sample Description: Water, Rinsate Blank *Received:* 03-27-97
Laboratory Sample #: 97031054 *Analyzed:* 04-02-97
Laboratory Reference #: MWI 8767 *Reported:* 04-08-97

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.

ORANGE COAST ANALYTICAL, INC.
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SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270) (continued)

Sample Description: Water, Rinsate Blank
Laboratory Sample #: 97031054

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.
'-Methylphenol	106-44-5	5.0	N.D.
ıphthalene	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

Mark Noorani

ırk 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: 97031053
Laboratory Reference #: MWI 8767

Sampled: 03-27-97
Received: 03-27-97
Analyzed: 04-01-97
Reported: 04-08-97

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, Equip Blank

Laboratory Sample Number: 97031053

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	*104*
Toluene-d8	*93*
4-Bromofluorobenzene	*102*

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: 97031054
Laboratory Reference #: MWI 8767

Sampled: 03-27-97
Received: 03-27-97
Analyzed: 04-01-97
Reported: 04-08-97

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.
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: Water, Rinsate Blank

Laboratory Sample Number: 97031054

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	*101*
Toluene-d8	*94*
4-Bromofluorobenzene	*107*

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, Trip Blank
Laboratory Sample Number: 97031055
Laboratory Reference #: MWI 8767

Sampled: 03-27-97
Received: 03-27-97
Analyzed: 04-01-97
Reported: 04-08-97

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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Sample Description: Water, Trip Blank

Laboratory Sample Number: 97031055

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.

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Mark Noorani
Laboratory Director

Surrogate Recoveries	*%*
Dibromofluoromethane	*102*
Toluene-d8	*92*
4-Bromofluorobenzene	*102*

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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, Equipment Blank

Laboratory Sample Number: 97031053
Laboratory Reference #: MWI 8767

Sampled: 03-27-97
Received: 03-27-97
Analyzed: 03-28-97
Reported: 04-08-97

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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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: 97031054
Laboratory Reference #: MWI 8767

Sampled: 03-27-97
Received: 03-27-97
Analyzed: 03-28-97
Reported: 04-08-97

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 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, Equipment Blank

Laboratory Sample Number: 97031053
Laboratory Reference #: MWI 8767

Sampled: 03-27-97
Received: 03-27-97
Analyzed: 03-28-97
Reported: 04-08-97

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
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: 97031054
Laboratory Reference #: MWI 8767

Sampled: 03-27-97
Received: 03-27-97
Analyzed: 03-28-97
Reported: 04-08-97

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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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 8767

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 : 03/28/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8767

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
PCB-1260	0.0	50	40	42	80	84	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 : Total Recoverable Petroleum Hydrocarbons (EPA 418.1)

Date of Analysis : 03/28/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8767

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 : 03/28/97
Laboratory Sample No : 97030397
Laboratory Reference No : MWI 8767

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Hydrocarbons	0.0	100	87	92	87	92	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 : Volatile Organics by GC/MS (EPA 8260)

Date of Analysis : 04/02/97
Laboratory Sample No : 97031034
Laboratory Reference No : MWI 8767

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
Benzene	0.0	50	53	49	106	98	8
1,1-Dichloroethene	0.0	50	54	50	108	100	8
Trichloroethene	0.0	50	49	44	98	88	11
Toluene	0.0	50	51	50	102	100	2
Chlorobenzene	0.0	50	49	47	98	94	4

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 : 04/04/97
Laboratory Sample No : 97031110
Laboratory Reference No : MWI 8767

Analyte	R1 (ng)	SP (ng)	MS (ng)	MSD (ng)	PR1 %	PR2 %	RPD %
1,4-Dichlorobenzene	0.0	50	48	47	96	94	2
n-Nitroso-di-n-propylamine	0.0	50	48	49	96	98	2
1,2,4-Trichlorobenzene	0.0	50	49	49	98	98	0
Acenaphthene	0.0	50	51	50	102	100	2
Pyrene	0.0	50	41	39	82	78	5
Pentachlorophenol	0.0	100	90	90	90	90	0
4-Chloro-3-Methylphenol	0.0	100	77	73	77	73	5
2-Chlorophenol	0.0	100	87	85	87	85	2
Phenol	0.0	100	77	75	77	75	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 : Semi-Volatile Organics by GC/MS (EPA 8270)

Date of Analysis : 04/02/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8767

Analyte	R1 (ng)	SP (ng)	MS (ng)	MSD (ng)	PR1 %	PR2 %	RPD %
1,4-Dichlorobenzene	0.0	50	40	41	80	82	2
n-Nitroso-di-n-propylamine	0.0	50	41	49	82	98	18
1,2,4-Trichlorobenzene	0.0	50	35	37	70	74	6
Acenaphthene	0.0	50	46	47	92	94	2
Pyrene	0.0	50	47	50	94	100	6
Pentachlorophenol	0.0	100	79	82	79	82	4
4-Chloro-3-Methylphenol	0.0	100	69	72	69	72	4
2-Chlorophenol	0.0	100	78	81	78	81	4
Phenol	0.0	100	30	33	30	33	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

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QC DATA REPORT

Analysis : Metals

Date of Analysis : 04/01/97
Laboratory Sample No : 97031017
Laboratory Reference No : MWI 8767

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Antimony	0.00	3.000	2.800	3.000	93	100	7
Arsenic	0.00	1.000	0.960	0.920	96	92	4
Barium	0.00	0.100	0.097	0.095	97	95	2
Beryllium	0.00	0.100	0.094	0.089	94	89	5
Cadmium	0.00	0.100	0.098	0.102	98	102	4
Chromium (VI)	0.00	0.500	0.430	0.410	86	82	5
Chromium (Total)	0.00	0.100	0.098	0.095	98	95	3
Cobalt	0.00	0.100	0.099	0.096	99	96	3
Copper	0.00	0.100	0.102	0.098	102	98	4
Lead	0.00	1.000	0.910	0.800	91	80	13
Mercury	0.000	0.020	0.022	0.020	110	100	10
Molybdenum	0.00	1.000	1.150	1.060	115	106	8
Nickel	0.00	0.500	0.520	0.490	104	98	6
Selenium	0.00	1.000	1.090	1.050	109	105	4
Silver	0.00	0.500	0.570	0.570	114	114	0
Thallium	0.00	3.000	2.600	3.000	87	100	14
Vanadium	0.00	0.500	0.470	0.450	94	90	4
Zinc	0.00	0.100	0.098	0.088	98	88	11

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 : 03/28/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8767

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
4-4' -DDD	0.00	1.00	0.66	0.80	66	80	19

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 : Metals

Date of Analysis : 04/02/97
Laboratory Sample No : 97031116
Laboratory Reference No : MWI 8767

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Antimony	0.0	30.0	30.7	30.1	102	100	2
Arsenic	0.0	10.0	10.0	9.2	100	92	8
Barium	10.0	10.0	21.8	20.9	118	109	4
Beryllium	0.00	1.00	0.99	1.05	99	105	6
Cadmium	0.00	1.00	0.99	1.00	99	100	1
Chromium (Total)	2.2	5.0	7.6	7.3	108	102	4
Chromium (VI)	0.00	1.00	1.05	0.92	105	92	13
Cobalt	0.83	1.00	1.80	1.70	97	87	6
Copper	2.1	5.0	7.5	7.4	108	106	1
Lead	0.00	10.00	9.40	9.70	94	97	3
Mercury	0.000	0.020	0.022	0.019	110	95	15
Molybdenum	0.0	10.0	9.1	9.2	91	92	1
Nickel	1.1	5.0	5.6	5.4	90	86	4
Selenium	0.0	10.0	9.9	9.3	99	93	6
Silver	0.0	5.0	4.3	4.3	86	86	0
Thallium	0.0	30.0	25.4	27.0	85	90	6
Vanadium	2.5	5.0	7.4	7.2	98	94	3
Zinc	4.2	5.0	8.7	8.7	90	90	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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Analysis Request and Chain of Custody Record

Page 1 of 1

REQUIRED TAT: 24 hr TAT on soil. TRPH only. Standard TAT for others

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: Montgomery Watson	PROJECT NAME: McDonnell Douglas Corporation
SEND REPORT TO: Fred Strauss	NUMBER: 1206031.01090010
ADDRESS: 250 N Madison Ave, Pasadena, CA 91101	LOCATION: Bldg 37 area
	ADDRESS: 19503 S Normandie Ave, Torrance, CA
PHONE: (818) 568-6587 FAX: (818) 796 5941	SAMPLED BY: IV / NM

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
B37-REA-SP30	2	3/27/97	0855	Soil	2"x6" SS sleeve	Ice	X	X	X	X			
B37-REA-SP31	2		1132	Soil	2"x6" SS sleeve		X	X	X	X			
B37-REA-SP32	2		1506	Soil	2"x6" SS sleeve		X	X	X	X			
Equipment blank	7		1545	Water	4 amber 1 poly 2 VOAs	Ice, HNO3 HCl	X	X	X	X	X	X	
Rinsate blank	7		1600				X	X	X	X	X	X	
Trip blank	2				2 VOAs	HCl			X				

AWN 3/28/97

Total No. of Samples: 6

Method of Shipment: Orange Coast Courier (1 cooler)

Relinquished By:	Date/Time:	Received By:	Date/Time:
Ivon Vargas	3/27/97 17:30		
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received For Lab By: [illegible]	Date/Time: 03/27/97 [illegible]

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 responsi[illegible] disposal. A disposal fee may be imposed if client fails to pickup samples.

MAR 28 '97 02:00PM MCDONNELL DOUGLAS P.1/1

BOE-C6-0109287

ORANGE COAST ANALYTICAL, INC.
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ontgomery 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 8777

Sampled : 03-28-97
Received: 03-28-97
Analyzed: 03-31-97
Reported: 03-31-97

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Laboratory Sample Number	*Client Sample Number*	*Sample Result (mg/kg)*
97031094	B37-RE4-SP33	500
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

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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-RE4-SP33

Laboratory Sample Number: 97031094
Laboratory Reference #: MWI 8777

Sampled: 03-28-97
Received: 03-28-97
Analyzed: 04-02-97
Reported: 04-10-97

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	96	<---
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	26	<---
Cobalt	6010	80	8000	0.5	7.6	<---
Copper	6010	25	2500	0.1	41	<---
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	70	<---

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

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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-RE4-SP33
Laboratory Sample Number: 97031094
Laboratory Reference #: MWI 8777

Sampled: 03-28-97
Received: 03-28-97
Analyzed: 04-07-97
Reported: 04-10-97

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.

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Sample Description: Soil, B37-RE4-SP33

Laboratory Sample Number: 97031094

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	5.6	<---
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	*102*
Toluene-d8	*96*
4-Bromofluorobenbzene	*103*

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tgomery 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-RE4-SP33
Laboratory Sample #: 97031094
Laboratory Reference #: MWI 8777

Sampled : 03-28-97
Received: 03-28-97
Analyzed: 04-04-97
Reported: 04-10-97

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

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*	
Acenaphthene	83-32-9	100	N.D.	
Acenaphthylene	208-96-8	100	N.D.	
Aniline	62-53-3	100	N.D.	
Anthracene	120-12-7	100	N.D.	
Benzidine	92-87-5	500	N.D.	
Benzoic Acid	65-85-0	250	N.D.	
Benzo(a)anthracene	56-55-3	100	240	<---
Benzo(b)fluoranthene	205-99-2	250	N.D.	
Benzo(k)fluoranthene	207-08-9	250	N.D.	
Benzo(g,h,i)perylene	191-24-2	250	N.D.	
Benzo(a)pyrene	50-32-8	250	N.D.	
Benzyl alcohol	100-51-6	100	N.D.	
Bis(2-chloroethoxy)methane	111-91-1	100	N.D.	
Bis(2-chloroethyl)ether	111-44-4	100	N.D.	
Bis(2-chloroisopropyl)ether	39638-32-9	100	N.D.	
Bis(2-ethylhexyl)phthalate	117-81-7	100	N.D.	
4-Bromophenyl phenyl ether	101-55-3	100	N.D.	
Butyl benzyl phthalate	85-68-7	100	N.D.	
4-Chloroaniline	106-47-8	100	N.D.	
2-Chloronaphthalene	91-58-7	100	N.D.	
4-Chloro-3-methylphenol	59-50-7	100	N.D.	
2-Chlorophenol	95-57-8	100	N.D.	
4-Chlorophenyl phenyl ether	7005-72-3	100	N.D.	
Chrysene	218-0109	100	300	<---
Dibenz(a,h)anthracene	53-70-3	100	N.D.	
Dibenzofuran	132-64-9	100	N.D.	
Di-n-butyl phthalate	84-74-2	250	N.D.	
1,3-Dichlorobenzene	541-73-1	100	N.D.	
1,4-Dichlorobenzene	106-46-7	100	N.D.	
1,2-Dichlorobenzene	95-50-1	100	N.D.	
3,3'-Dichlorobenzidine	91-94-1	100	N.D.	
2,4-Dichlorophenol	120-83-2	100	N.D.	
Diethyl phthalate	84-66-2	100	N.D.	
2,4-Dimethylphenol	105-67-9	100	N.D.	
Dimethyl phthalate	131-11-3	100	N.D.	
4 -Dinitro-2-methylphenol	534-52-1	100	N.D.	
2 -Dinitrophenol	51-28-5	100	N.D.	

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

Sample Description: Soil, B37-RE4-SP33
Laboratory Sample #: 97041094

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*	
2,4-Dinitrotoluene	121-14-2	250	N.D.	
2,6-Dinitrotoluene	606-20-2	250	N.D.	
Di-n-octyl phthalate	117-84-0	250	N.D.	
Fluoranthene	206-44-0	100	360	<---
Fluorene	86-73-7	100	100	<---
Hexachlorobenzene	118-74-1	100	N.D.	
Hexachlorobutadiene	87-68-3	100	N.D.	
Hexachlorocyclopentadiene	77-47-4	100	N.D.	
Hexachloroethane	67-72-1	100	N.D.	
Indeno(1,2,3-cd)pyrene	193-39-5	250	N.D.	
Isophorone	78-59-1	100	N.D.	
2-Methylnaphthalene	91-57-6	100	190	<---
2-Methylphenol	95-48-7	100	N.D.	
4-Methylphenol	106-44-5	100	N.D.	
Naphthalene	91-20-3	100	N.D.	
2-Nitroaniline	88-74-4	250	N.D.	
3-Nitroaniline	99-09-2	250	N.D.	
4-Nitroaniline	100-01-6	250	N.D.	
Nitrobenzene	98-95-3	100	N.D.	
2-Nitrophenol	88-75-5	100	N.D.	
4-Nitrophenol	100-02-7	100	N.D.	
N-Nitrosodiphenylamine	86-30-6	100	N.D.	
N-Nitroso-di-n-propylamine	621-64-7	100	N.D.	
N-Nitrosodimethylamine	62-75-9	100	N.D.	
Pentachlorophenol	87-86-5	250	N.D.	
Phenanthrene	85-01-8	100	290	<---
Phenol	108-95-2	100	N.D.	
Pyrene	129-00-0	100	390	<---
1,2,4-Trichlorobenzene	120-82-1	100	N.D.	
2,4,5-Trichlorophenol	95-95-4	100	N.D.	
2,4,6-Trichlorophenol	88-06-2	100	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, Equipment Blank

Laboratory Sample Number: 97031095
Laboratory Reference #: MWI 8777

Sampled: 03-28-97
Received: 03-28-97
Analyzed: 04-01-97
Reported: 04-10-97

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.

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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: 97031096
Laboratory Reference #: MWI 8777

Sampled: 03-28-97
Received: 03-28-97
Analyzed: 04-01-97
Reported: 04-10-97

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

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

ıtgomery 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 #: 97031095
Laboratory Reference #: MWI 8777

Sampled : 03-28-97
Received: 03-28-97
Analyzed: 04-02-97
Reported: 04-10-97

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.
zo(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.
-Dinitro-2-methylphenol	534-52-1	50	N.D.
-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 #: 97031095

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

Mark Noorani
Laboratory Director

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

Client Project ID: McDonnell Douglas
Client Project #: 1206035.01090010

Sampled : 03-28-97
Sample Description: Water, Rinsate Blank *Received:* 03-28-97
Laboratory Sample #: 97031096 *Analyzed:* 04-02-97
Laboratory Reference #: MWI 8777 *Reported:* 04-10-97

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.
nzo(g,h,i)perylene	191-24-2	25	N.D.
zo(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.
-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 #: 97031096

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

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, Equip Blank
Laboratory Sample Number: 97031095
Laboratory Reference #: MWI 8777

Sampled: 03-28-97
Received: 03-28-97
Analyzed: 04-03-97
Reported: 04-10-97

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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Sample Description: Water, Equip Blank

Laboratory Sample Number: 97031095

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	*103*
Toluene-d8	*95*
4-Bromofluorobenzene	*113*

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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: 97031096
Laboratory Reference #: MWI 8777

Sampled: 03-28-97
Received: 03-28-97
Analyzed: 04-03-97
Reported: 04-10-97

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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Sample Description: Water, Rinsate Blank

Laboratory Sample Number: 97031096

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	*101*
Toluene-d8	*93*
4-Bromofluorobenzene	*107*

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

Sample Description: Water, Trip Blank
Laboratory Sample Number: 97031097
Laboratory Reference #: MWI 8777

Sampled: 03-28-97
Received: 03-28-97
Analyzed: 04-03-97
Reported: 04-10-97

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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Sample Description: Water, Trip Blank

Laboratory Sample Number: 97031097

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	*106*
Toluene-d8	*94*
4-Bromofluorobenzene	*111*

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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, Equipment Blank

Laboratory Sample Number: 97031095
Laboratory Reference #: MWI 8777

Sampled: 03-28-97
Received: 03-28-97
Analyzed: 04-08-97
Reported: 04-10-97

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 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, Rinsate Blank

Laboratory Sample Number: 97031096
Laboratory Reference #: MWI 8777

Sampled: 03-28-97
Received: 03-28-97
Analyzed: 04-08-97
Reported: 04-10-97

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 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, Equipment Blank

Laboratory Sample Number: 97031095
Laboratory Reference #: MWI 8777

Sampled: 03-28-97
Received: 03-28-97
Analyzed: 04-08-97
Reported: 04-10-97

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
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: 97031096
Laboratory Reference #: MWI 8777

Sampled: 03-28-97
Received: 03-28-97
Analyzed: 04-08-97
Reported: 04-10-97

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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Laboratory Director

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ontgomery 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 8777

Sampled : 03-28-97
Received: 03-28-97
Analyzed: 03-31-97
Reported: 04-10-97

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Laboratory Sample Number	*Client Sample Number*	*Sample Result (mg/l)*
97031095	Equip Blank	N.D.
97031096	Rinstate Blank	N.D.

Detection Limit: 0.5

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

ORANGE COAST ANALYTICAL

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QC DATA REPORT

Analysis : Total Recoverable Petroleum Hydrocarbons (EPA 418.1)

Date of Analysis : 03/31/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8777

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Hydrocarbons	0.0	2.5	1.8	1.9	72	76	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

ORANGE COAST ANALYTICAL

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QC DATA REPORT

Analysis : Total Recoverable Petroleum Hydrocarbons (EPA 418.1)

Date of Analysis : 03/31/97
Laboratory Sample No : 97030931
Laboratory Reference No : MWI 8777

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Hydrocarbons	0.0	100	92	92	92	92	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

ORANGE COAST ANALYTICAL

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QC DATA REPORT

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

Date of Analysis : 04/04/97
Laboratory Sample No : 97031110
Laboratory Reference No : MWI 8777

Analyte	R1 (ng)	SP (ng)	MS (ng)	MSD (ng)	PR1 %	PR2 %	RPD %
1,4-Dichlorobenzene	0.0	50	48	47	96	94	2
n-Nitroso-di-n-propylamine	0.0	50	48	49	96	98	2
1,2,4-Trichlorobenzene	0.0	50	49	49	98	98	0
Acenaphthene	0.0	50	51	50	102	100	2
Pyrene	0.0	50	41	39	82	78	5
Pentachlorophenol	0.0	100	90	90	90	90	0
4-Chloro-3-Methylphenol	0.0	100	77	73	77	73	5
2-Chlorophenol	0.0	100	87	85	87	85	2
Phenol	0.0	100	77	75	77	75	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

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QC DATA REPORT

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

Date of Analysis : 04/02/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8777

Analyte	R1 (ng)	SP (ng)	MS (ng)	MSD (ng)	PR1 %	PR2 %	RPD %
1,4-Dichlorobenzene	0.0	50	40	41	80	82	2
n-Nitroso-di-n-propylamine	0.0	50	41	49	82	98	18
1,2,4-Trichlorobenzene	0.0	50	35	37	70	74	6
Acenaphthene	0.0	50	46	47	92	94	2
Pyrene	0.0	50	47	50	94	100	6
Pentachlorophenol	0.0	100	79	82	79	82	4
4-Chloro-3-Methylphenol	0.0	100	69	72	69	72	4
2-Chlorophenol	0.0	100	78	81	78	81	4
Phenol	0.0	100	30	33	30	33	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

Mark Noorani

MARK NOORANI
Laboratory Director

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QC DATA REPORT

Analysis : Metals

Date of Analysis : 04/02/97
Laboratory Sample No : 97031116
Laboratory Reference No : MWI 8777

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Antimony	0.0	30.0	30.7	30.1	102	100	2
Arsenic	0.0	10.0	10.0	9.2	100	92	8
Barium	10.0	10.0	21.8	20.9	118	109	4
Beryllium	0.00	1.00	0.99	1.05	99	105	6
Cadmium	0.00	1.00	0.99	1.00	99	100	1
Chromium (Total)	2.2	5.0	7.6	7.3	108	102	4
Chromium (VI)	0.00	1.00	1.05	0.92	105	92	13
Cobalt	0.83	1.00	1.80	1.70	97	87	6
Copper	2.1	5.0	7.5	7.4	108	106	1
Lead	0.00	10.00	9.40	9.70	94	97	3
Mercury	0.000	0.020	0.022	0.019	110	95	15
Molybdenum	0.0	10.0	9.1	9.2	91	92	1
Nickel	1.1	5.0	5.6	5.4	90	86	4
Selenium	0.0	10.0	9.9	9.3	99	93	6
Silver	0.0	5.0	4.3	4.3	86	86	0
Thallium	0.0	30.0	25.4	27.0	85	90	6
Vanadium	2.5	5.0	7.4	7.2	98	94	3
Zinc	4.2	5.0	8.7	8.7	90	90	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

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

QC DATA REPORT

Analysis : Metals

Date of Analysis : 04/01/97
Laboratory Sample No : 97031017
Laboratory Reference No : MWI 8777

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Antimony	0.00	3.000	2.800	3.000	93	100	7
Arsenic	0.00	1.000	0.960	0.920	96	92	4
Barium	0.00	0.100	0.097	0.095	97	95	2
Beryllium	0.00	0.100	0.094	0.089	94	89	5
Cadmium	0.00	0.100	0.098	0.102	98	102	4
Chromium (VI)	0.00	0.500	0.430	0.410	86	82	5
Chromium (Total)	0.00	0.100	0.098	0.095	98	95	3
Cobalt	0.00	0.100	0.099	0.096	99	96	3
Copper	0.00	0.100	0.102	0.098	102	98	4
Lead	0.00	1.000	0.910	0.800	91	80	13
Mercury	0.000	0.020	0.022	0.020	110	100	10
Molybdenum	0.00	1.000	1.150	1.060	115	106	8
Nickel	0.00	0.500	0.520	0.490	104	98	6
Selenium	0.00	1.000	1.090	1.050	109	105	4
Silver	0.00	0.500	0.570	0.570	114	114	0
Thallium	0.00	3.000	2.600	3.000	87	100	14
Vanadium	0.00	0.500	0.470	0.450	94	90	4
Zinc	0.00	0.100	0.098	0.088	98	88	11

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
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 : Organochlorine Pesticides (EPA 8080)

Date of Analysis : 04/08/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8777

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
4,4'-DDT	0.0	1.00	0.73	0.69	73	69	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 : PCB 'S (EPA 8080)

Date of Analysis : 04/08/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8777

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
PCB-1260	0.0	50	45	41	90	82	9

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 : 04/03/97
Laboratory Sample No : 97040110
Laboratory Reference No : MWI 8777

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
Benzene	0.0	20	21	21	105	105	0
1,1-Dichloroethene	0.0	20	20	20	100	100	0
Trichloroethene	0.0	20	19	21	95	105	10
Toluene	0.0	20	22	21	110	105	5
Chlorobenzene	0.0	20	20	20	100	100	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 : 04/07/97
Laboratory Sample No : 97041110
Laboratory Reference No : MWI 8777

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
Benzene	0.0	50	54	52	108	104	4
1,1-Dichloroethene	0.0	50	53	52	106	104	2
Trichloroethene	0.0	50	54	52	108	104	4
Toluene	0.0	50	55	54	110	108	2
Chlorobenzene	0.0	50	48	50	96	100	4

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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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 1 of 1

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

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: Montgomery Watson	PROJECT NAME: Mc Donnell Douglas C-6 facility
SEND REPORT TO: Fred Strauss	NUMBER: 1206035.01090010
ADDRESS: 250 N. Harbison Ave	LOCATION: Bldg 37 area
Pasadena, CA 91101	ADDRESS: 19503 S Normandie Ave
	Torrance, CA
PHONE: (818) 568-6582 FAX: (818) 796-5941	SAMPLED BY: IV / NM

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	TRPH 418.1	Title 22 Metals	VOCs 8240	SVOCs 8270	PCBs 8080	Pesticides 8080			REMARKS/PRECAUTIONS
B37-RE4-SP33	2	3/28/97	11:32	Soil	2"x6" SS Sleeve	Ice	X	X	X	X					
Equipment blank	7	↓	15:45	Water	Amber 1 poly 2 VOAs	None Nitric HCL	X	X	X	X	X	X			
Rinsate blank	7	↓	16:00	↓	Amber 1 poly 2 VOAs	None Nitric HCL	X	X	X	X	X	X			
trip blank	2	↓	—	↓	2 VOAs	HCL			X						

Total No. of Samples: 4

Method of Shipment: Orange Coast Courier (1 cooler total 3/28/97)

Relinquished By:	Date/Time:	Received By:	Date/Time:
Ivan Vargas	3/28/97 18:10		
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received For Lab By: [signature]	Date/Time: 03-28-97 6:08 P.M.

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 fo osal. A disposal fee may be imposed if client fails to pickup samples.

BOE-C6-0109321

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

Analysis Method: 418.1

Sample Description: Soil

Laboratory Reference #: MWI 8781

Sampled : 03-31-97
Received: 03-31-97
Analyzed: 04-01-97
Reported: 04-01-97

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Laboratory Sample Number	*Client Sample Number*	*Sample Result (mg/kg)*
97031109	B37-RE4-SP34	110
97031110	B37-RE4-SP35	N.D.
97031111	B37-GS-112-5.5'	15
97031112	B37-GS-113-5.5'	14
97031113	B37-GS-114-5.5'	13
97031114	B37-GS-115-5.5'	28
97031115	B37-GS-116-8'	N.D.
97031116	B37-RE4-SP36	77
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

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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-RE4-SP34

Laboratory Sample Number: 97031109
Laboratory Reference #: MWI 8781

Sampled: 03-31-97
Received: 03-31-97
Analyzed: 04-02-97
Reported: 04-14-97

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	130	<---
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	31	<---
Cobalt	6010	80	8000	0.5	7.8	<---
Copper	6010	25	2500	0.1	27	<---
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	11	<---
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	30	<---
Zinc	6010	250	5000	0.1	58	<---

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

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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-RE4-SP34
Laboratory Sample Number: 97031109
Laboratory Reference #: MWI 8781

Sampled: 03-31-97
Received: 03-31-97
Analyzed: 04-07-97
Reported: 04-14-97

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-Dichloroethene	75-35-4	2.5	N.D.
ans 1,2-Dichloroethene	156-60-5	2.5	N.D.
,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.

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

Sample Description: Soil, B37-RE4-SP34

Laboratory Sample Number: 97031109

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	*100*
Toluene-d8	*97*
4-Bromofluorobenbzene	*105*

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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 : 03-31-97
Received: 03-31-97
Analyzed: 04-03-97
Reported: 04-14-97

Sample Description: Soil, B37-RE4-SP34
Laboratory Sample #: 97031109
Laboratory Reference #: MWI 8781

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

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*
Acenaphthene	83-32-9	100	N.D.
Acenaphthylene	208-96-8	100	N.D.
Aniline	62-53-3	100	N.D.
Anthracene	120-12-7	100	N.D.
Benzidine	92-87-5	500	N.D.
Benzoic Acid	65-85-0	250	N.D.
Benzo(a)anthracene	56-55-3	100	N.D.
Benzo(b)fluoranthene	205-99-2	250	N.D.
Benzo(k)fluoranthene	207-08-9	250	N.D.
Benzo(g,h,i)perylene	191-24-2	250	N.D.
Benzo(a)pyrene	50-32-8	250	N.D.
Benzyl alcohol	100-51-6	100	N.D.
Bis(2-chloroethoxy)methane	111-91-1	100	N.D.
Bis(2-chloroethyl)ether	111-44-4	100	N.D.
Bis(2-chloroisopropyl)ether	39638-32-9	100	N.D.
Bis(2-ethylhexyl)phthalate	117-81-7	100	N.D.
4-Bromophenyl phenyl ether	101-55-3	100	N.D.
Butyl benzyl phthalate	85-68-7	100	N.D.
4-Chloroaniline	106-47-8	100	N.D.
2-Chloronaphthalene	91-58-7	100	N.D.
4-Chloro-3-methylphenol	59-50-7	100	N.D.
2-Chlorophenol	95-57-8	100	N.D.
4-Chlorophenyl phenyl ether	7005-72-3	100	N.D.
Chrysene	218-0109	100	N.D.
Dibenz(a,h)anthracene	53-70-3	100	N.D.
Dibenzofuran	132-64-9	100	N.D.
Di-n-butyl phthalate	84-74-2	250	N.D.
1,3-Dichlorobenzene	541-73-1	100	N.D.
1,4-Dichlorobenzene	106-46-7	100	N.D.
1,2-Dichlorobenzene	95-50-1	100	N.D.
3,3'-Dichlorobenzidine	91-94-1	100	N.D.
2,4-Dichlorophenol	120-83-2	100	N.D.
Diethyl phthalate	84-66-2	100	N.D.
2,4-Dimethylphenol	105-67-9	100	N.D.
Dimethyl phthalate	131-11-3	100	N.D.
4,6-Dinitro-2-methylphenol	534-52-1	100	N.D.
2,4-Dinitrophenol	51-28-5	100	N.D.

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

Sample Description: Soil, B37-RE4-SP34
Laboratory Sample #: 97031109

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*	
2,4-Dinitrotoluene	121-14-2	250	N.D.	
2,6-Dinitrotoluene	606-20-2	250	N.D.	
Di-n-octyl phthalate	117-84-0	250	N.D.	
Fluoranthene	206-44-0	100	N.D.	
Fluorene	86-73-7	100	N.D.	
Hexachlorobenzene	118-74-1	100	N.D.	
Hexachlorobutadiene	87-68-3	100	N.D.	
Hexachlorocyclopentadiene	77-47-4	100	N.D.	
Hexachloroethane	67-72-1	100	N.D.	
Indeno(1,2,3-cd)pyrene	193-39-5	250	N.D.	
Isophorone	78-59-1	100	N.D.	
2-Methylnaphthalene	91-57-6	100	N.D.	
2-Methylphenol	95-48-7	100	N.D.	
4-Methylphenol	106-44-5	100	N.D.	
Naphthalene	91-20-3	100	N.D.	
2-Nitroaniline	88-74-4	250	N.D.	
3-Nitroaniline	99-09-2	250	N.D.	
4-Nitroaniline	100-01-6	250	N.D.	
Nitrobenzene	98-95-3	100	N.D.	
2-Nitrophenol	88-75-5	100	N.D.	
4-Nitrophenol	100-02-7	100	N.D.	
N-Nitrosodiphenylamine	86-30-6	100	N.D.	
N-Nitroso-di-n-propylamine	621-64-7	100	N.D.	
N-Nitrosodimethylamine	62-75-9	100	N.D.	
Pentachlorophenol	87-86-5	250	N.D.	
Phenanthrene	85-01-8	100	N.D.	
Phenol	108-95-2	100	N.D.	
Pyrene	129-00-0	100	110	<---
1,2,4-Trichlorobenzene	120-82-1	100	N.D.	
2,4,5-Trichlorophenol	95-95-4	100	N.D.	
2,4,6-Trichlorophenol	88-06-2	100	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

Analysis Method: 418.1

Sample Description: Water

Laboratory Reference #: MWI 8781

Sampled : 03-31-97
Received: 03-31-97
Analyzed: 04-02-97
Reported: 04-14-97

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Laboratory Sample Number	*Client Sample Number*	*Sample Result (mg/l)*
97031117	Equip Blank	N.D.
97031118	Rinstate 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

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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: 97031117
Laboratory Reference #: MWI 8781

Sampled: 03-31-97
Received: 03-31-97
Analyzed: 04-01-97
Reported: 04-14-97

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

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, Rinsate Blank

Laboratory Sample Number: 97031118
Laboratory Reference #: MWI 8781

Sampled: 03-31-97
Received: 03-31-97
Analyzed: 04-01-97
Reported: 04-14-97

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

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, Equip Blank
Laboratory Sample Number: 97031117
Laboratory Reference #: MWI 8781

Sampled: 03-31-97
Received: 03-31-97
Analyzed: 04-03-97
Reported: 04-14-97

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: 97031117

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	*106*
Toluene-d8	*93*
4-Bromofluorobenzene	*107*

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, Rinsate Blank
Laboratory Sample Number: 97031118
Laboratory Reference #: MWI 8781

Sampled: 03-31-97
Received: 03-31-97
Analyzed: 04-12-97
Reported: 04-14-97

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: 97031118

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	*104*
Toluene-d8	*94*
4-Bromofluorobenzene	*108*

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

Sample Description: Water, Trip Blank
Laboratory Sample Number: 97031119
Laboratory Reference #: MWI 8781

Sampled: 03-31-97
Received: 03-31-97
Analyzed: 04-12-97
Reported: 04-14-97

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, Trip Blank

Laboratory Sample Number: 97031119

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	*107*
Toluene-d8	*91*
4-Bromofluorobenzene	*107*

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: Water, Equip Blank
Laboratory Sample #: 97031117
Laboratory Reference #: MWI 8781

Sampled : 03-31-97
Received: 03-31-97
Analyzed: 04-04-97
Reported: 04-14-97

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 #: 97031117

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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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 #: 97031118
Laboratory Reference #: MWI 8781

Sampled : 03-31-97
Received: 03-31-97
Analyzed: 04-04-97
Reported: 04-14-97

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 #: 97031118

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.

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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: 97031117
Laboratory Reference #: MWI 8781

Sampled: 03-31-97
Received: 03-31-97
Analyzed: 04-08-97
Reported: 04-14-97

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 of detection.

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

Client Project ID: McDonnell Douglas
Client Project #: 1206035.01090010

Sample Description: Water, Rinsate Blank

Laboratory Sample Number: 97031118
Laboratory Reference #: MWI 8781

Sampled: 03-31-97
Received: 03-31-97
Analyzed: 04-08-97
Reported: 04-14-97

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 of detection.

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

Client Project ID: McDonnell Douglas
Client Project #: 1206035.01090010

Sample Description: Water, Equip Blank

Laboratory Sample Number: 97031117
Laboratory Reference #: MWI 8781

Sampled: 03-31-97
Received: 03-31-97
Analyzed: 04-08-97
Reported: 04-14-97

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: 97031118
Laboratory Reference #: MWI 8781

Sampled: 03-31-97
Received: 03-31-97
Analyzed: 04-08-97
Reported: 04-14-97

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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QC DATA REPORT

Analysis : Total Recoverable Petroleum Hydrocarbons (EPA 418.1)

Date of Analysis : 04/01/97
Laboratory Sample No : 97030931
Laboratory Reference No : MWI 8781

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Hydrocarbons	0.0	100	100	100	100	100	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 : 04/02/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8781

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Hydrocarbons	0.0	2.5	2.3	2.2	92	88	4

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 : 04/01/97
Laboratory Sample No : 97031017
Laboratory Reference No : MWI 8781

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Antimony	0.00	3.000	2.800	3.000	93	100	7
Arsenic	0.00	1.000	0.960	0.920	96	92	4
Barium	0.00	0.100	0.097	0.095	97	95	2
Beryllium	0.00	0.100	0.094	0.089	94	89	5
Cadmium	0.00	0.100	0.098	0.102	98	102	4
Chromium (VI)	0.00	0.500	0.430	0.410	86	82	5
Chromium (Total)	0.00	0.100	0.098	0.095	98	95	3
Cobalt	0.00	0.100	0.099	0.096	99	96	3
Copper	0.00	0.100	0.102	0.098	102	98	4
Lead	0.00	1.000	0.910	0.800	91	80	13
Mercury	0.000	0.020	0.022	0.020	110	100	10
Molybdenum	0.00	1.000	1.150	1.060	115	106	8
Nickel	0.00	0.500	0.520	0.490	104	98	6
Selenium	0.00	1.000	1.090	1.050	109	105	4
Silver	0.00	0.500	0.570	0.570	114	114	0
Thallium	0.00	3.000	2.600	3.000	87	100	14
Vanadium	0.00	0.500	0.470	0.450	94	90	4
Zinc	0.00	0.100	0.098	0.088	98	88	11

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 : 04/02/97
Laboratory Sample No : 97031116
Laboratory Reference No : MWI 8781

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Antimony	0.0	30.0	30.7	30.1	102	100	2
Arsenic	0.0	10.0	10.0	9.2	100	92	8
Barium	10.0	10.0	21.8	20.9	118	109	4
Beryllium	0.00	1.00	0.99	1.05	99	105	6
Cadmium	0.00	1.00	0.99	1.00	99	100	1
Chromium (Total)	2.2	5.0	7.6	7.3	108	102	4
Chromium (VI)	0.00	1.00	1.05	0.92	105	92	13
Cobalt	0.83	1.00	1.80	1.70	97	87	6
Copper	2.1	5.0	7.5	7.4	108	106	1
Lead	0.00	10.00	9.40	9.70	94	97	3
Mercury	0.000	0.020	0.022	0.019	110	95	15
Molybdenum	0.0	10.0	9.1	9.2	91	92	1
Nickel	1.1	5.0	5.6	5.4	90	86	4
Selenium	0.0	10.0	9.9	9.3	99	93	6
Silver	0.0	5.0	4.3	4.3	86	86	0
Thallium	0.0	30.0	25.4	27.0	85	90	6
Vanadium	2.5	5.0	7.4	7.2	98	94	3
Zinc	4.2	5.0	8.7	8.7	90	90	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 : 04/07/97
Laboratory Sample No : 97041110
Laboratory Reference No : MWI 8781

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
Benzene	0.0	50	54	52	108	104	4
1,1-Dichloroethene	0.0	50	53	52	106	104	2
Trichloroethene	0.0	50	54	52	108	104	4
Toluene	0.0	50	55	54	110	108	2
Chlorobenzene	0.0	50	48	50	96	100	4

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
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 : Volatile Organics by GC/MS (EPA 8260)

Date of Analysis : 04/12/97
Laboratory Sample No : 97031118
Laboratory Reference No : MWI 8781

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
Benzene	0.0	20	17	19	85	95	11
1,1-Dichloroethene	0.0	20	15	17	75	85	13
Trichloroethene	0.0	20	17	18	85	90	6
Toluene	0.0	20	18	20	90	100	11
Chlorobenzene	0.0	20	18	19	90	95	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 : 04/04/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8781

Analyte	R1 (ng)	SP (ng)	MS (ng)	MSD (ng)	PR1 %	PR2 %	RPD %
1,4-Dichlorobenzene	0.0	50	41	39	82	78	5
n-Nitroso-di-n-propylamine	0.0	50	45	42	90	84	7
1,2,4-Trichlorobenzene	0.0	50	40	40	80	80	0
Acenaphthene	0.0	50	47	45	94	90	4
Pyrene	0.0	50	44	45	88	90	2
Pentachlorophenol	0.0	100	82	83	82	83	1
4-Chloro-3-Methylphenol	0.0	100	70	69	70	69	1
2-Chlorophenol	0.0	100	81	79	81	79	3
Phenol	0.0	100	31	31	31	31	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 : 04/07/97
Laboratory Sample No : 97031115
Laboratory Reference No : MWI 8781

Analyte	R1 (ng)	SP (ng)	MS (ng)	MSD (ng)	PR1 %	PR2 %	RPD %
1,4-Dichlorobenzene	0.0	50	42	44	84	88	5
n-Nitroso-di-n-propylamine	0.0	50	44	47	88	94	7
1,2,4-Trichlorobenzene	0.0	50	42	44	84	88	5
Acenaphthene	0.0	50	45	47	90	94	4
Pyrene	0.0	50	44	45	88	90	2
Pentachlorophenol	0.0	100	77	82	77	82	6
4-Chloro-3-Methylphenol	0.0	100	69	72	69	72	4
2-Chlorophenol	0.0	100	76	79	76	79	4
Phenol	0.0	100	71	74	71	74	4

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

QC DATA REPORT

Analysis : Organochlorine Pesticides (EPA 8080)

Date of Analysis : 04/08/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8781

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
4,4'-DDT	0.0	1.00	0.73	0.69	73	69	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

ORANGE COAST ANALYTICAL

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

QC DATA REPORT

Analysis : PCB 'S (EPA 8080)

Date of Analysis : 04/08/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8781

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
PCB-1260	0.0	50	45	41	90	82	9

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 92680
(714) 832-0064, Fax (714) 832-0067

Analysis Request and Chain of Custody Record

Lab Job No: _____
Page 1 of _____

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

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: Montgomery Watson	PROJECT NAME: McDonnell Douglas C.C. Facility
SEND REPORT TO: Fred Strauss	NUMBER: 1706035.01090010
ADDRESS: 250 N. Madison Ave. Pasadena, CA 91101	LOCATION: BHPG 37 Area
	ADDRESS: 19503 S. Normandie Ave. Torrance CA
PHONE: (818) 568-6582 FAX: (818) 796-5441	SAMPLED BY: JAN / JV

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	TPPH 418.1	7 16 22 metals	VOCs (8260)	SVOCs (8270)	PCBs (8082)	Pesticides (8080)		REMARKS/PRECAUTIONS
B37-RE4-SP34	2	3/31/97	0840	Soil	7"x6" SS Sleeve	ICE	X	X	X	X				
B37-RE4-SP35	↓	↓	1050	↓	↓	↓	X	X	X	X				
B37-GS-112-5.5'	↓	↓	1125	↓	↓	↓	X	X						
B37-GS-113-5.5'	↓	↓	1135	↓	↓	↓	X	X						
B37-GS-114-5.5'	↓	↓	1140	↓	↓	↓	X	X						
B37-GS-115-5.5'	↓	↓	1145	↓	↓	↓	X	X						
B37-GS-116-8'	↓	↓	1155	↓	↓	↓	X	X						
B37-RE4-SP36	↓	↓	1350	↓	↓	↓	X	X	X	X				
Equipment Blank	7	3/31/97	1615	Water	40 mL VOA Vials	Trace HCl	X	X	X	X	X	X		
Rinsate Blank	7	↓	1630	↓	↓	↓	X	X	X	X	X	X		
Trip Blank	2	↓	—	↓	2 vials	HCl			X					

Total No. of Samples: 11

Method of Shipment: Courier (Orange Coast Analytical)

Relinquished By:	Date/Time:	Received By:	Date/Time:
John Mann	3/31/97 16:45		
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received For Lab By: Joyce Harlan	Date/Time: 03.31.97 4:45 P.M.

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-C6-01109355

F A X

MONTGOMERY WATSON

250 N. Madison Avenue
Pasadena, California 91101

Tel: 818 568 6508
Fax: 818 796 5941

Date: 4/2/97

To: Mark Noorani

Fax No: (714) 832-0067

From: Steve Reiners

Reference: MDRC

Subject: Additional Analyses

No. of Pages: 1
(including cover)

Comments:

Please run the following samples for VOCs (8260) and SVOCs (8270) on standard turn-around time:

B37-GS-113-5.5'
B37-GS-115-5.5'

Please call me at (818) 568-6334 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.

FAX

MONTGOMERY WATSON

250 N. Madison Avenue
Pasadena, California 91101

Tel: 818 568 6508
Fax: 818 796 5941

Date: 4/2/97

To: Mark Noorani

Fax No: (714) 832-0067

From: Steve Reiners

Reference: MDRC

Subject: Additional Analyses

No. of Pages: 1
(including cover)

Comments:

Please run the following samples for VOCs (8260) and SVOCs (8270) on standard turn-around time:

- B37-GS-112-5.5'
- B37-GS-114-5.5'
- B37-GS-116-8'
  and B37-GS-117-5' through B37-GS-131-9'

Please call me at (818) 568-6334 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.

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

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

Sampled : 04-17-97
Sample Description: Soil, B37-RE4-SP34A *Received:* 04-17-97
Laboratory Sample #: 97040817 *Analyzed:* 04-18-97
Laboratory Reference #: MWI 8924 *Reported:* 04-18-97

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

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*
Acenaphthene	83-32-9	100	N.D.
Acenaphthylene	208-96-8	100	N.D.
Aniline	62-53-3	100	N.D.
Anthracene	120-12-7	100	N.D.
Benzidine	92-87-5	500	N.D.
Benzoic Acid	65-85-0	250	N.D.
Benzo(a)anthracene	56-55-3	100	N.D.
Benzo(b)fluoranthene	205-99-2	250	N.D.
Benzo(k)fluoranthene	207-08-9	250	N.D.
Benzo(g,h,i)perylene	191-24-2	250	N.D.
zo(a)pyrene	50-32-8	250	N.D.
zyl alcohol	100-51-6	100	N.D.
Bis(2-chloroethoxy)methane	111-91-1	100	N.D.
Bis(2-chloroethyl)ether	111-44-4	100	N.D.
Bis(2-chloroisopropyl)ether	39638-32-9	100	N.D.
Bis(2-ethylhexyl)phthalate	117-81-7	100	120 <---
4-Bromophenyl phenyl ether	101-55-3	100	N.D.
Butyl benzyl phthalate	85-68-7	100	N.D.
4-Chloroaniline	106-47-8	100	N.D.
2-Chloronaphthalene	91-58-7	100	N.D.
4-Chloro-3-methylphenol	59-50-7	100	N.D.
2-Chlorophenol	95-57-8	100	N.D.
4-Chlorophenyl phenyl ether	7005-72-3	100	N.D.
Chrysene	218-0109	100	N.D.
Dibenz(a,h)anthracene	53-70-3	100	N.D.
Dibenzofuran	132-64-9	100	N.D.
Di-n-butyl phthalate	84-74-2	250	N.D.
1,3-Dichlorobenzene	541-73-1	100	N.D.
1,4-Dichlorobenzene	106-46-7	100	N.D.
1,2-Dichlorobenzene	95-50-1	100	N.D.
3,3'-Dichlorobenzidine	91-94-1	100	N.D.
2,4-Dichlorophenol	120-83-2	100	N.D.
Diethyl phthalate	84-66-2	100	N.D.
2,4-Dimethylphenol	105-67-9	100	N.D.
Dimethyl phthalate	131-11-3	100	N.D.
4 6-Dinitro-2-methylphenol	534-52-1	100	N.D.
-Dinitrophenol	51-28-5	100	N.D.

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

Sample Description: Soil, B37-RE4-SP34A
Laboratory Sample #: 97040817

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*
2,4-Dinitrotoluene	121-14-2	250	N.D.
2,6-Dinitrotoluene	606-20-2	250	N.D.
Di-n-octyl phthalate	117-84-0	250	N.D.
Fluoranthene	206-44-0	100	N.D.
Fluorene	86-73-7	100	N.D.
Hexachlorobenzene	118-74-1	100	N.D.
Hexachlorobutadiene	87-68-3	100	N.D.
Hexachlorocyclopentadiene	77-47-4	100	N.D.
Hexachloroethane	67-72-1	100	N.D.
Indeno(1,2,3-cd)pyrene	193-39-5	250	N.D.
Isophorone	78-59-1	100	N.D.
2-Methylnaphthalene	91-57-6	100	N.D.
2-Methylphenol	95-48-7	100	N.D.
4-Methylphenol	106-44-5	100	N.D.
Naphthalene	91-20-3	100	N.D.
2-Nitroaniline	88-74-4	250	N.D.
3-Nitroaniline	99-09-2	250	N.D.
4-Nitroaniline	100-01-6	250	N.D.
Nitrobenzene	98-95-3	100	N.D.
2-Nitrophenol	88-75-5	100	N.D.
4-Nitrophenol	100-02-7	100	N.D.
N-Nitrosodiphenylamine	86-30-6	100	N.D.
N-Nitroso-di-n-propylamine	621-64-7	100	N.D.
N-Nitrosodimethylamine	62-75-9	100	N.D.
Pentachlorophenol	87-86-5	250	N.D.
Phenanthrene	85-01-8	100	N.D.
Phenol	108-95-2	100	N.D.
Pyrene	129-00-0	100	N.D.
1,2,4-Trichlorobenzene	120-82-1	100	N.D.
2,4,5-Trichlorophenol	95-95-4	100	N.D.
2,4,6-Trichlorophenol	88-06-2	100	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: Soil, B37-RE4-SP34B
Laboratory Sample #: 97040818
Laboratory Reference #: MWI 8924

Sampled : 04-17-97
Received: 04-17-97
Analyzed: 04-18-97
Reported: 04-18-97

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

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*
Acenaphthene	83-32-9	100	N.D.
Acenaphthylene	208-96-8	100	N.D.
Aniline	62-53-3	100	N.D.
Anthracene	120-12-7	100	N.D.
Benzidine	92-87-5	500	N.D.
Benzoic Acid	65-85-0	250	N.D.
Benzo(a)anthracene	56-55-3	100	N.D.
Benzo(b)fluoranthene	205-99-2	250	N.D.
Benzo(k)fluoranthene	207-08-9	250	N.D.
Benzo(g,h,i)perylene	191-24-2	250	N.D.
Benzo(a)pyrene	50-32-8	250	N.D.
Benzyl alcohol	100-51-6	100	N.D.
Bis(2-chloroethoxy)methane	111-91-1	100	N.D.
Bis(2-chloroethyl)ether	111-44-4	100	N.D.
Bis(2-chloroisopropyl)ether	39638-32-9	100	N.D.
Bis(2-ethylhexyl)phthalate	117-81-7	100	N.D.
4-Bromophenyl phenyl ether	101-55-3	100	N.D.
Butyl benzyl phthalate	85-68-7	100	N.D.
4-Chloroaniline	106-47-8	100	N.D.
2-Chloronaphthalene	91-58-7	100	N.D.
4-Chloro-3-methylphenol	59-50-7	100	N.D.
2-Chlorophenol	95-57-8	100	N.D.
4-Chlorophenyl phenyl ether	7005-72-3	100	N.D.
Chrysene	218-0109	100	110 <---
Dibenz(a,h)anthracene	53-70-3	100	N.D.
Dibenzofuran	132-64-9	100	N.D.
Di-n-butyl phthalate	84-74-2	250	N.D.
1,3-Dichlorobenzene	541-73-1	100	N.D.
1,4-Dichlorobenzene	106-46-7	100	N.D.
1,2-Dichlorobenzene	95-50-1	100	N.D.
3,3'-Dichlorobenzidine	91-94-1	100	N.D.
2,4-Dichlorophenol	120-83-2	100	N.D.
Diethyl phthalate	84-66-2	100	N.D.
2,4-Dimethylphenol	105-67-9	100	N.D.
Dimethyl phthalate	131-11-3	100	N.D.
4,6-Dinitro-2-methylphenol	534-52-1	100	N.D.
2,4-Dinitrophenol	51-28-5	100	N.D.

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

Sample Description: Soil, B37-RE4-SP34B
Laboratory Sample #: 97040818

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*	
2,4-Dinitrotoluene	121-14-2	250	N.D.	
2,6-Dinitrotoluene	606-20-2	250	N.D.	
Di-n-octyl phthalate	117-84-0	250	N.D.	
Fluoranthene	206-44-0	100	160	<---
Fluorene	86-73-7	100	N.D.	
Hexachlorobenzene	118-74-1	100	N.D.	
Hexachlorobutadiene	87-68-3	100	N.D.	
Hexachlorocyclopentadiene	77-47-4	100	N.D.	
Hexachloroethane	67-72-1	100	N.D.	
Indeno(1,2,3-cd)pyrene	193-39-5	250	N.D.	
Isophorone	78-59-1	100	N.D.	
2-Methylnaphthalene	91-57-6	100	N.D.	
2-Methylphenol	95-48-7	100	N.D.	
4-Methylphenol	106-44-5	100	N.D.	
Naphthalene	91-20-3	100	N.D.	
2-Nitroaniline	88-74-4	250	N.D.	
3-Nitroaniline	99-09-2	250	N.D.	
4-Nitroaniline	100-01-6	250	N.D.	
Nitrobenzene	98-95-3	100	N.D.	
2-Nitrophenol	88-75-5	100	N.D.	
4-Nitrophenol	100-02-7	100	N.D.	
N-Nitrosodiphenylamine	86-30-6	100	N.D.	
N-Nitroso-di-n-propylamine	621-64-7	100	N.D.	
N-Nitrosodimethylamine	62-75-9	100	N.D.	
Pentachlorophenol	87-86-5	250	N.D.	
Phenanthrene	85-01-8	100	N.D.	
Phenol	108-95-2	100	N.D.	
Pyrene	129-00-0	100	120	<---
1,2,4-Trichlorobenzene	120-82-1	100	N.D.	
2,4,5-Trichlorophenol	95-95-4	100	N.D.	
2,4,6-Trichlorophenol	88-06-2	100	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

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

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

Sampled : 04-17-97
Sample Description: Soil, B37-RE4-SP34C *Received:* 04-17-97
Laboratory Sample #: 97040819 *Analyzed:* 04-18-97
Laboratory Reference #: MWI 8924 *Reported:* 04-18-97

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

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*
Acenaphthene	83-32-9	100	N.D.
Acenaphthylene	208-96-8	100	N.D.
Aniline	62-53-3	100	N.D.
Anthracene	120-12-7	100	N.D.
Benzidine	92-87-5	500	N.D.
Benzoic Acid	65-85-0	250	N.D.
Benzo(a)anthracene	56-55-3	100	120 <---
Benzo(b)fluoranthene	205-99-2	250	N.D.
Benzo(k)fluoranthene	207-08-9	250	N.D.
Benzo(g,h,i)perylene	191-24-2	250	N.D.
zo(a)pyrene	50-32-8	250	N.D.
zyl alcohol	100-51-6	100	N.D.
Bis(2-chloroethoxy)methane	111-91-1	100	N.D.
Bis(2-chloroethyl)ether	111-44-4	100	N.D.
Bis(2-chloroisopropyl)ether	39638-32-9	100	N.D.
Bis(2-ethylhexyl)phthalate	117-81-7	100	N.D.
4-Bromophenyl phenyl ether	101-55-3	100	N.D.
Butyl benzyl phthalate	85-68-7	100	N.D.
4-Chloroaniline	106-47-8	100	N.D.
2-Chloronaphthalene	91-58-7	100	N.D.
4-Chloro-3-methylphenol	59-50-7	100	N.D.
2-Chlorophenol	95-57-8	100	N.D.
4-Chlorophenyl phenyl ether	7005-72-3	100	N.D.
Chrysene	218-0109	100	130 <---
Dibenz(a,h)anthracene	53-70-3	100	N.D.
Dibenzofuran	132-64-9	100	N.D.
Di-n-butyl phthalate	84-74-2	250	N.D.
1,3-Dichlorobenzene	541-73-1	100	N.D.
1,4-Dichlorobenzene	106-46-7	100	N.D.
1,2-Dichlorobenzene	95-50-1	100	N.D.
3,3'-Dichlorobenzidine	91-94-1	100	N.D.
2,4-Dichlorophenol	120-83-2	100	N.D.
Diethyl phthalate	84-66-2	100	N.D.
2,4-Dimethylphenol	105-67-9	100	N.D.
Dimethyl phthalate	131-11-3	100	N.D.
4 6-Dinitro-2-methylphenol	534-52-1	100	N.D.
-Dinitrophenol	51-28-5	100	N.D.

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

Sample Description: Soil, B37-RE4-SP34C
Laboratory Sample #: 97040819

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*	
2,4-Dinitrotoluene	121-14-2	250	N.D.	
2,6-Dinitrotoluene	606-20-2	250	N.D.	
Di-n-octyl phthalate	117-84-0	250	N.D.	
Fluoranthene	206-44-0	100	200	<---
Fluorene	86-73-7	100	N.D.	
Hexachlorobenzene	118-74-1	100	N.D.	
Hexachlorobutadiene	87-68-3	100	N.D.	
Hexachlorocyclopentadiene	77-47-4	100	N.D.	
Hexachloroethane	67-72-1	100	N.D.	
Indeno(1,2,3-cd)pyrene	193-39-5	250	N.D.	
Isophorone	78-59-1	100	N.D.	
2-Methylnaphthalene	91-57-6	100	N.D.	
2-Methylphenol	95-48-7	100	N.D.	
4-Methylphenol	106-44-5	100	N.D.	
Naphthalene	91-20-3	100	N.D.	
2-Nitroaniline	88-74-4	250	N.D.	
3-Nitroaniline	99-09-2	250	N.D.	
4-Nitroaniline	100-01-6	250	N.D.	
Nitrobenzene	98-95-3	100	N.D.	
2-Nitrophenol	88-75-5	100	N.D.	
4-Nitrophenol	100-02-7	100	N.D.	
N-Nitrosodiphenylamine	86-30-6	100	N.D.	
N-Nitroso-di-n-propylamine	621-64-7	100	N.D.	
N-Nitrosodimethylamine	62-75-9	100	N.D.	
Pentachlorophenol	87-86-5	250	N.D.	
Phenanthrene	85-01-8	100	N.D.	
Phenol	108-95-2	100	N.D.	
Pyrene	129-00-0	100	160	<---
1,2,4-Trichlorobenzene	120-82-1	100	N.D.	
2,4,5-Trichlorophenol	95-95-4	100	N.D.	
2,4,6-Trichlorophenol	88-06-2	100	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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tgomery Watson
N: Mr. Fred Strauss
250 N. Madison Ave.
Pasadena, CA 91101

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

Sampled : 04-17-97
Sample Description: Soil, B37-RE4-SP34D *Received:* 04-17-97
Laboratory Sample #: 97040820 *Analyzed:* 04-18-97
Laboratory Reference #: MWI 8924 *Reported:* 04-18-97

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

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*
Acenaphthene	83-32-9	100	N.D.
Acenaphthylene	208-96-8	100	N.D.
Aniline	62-53-3	100	N.D.
Anthracene	120-12-7	100	N.D.
Benzidine	92-87-5	500	N.D.
Benzoic Acid	65-85-0	250	N.D.
Benzo(a)anthracene	56-55-3	100	N.D.
Benzo(b)fluoranthene	205-99-2	250	N.D.
Benzo(k)fluoranthene	207-08-9	250	N.D.
Benzo(g,h,i)perylene	191-24-2	250	N.D.
zo(a)pyrene	50-32-8	250	N.D.
zyl alcohol	100-51-6	100	N.D.
Bis(2-chloroethoxy)methane	111-91-1	100	N.D.
Bis(2-chloroethyl)ether	111-44-4	100	N.D.
Bis(2-chloroisopropyl)ether	39638-32-9	100	N.D.
Bis(2-ethylhexyl)phthalate	117-81-7	100	N.D.
4-Bromophenyl phenyl ether	101-55-3	100	N.D.
Butyl benzyl phthalate	85-68-7	100	N.D.
4-Chloroaniline	106-47-8	100	N.D.
2-Chloronaphthalene	91-58-7	100	N.D.
4-Chloro-3-methylphenol	59-50-7	100	N.D.
2-Chlorophenol	95-57-8	100	N.D.
4-Chlorophenyl phenyl ether	7005-72-3	100	N.D.
Chrysene	218-0109	100	N.D.
Dibenz(a,h)anthracene	53-70-3	100	N.D.
Dibenzofuran	132-64-9	100	N.D.
Di-n-butyl phthalate	84-74-2	250	N.D.
1,3-Dichlorobenzene	541-73-1	100	N.D.
1,4-Dichlorobenzene	106-46-7	100	N.D.
1,2-Dichlorobenzene	95-50-1	100	N.D.
3,3'-Dichlorobenzidine	91-94-1	100	N.D.
2,4-Dichlorophenol	120-83-2	100	N.D.
Diethyl phthalate	84-66-2	100	N.D.
2,4-Dimethylphenol	105-67-9	100	N.D.
Dimethyl phthalate	131-11-3	100	N.D.
4 6-Dinitro-2-methylphenol	534-52-1	100	N.D.
-Dinitrophenol	51-28-5	100	N.D.

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

Sample Description: Soil, B37-RE4-SP34D
Laboratory Sample #: 97040820

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*
2,4-Dinitrotoluene	121-14-2	250	N.D.
2,6-Dinitrotoluene	606-20-2	250	N.D.
Di-n-octyl phthalate	117-84-0	250	N.D.
Fluoranthene	206-44-0	100	N.D.
Fluorene	86-73-7	100	N.D.
Hexachlorobenzene	118-74-1	100	N.D.
Hexachlorobutadiene	87-68-3	100	N.D.
Hexachlorocyclopentadiene	77-47-4	100	N.D.
Hexachloroethane	67-72-1	100	N.D.
Indeno(1,2,3-cd)pyrene	193-39-5	250	N.D.
Isophorone	78-59-1	100	N.D.
2-Methylnaphthalene	91-57-6	100	N.D.
2-Methylphenol	95-48-7	100	N.D.
4-Methylphenol	106-44-5	100	N.D.
Naphthalene	91-20-3	100	N.D.
2-Nitroaniline	88-74-4	250	N.D.
3-Nitroaniline	99-09-2	250	N.D.
4-Nitroaniline	100-01-6	250	N.D.
Nitrobenzene	98-95-3	100	N.D.
2-Nitrophenol	88-75-5	100	N.D.
4-Nitrophenol	100-02-7	100	N.D.
N-Nitrosodiphenylamine	86-30-6	100	N.D.
N-Nitroso-di-n-propylamine	621-64-7	100	N.D.
N-Nitrosodimethylamine	62-75-9	100	N.D.
Pentachlorophenol	87-86-5	250	N.D.
Phenanthrene	85-01-8	100	N.D.
Phenol	108-95-2	100	N.D.
Pyrene	129-00-0	100	N.D.
1,2,4-Trichlorobenzene	120-82-1	100	N.D.
2,4,5-Trichlorophenol	95-95-4	100	N.D.
2,4,6-Trichlorophenol	88-06-2	100	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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[illegible]tgomery Watson
A[illegible]N: Mr. Fred Strauss
250 N. Madison Ave.
Pasadena, CA 91101

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

Sample Description: Soil, B37-RE4-SP34E
Laboratory Sample #: 97040821
Laboratory Reference #: MWI 8924

Sampled : 04-17-97
Received: 04-17-97
Analyzed: 04-18-97
Reported: 04-18-97

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

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*	
Acenaphthene	83-32-9	100	N.D.	
Acenaphthylene	208-96-8	100	N.D.	
Aniline	62-53-3	100	N.D.	
Anthracene	120-12-7	100	N.D.	
Benzidine	92-87-5	500	N.D.	
Benzoic Acid	65-85-0	250	N.D.	
Benzo(a)anthracene	56-55-3	100	290	<---
Benzo(b)fluoranthene	205-99-2	250	340	<---
Benzo(k)fluoranthene	207-08-9	250	N.D.	
Benzo(g,h,i)perylene	191-24-2	250	N.D.	
B[illegible]o(a)pyrene	50-32-8	250	300	<---
B[illegible]zyl alcohol	100-51-6	100	N.D.	
Bis(2-chloroethoxy)methane	111-91-1	100	N.D.	
Bis(2-chloroethyl)ether	111-44-4	100	N.D.	
Bis(2-chloroisopropyl)ether	39638-32-9	100	N.D.	
Bis(2-ethylhexyl)phthalate	117-81-7	100	N.D.	
4-Bromophenyl phenyl ether	101-55-3	100	N.D.	
Butyl benzyl phthalate	85-68-7	100	N.D.	
4-Chloroaniline	106-47-8	100	N.D.	
2-Chloronaphthalene	91-58-7	100	N.D.	
4-Chloro-3-methylphenol	59-50-7	100	N.D.	
2-Chlorophenol	95-57-8	100	N.D.	
4-Chlorophenyl phenyl ether	7005-72-3	100	N.D.	
Chrysene	218-0109	100	320	<---
Dibenz(a,h)anthracene	53-70-3	100	N.D.	
Dibenzofuran	132-64-9	100	N.D.	
Di-n-butyl phthalate	84-74-2	250	N.D.	
1,3-Dichlorobenzene	541-73-1	100	N.D.	
1,4-Dichlorobenzene	106-46-7	100	N.D.	
1,2-Dichlorobenzene	95-50-1	100	N.D.	
3,3'-Dichlorobenzidine	91-94-1	100	N.D.	
2,4-Dichlorophenol	120-83-2	100	N.D.	
Diethyl phthalate	84-66-2	100	N.D.	
2,4-Dimethylphenol	105-67-9	100	N.D.	
Dimethyl phthalate	131-11-3	100	N.D.	
4 [illegible]-Dinitro-2-methylphenol	534-52-1	100	N.D.	
2[illegible]Dinitrophenol	51-28-5	100	N.D.	

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

Sample Description: Soil, B37-RE4-SP34E
Laboratory Sample #: 97040821

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT ug/kg*	*SAMPLE RESULTS ug/kg*	
2,4-Dinitrotoluene	121-14-2	250	N.D.	
2,6-Dinitrotoluene	606-20-2	250	N.D.	
Di-n-octyl phthalate	117-84-0	250	N.D.	
Fluoranthene	206-44-0	100	540	<---
Fluorene	86-73-7	100	N.D.	
Hexachlorobenzene	118-74-1	100	N.D.	
Hexachlorobutadiene	87-68-3	100	N.D.	
Hexachlorocyclopentadiene	77-47-4	100	N.D.	
Hexachloroethane	67-72-1	100	N.D.	
Indeno(1,2,3-cd)pyrene	193-39-5	250	N.D.	
Isophorone	78-59-1	100	N.D.	
2-Methylnaphthalene	91-57-6	100	N.D.	
2-Methylphenol	95-48-7	100	N.D.	
4-Methylphenol	106-44-5	100	N.D.	
Naphthalene	91-20-3	100	N.D.	
2-Nitroaniline	88-74-4	250	N.D.	
3-Nitroaniline	99-09-2	250	N.D.	
4-Nitroaniline	100-01-6	250	N.D.	
Nitrobenzene	98-95-3	100	N.D.	
2-Nitrophenol	88-75-5	100	N.D.	
4-Nitrophenol	100-02-7	100	N.D.	
N-Nitrosodiphenylamine	86-30-6	100	N.D.	
N-Nitroso-di-n-propylamine	621-64-7	100	N.D.	
N-Nitrosodimethylamine	62-75-9	100	N.D.	
Pentachlorophenol	87-86-5	250	N.D.	
Phenanthrene	85-01-8	100	150	<---
Phenol	108-95-2	100	N.D.	
Pyrene	129-00-0	100	440	<---
1,2,4-Trichlorobenzene	120-82-1	100	N.D.	
2,4,5-Trichlorophenol	95-95-4	100	N.D.	
2,4,6-Trichlorophenol	88-06-2	100	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

Analysis Method: 418.1

Sample Description: Water

Laboratory Reference #: MWI 8924

Sampled : 04-17-97
Received: 04-17-97
Analyzed: 04-22-97
Reported: 04-28-97

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Laboratory Sample Number	*Client Sample Number*	*Sample Result (mg/l)*
97040822	Equip Blank	N.D.
97040823	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

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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: 97040822
Laboratory Reference #: MWI 8924

Sampled: 04-17-97
Received: 04-17-97
Analyzed: 04-22-97
Reported: 04-28-97

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: 97040823
Laboratory Reference #: MWI 8924

Sampled: 04-17-97
Received: 04-17-97
Analyzed: 04-22-97
Reported: 04-28-97

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

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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: 97040822
Laboratory Reference #: MWI 8924

Sampled: 04-17-97
Received: 04-17-97
Analyzed: 04-24-97
Reported: 04-28-97

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.
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: Water, Equip Blank

Laboratory Sample Number: 97040822

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	*109*
Toluene-d8	*101*
4-Bromofluorobenzene	*108*

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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: 97040823
Laboratory Reference #: MWI 8924

Sampled: 04-17-97
Received: 04-17-97
Analyzed: 04-24-97
Reported: 04-28-97

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, Rinsate Blank

Laboratory Sample Number: 97040823

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	*107*
Toluene-d8	*100*
4-Bromofluorobenzene	*109*

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

Sample Description: Water, Trip Blank
Laboratory Sample Number: 97040824
Laboratory Reference #: MWI 8924

Sampled: 04-17-97
Received: 04-17-97
Analyzed: 04-24-97
Reported: 04-28-97

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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Sample Description: Water, Trip Blank

Laboratory Sample Number: 97040824

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	*113*
Toluene-d8	*98*
4-Bromofluorobenzene	*106*

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

Sample Description: Water, Equip Blank
Laboratory Sample #: 97040822
Laboratory Reference #: MWI 8924

Sampled : 04-17-97
Received: 04-17-97
Analyzed: 04-23-97
Reported: 04-28-97

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 #: 97040822

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.
[illegible]hthalene	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

Mark Noorani

[illegible] 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

Sampled : 04-17-97
Sample Description: Water, Rinsate Blank *Received:* 04-17-97
Laboratory Sample #: 97040823 *Analyzed:* 04-23-97
Laboratory Reference #: MWI 8924 *Reported:* 04-28-97

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 #: 97040823

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.
N[illegible]thalene	91-20-3	50	N.D.
2[illegible]itroaniline	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: 97040822
Laboratory Reference #: MWI 8924

Sampled: 04-17-97
Received: 04-17-97
Analyzed: 04-22-97
Reported: 04-28-97

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 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, Rinsate Blank

Laboratory Sample Number: 97040823
Laboratory Reference #: MWI 8924

Sampled: 04-17-97
Received: 04-17-97
Analyzed: 04-22-97
Reported: 04-28-97

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 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: 97040822
Laboratory Reference #: MWI 8924

Sampled: 04-17-97
Received: 04-17-97
Analyzed: 04-21-97
Reported: 04-28-97

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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Pasadena, CA 91101

Client Project ID: McDonnell Douglas
Client Project #: 1206035.01090010

Sample Description: Water, Rinsate Blank

Laboratory Sample Number: 97040823
Laboratory Reference #: MWI 8924

Sampled: 04-17-97
Received: 04-17-97
Analyzed: 04-21-97
Reported: 04-28-97

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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QC DATA REPORT

Analysis : Metals

Date of Analysis : 04/22/97
Laboratory Sample No : 97040596
Laboratory Reference No : MWI 8924

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Antimony	0.00	3.000	2.420	2.700	81	90	11
Arsenic	0.00	1.000	0.800	0.920	80	92	14
Barium	0.00	0.100	0.105	0.104	105	104	1
Beryllium	0.00	0.100	0.085	0.087	85	87	2
Cadmium	0.00	0.100	0.089	0.097	89	97	9
Chromium (VI)	0.00	0.500	0.450	0.490	90	98	9
Chromium (Total)	0.00	0.100	0.087	0.091	87	91	4
Cobalt	0.00	0.100	0.109	0.107	109	107	2
Copper	0.00	0.100	0.080	0.089	80	89	11
Lead	0.00	1.000	1.040	1.010	104	101	3
Mercury	0.000	0.020	0.020	0.022	100	110	10
Molybdenum	0.00	1.000	0.920	1.000	92	100	8
Nickel	0.00	0.500	0.500	0.480	100	96	4
Selenium	0.00	1.000	0.860	0.950	86	95	10
Silver	0.00	0.500	0.440	0.480	88	96	9
Thallium	0.00	3.000	2.460	2.650	82	88	7
Vanadium	0.00	0.500	0.450	0.470	90	94	4
Zinc	0.00	0.100	0.109	0.109	109	109	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 : Metals

Date of Analysis : 04/21/97
Laboratory Sample No : 97040833
Laboratory Reference No : MWI 8924

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Antimony	0.00	30.00	28.00	28.00	93	93	0
Arsenic	0.00	10.00	10.80	10.80	108	108	0
Barium	14.00	10.00	24.00	25.00	100	110	4
Beryllium	0.00	1.00	1.10	1.14	110	114	4
Cadmium	0.00	1.00	0.92	0.94	92	94	2
Chromium (Total)	2.90	5.00	7.70	7.90	96	100	3
Chromium (VI)	0.00	1.00	0.88	0.91	88	91	3
Cobalt	0.80	1.00	1.88	1.87	108	107	1
Copper	1.40	1.00	2.30	2.45	90	105	6
Lead	0.00	10.00	9.00	9.60	90	96	6
Mercury	0.000	0.020	0.024	0.023	120	115	4
Molybdenum	0.00	10.00	10.40	9.80	104	98	6
Nickel	1.30	5.00	6.40	5.90	102	92	8
Selenium	0.00	10.00	9.30	9.90	93	99	6
Silver	0.00	5.00	5.00	4.50	100	90	11
Thallium	0.00	30.00	28.00	27.00	93	90	4
Vanadium	3.80	5.00	8.90	8.80	102	100	1
Zinc	4.70	5.00	9.80	9.50	102	96	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 : Volatile Organics by GC/MS (EPA 8260)

Date of Analysis : 04/25/97
Laboratory Sample No : 97040851
Laboratory Reference No : MWI 8924

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
Benzene	0.0	50	45	47	90	94	4
1,1-Dichloroethene	53	50	110	99	114	92	11
Trichloroethene	6.5	50	62	65	111	117	5
Toluene	0.0	50	48	49	54	98	2
Chlorobenzene	0.0	50	47	47	51	94	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 : 04/24/97
Laboratory Sample No : 97040824
Laboratory Reference No : MWI 8924

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
Benzene	0.0	20	17	16	85	80	6
1,1-Dichloroethene	0.0	20	15	14	75	70	7
Trichloroethene	0.0	20	19	17	95	85	11
Toluene	0.0	20	18	16	90	80	12
Chlorobenzene	0.0	20	18	16	90	80	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 : Semi-Volatile Organics by GC/MS (EPA 8270)

Date of Analysis : 04/16/97
Laboratory Sample No : 97040492
Laboratory Reference No : MWI 8924

Analyte	R1 (ng)	SP (ng)	MS (ng)	MSD (ng)	PR1 %	PR2 %	RPD %
1,4-Dichlorobenzene	0.0	50	46	45	92	90	2
n-Nitroso-di-n-propylamine	0.0	50	49	49	98	98	0
1,2,4-Trichlorobenzene	0.0	50	48	47	96	94	2
Acenaphthene	0.0	50	51	50	102	100	2
Pyrene	0.0	50	38	33	76	66	14
Pentachlorophenol	0.0	100	77	82	77	82	6
4-Chloro-3-Methylphenol	0.0	100	71	72	71	72	1
2-Chlorophenol	0.0	100	79	77	79	77	3
Phenol	0.0	100	70	69	70	69	1

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 : 04/23/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8924

Analyte	R1 (ng)	SP (ng)	MS (ng)	MSD (ng)	PR1 %	PR2 %	RPD %
1,4-Dichlorobenzene	0.0	50	37	43	74	86	15
n-Nitroso-di-n-propylamine	0.0	50	47	50	94	100	6
1,2,4-Trichlorobenzene	0.0	50	39	45	78	90	14
Acenaphthene	0.0	50	47	51	94	102	8
Pyrene	0.0	50	40	46	80	92	14
Pentachlorophenol	0.0	100	80	80	80	80	0
4-Chloro-3-Methylphenol	0.0	100	65	67	65	67	3
2-Chlorophenol	0.0	100	80	83	80	83	4
Phenol	0.0	100	23	26	23	26	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 : Organochlorine Pesticides (EPA 8080)

Date of Analysis : 04/22/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8924

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
4,4'-DDT	0.0	1.00	0.95	1.00	95	100	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 : PCB 'S (EPA 8080)

Date of Analysis : 04/21/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8924

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
PCB-1260	0.0	20	9.6	7.5	48	38	25

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 : 04/18/97
Laboratory Sample No : 97040628
Laboratory Reference No : MWI 8924

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Hydrocarbons	0.0	100	97	107	97	107	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

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 : Total Recoverable Petroleum Hydrocarbons (EPA 418.1)

Date of Analysis : 04/22/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8924

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Hydrocarbons	0.0	2.5	2.2	2.1	88	84	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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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 1 of 1

REQUIRED TAT: 24 hr TAT on Soil TRPH; 24 hr TAT (or ASAP) on B37-RE4-SP34; ~~STANDARD TAT OTHERWISE~~

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: Montgomery Watson	PROJECT NAME: McDonnell Douglas
SEND REPORT TO: Fred Strauss	NUMBER: 1206035.01090010
ADDRESS: 250 N. Madison Ave. Pasadena, CA 91101	LOCATION: C-6 Facility, Bldg. 37 Area
	ADDRESS: 19503 S. Normandie Ave. Los Angeles, CA
PHONE: (818) 568-6582 FAX: (818) 796-5944	SAMPLED BY: AWN/IV

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
B37-RE4-SP50	2	4/17/97	0900	SOIL	2"x6" ss sleeve	ICE	X	X	X	X			24 hr TAT on TRPH only.
B37-RE4-SP34A	2	↓	1310	↓	↓	↓				X			24 hr TAT or ASAP (48hr)
B37-RE4-SP34B	2		1315							X			↓
B37-RE4-SP34C	2		1330							X			
B37-RE4-SP34D	2		1345							X			
B37-RE4-SP34E	2		1405							X			
Equipment Blank	7		1545	Water	4 poly 1 Pint 2 Liter		X	X	X	X	X	X	Standard TAT
Rinsate Blank	7		1600	↓	↓		X	X	X	X	X	X	↓
Trip Blank	2	↓	—	↓	2 VOAs				X				↓

Total No. of Samples: 9

Method of Shipment: 1 cooler via Orange Coast Courier

Relinquished By:	Date/Time:	Received By:	Date/Time:
Adam W. Nomi	4/17/97 1630		
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received For Lab By: [illegible]	Date/Time: 4/17/97 16:30

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 [illegible] sposal. A disposal fee may be imposed if client fails to pickup samples.

BOE-C6-0109395

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: Soil, B37-RE4-SPCONFA

Laboratory Sample Number: 97041008
Laboratory Reference #: MWI 8938

Sampled: 04-21-97
Received: 04-21-97
Analyzed: 04-22-97
Reported: 04-22-97

PCB'S (EPA 8080)

ANALYTE	*CAS NUMBER*	*DETECTION LIMIT (ug/kg)*	*SAMPLE RESULTS (ug/kg)*
PCB-1016	12674-11-2	20	N.D.
PCB-1221	11104-28-2	20	N.D.
PCB-1232	11141-16-5	20	N.D.
PCB-1242	53469-21-9	20	N.D.
PCB-1248	12672-29-6	20	N.D.
PCB-1254	11097-69-1	20	N.D.
PCB-1260	11096-82-5	20	57

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

ORANGE COAST ANALYTICAL

Mark Noorani
Mark Noorani
Laboratory Director

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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

Analysis Method: 418.1

Sample Description: Water

Laboratory Reference #: MWI 8938

Sampled : 04-21-97
Received: 04-21-97
Analyzed: 04-22-97
Reported: 05-05-97

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Laboratory Sample Number	*Client Sample Number*	*Sample Result (mg/l)*
97041021	Equip Blank	N.D.
97041022	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

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Laboratory Director

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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: Water, Equip Blank

Laboratory Sample Number: 97041021
Laboratory Reference #: MWI 8938

Sampled: 04-21-97
Received: 04-21-97
Analyzed: 04-22-97
Reported: 05-05-97

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.

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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, Rinsate Blank

Laboratory Sample Number: 97041022
Laboratory Reference #: MWI 8938

Sampled: 04-21-97
Received: 04-21-97
Analyzed: 04-22-97
Reported: 05-05-97

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, Equip Blank
Laboratory Sample Number: 97041021
Laboratory Reference #: MWI 8938

Sampled: 04-21-97
Received: 04-21-97
Analyzed: 04-28-97
Reported: 05-05-97

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, Equip Blank

Laboratory Sample Number: 97041021

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	*105*
4-Bromofluorobenzene	*107*

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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: 97041022
Laboratory Reference #: MWI 8938

Sampled: 04-21-97
Received: 04-21-97
Analyzed: 04-28-97
Reported: 05-05-97

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, Rinsate Blank

Laboratory Sample Number: 97041022

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	*106*
Toluene-d8	*104*
4-Bromofluorobenzene	*108*

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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: 97041023
Laboratory Reference #: MWI 8938

Sampled: 04-21-97
Received: 04-21-97
Analyzed: 04-28-97
Reported: 05-05-97

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, Trip Blank

Laboratory Sample Number: 97041023

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	*108*
Toluene-d8	*104*
4-Bromofluorobenzene	*110*

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

Client Project ID: McDonnell Douglas
Client Project #: 1206035.01090010

Sampled : 04-21-97
Sample Description: Water, Equip Blank
Received: 04-21-97
Laboratory Sample #: 97041021
Analyzed: 04-28-97
Laboratory Reference #: MWI 8938
Reported: 05-05-97

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.
zo(a)pyrene	50-32-8	25	N.D.
zyl 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.
-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 #: 97041021

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

Mark Noorani
Laboratory Director

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 : 04-21-97
Sample Description: Water, Rinsate Blank *Received:* 04-21-97
Laboratory Sample #: 97041022 *Analyzed:* 04-28-97
Laboratory Reference #: MWI 8938 *Reported:* 05-05-97

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 #: 97041022

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

Mark Noorani
Laboratory Director

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

Sample Description: Water, Equip Blank

Laboratory Sample Number: 97041021
Laboratory Reference #: MWI 8938

Sampled: 04-21-97
Received: 04-21-97
Analyzed: 04-28-97
Reported: 05-05-97

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 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: 97041022
Laboratory Reference #: MWI 8938

Sampled: 04-21-97
Received: 04-21-97
Analyzed: 04-28-97
Reported: 05-05-97

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 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, Equip Blank

Laboratory Sample Number: 97041021
Laboratory Reference #: MWI 8938

Sampled: 04-21-97
Received: 04-21-97
Analyzed: 04-28-97
Reported: 05-05-97

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.

ORANGE COAST ANALYTICAL

Mark Noorani
Laboratory Director

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

Sample Description: Water, Rinsate Blank

Laboratory Sample Number: 97041022
Laboratory Reference #: MWI 8938

Sampled: 04-21-97
Received: 04-21-97
Analyzed: 04-28-97
Reported: 05-05-97

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.

ORANGE COAST ANALYTICAL

Mark Noorani
Laboratory Director

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QC DATA REPORT

Analysis : Total Recoverable Petroleum Hydrocarbons (EPA 418.1)

Date of Analysis : 04/22/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8938

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Hydrocarbons	0.0	2.5	2.2	2.1	88	84	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

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

QC DATA REPORT

Analysis : Total Recoverable Petroleum Hydrocarbons (EPA 418.1)

Date of Analysis : 04/22/97
Laboratory Sample No : 97040932
Laboratory Reference No : MWI 8938

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Hydrocarbons	0.0	100	118	113	118	113	4

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 : 05/05/97
Laboratory Sample No : 97041020
Laboratory Reference No : MWI 8938

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Antimony	0.00	30.00	29.00	29.00	97	97	0
Arsenic	0.00	10.00	8.40	8.10	84	81	4
Barium	8.20	10.00	16.00	17.00	78	88	6
Beryllium	0.00	1.00	0.98	0.96	98	96	2
Cadmium	0.00	1.00	0.95	0.94	95	94	1
Chromium (Total)	1.60	5.00	5.70	5.90	82	86	3
Chromium (VI)	0.00	1.00	0.97	0.87	97	87	11
Cobalt	0.30	1.00	1.25	1.28	95	98	2
Copper	0.60	1.00	1.59	1.61	99	101	1
Lead	0.00	10.00	8.60	9.20	86	92	7
Mercury	0.000	0.020	0.020	0.022	100	110	10
Molybdenum	0.00	10.00	8.40	8.20	84	82	2
Nickel	0.34	5.00	4.90	5.00	91	93	2
Selenium	0.00	10.00	8.00	8.00	80	80	0
Silver	0.00	5.00	4.20	4.00	84	80	5
Thallium	0.00	30.00	24.00	23.00	80	77	4
Vanadium	1.90	5.00	6.50	6.60	92	94	2
Zinc	1.50	5.00	6.30	6.10	96	92	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 : Metals

Date of Analysis : 04/22/97
Laboratory Sample No : 97040596
Laboratory Reference No : MWI 8938

Analyte	R1 (ppm)	SP (ppm)	MS (ppm)	MSD (ppm)	PR1 %	PR2 %	RPD %
Antimony	0.00	3.000	2.420	2.700	81	90	11
Arsenic	0.00	1.000	0.800	0.920	80	92	14
Barium	0.00	0.100	0.105	0.104	105	104	1
Beryllium	0.00	0.100	0.085	0.087	85	87	2
Cadmium	0.00	0.100	0.089	0.097	89	97	9
Chromium (VI)	0.00	0.500	0.450	0.490	90	98	9
Chromium (Total)	0.00	0.100	0.087	0.091	87	91	4
Cobalt	0.00	0.100	0.109	0.107	109	107	2
Copper	0.00	0.100	0.080	0.089	80	89	11
Lead	0.00	1.000	1.040	1.010	104	101	3
Mercury	0.000	0.020	0.020	0.022	100	110	10
Molybdenum	0.00	1.000	0.920	1.000	92	100	8
Nickel	0.00	0.500	0.500	0.480	100	96	4
Selenium	0.00	1.000	0.860	0.950	86	95	10
Silver	0.00	0.500	0.440	0.480	88	96	9
Thallium	0.00	3.000	2.460	2.650	82	88	7
Vanadium	0.00	0.500	0.450	0.470	90	94	4
Zinc	0.00	0.100	0.109	0.109	109	109	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 : 04/28/97
Laboratory Sample No : 97041022
Laboratory Reference No : MWI 8938

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
Benzene	0.0	20	18	16	90	80	12
1,1-Dichloroethene	0.0	20	17	15	85	75	13
Trichloroethene	0.0	20	19.7	17.2	99	86	14
Toluene	0.0	20	18	17	90	85	6
Chlorobenzene	0.0	20	17	16	85	80	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 : Volatile Organics by GC/MS (EPA 8260)

Date of Analysis : 04/25/97
Laboratory Sample No : 97040920
Laboratory Reference No : MWI 8938

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
Benzene	0.0	50	43	48	86	96	11
1,1-Dichloroethene	0.0	50	42	44	84	88	5
Trichloroethene	0.0	50	51	56	102	112	9
Toluene	0.0	50	45	49	90	98	9
Chlorobenzene	0.0	50	46	46	92	92	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 : 04/29/97
Laboratory Sample No : 97041020
Laboratory Reference No : MWI 8938

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
Benzene	0.0	50	45	42	90	84	7
1,1-Dichloroethene	0.0	50	44	39	88	78	12
Trichloroethene	0.0	50	52	47	104	94	10
Toluene	0.0	50	47	44	94	88	7
Chlorobenzene	0.0	50	44	42	88	84	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 : 04/25/97
Laboratory Sample No : 97040857
Laboratory Reference No : MWI 8938

Analyte	R1 (ng)	SP (ng)	MS (ng)	MSD (ng)	PR1 %	PR2 %	RPD %
1,4-Dichlorobenzene	0.0	50	45	46	90	92	2
n-Nitroso-di-n-propylamine	0.0	50	50	51	100	102	2
1,2,4-Trichlorobenzene	0.0	50	45	46	90	92	2
Acenaphthene	0.0	50	49	48	98	96	2
Pyrene	0.0	50	45	45	90	90	0
Pentachlorophenol	0.0	100	80	81	80	81	1
4-Chloro-3-Methylphenol	0.0	100	72	70	72	70	3
2-Chlorophenol	0.0	100	86	86	86	86	0
Phenol	0.0	100	77	72	77	72	7

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 : 04/28/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8938

Analyte	R1 (ng)	SP (ng)	MS (ng)	MSD (ng)	PR1 %	PR2 %	RPD %
1,4-Dichlorobenzene	0.0	50	39	39	78	78	0
n-Nitroso-di-n-propylamine	0.0	50	42	49	84	98	15
1,2,4-Trichlorobenzene	0.0	50	39	39	78	78	0
Acenaphthene	0.0	50	47	46	94	92	2
Pyrene	0.0	50	43	41	86	82	5
Pentachlorophenol	0.0	100	72	76	72	76	5
4-Chloro-3-Methylphenol	0.0	100	56	60	56	60	7
2-Chlorophenol	0.0	100	77	79	77	79	3
Phenol	0.0	100	25	27	25	27	8

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 : 04/28/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8938

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
4,4'-DDT	0.0	1.00	1.10	1.00	110	100	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

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QC DATA REPORT

Analysis : PCB 'S (EPA 8080)

Date of Analysis : 04/28/97
Laboratory Sample No : OCA 100
Laboratory Reference No : MWI 8938

Analyte	R1 (ppb)	SP (ppb)	MS (ppb)	MSD (ppb)	PR1 %	PR2 %	RPD %
PCB-1260	0.0	20	11	9.2	55	46	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

ORANGE COAST ANALYTICAL

MARK NOORANI
Laboratory Director

FAX

MONTGOMERY WATSON

250 N. Madison Avenue
Pasadena, California 91101

Tel: 818 568 6508
Fax: 818 796 5941

Date: 4/22/97

To: Mark Noorani

Fax No: (714) 832-0067

From: Steve Reiners

Reference: MDRC

Subject: Additional Analyses

No. of Pages: 1
(including cover)

Comments:

Please run the following samples for VOCs (8260) and SVOCs (8270) on standard turn-around time:

B37-GS-143-6'
B37-GS-145-6'
B37-GS-147-4'
B37-GS-149-5.5'
B37-GS-151-5.5'
B37-GS-153-5.5'

Also please change the sample names on the following two samples from yesterday (4/21):

B37-RE3-SPCONF changes to B37-RE3-SPCONFA
B37-RE4-SPCONF changes to B37-RE4-SPCONFA

Please call me at (818) 568-6334 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.

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 PCBs & TRPH only.
REQUIRED TAT: Standard TAT Otherwise

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: Montgomery Watson	PROJECT NAME: Mc Donnell Douglas
SEND REPORT TO: Fred Strauss	NUMBER: 1206035.01090010
ADDRESS: 250 N. Madison Ave.	LOCATION: C-6 Facility - Bldg. 37 Area
Pasadena, CA 91101	ADDRESS: 19503 S. Normandie Ave.
	Los Angeles, CA
PHONE: (818) 568-6582 FAX: (818) 796-5941	SAMPLED BY: IV/JAM

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	4/21/97	1615	Water	1 amber 1 poly 2 VOAs	HNO3 HCl	X	X	X	X	X	X			
Rinsate Blank	7	↓	1630	↓	↓	↓	X	X	X	X	X	X			
Trip Blank	2	↓	—	↓	2 VOAs	HCl			X						

Total No. of Samples: 17

Method of Shipment: 2 coolers via Orange Coast Courier

Relinquished By:	Date/Time:	Received By:	Date/Time:
Adam W Vernia	4/21/97 1700		
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received For Lab By: Lynn Hathem	Date/Time: 04.22.97 5:00 P.M.

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-C6-0109426

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

Analysis Request and Chain of Custody Record

Lab Job No: _____
Page 1 of 2

REQUIRED TAT: 24 hr TAT on Soil PCBs & TRPH only. Standard TAT otherwise.

CUSTOMER INFORMATION

COMPANY: Montgomery Watson
SEND REPORT TO: Fred Strauss
ADDRESS: 250 N. Madison Ave.
Pasadena, CA 91101
PHONE: (818) 568-6582 FAX: (818) 796-5941

PROJECT INFORMATION

PROJECT NAME: Mc Donnell Douglas
NUMBER: 12060035.01090010
LOCATION: C-6 Facility - Bldg. 37 Area
ADDRESS: 19503 S. Normandie Ave.
Los Angeles, CA
SAMPLED BY: AWN/IV/JAM

SAMPLE ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRESERVATIVE	TRPH 418.1	Title 22 Metals	VOCs 8260	SVOCs 8270	PCBs 8080	Pesticides 8080	REMARKS/PRECAUTIONS
B37-RE3-SPCONF	2	4/21/97	1325	SOIL	2"x6" ss sleeve	ICE				X			Rush 24 hr TAT
B37-RE4-SPCONF	2		1335							X			Rush 24 hr TAT
B37-GS-142-6'	2		1036				X	X					
B37-GS-143-6'	2		1044				X	X					
B37-GS-144-6'	2		1052				X	X					
B37-GS-145-6'	2		1058				X	X					
B37-GS-146-6'	2		1106				X	X					
B37-GS-147-4'	2		1115				X	X					
B37-GS-148-6'	2		1121				X	X					
B37-GS-149-5.5'	2		1528				X	X					
B37-GS-150-5.5'	2		1535				X	X					
B37-GS-151-5.5'	2		1542				X	X					
B37-GS-152-5.5'	2		1552				X	X					
B37-GS-153-5.5'	2		1600				X	X					

Total No. of Samples: 17

Method of Shipment: 2 coolers via Orange Coast Courier

Relinquished By:	Date/Time:	Received By:	Date/Time:
Adam Vi Vonio	4/21/97 1700		
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received For Lab By: Sayed Hashmi	Date/Time: (MH) 4-22-97 5:00 PM

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-C6-0109427

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

SPL, INC.

REPORT APPROVAL SHEET

WORK ORDER NUMBER: *97 - 02 - 153*

Approved for release by:

Joel Grice, Laboratory Manager — *Date:* 2/28/97

Michael J. Crisostomo, Project Manager — *Date:* 2-27-97

Data table QA'd by HM 3/11/97

Certificate of Analysis No. 9702153

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
Method: 418.1*

Report Date: 2/28/97
Date(s) Received: 2/20/97
Date(s) Sampled: 2/20/97
Date(s) Analyzed: 2/21/97
Project Number: 120603501090010
Matrix: SOIL

Units: mg/Kg

Sample ID	Petroleum Extractables
B37-G6-1	ND<10
B37-D8-2	23000
B37-D9-1	ND<10

Results reported at Practical Quantitation Limit 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.

Certificate of Analysis No. 9702153

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: 2/28/97
Date(s) Received: 2/20/97
Date(s) Sampled: 2/20/97
Date(s) Analyzed: 2/25/97,2/23/97,2/21/9
Project Number: 12060350109001
Matrix: SOIL

Analyte	Units	EPA Method	B37-G6-1	B37-D8-2	B37-D9-1
Antimony, Total	mg/Kg	6010A***	ND<0.500	ND<0.500	ND<0.500
Arsenic, Total	mg/Kg	6010A***	ND<0.11	ND<0.11	ND<0.11
Barium, Total	mg/Kg	6010A***	126	115	40.6
Beryllium, Total	mg/Kg	6010A***	ND<0.06	ND<0.06	ND<0.06
Cadmium, Total	mg/Kg	6010A***	0.265	0.175	ND<0.05
Chromium, Total	mg/Kg	6010A***	10.3	14.1	5.99
Cobalt, Total	mg/Kg	6010A***	8.27	8.82	2.78
Copper, Total	mg/Kg	6010A***	8.72	17.7	5.00
Digestion-Solids 3050A	N/A	3050A***	02/21/97	02/21/97	02/21/97
Lead, Total	mg/Kg	6010A***	3.25	1.84	5.16
Mercury Digestion in Soil	N/A	7471A***	02/21/97	02/21/97	02/21/97
Mercury, Total	mg/Kg	7471A***	ND<0.200	ND<0.200	ND<0.200
Molybdenum,Total	mg/Kg	6010A***	ND<2.50	ND<2.50	ND<2.50
Nickel, Total	mg/Kg	6010A ***	13.2	12.4	ND<5.00
Selenium, Total	mg/Kg	6010A***	ND<5.00	ND<5.00	ND<5.00
Silver, Total	mg/Kg	6010A***	ND<5.00	ND<5.00	ND<5.00
Thallium, Total	mg/Kg	6010A***	ND<0.500	ND<0.500	ND<0.500
Ultrasonic Extraction 3550A	N/A	3550A	02/23/97	02/23/97	02/23/97
Vanadium, Total	mg/Kg	6010A***	22.8	32.4	11.2
Zinc, Total	mg/Kg	6010A***	26.1	67.3	22.7

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.

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

SPL California License Number 2178

Certificate of Analysis No. 9702153

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: 2/28/97
Date(s) Received: 2/20/97
Date(s) Sampled: 2/20/97
Date(s) Analyzed: 2/24/97
Project Number: 120603501090010
Matrix: SOIL

Method: 8260 Soil, Volatile Organics

Units: UG/KG

Analyte	B37-G6-1	B37-D8-2	B37-D9-1
Dichlorodifluoromethane	ND<5	ND<5	ND<5
Chloromethane	ND<5	ND<5	ND<5
Vinyl chloride	ND<5	ND<5	ND<5
Bromomethane	ND<5	ND<5	ND<5
Chloroethane	ND<5	ND<5	ND<5
Trichlorofluoromethane	ND<5	ND<5	ND<5
1,1-Dichloroethene	ND<5	ND<5	ND<5
Methylene chloride	ND<5	ND<5	ND<5
trans-1,2-Dichloroethene	ND<5	ND<5	ND<5
1,1-Dichloroethane	ND<5	ND<5	ND<5
2,2-Dichloropropane	ND<5	ND<5	ND<5
cis-1,2-Dichloroethene	ND<5	ND<5	ND<5
Chloroform	ND<5	ND<5	ND<5
Bromochloromethane	ND<5	ND<5	ND<5
1,1,1-Trichloroethane	ND<5	ND<5	ND<5
1,1-Dichloropropene	ND<5	ND<5	ND<5
Carbon tetrachloride	ND<5	ND<5	ND<5
1,2-Dichloroethane	ND<5	ND<5	ND<5
Benzene	ND<5	ND<5	ND<5
Trichloroethene	ND<5	ND<5	ND<5
1,2-Dichloropropane	ND<5	ND<5	ND<5
Bromodichloromethane	ND<5	ND<5	ND<5
Dibromomethane	ND<5	ND<5	ND<5
cis-1,3-Dichloropropene	ND<5	ND<5	ND<5
Toluene	ND<5	ND<5	ND<5
trans-1,3-Dichloropropene	ND<5	ND<5	ND<5
1,1,2-Trichloroethane	ND<5	ND<5	ND<5
1,2-Dibromoethane	ND<5	ND<5	ND<5
1,3-Dichloropropane	ND<5	ND<5	ND<5
Tetrachloroethene	ND<5	ND<5	ND<5
Dibromochloromethane	ND<5	ND<5	ND<5
Chlorobenzene	ND<5	ND<5	ND<5
1,1,1,2-Tetrachloroethane	ND<5	ND<5	ND<5
Ethylbenzene	ND<5	ND<5	ND<5
m,p-Xylene	ND<5	ND<5	ND<5
o-Xylene	ND<5	ND<5	ND<5
Styrene	ND<5	ND<5	ND<5
Bromoform	ND<5	ND<5	ND<5

FULLERTON LABORATORY
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Certificate of Analysis No. 9702153

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: 2/28/97
Date(s) Received: 2/20/97
Date(s) Sampled: 2/20/97
Date(s) Analyzed: 2/24/97
Project Number: 120603501090010
Matrix: SOIL

Method: 8260 Soil, Volatile Organics

Units: UG/KG

Analyte	B37-G6-1	B37-D8-2	B37-D9-1
Isopropylbenzene	ND<5	ND<5	ND<5
1,1,2,2-Tetrachloroethane	ND<5	ND<5	ND<5
1,2,3-Trichloropropane	ND<5	ND<5	ND<5
n-Propylbenzene	ND<5	ND<5	ND<5
Bromobenzene	ND<5	ND<5	ND<5
1,3,5-Trimethylbenzene	ND<5	10	ND<5
2-Chlorotoluene	ND<5	ND<5	ND<5
4-Chlorotoluene	ND<5	ND<5	ND<5
tert-Butylbenzene	ND<5	ND<5	ND<5
1,2,4-Trimethylbenzene	ND<5	31	ND<5
sec-Butylbenzene	ND<5	ND<5	ND<5
p-Isopropyltoluene	ND<5	ND<5	ND<5
1,3-Dichlorobenzene	ND<5	ND<5	ND<5
1,4-Dichlorobenzene	ND<5	ND<5	ND<5
n-Butylbenzene	ND<5	ND<5	ND<5
1,2-Dichlorobenzene	ND<5	ND<5	ND<5
1,2-Dibromo-3-chloroprop	ND<5	ND<5	ND<5
1,2,4-Trichlorobenzene	ND<5	ND<5	ND<5
Hexachlorobutadiene	ND<5	ND<5	ND<5
Naphthalene	ND<5	96	ND<5
1,2,3-Trichlorobenzene	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.

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

Certificate of Analysis No. 9702153

Client:	Montgomery Watson	**Report Date:**	2/28/97
Client Address:	250 N. Madison Avenue	**Date(s) Received:**	2/20/97
	Pasadena, CA 91101	**Date(s) Sampled:**	2/20/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	2/24/97
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-G6-1	B37-D8-2	B37-D9-1
Acenaphthene	ND<330	ND<5000	ND<330
Acenaphthylene	ND<330	ND<5000	ND<330
Aniline	ND<330	ND<5000	ND<330
Anthracene	ND<330	ND<5000	ND<330
Benzo (a) Anthracene	ND<330	ND<5000	ND<330
Benzo (b) Fluoranthene	ND<330	ND<5000	ND<330
Benzo (k) Fluoranthene	ND<330	ND<5000	ND<330
Benzo (a) Pyrene	ND<330	ND<5000	ND<330
Benzoic Acid	ND<1600	ND<24000	ND<1600
Benzo (g,h,i) Perylene	ND<330	ND<5000	ND<330
Benzyl alcohol	ND<330	ND<5000	ND<330
4-Bromophenylphenyl ether	ND<330	ND<5000	ND<330
Butylbenzylphthalate	ND<330	ND<5000	ND<330
di-n-Butyl phthalate	ND<330	ND<5000	ND<330
Carbazole	ND<330	ND<5000	ND<330
4-Chloroaniline	ND<330	ND<5000	ND<330
bis (2-Chloroethoxy) Methane	ND<330	ND<5000	ND<330
bis (2-Chloroethyl) Ether	ND<330	ND<5000	ND<330
bis (2-Chloroisopropyl) Ether	ND<330	ND<5000	ND<330
4-Chloro-3-Methylphenol	ND<330	ND<5000	ND<330
2-Chloronaphthalene	ND<330	ND<5000	ND<330
2-Chlorophenol	ND<330	ND<5000	ND<330
4-Chlorophenylphenyl ether	ND<330	ND<5000	ND<330
Chrysene	ND<330	ND<5000	ND<330
Dibenz (a,h) Anthracene	ND<330	ND<5000	ND<330
Dibenzofuran	ND<330	ND<5000	ND<330
1,2-Dichlorobenzene	ND<330	ND<5000	ND<330
1,3-Dichlorobenzene	ND<330	ND<5000	ND<330
1,4-Dichlorobenzene	ND<330	ND<5000	ND<330
3,3'-Dichlorobenzidine	ND<330	ND<5000	ND<330
2,4-Dichlorophenol	ND<330	ND<5000	ND<330
Diethylphthalate	ND<330	ND<5000	ND<330
2,4-Dimethylphenol	ND<330	ND<5000	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. 9702153

Client:	Montgomery Watson	**Report Date:**	2/28/97
Client Address:	250 N. Madison Avenue	**Date(s) Received:**	2/20/97
	Pasadena, CA 91101	**Date(s) Sampled:**	2/20/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	2/24/97
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-G6-1	B37-D8-2	B37-D9-1
Dimethyl Phthalate	ND<330	ND<5000	ND<330
4,6-Dinitro-2-Methylphenol	ND<800	ND<12000	ND<800
2,4-Dinitrophenol	ND<800	ND<12000	ND<800
2,4-Dinitrotoluene	ND<330	ND<5000	ND<330
2,6-Dinitrotoluene	ND<330	ND<5000	ND<330
1,2-Diphenylhydrazine	ND<330	ND<5000	ND<330
bis (2-Ethylhexyl)Phthalate	ND<330	10000	ND<330
Fluoranthene	ND<330	ND<5000	ND<330
Fluorene	ND<330	ND<5000	ND<330
Hexachlorobenzene	ND<330	ND<5000	ND<330
Hexachlorobutadiene	ND<330	ND<5000	ND<330
Hexachloroethane	ND<330	ND<5000	ND<330
Hexachlorocyclopentadiene	ND<330	ND<5000	ND<330
Indeno(1,2,3-cd)Pyrene	ND<330	ND<5000	ND<330
Isophorone	ND<330	ND<5000	ND<330
2-Methylnaphthalene	ND<330	ND<5000	ND<330
2-Methylphenol	ND<330	ND<5000	ND<330
4-Methylphenol	ND<330	ND<5000	ND<330
Napthalene	ND<330	ND<5000	ND<330
2-Nitroaniline	ND<800	ND<12000	ND<800
3-Nitroaniline	ND<800	ND<12000	ND<800
4-Nitroaniline	ND<800	ND<12000	ND<800
Nitrobenzene	ND<330	ND<5000	ND<330
2-Nitrophenol	ND<330	ND<5000	ND<330
4-Nitrophenol	ND<800	ND<12000	ND<800
N-Nitrosodiphenylamine	ND<330	ND<5000	ND<330
N-Nitroso-Di-n-Propylamine	ND<330	ND<5000	ND<330
Di-n-Octyl Phthalate	ND<330	ND<5000	ND<330
Pentachlorophenol	ND<800	ND<12000	ND<800
Phenanthrene	ND<330	ND<5000	ND<330
Phenol	ND<330	ND<5000	ND<330
Pyrene	ND<330	ND<5000	ND<330
Pyridine	ND<330	ND<5000	ND<330
1,2,4-Trichlorobenzene	ND<330	ND<5000	ND<330
2,4,5-Trichlorophenol	ND<800	ND<12000	ND<800
2,4,6-Trichlorophenol	ND<330	ND<5000	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 LABORATORY
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-6868

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/24/97
Analyzed on: 02/21/97
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
9702153-03A	ND	ND	500	489	97.8	470	94.0	4.0	20	80 -120

PETHS022197 -9702045

Samples in batch:

9702148-01A 9702153-01A 9702153-02A 9702153-03A

COMMENTS:

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/24/97
Analyzed on: 02/21/97
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	Blank Value mg/Kg	LCS Concentration mg/Kg	Measured Concentration mg/Kg	% Recovery	QC Limits Recovery
LCS	ND	500	451	90.2	80 - 120

PETHS022197 -9702045

Samples in batch:

9702148-01A 9702153-01A 9702153-02A 9702153-03A

COMMENTS:

QUALITY CONTROL INFORMATION
METALS

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

MS/MSD Results

Date: 2/25/97
Sample ID: 9702153-3

Matrix: Soil
Includes: 9702136-1; 9702139-1-2; 9702148-1; 9702153-1-3

Parameter	LMB	LCS Rec. (%)	Acceptability Range (%)	MS Rec. (%)	MSD Rec. (%)	Acceptability Range (%)	RPD	RPD Range (%)
Antimony, Sb	ND	104.0	84-117	86.6	85.3	80-120	1.5	20
Arsenic, As	ND	107.2	85-117	101	101	80-120	0.1	20
Barium, Ba	ND	100.1	62-136	96.4	92.5	80-120	4.1	20
Beryllium, Be	ND	101.3	85-111	99.4	99.4	80-120	0.0	20
Cadmium, Cd	ND	103.4	86-112	98.7	98.5	80-120	0.2	20
Chromium, Cr	ND	101.0	83-110	96.5	96.7	80-120	0.2	20
Cobalt, Co	ND	102.4	85-112	96.2	96.4	80-120	0.2	20
Copper, Cu	ND	100.7	84-111	98.0	98.1	80-120	0.1	20
Lead, Pb	ND	102.0	85-110	93.1	92.1	80-120	1.1	20
Molybdenum, Mo	ND	101.9	83-110	94.8	94.4	80-120	0.5	20
Nickel, Ni	ND	102.1	86-110	96.0	96.6	80-120	0.6	20
Selenium, Se	ND	101.6	84-111	96.1	96.3	80-120	0.2	20
Silver, Ag	ND	107.0	80-125**	98.7	98.8	80-120	0.1	20
Thallium, Tl	ND	101.2	83-109	92.5	92.6	80-120	0.1	20
Vanadium, V	ND	101.4	84-109	96.3	96.4	80-120	0.1	20
Zinc, Zn	ND	107.4	88-117	98.3	99.4	80-120	1.1	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

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/24/97
Analyzed on: 02/21/97
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
9702121-03A	ND	ND	.0010	.00097	97.0	.00097	97.0	0	20	80 -120

HGS022197 -9702044

Samples in batch:

9702118-01A	9702118-02A	9702121-01A	9702121-02A
9702121-03A	9702121-04A	9702121-05A	9702121-06A
9702125-01A	9702136-01A	9702139-01A	9702139-02A
9702148-01A	9702153-01A	9702153-02A	9702153-03A

COMMENTS:

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/24/97
Analyzed on: 02/21/97
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	0.00097	97.0	80 - 120

HGS022197 -9702044

Samples in batch:

9702118-01A	9702118-02A	9702121-01A	9702121-02A
9702121-03A	9702121-04A	9702121-05A	9702121-06A
9702125-01A	9702136-01A	9702139-01A	9702139-02A
9702148-01A	9702153-01A	9702153-02A	9702153-03A

COMMENTS:

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No: 9702153

C- 02559

page 1 of 1

Client Name: Montgomery Watson

Address/Phone: 250 N. Madison Ave, Pasadena

Client Contact: Fred Strauss - (818) 568-6582

Project Name: MDRC C-6 Facility, Torrance, CA

Project Number: 1206035.01090010

Project Location: BLDG 37 Area

Invoice To: Fred Strauss

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-E-6~~ B37-G6-1' SHR 3/5/97	2-20-97	1300		X	S	6"x2" SS sleeve	Approx 12 oz	Ice	2	X	X	X	X					
~~B37-B-8~~ B37-D8-2' SHR 3/5/97	↓	1310		X	S	↓	↓	↓	↓	X	X	X	X					
~~B37-B-9~~ B37-D9-1' SHR 3/5/97	↓	1320		X	S	↓	↓	↓	↓	X	X	X	X					

Client/Consultant Remarks: ~~24 hr. TAT on TRPH only~~, standard TAT on all ~~otherwise~~ samples
NOT 24hr. TAT on TRPH

Laboratory remarks:

Intact? ☑ Y ☐ N

Temp: 2.0 °C

Requested TAT
~~TRPH only~~

24hr ☐ 72hr ☐

48hr ☐ Standard ☒ All ~~others~~

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		date	time
1. Relinquished by Sampler: Joshua Mann	2-20-97	15:00	2. Received by: [signature]	2-20-97	18:35
3. Relinquished by:			4. Received by:		
5. Relinquished by:			6. Received by Laboratory:		

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

☐ 45[illegible] 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 ( ) 447-6868

BOE-C6-0109442

SPL Fullerton Environmental Laboratory
Sample Receiving Checklist

SPL Workorder Number: 9702153

Date: 2-21-97 Time: 9:041

	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 2.0 °C

Samples Were Delivered by:

SPL Courier	G. Molano
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

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPL Contract:

Lab Code: Case No.:9702165 SAS No.: SDG No.:

Matrix Spike - [illegible] :222-GVD-HA Level(low/med) LOW

Please include This 8270 QC with Your original report SPL 9702153 Thanks, Mary

:E :D 'Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
2500	0	1900	76	12-110
2500	0	1500	60	27-123
1600	0	1100	69	36- 97
1600	0	1800	112	41-116
1600	0	1400	88	39- 98
2500	0	2000	80	23- 97
1600	0	1300	81	46-118
2500	0	1500	60	30-150
1600	0	1500	94	50-150
2500	0	2100	84	9-103
1600	0	970	61	26-127

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	2500	1900	76	0	42	12-110
2-Chlorophenol	2500	1400	56	7	40	27-123
1,4-Dichlorobenzene	1600	1100	69	0	28	36- 97
N-Nitroso-di-n-prop.(1)	1600	1800	112	0	38	41-116
1,2,4-Trichlorobenzene	1600	1400	88	0	28	39- 98
4-Chloro-3-methylphenol	2500	2000	80	0	42	23- 97
Acenaphthene	1600	1300	81	0	31	46-118
4-Nitrophenol	2500	1500	60	0	50	30-150
2,4-Dinitrotoluene	1600	1500	94	0	50	50-150
Pentachlorophenol	2500	2100	84	0	50	9-103
Pyrene	1600	970	61	0	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: 0 out of 22 outside limits

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/p.i/p970220.b/p8270sQ.m
Misc Info: E050S1/P050B02/P051CC1

Client SDG: p970220
Fraction: SV
Operator: PC
SampleType: METHSPIKE
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
5 Phenol	2500	1800	72.02	12-110
9 2-Chlorophenol	2500	1500	58.65	27-123
12 1,4-Dichlorobenzen	1600	1100	71.09	36-97
21 N-Nitroso-di-n-pro	1600	1800	110.57	41-116
31 1,2,4-Trichloroben	1600	1400	87.62	39-98
36 4-Chloro-3-methylp	2500	1900	75.90	23-97
49 Acenaphthene	1600	1200	73.22	46-118
51 4-Nitrophenol	2500	2200	88.07	30-150
53 2,4-Dinitrotoluene	1600	1400	85.76	50-150
64 Pentachlorophenol	2500	1900	76.67	9-103
71 Pyrene	1600	910	56.72	26-127

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 23 Nitrobenzene-d5	1600	1300	82.59	23-120
$ 41 2-Fluorobiphenyl	1600	1100	67.93	30-115
$ 72 Terphenyl-d14	1600	960	60.09	18-137
$ 3 2-Fluorophenol	2500	1800	70.69	25-121
$ 4 Phenol-d5	2500	2200	89.91	24-113
$ 61 2,4,6-Tribromophen	2500	2300	92.90	19-122

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

SPL Blank QC Report

Matrix: Soil
Sample ID: BLANK
Batch: E970223044703

Reported on: 02/25/97 13:38
Analyzed on: 02/24/97 15:59
Analyst: PC

METHOD 8270 P054B02

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) 660-0901

SPL Blank QC Report

Matrix: Soil
Sample ID: BLANK
Batch: E970223044703

Reported on: 02/25/97 13:38
Analyzed on: 02/24/97 15:59
Analyst: PC

METHOD 8270 P054B02

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: E970223044703

Reported on: 02/25/97 13:38
Analyzed on: 02/24/97 15:59
Analyst: PC

METHOD 8270 P054B02

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

Surrogate	Result	QC Criteria	Units
Nitrobenzene-d5	78	23-120	% Recovery
2-Fluorobiphenyl	68	30-115	% Recovery
Terphenyl-d14	56	18-137	% Recovery
Phenol-d5	78	24-113	% Recovery
2-Fluorophenol	60	25-121	% Recovery
2,4,6-Tribromophenol	79	19-122	% Recovery

Samples in Batch 9702987-01 9702987-02 9702987-03

Notes

ND - Not detected.

SPL Houston Labs

Data file : /chem1/p.i/p970224.b/p054b02.d
Lab Smp Id: BLANK
Inj Date : 24-FEB-1997 15:59
Operator : PC Inst ID: p.i
Smp Info : BLANK-8270S/1X
Misc Info : E054S1/P054B02/P055IC2
Comment :
Method : /chem1/p.i/p970224.b/p8270sQ.m
Meth Date : 24-Feb-1997 16:06 patti Quant Type: ISTD
Cal Date : 24-FEB-1997 14:58 Cal File: p055ic5.d
Als bottle: 2
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: BLK1.sub
Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 11 1,4-Dichlorobenzene-d4	152.00	4.644	4.649	(1.000)	30917	40	
* 32 Naphthalene-d8	136.00	6.395	6.411	(1.000)	121916	40	
Acenaphthene-d10	164.00	9.121	9.132	(1.000)	63752	40	
* 65 Phenanthrene-d10	188.00	11.436	11.447	(1.000)	96181	40	
* 76 Chrysene-d12	240.00	15.661	15.677	(1.000)	60214	40	
* 83 Perylene-d12	264.00	17.799	17.816	(1.000)	56512	40	
$ 23 Nitrobenzene-d5	82.00	5.420	5.430	(0.847)	75661	74	1200
$ 41 2-Fluorobiphenyl	172.00	8.105	8.115	(0.889)	131554	66	1100
$ 72 Terphenyl-d14	244.00	14.063	14.055	(0.898)	101973	54	900
$ 4 Phenol-d5	99.00	4.280	4.284	(0.922)	123973	120	1900
$ 3 2-Fluorophenol	112.00	3.293	3.274	(0.709)	93245	90	1500
$ 61 2,4,6-Tribromophenol	329.70	10.391	10.401	(0.909)	21799	120	2000

SPL Houston Labs

Data file : /chem1/p.i/p970224.b/p054tl2.d
Lab Smp Id: LCS
Inj Date : 24-FEB-1997 15:30
Operator : PC
Inst ID: p.i
Smp Info : METHSPIKE-8270S/1X
Misc Info : E054S1/P054B02/P055IC2
Comment :
Method : /chem1/p.i/p970224.b/p8270sQ.m
Meth Date : 24-Feb-1997 16:06 patti
Quant Type: ISTD
Cal Date : 24-FEB-1997 14:58
Cal File: p055ic5.d
Als bottle: 1
QC Sample: METHSPIKE
Dil Factor: 1.000
Integrator: HP RTE
Compound Sublist: LCS.sub
Target Version: 3.10

LCS

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 11 1,4-Dichlorobenzene-d4	152.00	4.645	4.649	(1.000)	27125	40	
* 32 Naphthalene-d8	136.00	6.396	6.411	(1.000)	112495	40	
* 48 Acenaphthene-d10	164.00	9.128	9.132	(1.000)	60819	40	
* 65 Phenanthrene-d10	188.00	11.443	11.447	(1.000)	89642	40	
* 76 Chrysene-d12	240.00	15.662	15.677	(1.000)	51462	40	
* 83 Perylene-d12	264.00	17.800	17.816	(1.000)	46333	40	
$ 23 Nitrobenzene-d5	82.00	5.421	5.430	(0.848)	73089	78	1300
$ 41 2-Fluorobiphenyl	172.00	8.106	8.115	(0.888)	130269	70	1200
$ 72 Terphenyl-d14	244.00	14.063	14.055	(0.898)	95636	60	1000
$ 3 2-Fluorophenol	112.00	3.294	3.274	(0.709)	91970	100	1700
$ 4 Phenol-d5	99.00	4.293	4.284	(0.924)	118131	130	2100
$ 61 2,4,6-Tribromophenol	329.70	10.391	10.401	(0.908)	21572	130	2100
5 Phenol	94.00	4.316	4.302	(0.929)	97660	110	1800
9 2-Chlorophenol	128.00	4.439	4.437	(0.956)	80437	96	1600
12 1,4-Dichlorobenzene	146.00	4.669	4.672	(1.005)	64591	82	1400
21 N-Nitroso-di-n-propylamine	70.00	5.268	5.289	(1.134)	48542	89	1500
31 1,2,4-Trichlorobenzene	180.00	6.343	6.358	(0.992)	52512	84	1400
36 4-Chloro-3-methylphenol	107.00	7.342	7.345	(1.148)	83109	100	1700
49 Acenaphthene	153.00	9.181	9.184	(1.006)	112992	75	1200
51 4-Nitrophenol	109.00	9.469	9.466	(1.037)	23961	120	1900
53 2,4-Dinitrotoluene	165.00	9.551	9.555	(1.046)	52048	73	1200
64 Pentachlorophenol	266.00	11.278	11.282	(0.986)	27958	110	1800
71 Pyrene	202.00	13.723	13.726	(0.876)	132777	53	380

SPL Houston Labs

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: p.i
Lab File ID: p054tl2.d
Lab Smp Id: LCS
Analysis Type: SV
Quant Type: ISTD
Operator: PC
Method File: /chem1/p.i/p970224.b/p8270s.m
Misc Info: E054S1/P054B02/P055IC2

Calibration Date: 02/24/97
Calibration Time: 1300

Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	29244	14622	58488	27125	-7.25
32 Naphthalene-d8	119805	59902	239610	112495	-6.10
48 Acenaphthene-d10	60266	30133	120532	60819	0.92
65 Phenanthrene-d10	93806	46903	187612	89642	-4.44
76 Chrysene-d12	45368	22684	90736	51462	13.43
83 Perylene-d12	58962	29481	117924	46333	-21.42

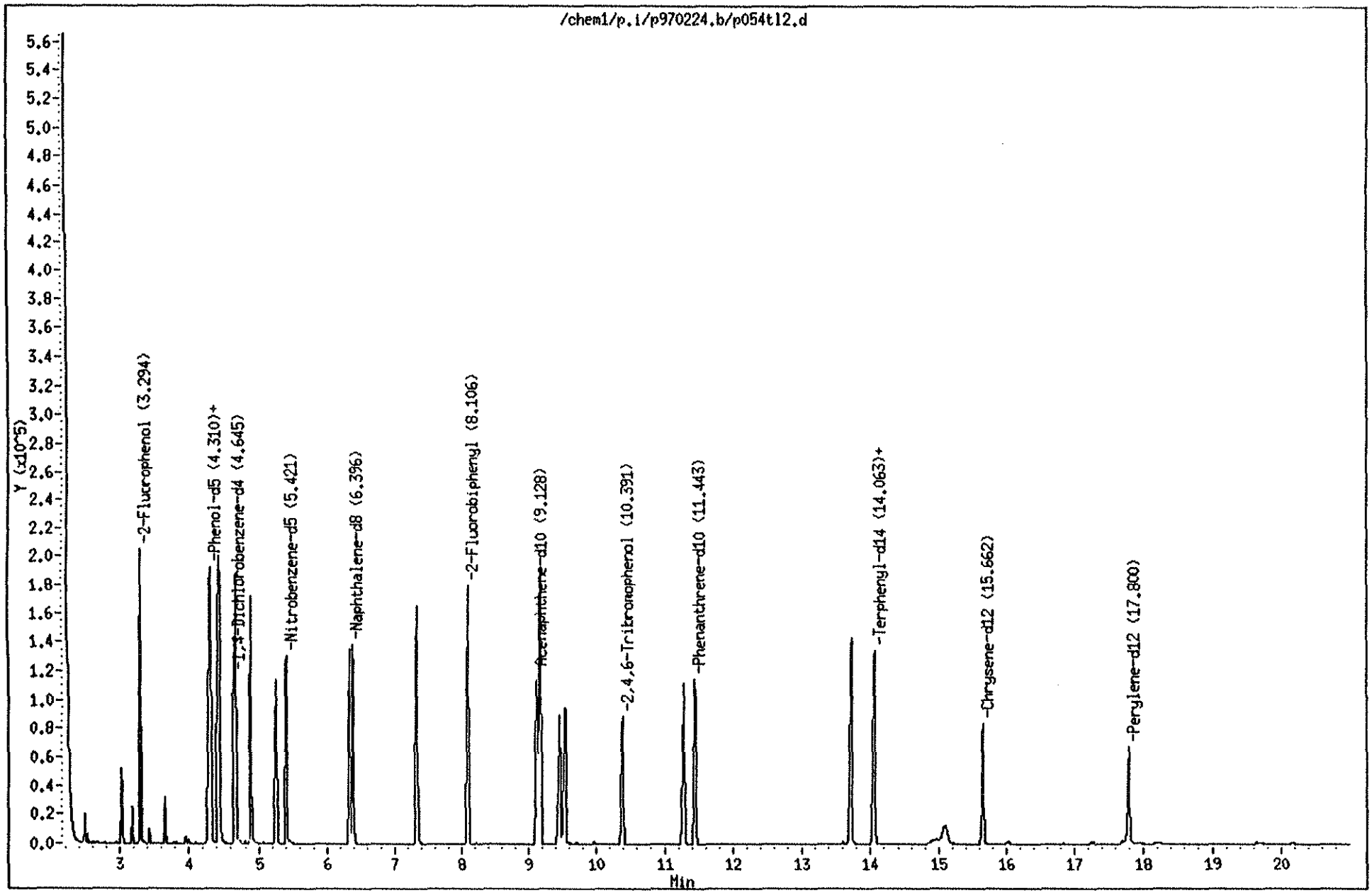
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	4.65	4.15	5.15	4.65	-0.08
32 Naphthalene-d8	6.41	5.91	6.91	6.40	-0.24
48 Acenaphthene-d10	9.13	8.63	9.63	9.13	-0.04
65 Phenanthrene-d10	11.45	10.95	11.95	11.44	-0.03
76 Chrysene-d12	15.68	15.18	16.18	15.66	-0.10
83 Perylene-d12	17.82	17.32	18.32	17.80	-0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/p.i/p970224.b/p054t12.d
Date : 24-FEB-1997 15:30
Client ID:
Sample Info: METHSPIKE-8270S/1X
Volume Injected (uL): 2.0
Column phase:

Instrument: p.i

Operator: PC
Column diameter: 0.25



BOE-C6-0109452

SPL Houston Labs

Data file : /chem1/p.i/p970220.b/p051s01.d
Lab Smp Id: 9702165-10A
Inj Date : 20-FEB-1997 11:17
Operator : PC pc
Smp Info : 9702165-10A-8270S/1X
Misc Info : E050S1/P050B02/P051CC1
Comment :
Method : /chem1/p.i/p970220.b/p8270sQ.m
Meth Date : 20-Feb-1997 10:48 patti
Cal Date : 14-FEB-1997 10:38
Als bottle: 6
Dil Factor: 1.000
Integrator: HP RTE
Target Version: 3.10

Inst ID: p.i
Quant Type: ISTD
Cal File: p045ic5.d
Compound Sublist: 8270.sub

SAMPLE/MS/MSD/LCS

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 11 1,4-Dichlorobenzene-d4	152.00	4.861	4.922	(1.000)	281346	40	
* 32 Naphthalene-d8	136.00	6.630	6.697	(1.000)	1133862	40	
8 Acenaphthene-d10	164.00	9.373	9.429	(1.000)	546306	40	
5 Phenanthrene-d10	188.00	11.694	11.756	(1.000)	896215	40	
* 76 Chrysene-d12	240.00	15.930	15.992	(1.000)	532931	40	
* 83 Perylene-d12	264.00	18.122	18.189	(1.000)	537127	40	
S 3 2-Fluorophenol	112.00	3.492	3.506	(0.718)	951540	97	1600
S 4 Phenol-d5	99.00	4.479	4.523	(0.921)	1406441	130	2100
S 61 2,4,6-Tribromophenol	329.70	10.643	10.692	(0.910)	317076	160	2600
S 23 Nitrobenzene-d5	82.00	5.637	5.704	(0.850)	812781	76	1300
S 41 2-Fluorobiphenyl	172.00	8.345	8.401	(0.890)	1269990	75	1200
S 72 Terphenyl-d14	244.00	14.321	14.358	(0.899)	874650	61	1000

SPL Houston Labs

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: p.i
Lab File ID: p051s01.d
Lab Smp Id: 9702165-10A
Analysis Type: SV
Quant Type: ISTD
Operator: PC
Method File: /chem1/p.i/p970220.b/p8270s.m
Misc Info: E050S1/P050B02/P051CC1

Calibration Date: 02/20/97
Calibration Time: 0947

Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	277412	138706	554824	281846	1.60
32 Naphthalene-d8	1120723	560362	2241446	1133862	1.17
48 Acenaphthene-d10	593092	296546	1186184	546806	-7.80
65 Phenanthrene-d10	985549	492774	1971098	896215	-9.06
76 Chrysene-d12	478103	239052	956206	532931	11.47
83 Perylene-d12	622157	311078	1244314	537127	-13.67

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	4.87	4.37	5.37	4.86	-0.12
32 Naphthalene-d8	6.64	6.14	7.14	6.63	-0.18
48 Acenaphthene-d10	9.38	8.88	9.88	9.37	-0.06
65 Phenanthrene-d10	11.70	11.20	12.20	11.69	-0.05
76 Chrysene-d12	15.94	15.44	16.44	15.93	-0.07
83 Perylene-d12	18.12	17.62	18.62	18.12	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

SPL Houston Labs

Data file : /chem1/p.i/p970220.b/p051k01.d
Lab Smp Id: 9702165-10AMS
Inj Date : 20-FEB-1997 11:47
Operator : PC pc Inst ID: p.i
Smp Info : 9702165-10AMS-8270S/1X
Misc Info : E050S1/P050B02/P051CC1
Comment :
Method : /chem1/p.i/p970220.b/p8270sQ.m
Meth Date : 20-Feb-1997 10:48 patti Quant Type: ISTD
Cal Date : 14-FEB-1997 10:38 Cal File: p045ic5.d
Als bottle: 7 QC Sample: MS
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: LCS.sub
Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)	
* 11 1,4-Dichlorobenzene-d4	152.00	4.870	4.922	(1.000)	269328	40		
* 32 Naphthalene-d8	136.00	6.632	6.697	(1.000)	1126481	40		
* 48 Acenaphthene-d10	164.00	9.382	9.429	(1.000)	518511	40		(M)
* 65 Phenanthrene-d10	188.00	11.709	11.756	(1.000)	842584	40		(M)
* 76 Chrysene-d12	240.00	15.939	15.992	(1.000)	522337	40		
* 83 Perylene-d12	264.00	18.130	18.189	(1.000)	528736	40		
S 23 Nitrobenzene-d5	82.00	5.645	5.704	(0.851)	799990	76	1300	
S 41 2-Fluorobiphenyl	172.00	8.348	8.401	(0.890)	1273313	81	1300	
S 72 Terphenyl-d14	244.00	14.323	14.358	(0.899)	850851	60	1000	
S 3 2-Fluorophenol	112.00	3.495	3.536	(0.718)	955240	100	1700	
S 4 Phenol-d5	99.00	4.488	4.533	(0.922)	1352709	130	2200	
S 61 2,4,6-Tribromophenol	329.70	10.545	10.592	(0.909)	218262	170	2900	
5 Phenol	94.00	4.517	4.540	(0.928)	1286178	110	1900	
9 2-Chlorophenol	128.00	4.658	4.699	(0.957)	756344	89	1500	
12 1,4-Dichlorobenzene	146.00	4.893	4.940	(1.005)	601475	68	1100	
21 N-Nitroso-di-n-propylamine	70.00	5.492	5.557	(1.128)	611365	100	1800	
31 1,2,4-Trichlorobenzene	180.00	6.579	6.638	(0.992)	633313	85	1400	
36 4-Chloro-3-methylphenol	107.00	7.561	7.607	(1.140)	979697	120	2000	(M)
49 Acenaphthene	153.00	9.435	9.482	(1.006)	994102	80	1300	
51 4-Nitrophenol	109.00	9.682	9.723	(1.032)	112183	90	1500	
53 2,4-Dinitrotoluene	165.00	9.793	9.834	(1.044)	501729	90	1500	
64 Pentachlorophenol	266.00	11.532	11.573	(0.985)	327459	130	2100	(M)
71 Pyrene	202.00	14.000	14.035	(0.878)	1265443	58	970	

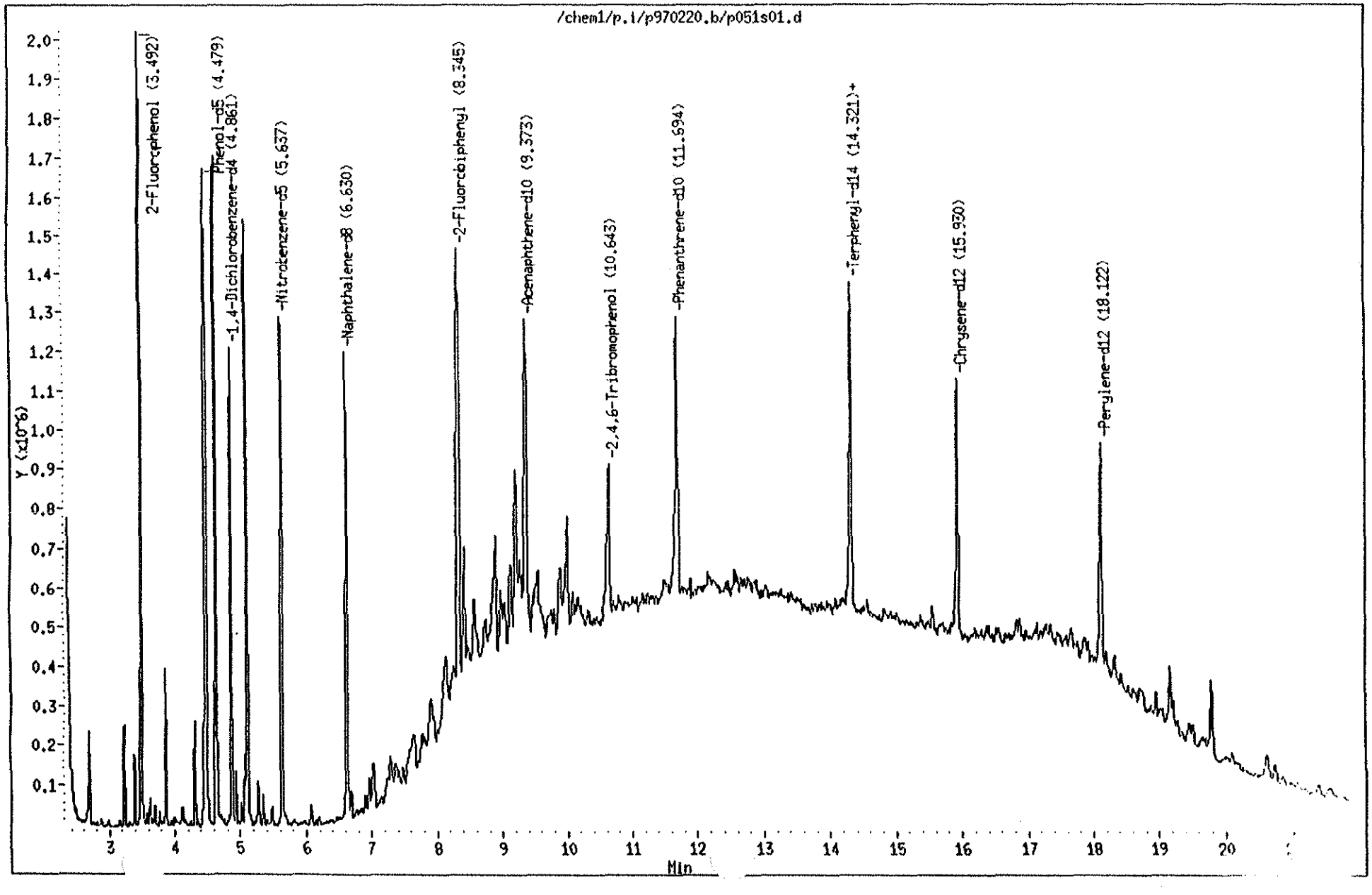
QC Flag Legend

M - Compound response manually integrated.

Data File: /chem1/p.i/p970220.b/p051s01.d
Date : 20-FEB-1997 11:17
Client ID:
Sample Info: 9702165-10A-8270S/1X
Volume Injected (uL): 2.0
Column phase:

Instrument: p.i

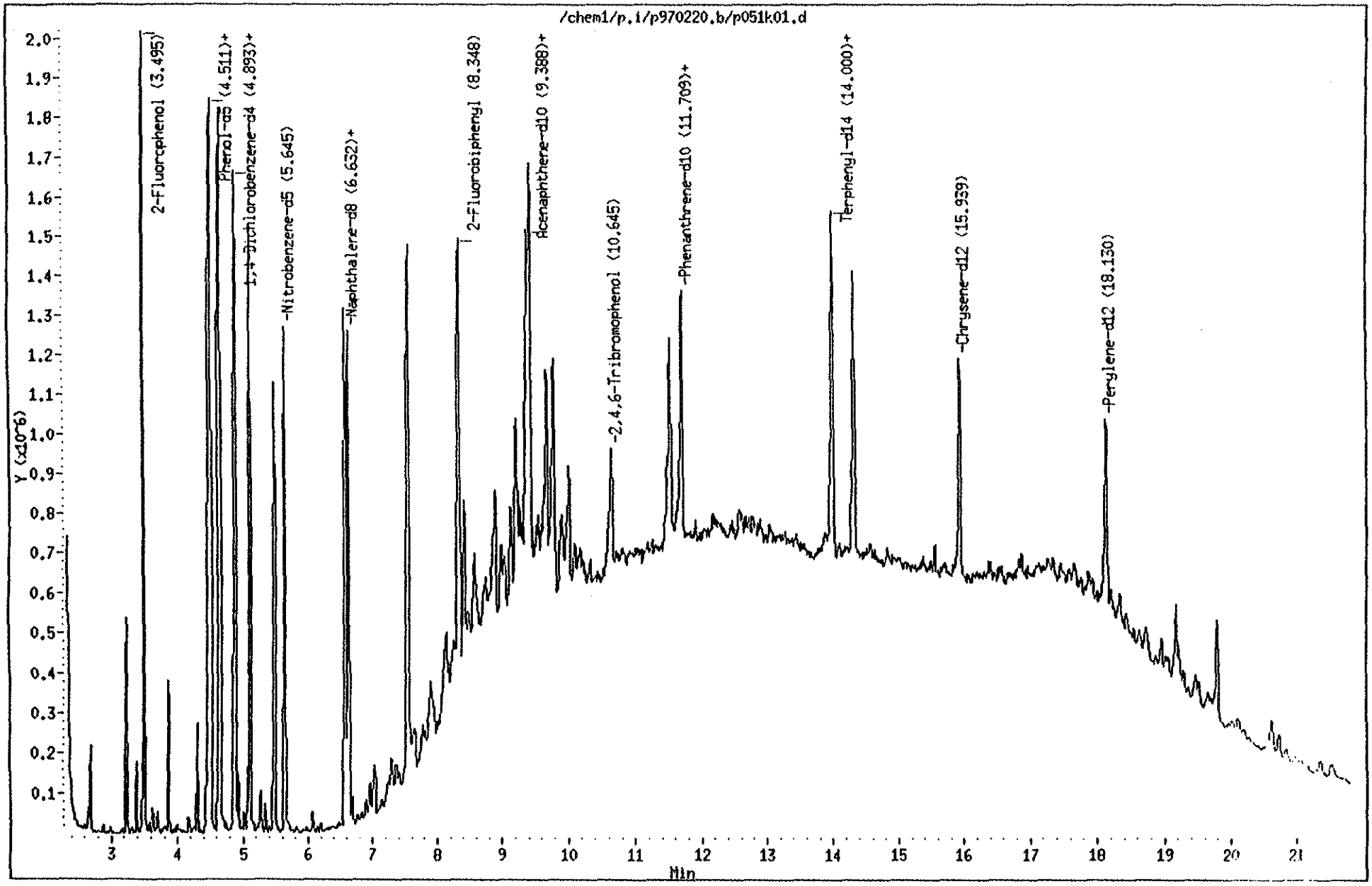
Operator: PC
Column diameter: 0.25



Data File: /chem1/p.i/p970220.b/p051k01.d
Date : 20-FEB-1997 11:47
Client ID:
Sample Info: 9702165-10AMS-8270S/1X
Volume Injected (uL): 2.0
Column phase:

Instrument: p.i

Operator: PC
Column diameter: 0.25



SPL Houston Labs

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: p.i
Lab File ID: p051k01.d
Lab Smp Id: 9702165-10AMS
Analysis Type: SV
Quant Type: ISTD
Operator: PC
Method File: /chem1/p.i/p970220.b/p8270s.m
Misc Info: E050S1/P050B02/P051CC1

Calibration Date: 02/20/97
Calibration Time: 0947

Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	277412	138706	554824	269328	-2.91
32 Naphthalene-d8	1120723	560362	2241446	1126481	0.51
48 Acenaphthene-d10	593092	296546	1186184	518511	-12.57
65 Phenanthrene-d10	985549	492774	1971098	842584	-14.51
76 Chrysene-d12	478103	239052	956206	522337	9.25
83 Perylene-d12	622157	311078	1244314	528736	-15.02

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	4.87	4.37	5.37	4.87	0.05
32 Naphthalene-d8	6.64	6.14	7.14	6.63	-0.14
48 Acenaphthene-d10	9.38	8.88	9.88	9.38	0.03
65 Phenanthrene-d10	11.70	11.20	12.20	11.71	0.07
76 Chrysene-d12	15.94	15.44	16.44	15.94	-0.02
83 Perylene-d12	18.12	17.62	18.62	18.13	0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

SPL Houston Labs

Data file : /chem1/p.i/p970220.b/p051kd1.d
Lab Smp Id: 9702165-10AMSD
Inj Date : 20-FEB-1997 12:18
Operator : PC
Inst ID: p.i
Smp Info : 9702165-10AMSD-8270S/1X
Misc Info : E050S1/P050B02/P051CC1
Comment :
Method : /chem1/p.i/p970220.b/p8270sQ.m
Meth Date : 20-Feb-1997 10:48 patti
Quant Type: ISTD
Cal Date : 14-FEB-1997 10:38
Cal File: p045ic5.d
Als bottle: 7
QC Sample: MSD
Dil Factor: 1.000
Integrator: HP RTE
Compound Sublist: LCS.sub
Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 11 1,4-Dichlorobenzene-d4	152.00	4.870	4.922	(1.000)	276994	40	
* 32 Naphthalene-d8	136.00	6.632	6.697	(1.000)	1162010	40	
Acenaphthene-d10	164.00	9.382	9.429	(1.000)	529968	40	
Phenanthrene-d10	188.00	11.709	11.756	(1.000)	878622	40	
* 76 Chrysene-d12	240.00	15.939	15.992	(1.000)	519651	40	
* 83 Perylene-d12	264.00	18.136	18.189	(1.000)	525155	40	
$ 23 Nitrobenzene-d5	82.00	5.645	5.704	(0.851)	813397	74	1200
$ 41 2-Fluorobiphenyl	172.00	8.348	8.401	(0.890)	1314664	62	1400
$ 72 Terphenyl-d14	244.00	14.323	14.358	(0.899)	866714	62	1000
$ 3 2-Fluorophenol	112.00	3.501	3.506	(0.719)	978767	100	1700
$ 4 Phenol-d5	99.00	4.488	4.523	(0.922)	1400988	130	2200
$ 61 2,4,6-Tribromophenol	329.70	10.651	10.592	(0.910)	223182	170	2800
5 Phenol	94.00	4.517	4.540	(0.928)	1313433	110	1900
9 2-Chlorophenol	128.00	4.664	4.699	(0.958)	767053	87	1400
12 1,4-Dichlorobenzene	146.00	4.893	4.940	(1.005)	617736	68	1100
21 N-Nitroso-di-n-propylamine	70.00	5.492	5.557	(1.128)	631722	100	1800
31 1,2,4-Trichlorobenzene	180.00	6.585	6.638	(0.993)	645310	83	1400
36 4-Chloro-3-methylphenol	107.00	7.560	7.607	(1.140)	1003068	120	2000
49 Acenaphthene	153.00	9.435	9.482	(1.006)	1012027	79	1300
51 4-Nitrophenol	109.00	9.687	9.723	(1.033)	118213	92	1500
53 2,4-Dinitrotoluene	165.00	9.793	9.834	(1.044)	513627	90	1500
64 Pentachlorophenol	266.00	11.532	11.573	(0.985)	336397	130	2100 M)
71 Pyrene	202.00	14.000	14.035	(0.878)	1261742	58	970

QC Flag Legend

M - Compound response manually integrated.

SPL Houston Labs

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: p.i
Lab File ID: p051kd1.d
Lab Smp Id: 9702165-10AMSD
Analysis Type: SV
Quant Type: ISTD
Operator: PC
Method File: /chem1/p.i/p970220.b/p8270s.m
Misc Info: E050S1/P050B02/P051CC1

Calibration Date: 02/20/97
Calibration Time: 0947

Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	277412	138706	554824	276994	-0.15
32 Naphthalene-d8	1120723	560362	2241446	1162010	3.68
48 Acenaphthene-d10	593092	296546	1186184	529988	-10.64
65 Phenanthrene-d10	985549	492774	1971098	878622	-10.85
76 Chrysene-d12	478103	239052	956206	519651	8.69
83 Perylene-d12	622157	311078	1244314	525155	-15.59

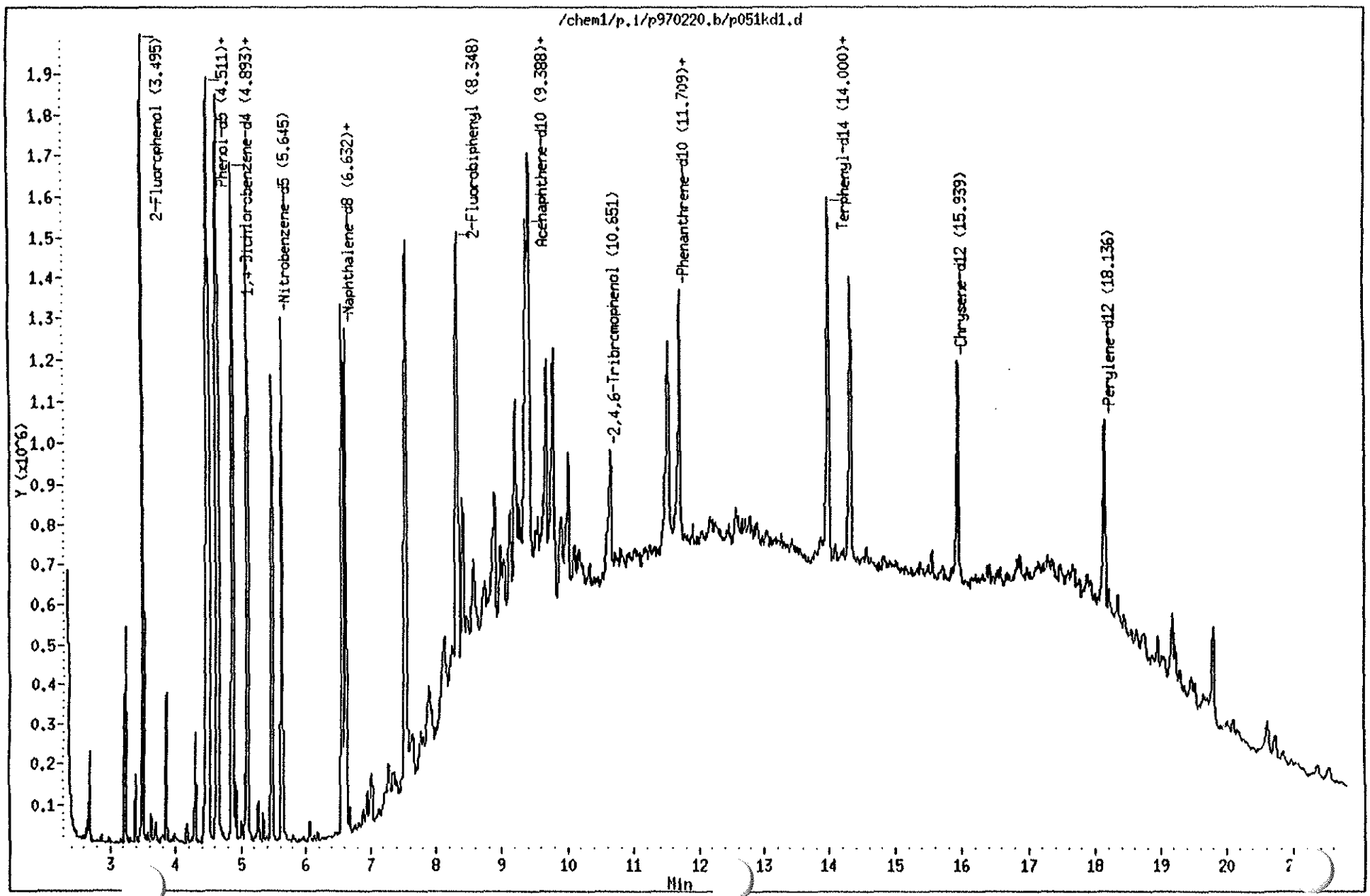
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	4.87	4.37	5.37	4.87	0.05
32 Naphthalene-d8	6.64	6.14	7.14	6.63	-0.14
48 Acenaphthene-d10	9.38	8.88	9.88	9.38	0.03
65 Phenanthrene-d10	11.70	11.20	12.20	11.71	0.07
76 Chrysene-d12	15.94	15.44	16.44	15.94	-0.02
83 Perylene-d12	18.12	17.62	18.62	18.14	0.08

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/p.i/p970220.b/p051kd1.d
Date : 20-FEB-1997 12:18
Client ID:
Sample Info: 9702165-10ANSD-8270S/1X
Volume Injected (uL): 2.0
Column phase:

Instrument: p.i

Operator: PC
Column diameter: 0.25



BOE-C6-0109461

SPL Houston Labs

Data file : /chem1/p.i/p970220.b/p050tl2.d
Lab Smp Id: LCS
Inj Date : 20-FEB-1997 10:17
Operator : PC pc Inst ID: p.i
Smp Info : METHSPIKE-8270S/1X
Misc Info : E050S1/P050B02/P051CC1
Comment :
Method : /chem1/p.i/p970220.b/p8270sQ.m
Meth Date : 20-Feb-1997 10:48 patti Quant Type: ISTD
Cal Date : 14-FEB-1997 10:38 Cal File: p045ic5.d
Als bottle: 1 QC Sample: METHSPIKE
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: LCS.sub
Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 11 1,4-Dichlorobenzene-d4	152.00	4.865	4.922	(1.000)	272058	40	
* 32 Naphthalene-d8	136.00	6.627	6.697	(1.000)	1123890	40	
* 48 Acenaphthene-d10	164.00	9.365	9.429	(1.000)	657289	40	
* 65 Phenanthrene-d10	188.00	11.692	11.756	(1.000)	1036690	40	
* 76 Chrysene-d12	240.00	15.922	15.992	(1.000)	756820	40	
* 83 Perylene-d12	264.00	18.102	18.189	(1.000)	723733	40	
S 23 Nitrobenzene-d5	82.00	5.640	5.704	(0.851)	532470	79	1300
S 41 2-Fluorobiphenyl	172.00	8.337	8.401	(0.890)	1354923	65	1100
S 72 Terphenyl-d14	244.00	14.307	14.355	(0.899)	1184577	58	960
S 3 2-Fluorophenol	112.00	3.508	3.506	(0.721)	989043	110	1800
S 4 Phenol-d5	99.00	4.489	4.523	(0.923)	1399947	130	2200
S 61 2,4,6-Tribromophenol	329.00	10.634	10.692	(0.910)	228246	140	2300
5 Phenol	94.00	4.518	4.540	(0.929)	1247770	110	1800
9 2-Chlorophenol	128.00	4.659	4.699	(0.958)	756816	88	1500
12 1,4-Dichlorobenzene	146.00	4.894	4.940	(1.006)	606555	68	1100
21 N-Nitroso-di-n-propylamine	70.00	5.488	5.557	(1.128)	621605	110	1800
31 1,2,4-Trichlorobenzene	180.00	6.575	6.638	(0.992)	627767	84	1400
36 4-Chloro-3-methylphenol	107.00	7.550	7.607	(1.139)	915705	110	1900
49 Acenaphthene	153.00	9.418	9.482	(1.006)	1122414	70	1200
51 4-Nitrophenol	109.00	9.677	9.723	(1.033)	235420	130	2200
53 2,4-Dinitrotoluene	165.00	9.783	9.834	(1.045)	580890	82	1400
64 Pentachlorophenol	266.00	11.516	11.573	(0.985)	368144	120	1900
71 Pyrene	202.00	13.978	14.035	(0.878)	1733250	54	910

SPL Houston Labs

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: p.i
Lab File ID: p050tl2.d
Lab Smp Id: LCS
Analysis Type: SV
Quant Type: ISTD
Operator: PC
Method File: /chem1/p.i/p970220.b/p8270s.m
Misc Info: E050S1/P050B02/P051CC1

Calibration Date: 02/20/97
Calibration Time: 0947

Level: LOW
Sample Type: SOIL

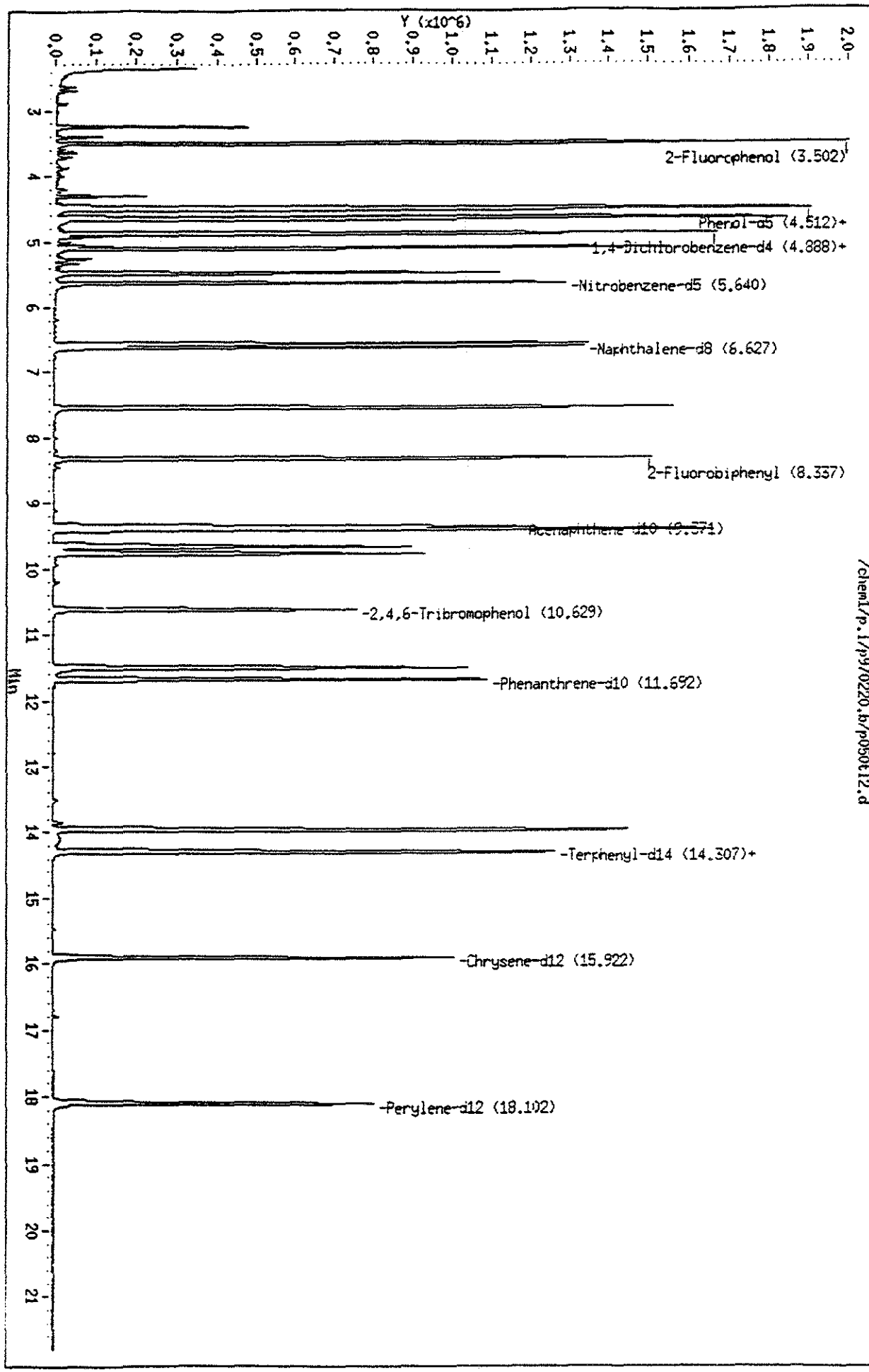
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	277412	138706	554824	272058	-1.93
32 Naphthalene-d8	1120723	560362	2241446	1123890	0.28
48 Acenaphthene-d10	593092	296546	1186184	657289	10.82
65 Phenanthrene-d10	985549	492774	1971098	1036690	5.19
76 Chrysene-d12	478103	239052	956206	756820	58.30
83 Perylene-d12	622157	311078	1244314	723733	16.33

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	4.87	4.37	5.37	4.86	-0.04
32 Naphthalene-d8	6.64	6.14	7.14	6.63	-0.21
48 Acenaphthene-d10	9.38	8.88	9.88	9.37	-0.15
65 Phenanthrene-d10	11.70	11.20	12.20	11.69	-0.07
76 Chrysene-d12	15.94	15.44	16.44	15.92	-0.12
83 Perylene-d12	18.12	17.62	18.62	18.10	-0.11

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/p.1/p970220.b/p050t12.d
Date : 20-FEB-1997 10:17
Client ID:
Sample Info: METHSPIKE-8270S/1X
Volume Injected (uL): 2.0
Column phase:

Instrument: p.1
Operator: PC
Column diameter: 0.25



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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/25/97
Analyzed on: 02/23/97
Analyst: LAR

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.
9702979-01A	86	86	0	20

-9702740

amples in batch:

9702909-01A 9702909-02A 9702909-03A 9702909-04A
9702979-01A 9702979-02A 9702987-01A 9702987-02A
9702987-03A 9702988-01A

COMMENTS:

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No: 9702153

C- 02559

page 1 of 1

Client Name: Montgomery Watson

Address/Phone: 250 N. Madison Ave Pasadena

Client Contact: Fred Strauss - (818) 568-6582

Project Name: MDRC C-6 Facility, Torrance, CA

Project Number: 1206035.01090010

Project Location: BLDG 37 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)	7 of 22 metals	VOCs (8260)	SVOCs (8270)					
B37-E-6	2-20-97	1300		x	S	6"x2" SS sleeve	Approx 12 oz	Ice	2	x	x	x	x					
B37-B-8	↓	1310		x	S	↓	↓	↓	↓	x	x	x	x					
B37-B-9	↓	1320		x	S	↓	↓	↓	↓	x	x	x	x					

Client/Consultant Remarks: ~~24 hr. TAT on TRPH only~~, standard TAT on all ~~other~~ samples
NOT 24hr. TAT on TRPH

Laboratory remarks:

Intact? ☑ Y ☐ N

Temp: 2.0 °C

Requested TAT
~~TRPH only~~
24hr ☐ 72hr ☐
48hr ☐ Standard ☒ All others
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: John Mann	2-20-97	15:00	2. Received by: 2-20-97 18:35
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
☐ 45 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 ( ) 447-6868

BOE-C6-0109467

9702987

SPL

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

INTEROFFICE SAMPLE TRANSFER
CHAIN-OF-CUSTODY FORM

PAGE 1 OF 1

ORIGINATING LAB: Fullerton RECEIVING LAB: Houston DATE: 2-21-97

ATTENTION: Brent Besson REPORT RESULTS TO: Mike Cassotano

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

CLIENT NAME: Montgomery Watson PROJECT #: 9702153 DATE NEEDED: 2/26/97

HEADING FOR ANALYSIS:	INVOICE TO:
COMPANY: Montgomery Watson	COMPANY: SPL-Fullerton
ADDRESS: 250 N. Madison Avenue	ADDRESS:
Pasadena, CA 91101	
ATTN: Nancy Matsumoto	ATTN: Mike C.

SAMPLE NO. IDENTIFICATION	DATE/TIME COLLECTED	LAB SAMPLE NUMBER	SAMPLE MATRIX	ANALYSES REQUESTED	QUOTED PRICE
	2/20/97 1300	9702153-01B	Soil	8270S/PRP6MS	$205.00
	1310	-02B	Soil	8270S/PRP6MS	
	1320	-03B	Soil	8270S/PRP6MS	

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
1. [signature]	2/21/97	9:52	[signature]	2/22/97	0930
2.					

NOTES: Fed Ex # 392 5303 392

BOE-C6-0109468

SPL

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

INTEROFFICE SAMPLE TRANSFER
CHAIN-OF-CUSTODY FORM

PAGE 1 OF 1

ORIGINATING LAB: Fullerton RECEIVING LAB: Houston DATE: 2-21-97

ATTENTION: Brent Barron REPORT RESULTS TO: Mike Crissostomo

REPORT RESULTS BY: ☐ VERBAL ☐ WRITTEN ☑ FAX FAX#

CLIENT NAME: Montgomery Watson PROJECT #: 9702102 DATE NEEDED: 2-26-97

HEADING FOR ANALYSIS:	INVOICE TO:
COMPANY: Montgomery Watson	COMPANY: SPL-Fullerton
ADDRESS:	ADDRESS:
ATTN:	ATTN: Mike Crissostomo

SAMPLE NO. IDENTIFICATION	DATE/TIME COLLECTED	LAB SAMPLE NUMBER	SAMPLE MATRIX	ANALYSES REQUESTED	QUOTED PRICE
	2/12/97 15:55	9202102-04A	Soil	8270S/PRPGMS	205.00

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
1. [signature]	2/21/97	15:00			
2.					

NOTES:

BOE-C6-0109469

SPL Houston Environmental Laboratory

Sample Login Checklist

Date:	Time:
2/22/97	1215

SPL Sample ID:
9702987

			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:		3 C	
10	Method of sample delivery to SPL:	SPL Delivery		
		Client Delivery		
		FedEx Delivery (airbill #)	8905303 3912	
		Other:		
11	Method of sample disposal:	SPL Disposal		
		HOLD		
		Return to Client		

Name:	Date:
Arlen Stark	2/22/97

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

SPL, INC.

REPORT APPROVAL SHEET

WORK ORDER NUMBER: 97 - 03 - 038

Approved for release by:

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

Michael J. Crisostomo, Project Manager — *Date:* 3-17-97

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

Certificate of Analysis No. 9703038

Client:	Montgomery Watson	**Report Date:**	3/5/97
Client Address:	250 N. Madison Avenue	**Date(s) Received:**	2/20/97
	Pasadena, CA 91101	**Date(s) Sampled:**	2/20/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	3/10/97
Project Name:	MDRC C6-Facility Building 37	**Project Number:**	120603501090010
Site:	Torrance, CA	**Matrix:**	SOIL
Method:	Mod. D-2887, Simulated Distillation	**Units:**	mg/Kg

Carbon Chain Range	B37-D8-2ft.
C08-C09	ND
C10-C11	380
C12-C13	2900
C14-C15	240
C16-C17	83
C18-C19	680
C20-C23	2600
C24-C27	1500
C28-C31	900
C32-C35	310
C36-C39	ND
C40-C43	ND
Total	9593

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. 9703038

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

Report Date: 3/17/97
Date(s) Received: 2/20/97
Date(s) Sampled: 2/20/97
Date(s) Analyzed: 3/5/97

Project Name: MDRC C-6 Facility Building 37
Site: Torrance, CA
Method: CA LUFT, App. D

Project Number: 120603501090010
Matrix: SOIL
Units: N/A

Sample ID	Soil extraction
B37-D8-2ft.	03/05/97

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

SPL BATCH QUALITY CONTROL REPORT **

M8015 - Carbon Chain ID

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

Matrix: Soil

Units: mg/Kg

Batch Id: GC_6970306010900

L A B O R A T O R Y C O N T R O L S A M P L E

S P I K E C O M P O U N D S	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Petroleum Hydrocarbons-Die	ND	200	162	81.0	70 - 140

Analyst: RTC

Sequence Date: 03/06/97

SPL ID of sample spiked: 970305SLCS

Sample File ID:

Method Blank File ID:

Blank Spike File ID: GC6B052.TX0

Matrix Spike File ID:

Matrix Spike Duplicate File ID: GC6B052.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: SPL Internal Limits

(***) = Source: SPL Internal Limits

SAMPLES IN BATCH(SPL ID): 9703038-01A

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

Resubmit for Analysis: 9703038

F A X

MONTGOMERY WATSON

250 N. Madison Avenue
Pasadena, California 91101

Tel: 818 568 6508
Fax: 818 796 5941

Date: 3/5/97

To: Mike Crisostomo

Fax No: (714) 447-6800

From: Nancy Matsumoto

Reference: MDRC

Subject: Additional Analyses

No. of Pages: 2
(including cover)

Comments:

Please run the following sample for Carbon Chain Range:

B37-D8-2'

COC follows. Please note that we are close to holding time on this one. 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.

Resubmit for CC ID: 9703038

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No: 9702153

C- 02559

page 1 of 1

Client Name: Montgomery Watson
Address/Phone: 250 N. Madison Ave. Pasadena
Client Contact: Fred Strauss - (818) 568-6582
Project Name: MDRC C-6 Facility, Torrance, CA
Project Number: 1206035.01090010
Project Location: BLDG 37 Area
Invoice To: Fred Strauss

SAMPLE ID	DATE	TIME	comp	grab	matrix (W=water S=soil SL=sludge O=other)	bottle (P=plastic A=amber glass V=vial G=glass)	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)
~~B37-5-6~~ B37-6W-1	2-20-97	1300		X	S	[illegible]	[illegible]	[illegible]	2	X	X	X	X
~~B37-6-7~~ B37-DP-2	↓	1310		X	S	↓	↓	↓	↓	X	X	X	X
~~B37-8-9~~ B37-DP-1	↓	1320		X	S	↓	↓	↓	↓	X	X	X	X

Post-it® Fax Note 7671
Date 2/21/97 # of pages ▶ 1
To Mike C. From Nancy M.
Co./Dept. SPL Co. MW
Phone # Phone # (818) 568-6582
Fax # (714) 447-6800 Fax #

Client/Consultant Remarks: ~~24 hr. TAT on TRPH only~~, standard TAT on all ~~other~~ samples. NOT 24hr. TAT on TRPH

Laboratory remarks

Intact? ☑ Y ☐ N
Temp: 2.0 °C

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: Kathia Mason	date 2-20-97	time 15:00	2. Received by: [signature] 2-20-97 18:51
3. Relinquished by:	date	time	4. Received by:
5. Relinquished by:	date	time	6. Received by Laboratory:

☐ 8880 Interchange Drive, Houston, TX 77034 (713) 660-0901
☐ 450 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) 447-68

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

SPL, INC.

REPORT APPROVAL SHEET

WORK ORDER NUMBER: *97 - 02 - 216*

Approved for release by:

Joel Grice, Laboratory Manager — *Date:* 3/11/97

Michael J. Crisostomo, Project Manager — *Date:* 3-7-97

FULLERTON LABORATORY
1511 E ORANGETHORPE AVE.
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CASE NARRATIVE

SPL Workorder Number: 9702216

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 February 27, 1997, three (3) soil samples 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 February 28, 1997. The samples were received intact and within the 2°C - 6°C preservation temperature range.

The samples were analyzed as 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 several elements: antimony, arsenic, barium, cobalt, lead, nickel, selenium, silver, and thallium. 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.

Note that the semi-volatile organics analyses were performed at SPL's Houston laboratory, under Houston workorder number 9703006. The result for the internal standard, Chrysene-d12, was outside the QC control limits for sample B37-A14-4ft. due to matrix interference. This sample was arbitrarily chosen for MS/MSD analyses; the internal standard Chrysene-d12 was likewise outside the QC control limits for these analyses.

If you have any questions regarding information presented in this report please call me at (714) 447-6868. Please refer to workorder 9702216 to expedite service.

Michael J. Crisostomo
Project Manager

Certificate of Analysis No. 9702216

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
Method: 418.1*

Report Date: 3/7/97
Date(s) Received: 2/27/97
Date(s) Sampled: 2/27/97
Date(s) Analyzed: 2/28/97
Project Number: 120603501090010
Matrix: SOIL

Units: mg/Kg

Sample ID	Petroleum Extractables
B37-A11-4ft.	3100
B37-A13-4ft.	93
B37-A14-4ft.	4300

Results reported at Practical Quantitation Limit 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

Certificate of Analysis No. 9702216

FULLERTON LABORATORY
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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: 3/7/97
Date(s) Received: 2/27/97
Date(s) Sampled: 2/27/97
Date(s) Analyzed: 3/6/97,3/5/97,3/4/97,3/
Project Number: 12060350109001
Matrix: SOIL

Analyte	Units	EPA Method	B37-A11-4ft.	B37-A13-4ft.	B37-A14-4ft.
Antimony, Total	mg/Kg	6010A***	ND<0.500	ND<0.500	ND<0.500
Arsenic, Total	mg/Kg	6010A***	1.94	ND<0.11	ND<0.11
Barium, Total	mg/Kg	6010A***	107	128	118
Beryllium, Total	mg/Kg	6010A***	ND<0.06	ND<0.06	ND<0.06
Cadmium, Total	mg/Kg	6010A***	0.31	0.56	10.3
Chromium, Total	mg/Kg	6010A***	14.7	24.2	73.2
Cobalt, Total	mg/Kg	6010A***	10.4	10.8	9.92
Copper, Total	mg/Kg	6010A***	16.3	21.7	48.2
Digestion-Solids 3050A	N/A	3050A***	03/04/97	03/04/97	03/04/97
Lead, Total	mg/Kg	6010A***	6.73	10.8	34.0
Mercury Digestion in Soil	N/A	7471A***	03/04/97	03/04/97	03/04/97
Mercury, Total	mg/Kg	7471A***	ND<0.200	ND<0.200	ND<0.200
Molybdenum,Total	mg/Kg	6010A***	ND<2.50	ND<2.50	ND<2.50
Nickel, Total	mg/Kg	6010A ***	12.1	14.9	14.7
Selenium, Total	mg/Kg	6010A***	ND<5.00	ND<5.00	ND<5.00
Silver, Total	mg/Kg	6010A***	ND<5.00	ND<5.00	ND<5.00
Thallium, Total	mg/Kg	6010A***	ND<0.500	ND<0.500	ND<0.500
Ultrasonic Extraction 3550A	N/A	3550A	03/02/97	03/02/97	03/02/97
Vanadium, Total	mg/Kg	6010A***	32.3	41.2	36.2
Zinc, Total	mg/Kg	6010A***	45.2	67.8	156

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.

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

SPL California License Number 2178

Certificate of Analysis No. 9702216

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: 3/7/97
Date(s) Received: 2/27/97
Date(s) Sampled: 2/27/97
Date(s) Analyzed: 3/4/97,3/3/97
Project Number: 120603501090010
Matrix: SOIL

Method: 8260 Soil, Volatile Organics

Units: UG/KG

Analyte	B37-A11-4ft.	B37-A13-4ft.	B37-A14-4ft.
Dichlorodifluoromethane	ND<5	ND<5	ND<5
Chloromethane	ND<5	ND<5	ND<5
Vinyl chloride	ND<5	ND<5	ND<5
Bromomethane	ND<5	ND<5	ND<5
Chloroethane	ND<5	ND<5	ND<5
Trichlorofluoromethane	ND<5	ND<5	ND<5
1,1-Dichloroethene	ND<5	ND<5	ND<5
Methylene chloride	ND<5	ND<5	ND<5
trans-1,2-Dichloroethene	ND<5	ND<5	ND<5
1,1-Dichloroethane	ND<5	ND<5	ND<5
2,2-Dichloropropane	ND<5	ND<5	ND<5
cis-1,2-Dichloroethene	ND<5	ND<5	ND<5
Chloroform	ND<5	ND<5	ND<5
Bromochloromethane	ND<5	ND<5	ND<5
1,1,1-Trichloroethane	ND<5	ND<5	ND<5
1,1-Dichloropropene	ND<5	ND<5	ND<5
Carbon tetrachloride	ND<5	ND<5	ND<5
1,2-Dichloroethane	ND<5	ND<5	ND<5
Benzene	ND<5	ND<5	ND<5
Trichloroethene	ND<5	ND<5	ND<5
1,2-Dichloropropane	ND<5	ND<5	ND<5
Bromodichloromethane	ND<5	ND<5	ND<5
Dibromomethane	ND<5	ND<5	ND<5
cis-1,3-Dichloropropene	ND<5	ND<5	ND<5
Toluene	ND<5	ND<5	ND<5
trans-1,3-Dichloropropene	ND<5	ND<5	ND<5
1,1,2-Trichloroethane	ND<5	ND<5	ND<5
1,2-Dibromoethane	ND<5	ND<5	ND<5
1,3-Dichloropropane	ND<5	ND<5	ND<5
Tetrachloroethene	ND<5	ND<5	ND<5
Dibromochloromethane	ND<5	ND<5	ND<5
Chlorobenzene	ND<5	ND<5	ND<5
1,1,1,2-Tetrachloroethane	ND<5	ND<5	ND<5
Ethylbenzene	ND<5	ND<5	ND<5
m,p-Xylene	ND<5	ND<5	ND<5
o-Xylene	ND<5	ND<5	ND<5
Styrene	ND<5	ND<5	ND<5
Bromoform	ND<5	ND<5	ND<5

Certificate of Analysis No. 9702216

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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: 3/7/97
Date(s) Received: 2/27/97
Date(s) Sampled: 2/27/97
Date(s) Analyzed: 3/4/97,3/3/97
Project Number: 120603501090010
Matrix: SOIL

Method: 8260 Soil, Volatile Organics

Units: UG/KG

Analyte	B37-A11-4ft.	B37-A13-4ft.	B37-A14-4ft.
Isopropylbenzene	ND<5	ND<5	ND<5
1,1,2,2-Tetrachloroethane	ND<5	ND<5	ND<5
1,2,3-Trichloropropane	ND<5	ND<5	ND<5
n-Propylbenzene	ND<5	ND<5	ND<5
Bromobenzene	ND<5	ND<5	ND<5
1,3,5-Trimethylbenzene	ND<5	ND<5	ND<5
2-Chlorotoluene	ND<5	ND<5	ND<5
4-Chlorotoluene	ND<5	ND<5	ND<5
tert-Butylbenzene	ND<5	ND<5	ND<5
1,2,4-Trimethylbenzene	ND<5	ND<5	ND<5
sec-Butylbenzene	ND<5	ND<5	ND<5
p-Isopropyltoluene	ND<5	ND<5	ND<5
1,3-Dichlorobenzene	ND<5	ND<5	ND<5
1,4-Dichlorobenzene	ND<5	ND<5	ND<5
n-Butylbenzene	ND<5	ND<5	ND<5
1,2-Dichlorobenzene	ND<5	ND<5	ND<5
1,2-Dibromo-3-chloroprop	ND<5	ND<5	ND<5
1,2,4-Trichlorobenzene	ND<5	ND<5	ND<5
Hexachlorobutadiene	ND<5	ND<5	ND<5
Naphthalene	ND<5	ND<5	ND<5
1,2,3-Trichlorobenzene	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.

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PHONE (714) 447-6868

Certificate of Analysis No. 9702216

Client:	Montgomery Watson	**Report Date:**	3/7/97
Client Address:	250 N. Madison Avenue Pasadena, CA 91101	**Date(s) Received:**	2/27/97
		Date(s) Sampled:	2/27/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	3/3/97
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-A11-4ft.	B37-A13-4ft.	B37-A14-4ft.
Acenaphthene	ND<330	ND<330	ND<660
Acenaphthylene	ND<330	ND<330	ND<660
Aniline	ND<330	ND<330	ND<660
Anthracene	ND<330	ND<330	ND<660
Benzo (a) Anthracene	ND<330	1500	ND<660
Benzo (b) Fluoranthene	ND<330	1900	ND<660
Benzo (k) Fluoranthene	ND<330	1000	ND<660
Benzo (a) Pyrene	ND<330	1800	ND<660
Benzoic Acid	ND<1600	ND<1600	ND<3200
Benzo (g,h,i) Perylene	ND<330	1800	ND<660
Benzyl alcohol	ND<330	ND<330	ND<660
4-Bromophenylphenyl ether	ND<330	ND<330	ND<660
Butylbenzylphthalate	ND<330	ND<330	ND<660
di-n-Butyl phthalate	ND<330	ND<330	ND<660
Carbazole	ND<330	ND<330	ND<660
4-Chloroaniline	ND<330	ND<330	ND<660
bis (2-Chloroethoxy) Methane	ND<330	ND<330	ND<660
bis (2-Chloroethyl) Ether	ND<330	ND<330	ND<660
bis (2-Chloroisopropyl) Ether	ND<330	ND<330	ND<660
4-Chloro-3-Methylphenol	ND<330	ND<330	ND<660
2-Chloronaphthalene	ND<330	ND<330	ND<660
2-Chlorophenol	ND<330	ND<330	ND<660
4-Chlorophenylphenyl ether	ND<330	ND<330	ND<660
Chrysene	ND<330	1800	ND<660
Dibenz (a,h) Anthracene	ND<330	ND<330	ND<660
Dibenzofuran	ND<330	ND<330	ND<660
1,2-Dichlorobenzene	ND<330	ND<330	ND<660
1,3-Dichlorobenzene	ND<330	ND<330	ND<660
1,4-Dichlorobenzene	ND<330	ND<330	ND<660
3,3'-Dichlorobenzidine	ND<330	ND<330	ND<660
2,4-Dichlorophenol	ND<330	ND<330	ND<660
Diethylphthalate	ND<330	ND<330	ND<660
2,4-Dimethylphenol	ND<330	ND<330	ND<660
Dimethyl Phthalate	ND<330	ND<330	ND<660
4,6-Dinitro-2-Methylphenol	ND<800	ND<800	ND<1600
2,4-Dinitrophenol	ND<800	ND<800	ND<1600
2,4-Dinitrotoluene	ND<330	ND<330	ND<660
2,6-Dinitrotoluene	ND<330	ND<330	ND<660
1,2-Diphenylhydrazine	ND<330	ND<330	ND<660
bis (2-Ethylhexyl)Phthalate	ND<330	ND<330	ND<660

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FULLERTON, CA 92831
PHONE (714) 447-6868

Certificate of Analysis No. 9702216

Client:	Montgomery Watson	**Report Date:**	3/7/97
Client Address:	250 N. Madison Avenue	**Date(s) Received:**	2/27/97
	Pasadena, CA 91101	**Date(s) Sampled:**	2/27/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	3/3/97
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-A11-4ft.	B37-A13-4ft.	B37-A14-4ft.
Fluoranthene	ND<330	2000	ND<660
Fluorene	ND<330	ND<330	ND<660
Hexachlorobenzene	ND<330	ND<330	ND<660
Hexachlorobutadiene	ND<330	ND<330	ND<660
Hexachloroethane	ND<330	ND<330	ND<660
Hexachlorocyclopentadiene	ND<330	ND<330	ND<660
Indeno(1,2,3-cd)Pyrene	ND<330	1500	ND<660
Isophorone	ND<330	ND<330	ND<660
2-Methylnaphthalene	ND<330	ND<330	ND<660
2-Methylphenol	ND<330	ND<330	ND<660
4-Methylphenol	ND<330	ND<330	ND<660
Napthalene	ND<330	ND<330	ND<660
2-Nitroaniline	ND<800	ND<800	ND<1600
3-Nitroaniline	ND<800	ND<800	ND<1600
4-Nitroaniline	ND<800	ND<800	ND<1600
Nitrobenzene	ND<330	ND<330	ND<660
2-Nitrophenol	ND<330	ND<330	ND<660
4-Nitrophenol	ND<800	ND<800	ND<1600
N-Nitrosodiphenylamine	ND<330	ND<330	ND<660
N-Nitroso-Di-n-Propylamine	ND<330	ND<330	ND<660
Di-n-Octyl Phthalate	ND<330	ND<330	ND<660
Pentachlorophenol	ND<800	ND<800	ND<1600
Phenanthrene	ND<330	540	ND<660
Phenol	ND<330	ND<330	ND<660
Pyrene	ND<330	1300	ND<660
Pyridine	ND<330	ND<330	ND<660
1,2,4-Trichlorobenzene	ND<330	ND<330	ND<660
2,4,5-Trichlorophenol	ND<800	ND<800	ND<1600
2,4,6-Trichlorophenol	ND<330	ND<330	ND<660

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 03/03/97
Analyzed on: 02/28/97
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
9702205-01B	ND	ND	500	439	87.8	427	85.4	2.8	20	80 -120

PETHS022897 -9703004

Samples in batch:

9702205-01B 9702205-02B 9702205-03B 9702215-01A
9702215-02A 9702216-01A 9702216-02A 9702216-03A

COMMENTS:

FULLERTON LABORATORY
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FULLERTON, CA 92831
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** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 03/03/97
Analyzed on: 02/28/97
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	489	97.8	80 - 120

PETHS022897 -9703004

Samples in batch:

9702205-01B 9702205-02B 9702205-03B 9702215-01A
9702215-02A 9702216-01A 9702216-02A 9702216-03A

COMMENTS:

FULLERTON LABORATORY
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PHONE (714) 447-6868

QUALITY CONTROL INFORMATION

03/03/97

EPA 8240/8260 Compounds by EPA 8260 Method

9702216, 9702172, 9702206, 9702195, 9702215

Parameter	Laboratory Method Blank (ug/Kg)	Reporting Limits (ug/Kg)	LCS Rec. (%)	Acceptability Range (%)
Dichlorodifluoromethane	ND	5.0	124	70 - 130
Chloromethane	ND	5.0	112	70 - 130
Vinyl chloride	ND	5.0	94	70 - 130
Bromomethane	ND	5.0	100	70 - 130
Chloroethane	ND	5.0	98	70 - 130
Trichlorofluoromethane	ND	5.0	98	70 - 130
Acrolein	ND	50	NA	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	50	NA	70 - 130
Acetone	ND	100	92	70 - 130
1,1-Dichloroethene	ND	5.0	88	70 - 130
Acetonitrile	ND	50	NA	70 - 130
Iodomethane	ND	5.0	94	70 - 130
Allyl chloride	ND	50	NA	70 - 130
Methylene chloride	ND	5.0	82	70 - 130
Carbon disulfide	ND	5.0	92	70 - 130
Acrylonitrile	ND	50	102	70 - 130
2-Methoxy-2-methylpropane	ND	5.0	102	70 - 130
trans-1,2-dichloroethene	ND	5.0	86	70 - 130
Vinyl acetate	ND	10	92	70 - 130
1,1-Dichloroethane	ND	5.0	88	70 - 130
2-Butanone	ND	10	90	70 - 130
Propionitrile	ND	50	NA	70 - 130
2,2-Dichloropropane	ND	5.0	92	70 - 130
cis-1,2-dichloroethene	ND	5.0	92	70 - 130
Methacrylonitrile	ND	50	NA	70 - 130
Isobutyl alcohol	ND	100	NA	70 - 130
Chloroform	ND	5.0	86	70 - 130
Bromochloromethane	ND	5.0	88	70 - 130
1,1,1-Trichloroethane	ND	5.0	86	70 - 130
1,1-Dichloropropene	ND	5.0	96	70 - 130
Carbon tetrachloride	ND	5.0	90	70 - 130
1,2-Dichloroethane	ND	5.0	88	70 - 130
Benzene	ND	5.0	92	70 - 130
Trichloroethene	ND	5.0	92	70 - 130

ND = Not Detected

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FULLERTON, CA 92831
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QUALITY CONTROL INFORMATION

03/03/97

EPA 8240/8260 Compounds by EPA 8260 Method

9702216, 9702172, 9702206, 9702195, 9702215

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	128	70 - 130
4-Methyl-2-pentanone	ND	10	120	70 - 130
cis-1,3-Dichloropropene	ND	5.0	94	70 - 130
Toluene	ND	5.0	98	70 - 130
Ethyl methacrylate	ND	50	NA	70 - 130
trans-1,3-Dichloropropene	ND	5.0	98	70 - 130
2-Hexanone	ND	10	106	70 - 130
1,1,2-trichloroethane	ND	5.0	94	70 - 130
1,2-Dibromoethane	ND	5.0	94	70 - 130
1,3-Dichloropropane	ND	5.0	98	70 - 130
Tetrachloroethene	ND	5.0	100	70 - 130
Dibromochloromethane	ND	5.0	94	70 - 130
Chlorobenzene	ND	5.0	100	70 - 130
1,1,1,2-Tetrachloroethane	ND	5.0	94	70 - 130
Ethylbenzene	ND	5.0	106	70 - 130
m,p-Xylene	ND	5.0	108	70 - 130
o-Xylene	ND	5.0	106	70 - 130
Styrene	ND	5.0	110	70 - 130
Bromoform	ND	5.0	98	70 - 130
trans-1,4-Dichloro-2-butene	ND	50	NA	70 - 130
Pentachloroethane	ND	50	NA	70 - 130
Isopropylbenzene	ND	5.0	106	70 - 130
1,1,2,2-Tetrachloroethane	ND	5.0	94	70 - 130
1,2,3-Trichloropropane	ND	5.0	92	70 - 130
n-Propylbenzene	ND	5.0	108	70 - 130

ND = Not Detected

FULLERTON LABORATORY
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QUALITY CONTROL INFORMATION

03/03/ 97

EPA 8240/8260 Compounds by EPA 8260 Method

9702216, 9702172, 9702206, 9702195, 9702215

Parameter	Laboratory Method Blank (ug/Kg)	Reporting Limits (ug/Kg)	LCS Rec. (%)	Acceptability Range (%)
Bromobenzene	ND	5.0	98	70 - 130
1,3,5-Trimethylbenzene	ND	5.0	108	70 - 130
2-Chlorotoluene	ND	5.0	100	70 - 130
4-Chlorotoluene	ND	5.0	100	70 - 130
tert-Butylbenzene	ND	5.0	102	70 - 130
1,2,4-Trimethylbenzene	ND	5.0	106	70 - 130
sec-Butylbenzene	ND	5.0	104	70 - 130
p-Isopropyltoluene	ND	5.0	108	70 - 130
1,3-Dichlorobenzene	ND	5.0	96	70 - 130
1,4-Dichlorobenzene	ND	5.0	96	70 - 130
n-Butylbenzene	ND	5.0	102	70 - 130
1,2-Dichlorobenzene	ND	5.0	96	70 - 130
1,2-Dibromo-3-chloropropane	ND	5.0	92	70 - 130
1,2,4-Trichlorobenzene	ND	5.0	96	70 - 130
Hexachlorobutadiene	ND	5.0	94	70 - 130
Naphthalene	ND	5.0	98	70 - 130
1,2,3-Trichlorobenzene	ND	5.0	96	70 - 130
DBFM Surrogate Rec. (%)	105	----	85	60 - 140
Toluene-d8 Surrogate Rec. (%)	97	----	102	60 - 140
BFB Surrogate Rec. (%)	86	----	127	60 - 140

LCS = Laboratory Control Sample
ND = Not Detected

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QUALITY CONTROL INFORMATION

03/03/97

EPA 8240/8260 Compounds by EPA 8260 Method

9702216, 9702172, 9702206, 9702195, 9702215

Sample Spiked: 9702216-02A

Parameter	MS Recovery (%)	MSD Recovery (%)	RPD	Acceptability Range (%)	RPD Range (%)
1,1-Dichloroethene	114	117	2.6	70 - 130	30
Benzene	117	121	3.4	70 - 130	30
Trichloroethene	111	113	1.8	70 - 130	30
Toluene	101	105	3.9	70 - 130	30
Chlorobenzene	104	106	1.9	70 - 130	30
DBFM Surrogate Rec. (%)	111	121	---	60 - 140	---
Toluene-d8 Surrogate Rec. (%)	101	99	---	60 - 140	---
BFB Surrogate Rec. (%)	118	119	---	60 - 140	---

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

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QUALITY CONTROL INFORMATION

03/04/97

EPA 8240/8260 Compounds by EPA 8260 Method

9702215, 9702216, 9702226, 9702227, 9702228

Parameter	Laboratory Method Blank (ug/Kg)	Reporting Limits (ug/Kg)	LCS Rec. (%)	Acceptability Range (%)
Dichlorodifluoromethane	ND	5.0	122	70 - 130
Chloromethane	ND	5.0	122	70 - 130
Vinyl chloride	ND	5.0	110	70 - 130
Bromomethane	ND	5.0	110	70 - 130
Chloroethane	ND	5.0	106	70 - 130
Trichlorofluoromethane	ND	5.0	106	70 - 130
Acrolein	ND	50	90	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	50	NA	70 - 130
Acetone	ND	100	96	70 - 130
1,1-Dichloroethene	ND	5.0	94	70 - 130
Acetonitrile	ND	50	NA	70 - 130
Iodomethane	ND	5.0	104	70 - 130
Allyl chloride	ND	50	NA	70 - 130
Methylene chloride	ND	5.0	94	70 - 130
Carbon disulfide	ND	5.0	96	70 - 130
Acrylonitrile	ND	50	110	70 - 130
2-Methoxy-2-methylpropane	ND	5.0	98	70 - 130
trans-1,2-dichloroethene	ND	5.0	96	70 - 130
Vinyl acetate	ND	10	90	70 - 130
1,1-Dichloroethane	ND	5.0	98	70 - 130
2-Butanone	ND	10	92	70 - 130
Propionitrile	ND	50	NA	70 - 130
2,2-Dichloropropane	ND	5.0	92	70 - 130
cis-1,2-dichloroethene	ND	5.0	102	70 - 130
Methacrylonitrile	ND	50	NA	70 - 130
Isobutyl alcohol	ND	100	NA	70 - 130
Chloroform	ND	5.0	96	70 - 130
Bromochloromethane	ND	5.0	102	70 - 130
1,1,1-Trichloroethane	ND	5.0	94	70 - 130
1,1-Dichloropropene	ND	5.0	100	70 - 130
Carbon tetrachloride	ND	5.0	98	70 - 130
1,2-Dichloroethane	ND	5.0	96	70 - 130
Benzene	ND	5.0	102	70 - 130
Trichloroethene	ND	5.0	100	70 - 130

ND = Not Detected

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QUALITY CONTROL INFORMATION

03/04/97

EPA 8240/8260 Compounds by EPA 8260 Method

9702215, 9702216, 9702226, 9702227, 9702228

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	102	70 - 130
1,4-Dioxane	ND	100	NA	70 - 130
Bromodichloromethane	ND	5.0	96	70 - 130
Dibromomethane	ND	5.0	100	70 - 130
2-Chloroethyl vinyl ether	ND	10	126	70 - 130
4-Methyl-2-pentanone	ND	10	114	70 - 130
cis-1,3-Dichloropropene	ND	5.0	104	70 - 130
Toluene	ND	5.0	106	70 - 130
Ethyl methacrylate	ND	50	NA	70 - 130
trans-1,3-Dichloropropene	ND	5.0	100	70 - 130
2-Hexanone	ND	10	98	70 - 130
1,1,2-trichloroethane	ND	5.0	102	70 - 130
1,2-Dibromoethane	ND	5.0	100	70 - 130
1,3-Dichloropropane	ND	5.0	104	70 - 130
Tetrachloroethene	ND	5.0	108	70 - 130
Dibromochloromethane	ND	5.0	102	70 - 130
Chlorobenzene	ND	5.0	110	70 - 130
1,1,1,2-Tetrachloroethane	ND	5.0	104	70 - 130
Ethylbenzene	ND	5.0	114	70 - 130
m,p-Xylene	ND	5.0	117	70 - 130
o-Xylene	ND	5.0	116	70 - 130
Styrene	ND	5.0	118	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	106	70 - 130
1,1,2,2-Tetrachloroethane	ND	5.0	96	70 - 130
1,2,3-Trichloropropane	ND	5.0	96	70 - 130
n-Propylbenzene	ND	5.0	104	70 - 130

ND = Not Detected

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QUALITY CONTROL INFORMATION

03/04/ 97

EPA 8240/8260 Compounds by EPA 8260 Method

9702215, 9702216, 9702226, 9702227, 9702228

Parameter	Laboratory Method Blank (ug/Kg)	Reporting Limits (ug/Kg)	LCS Rec. (%)	Acceptability Range (%)
Bromobenzene	ND	5.0	106	70 - 130
1,3,5-Trimethylbenzene	ND	5.0	112	70 - 130
2-Chlorotoluene	ND	5.0	104	70 - 130
4-Chlorotoluene	ND	5.0	104	70 - 130
tert-Butylbenzene	ND	5.0	104	70 - 130
1,2,4-Trimethylbenzene	ND	5.0	112	70 - 130
sec-Butylbenzene	ND	5.0	104	70 - 130
p-Isopropyltoluene	ND	5.0	106	70 - 130
1,3-Dichlorobenzene	ND	5.0	100	70 - 130
1,4-Dichlorobenzene	ND	5.0	100	70 - 130
n-Butylbenzene	ND	5.0	100	70 - 130
1,2-Dichlorobenzene	ND	5.0	98	70 - 130
1,2-Dibromo-3-chloropropane	ND	5.0	86	70 - 130
1,2,4-Trichlorobenzene	ND	5.0	82	70 - 130
Hexachlorobutadiene	ND	5.0	88	70 - 130
Naphthalene	ND	5.0	90	70 - 130
1,2,3-Trichlorobenzene	ND	5.0	90	70 - 130
DBFM Surrogate Rec. (%)	90	----	94	60 - 140
Toluene-d8 Surrogate Rec. (%)	101	----	101	60 - 140
BFB Surrogate Rec. (%)	82	----	119	60 - 140

LCS = Laboratory Control Sample
ND = Not Detected

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QUALITY CONTROL INFORMATION

03/04/97

EPA 8240/8260 Compounds by EPA 8260 Method

9702215, 9702216, 9702226, 9702227, 9702228

Sample Spiked: 9702215-01A

Parameter	MS Recovery (%)	MSD Recovery (%)	RPD	Acceptability Range (%)	RPD Range (%)
1,1-Dichloroethene	103	99	4.0	70 - 130	30
Benzene	101	101	0.0	70 - 130	30
Trichloroethene	97	98	1.0	70 - 130	30
Toluene	96	96	0.0	70 - 130	30
Chlorobenzene	95	95	0.0	70 - 130	30
DBFM Surrogate Rec. (%)	94	95	---	60 - 140	---
Toluene-d8 Surrogate Rec. (%)	98	100	---	60 - 140	---
BFB Surrogate Rec. (%)	119	123	---	60 - 140	---

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

QUALITY CONTROL INFORMATION
METALS

FULLERTON LABORATORY
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MS/MSD Results

Date: 3/6/97
Sample ID: 9702226-14

Matrix: Soil
Includes: 9702215-1-2; 9702216-1-3; 9702227-1; 9702226-7-8, 11-13; 9702228-1; 9703017-1-3

Parameter	LMB	LCS Rec. (%)	Acceptability Range (%)	MS Rec. (%)		MSD Rec. (%)		Acceptability Range (%)	RPD	RPD Range (%)
Antimony, Sb	ND	103	84-117	56.1	*	57.1	*	80-120	1.8	20
Arsenic, As	ND	106	85-117	73.3	*	74.2	*	80-120	1.2	20
Barium, Ba	ND	103	62-136	77.8	*	76.2	*	80-120	2.0	20
Beryllium, Be	ND	102	85-111	85.4		84.9		80-120	0.5	20
Cadmium, Cd	ND	100	86-112	86.1		85.9		80-120	0.2	20
Chromium, Cr	ND	102	83-110	82.8		81.8		80-120	1.1	20
Cobalt, Co	ND	101	85-112	79.0	*	78.6	*	80-120	0.5	20
Copper, Cu	ND	102	84-111	88.2		86.6		80-120	1.9	20
Lead, Pb	ND	102	85-110	77.6	*	77.5	*	80-120	0.2	20
Molybdenum, Mo	ND	99.0	83-110	81.4		81.2		80-120	0.2	20
Nickel, Ni	ND	102	86-110	80.1		79.2	*	80-120	1.1	20
Selenium, Se	ND	102	84-111	74.9	*	73.9	*	80-120	1.3	20
Silver, Ag	ND	105	80-125	69.5	*	69.4	*	80-120	0.2	20
Thallium, Tl	ND	100	83-109	72.8	*	73.4	*	80-120	0.9	20
Vanadium, V	ND	101	84-109	86.5		84.6		80-120	2.2	20
Zinc, Zn	ND	106	88-117	88.9		86.8		80-120	2.3	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: 03/07/97
Analyzed on: 03/05/97
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
9702226-14A	ND	ND	.0010	.00104	104	.00102	102	1.9	20	80 -120

HGS030597 -9703020

Samples in batch:

9702205-01B	9702205-02B	9702205-03B	9702215-01A
9702215-02A	9702216-01A	9702216-02A	9702216-03A
9702226-07A	9702226-08A	9702226-11A	9702226-14A
9702227-01A	9702228-01A	9703017-01A	9703017-02A
9703017-03A	9703017-04A		

COMMENTS:

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 03/07/97
Analyzed on: 03/05/97
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	.0010	100	80 - 120

HGS030597 -9703020

ples in batch:

9702205-01B	9702205-02B	9702205-03B	9702215-01A
9702215-02A	9702216-01A	9702216-02A	9702216-03A
9702226-07A	9702226-08A	9702226-11A	9702226-14A
9702227-01A	9702228-01A	9703017-01A	9703017-02A
9703017-03A	9703017-04A		

COMMENTS:

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 03/03/97
Analyzed on: 03/03/97
Analyst: PT

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.
9703006-01A	84	84	0	20

-9703043

Samples in batch:

9702833-05A 9702833-06A 9702833-07A 9702833-08A
9702833-09A 9702833-10A 9702833-15A 9702833-16A
9702A38-01D 9703006-01A

COMMENTS:

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 03/03/97
Analyzed on: 03/03/97
Analyst: PT

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.
9702D13-01A	77	77	0	20

-9703042

amples in batch:

9702833-01A	9702833-02A	9702833-03A	9702833-04A
9702D13-01A	9702D14-01A	9702D15-01B	9702D16-01B
9703006-02A	9703006-03A		

COMMENTS:

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

SPL Blank QC Report

Matrix: Soil
Sample ID: BLANK
Batch: E970302044703

Reported on: 03/04/97 14:35
Analyzed on: 03/03/97 17:56
Analyst: LH

METHOD 8270 BLANK H061B02

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) 660-0901

SPL Blank QC Report

Matrix: Soil
Sample ID: BLANK
Batch: E970302044703

Reported on: 03/04/97 14:35
Analyzed on: 03/03/97 17:56
Analyst: LH

METHOD 8270 BLANK H061B02

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: E970302044703

Reported on: 03/04/97 14:35
Analyzed on: 03/03/97 17:56
Analyst: LH

METHOD 8270 BLANK H061B02

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

Surrogate	Result	QC Criteria	Units
Nitrobenzene-d5	104	23-120	% Recovery
2-Fluorobiphenyl	94	30-115	% Recovery
Terphenyl-d14	91	18-137	% Recovery
Phenol-d5	79	24-113	% Recovery
2-Fluorophenol	70	25-121	% Recovery
2,4,6-Tribromophenol	101	19-122	% Recovery

Samples in Batch 9703006-01 9703006-02 9703006-03

Notes

ND - Not detected.

SPL Houston Labs

Data file : /chem1/h.i/h970303.b/h061tl2.d
Lab Smp Id: LCS
Inj Date : 03-MAR-1997 17:27
Operator : LH Inst ID: h.i
Smp Info : METHSPIKE-8270S/1X
Misc Info : E061S1/H061B02/H06IC3
Comment :
Method : /chem1/h.i/h970303.b/h8270sQ.m
Meth Date : 03-Mar-1997 16:52 liping Quant Type: ISTD
Cal Date : 03-MAR-1997 15:51 Cal File: h062ic5.d
Als bottle: 7 QC Sample: MS
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: lcs.sub
Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 11 1,4-Dichlorobenzene-d4	152.00	4.542	4.541	(1.000)	341366	40	
* 32 Naphthalene-d8	136.00	6.337	6.336	(1.000)	1114601	40	
* 48 Acenaphthene-d10	164.00	9.068	9.068	(1.000)	583308	40	
* 65 Phenanthrene-d10	188.00	11.394	11.393	(1.000)	923250	40	
* 76 Chrysene-d12	240.00	15.627	15.626	(1.000)	644194	40	
* 83 Perylene-d12	264.00	17.771	17.782	(1.000)	671031	40	
$ 23 Nitrobenzene-d5	82.00	5.366	5.388	(0.847)	847702	86	1400
$ 41 2-Fluorobiphenyl	172.00	8.041	8.041	(0.887)	1469808	75	1200
$ 72 Terphenyl-d14	244.00	13.979	13.978	(0.895)	1260864	73	1200
$ 3 2-Fluorophenol	112.00	3.165	3.255	(0.697)	1152460	100	1700
$ 4 Phenol-d5	99.00	4.282	4.338	(0.943)	1169210	98	1600
$ 61 2,4,6-Tribromophenol	329.70	10.367	10.388	(0.910)	445589	160	2600
5 Phenol	94.00	4.294	4.372	(0.945)	1348064	91	1500
9 2-Chlorophenol	128.00	4.361	4.417	(0.960)	1079827	95	1600
12 1,4-Dichlorobenzene	146.00	4.565	4.564	(1.005)	834413	66	1100
21 N-Nitroso-di-n-propylamine	70.00	5.185	5.196	(1.142)	496703	75	1200
31 1,2,4-Trichlorobenzene	180.00	6.292	6.291	(0.993)	700324	82	1400
36 4-Chloro-3-methylphenol	107.00	7.398	7.476	(1.167)	890973	120	1900
49 Acenaphthene	153.00	9.114	9.124	(1.005)	1142636	70	1200
51 4-Nitrophenol	109.00	9.667	9.926	(1.066)	188991	96	1600
53 2,4-Dinitrotoluene	165.00	9.543	9.576	(1.052)	467432	79	1300
64 Pentachlorophenol	265.50	11.270	11.314	(0.989)	354404	110	1800
71 Pyrene	202.00	13.674	13.684	(0.875)	1341425	46	760

Data File: /chem1/h.i/h970303.b/h061tl2.d
Report Date: 04-Mar-1997 08:52

SPL Houston Labs

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: h.i
Lab File ID: h061tl2.d
Lab Smp Id: LCS
Analysis Type: SV
Quant Type: ISTD
Operator: LH
Method File: /chem1/h.i/h970303.b/h8270s.m
Misc Info: E061S1/H061B02/H06IC3

Calibration Date: 03/03/97
Calibration Time: 1456

Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	205085	102542	410170	341366	66.45
32 Naphthalene-d8	624249	312124	1248498	1114601	78.55
48 Acenaphthene-d10	329143	164572	658286	583308	77.22
65 Phenanthrene-d10	530319	265160	1060638	923250	74.09
76 Chrysene-d12	419980	209990	839960	644194	53.39
83 Perylene-d12	423952	211976	847904	671031	58.28

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	4.53	4.03	5.03	4.54	0.22
32 Naphthalene-d8	6.34	5.84	6.84	6.34	-0.02
48 Acenaphthene-d10	9.07	8.57	9.57	9.07	-0.02
65 Phenanthrene-d10	11.40	10.90	11.90	11.39	-0.01
76 Chrysene-d12	15.63	15.13	16.13	15.63	-0.01
83 Perylene-d12	17.77	17.27	18.27	17.77	-0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPL Contract:

Lab Code: Case No.: 9703006 SAS No.: SDG No.:

Matrix Spike - EPA Sample No.: 9702216-03B 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	1600	64	12-110
2-Chlorophenol	2500	0	1700	68	27-123
1,4-Dichlorobenzene	1600	0	1100	69	36- 97
N-Nitroso-di-n-prop.(1)	1600	0	1400	88	41-116
1,2,4-Trichlorobenzene	1600	0	1500	94	39- 98
4-Chloro-3-methylphenol	2500	0	2300	92	23- 97
Acenaphthene	1600	0	1300	81	46-118
4-Nitrophenol	2500	0	1800	72	30-150
2,4-Dinitrotoluene	1600	0	1900	119	50-150
Pentachlorophenol	2500	0	1200	48	9-103
Pyrene	1600	150	1400	78	26-127

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	2500	1600	64	0	42	12-110
2-Chlorophenol	2500	1700	68	0	40	27-123
1,4-Dichlorobenzene	1600	1100	69	0	28	36- 97
N-Nitroso-di-n-prop.(1)	1600	1500	94	7	38	41-116
1,2,4-Trichlorobenzene	1600	1500	94	0	28	39- 98
4-Chloro-3-methylphenol	2500	2200	88	4	42	23- 97
Acenaphthene	1600	1100	69	16	31	46-118
4-Nitrophenol	2500	1900	76	5	50	30-150
2,4-Dinitrotoluene	1600	1700	106	12	50	50-150
Pentachlorophenol	2500	1400	56	15	50	9-103
Pyrene	1600	1600	91	15	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: 0 out of 22 outside limits

BOE-C6-0109508

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/h970303.b/h8270sQ.m
Misc Info: E061S1/H061B02/H06IC3

Client SDG: h970303
Fraction: SV

Operator: LH
SampleType: MS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
5 Phenol	2500	1500	60.71	12-110
9 2-Chlorophenol	2500	1600	63.58	27-123
12 1,4-Dichlorobenzen	1600	1100	68.37	36-97
21 N-Nitroso-di-n-pro	1600	1200	78.51	41-116
31 1,2,4-Trichloroben	1600	1400	86.01	39-98
36 4-Chloro-3-methylp	2500	1900	76.73	23-97
49 Acenaphthene	1600	1200	72.75	46-118
51 4-Nitrophenol	2500	1600	63.81	30-150
53 2,4-Dinitrotoluene	1600	1300	82.23	50-150
64 Pentachlorophenol	2500	1800	72.59	9-103
71 Pyrene	1600	760	47.75	26-127

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 23 Nitrobenzene-d5	1600	1400	89.41	23-120
$ 41 2-Fluorobiphenyl	1600	1200	77.92	30-115
$ 72 Terphenyl-d14	1600	1200	75.80	18-137
$ 3 2-Fluorophenol	2500	1700	67.49	25-121
$ 4 Phenol-d5	2500	1600	65.58	24-113
$ 61 2,4,6-Tribromophen	2500	2600	104.41	19-122

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

9703006

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

INTEROFFICE SAMPLE TRANSFER
CHAIN-OF-CUSTODY FORM

PAGE 1 OF 1

ORIGINATING LAB: Fullerton RECEIVING LAB: Houston DATE: 2/28/97

ATTENTION: Brent Barron REPORT RESULTS TO: Mike Cassidy

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

CLIENT NAME: Montgomery Watson PROJECT #: 9702216 DATE NEEDED: 3/5/97

HEADING FOR ANALYSIS:	INVOICE TO:
COMPANY: Montgomery Watson	COMPANY: SPL-Fullerton
ADDRESS: 250 N. Madison Avenue	ADDRESS:
Pasadena, CA 91101	
ATTN: Nancy Matsumoto	ATTN: Mike C.

SAMPLE NO. IDENTIFICATION	DATE/TIME COLLECTED	LAB SAMPLE NUMBER	SAMPLE MATRIX	ANALYSES REQUESTED	QUOTED PRICE
	2/27/97 1700	9702216-01B	Soil	8270S/PRP64S	$205.00
	1705	9702216-02B			
	1710	9702216-03B			
					Intact

Box 3

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
1. [signature]	2/28/97	9:14	[signature]	3/1/97	1000
2.					

NOTES: Fed Ex # 392 5303 566

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No: 9702216

C- 02511

page 1 of 1

Client Name: MW

Address/Phone: 250 N. Madison Ave.

Client Contact: Fred Strauss

Project Name: MDRC C-6 Facility

Project Number: 1206035.01090010

Project Location: BLDG 37 Area

Invoice To: Fred Strauss

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)	Trib 22 Metals	VOCs (8260)	SVOCs (8270)					
B37-A11-4'	2-27-97	1700		X	S	6"x2" SS sleeve	~12oz	ICE	2	X	X	X	X					
B37-A13-4'	↓	1705		X	↓	↓	↓	↓	↓	↓	↓	↓	↓					
B37-A14-4'	↓	1710		X	↓	↓	↓	↓	↓	↓	↓	↓	↓					

Client/Consultant Remarks:

Laboratory remarks: * Standard TAT per Nancy Matsumoto 2/28/97, 0930 hrs

Intact? ☐ Y ☐ N

Temp:

Requested TAT

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		date	time
1. Relinquished by Sampler: Joshua Mann	2-27-97	1720	2. Received by:	2/28/97	
3. Relinquished by:			4. Received by:		
5. Relinquished by:			6. Received by Laboratory:		

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

☐ 45[illegible] 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 ( ) 447-6868

BOE-C6-0109512

SPL Fullerton Environmental Laboratory
Sample Receiving Checklist

SPL Workorder Number: 9702216

Date: 2/28/97 Time: 9:05

	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 2.0 °C

Samples Were Delivered by:

SPL Courier	G. Molano
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

SPL Houston Environmental Laboratory

Sample Login Checklist

Date: ~~3/8~~ 3/1/97	Time: 1100

SPL Sample ID: 9703006

			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:		3 C	
10	Method of sample delivery to SPL:	SPL Delivery		
		Client Delivery		
		FedEx Delivery (airbill #)	3925303566	
		Other:		
11	Method of sample disposal:	SPL Disposal	✓	
		HOLD		
		Return to Client		

Name: Amber Ethel	Date: 3/1/97

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

SPL, INC.

REPORT APPROVAL SHEET

WORK ORDER NUMBER: *97 - 04 - 101*

Approved for release by:

Joel Grice, Laboratory Manager — *Date:* 4/17/97

Michael J. Crisostomo, Project Manager — *Date:* 4-15-97

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

CASE NARRATIVE

SPL Workorder Number: 9704101

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 February 27, 1997, three (3) soil samples 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 February 28, 1997. The samples were received intact and within the 2°C - 6°C preservation temperature range.

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

On April 11, 1997, a fax transmittal was received requesting that sample B37-A14-4' be further analyzed under the WET guidelines since the TTLC values from initial determination of *cadmium* and *total chromium* were above the STLC limits.

The STLC leachate procedure was initiated on April 12, 1997, and the analysis of cadmium and total chromium was completed on April 14, 1997.

If you have any questions regarding information presented in this report please call me at (714) 447-6868. Please refer to workorder 9704101 to expedite service.

Michael J. Crisostomo
Project Manager

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

Certificate of Analysis No. 9704101

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: 4/15/97
Date(s) Received: 2/27/97
Date(s) Sampled: 2/27/97
Date(s) Analyzed: 4/14/97,4/12/97
Project Number: 12060350109001
Matrix: SOIL

Analyte	Units	EPA Method	B3-A14-4ft.
Cadmium, STLC Leachate	mg/L	6010 ***	ND<0.500
Chromium, STLC Leachate	mg/L	6010 ***	0.82
STLC Leachate Procedure	-	Title 22, App. II	04/12/97

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

** SPL QUALITY CONTROL REPORT **

Matrix:

Reported on: 04/15/97
Analyzed on: 04/14/97
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:

Chromium, STLC Leachate
METHOD 6010 ***

SPL Sample ID Number	Method Blank mg/L	Sample Result mg/L	Spike Added mg/L	Matrix Spike Result mg/L	Matrix Spike Recovery %	Matrix Spike Duplicate Result mg/L	Matrix Spike Duplicate Recovery %	RPD (%)	QC LIMITS (Advisory) RPD Max	QC LIMITS (Advisory) % REC
9704101-01A	ND	0.082	1.000	1.030	94.8	1.024	94.2	0.6	20	80 -120

ICPST041497 -9704029

Samples in batch:

9704101-01A

COMMENTS:

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

** SPL QUALITY CONTROL REPORT **

Matrix:

Reported on: 04/15/97
Analyzed on: 04/14/97
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:

Chromium, STLC Leachate
METHOD 6010 ***

SPL Sample ID Number	Blank Value mg/L	LCS Concentration mg/L	Measured Concentration mg/L	% Recovery	QC Limits Recovery
LCS	ND	1.000	0.998	99.8	80 - 120

ICPST041497 -9704029

Samples in batch:

9704101-01A

COMMENTS:

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

** SPL QUALITY CONTROL REPORT **

Matrix:

Reported on: 04/15/97
Analyzed on: 04/14/97
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:

Cadmium, STLC Leachate
METHOD 6010 ***

SPL Sample ID Number	Method Blank mg/L	Sample Result mg/L	Spike Added mg/L	Matrix Spike Result mg/L	Matrix Spike Recovery %	Matrix Spike Duplicate Result mg/L	Matrix Spike Duplicate Recovery %	RPD (%)	QC LIMITS (Advisory) RPD Max	QC LIMITS (Advisory) % REC
9704101-01A	ND	ND	1.000	0.984	98.4	0.976	97.6	0.8	20	80 -120

9704101-01A -9704030

Samples in batch:

9704101-01A

COMMENTS:

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

** SPL QUALITY CONTROL REPORT **

Matrix:

Reported on: 04/15/97
Analyzed on: 04/14/97
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:

Cadmium, STLC Leachate
METHOD 6010 ***

SPL Sample ID Number	Blank Value mg/L	LCS Concentration mg/L	Measured Concentration mg/L	% Recovery	QC Limits Recovery
LCS	ND	1.000	1.036	104	80 - 120

9704101-01A -9704030

Samples in batch:

9704101-01A

COMMENTS:

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

Privileged and Confidential 9704101

FAX

MONTGOMERY WATSON

250 North Madison Avenue
Pasadena, California 91101

Tel: 818 568 6508
Fax: 818 796 5941

Date: April 11, 1997

To:	Mike Crisostomo SPL	**Fax No:**	(714) 447-6800
From:	Nancy Matsumoto	**Reference:**	MDRC
Subject:	Additional Analysis Request, Soil Sample B37-A14-4'	**No. of Pages:** **(including cover)**	2

Please perform a California Waste Extraction Test (WET) on the following sample for cadium and total chromium:

B37-A14-4'

Copy of COC attached. 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: 9702216 7

C- 02511

page 1 of 1

Client Name: MW

Address/Phone: 250 N. Madison Ave

Client Contact: Fred Strauss

Project Name: MDRC C-6 Facility

Project Number: 1206035.01090010

Project Location: BLDG 37 area

Invoice To: Fred Strauss

Requested Analysis → Resubmitted for analysis to 9704101 to

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-A11-4'	2-27-97	1700		X	S	6"x2" SS sleeve	~120g	ICE	2	X	X	X	X				
B37-A13-4'	↓	1705		X	↓	↓	↓	↓	↓	↓	↓	↓	↓				
B37-A14-4'	↓	1710		X	↓	↓	↓	↓	↓	↓	↓	↓	↓				

Client/Consultant Remarks:

Laboratory remarks: * Standard TAT per Nancy Matsumoto 2/28/97, 0930 hrs

Intact? ☐ Y ☐ N

Temp:

Requested TAT: 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):

1. Relinquished by Sampler: Joshua Mann	date 2-27-97	time 1720	2. Received by: [signature] 2/28/97
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

APR-11-1997 14:49 MONTGOMERY WATSON 818 796 5541 P.02

TOTAL P.02

BOE-C6-0109525

SPL Fullerton Environmental Laboratory
Sample Receiving Checklist

SPL Workorder Number: 9704101 = Resubmitted for WET analysis from 9702216

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: _____

I:\data\forms\loginchk.wpd

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

SPL, INC.

REPORT APPROVAL SHEET

WORK ORDER NUMBER: 97 - 02 - 228

Approved for release by:

Joel Grice, Laboratory Manager — *Date:* 3/14/97

Michael J. Crisostomo, Project Manager — *Date:* 3-14-97

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

CASE NARRATIVE

SPL Workorder Number: 9702228

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 February 28, 1997, one (1) soil sample was received by the laboratory. The sample was received intact and within the 2°C - 6°C preservation temperature range.

The sample was analyzed as requested on the accompanying chain of custody record. Note that the SVOCs by 8270 were analyzed by SPL's Houston laboratory under workorder number 9703072.

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 several elements: antimony, arsenic, barium, cobalt, lead, nickel, selenium, silver, and thallium. 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.

If you have any questions regarding information presented in this report please call me at (714) 447-6868. Please refer to workorder 9702228 to expedite service.

Michael J. Crisostomo
Project Manager

Certificate of Analysis No. 9702228

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
Method: 418.1*

Report Date: 3/12/97
Date(s) Received: 2/28/97
Date(s) Sampled: 2/28/97
Date(s) Analyzed: 3/3/97
Project Number: 120603501090010
Matrix: SOIL

Units: mg/Kg

Sample ID	Petroleum Extractables
B37-A5-3ft.	56

Results reported at Practical Quantitation Limit 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. 9702228

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: 3/12/97
Date(s) Received: 2/28/97
Date(s) Sampled: 2/28/97
Date(s) Analyzed: 3/6/97,3/5/97,3/4/97
Project Number: 120603501090010
Matrix: SOIL

Analyte	Units	EPA Method	B37-A5-3ft.
Antimony, Total	mg/Kg	6010A***	ND<0.500
Arsenic, Total	mg/Kg	6010A***	ND<0.11
Barium, Total	mg/Kg	6010A***	122
Beryllium, Total	mg/Kg	6010A***	ND<0.06
Cadmium, Total	mg/Kg	6010A***	1.76
Chromium, Total	mg/Kg	6010A***	28
Cobalt, Total	mg/Kg	6010A***	9.05
Copper, Total	mg/Kg	6010A***	21.9
Digestion-Solids 3050A	N/A	3050A***	03/04/97
Lead, Total	mg/Kg	6010A***	15.6
Mercury Digestion in Soil	N/A	7471A***	03/04/97
Mercury, Total	mg/Kg	7471A***	ND<0.200
Molybdenum,Total	mg/Kg	6010A***	ND<2.50
Nickel, Total	mg/Kg	6010A ***	11.4
Selenium, Total	mg/Kg	6010A***	ND<5.00
Silver, Total	mg/Kg	6010A***	ND<5.00
Thallium, Total	mg/Kg	6010A***	ND<0.500
Ultrasonic Extraction 3550A	N/A	3550A	03/04/97
Vanadium, Total	mg/Kg	6010A***	31.6
Zinc, Total	mg/Kg	6010A***	65.7

Results reported at Practical Quantitation Limits unless otherwise specified.

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

Report Date: 3/12/97
Date(s) Received: 2/28/97
Date(s) Sampled: 2/28/97
Date(s) Analyzed: 3/4/97
Project Number: 120603501090010
Matrix: SOIL

Method: 8260 Soil, Volatile Organics

Units: UG/KG

Analyte	B37-A5-3ft.
Benzene	ND<5
Bromobenzene	ND<5
Bromochloromethane	ND<5
Bromodichloromethane	ND<5
Bromoform	ND<5
Bromomethane	ND<5
n-Butylbenzene	ND<5
sec-Butylbenzene	ND<5
tert-Butylbenzene	ND<5
Carbon tetrachloride	ND<5
Chlorobenzene	ND<5
Chlorodibromomethane	ND<5
Chloroethane	ND<5
Chloroform	ND<5
Chloromethane	ND<5
2-Chlorotoluene	ND<5
4-Chlorotoluene	ND<5
1,2-Dibromo-3-chloroprop	ND<5
1,2-Dibromoethane	ND<5
Dibromomethane	ND<5
1,2-Dichlorobenzene	ND<5
1,3-Dichlorobenzene	ND<5
1,4-Dichlorobenzene	ND<5
Dichlorodifluoromethane	ND<5
1,1-Dichloroethane	ND<5
1,2-Dichloroethane	ND<5
1,1-Dichloroethene	ND<5
cis-1,2-Dichloroethene	ND<5
trans-1,2-Dichloroethene	ND<5
1,2-Dichloropropane	ND<5
1,3-Dichloropropane	ND<5
2,2-Dichloropropane	ND<5
1,1-Dichloropropene	ND<5
Ethylbenzene	ND<5
Hexachlorobutadiene	ND<5
Isopropylbenzene	ND<5
p-Isopropyltoluene	ND<5
Methylene chloride	ND<5

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

Report Date: 3/12/97
Date(s) Received: 2/28/97
Date(s) Sampled: 2/28/97
Date(s) Analyzed: 3/4/97
Project Number: 120603501090010
Matrix: SOIL

Method: 8260 Soil, Volatile Organics

Units: UG/KG

Analyte	B37-A5-3ft.
Naphthalene	ND<5
n-Propylbenzene	ND<5
Styrene	ND<5
1,1,1,2-Tetrachloroethane	ND<5
1,1,2,2-Tetrachloroethane	ND<5
Tetrachloroethene	ND<5
Toluene	ND<5
1,2,3-Trichlorobenzene	ND<5
1,2,4-Trichlorobenzene	ND<5
1,1,1-Trichloroethane	ND<5
1,1,2-Trichloroethane	ND<5
Trichloroethene	ND<5
1,2,3-Trichloropropane	ND<5
1,2,4-Trimethylbenzene	ND<5
1,3,5-Trimethylbenzene	ND<5
Vinyl chloride	ND<5

Results reported at Practical Quantitation Limits unless otherwise specified.

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Certificate of Analysis No. 9702228

Client:	Montgomery Watson	**Report Date:**	3/7/97
Client Address:	250 N. Madison Avenue Pasadena, CA 91101	**Date(s) Received:**	2/28/97
		Date(s) Sampled:	2/28/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	3/4/97
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-A5-3ft.
Acenaphthene	ND<330
Acenaphthylene	ND<330
Aniline	ND<330
Anthracene	ND<330
Benzo (a) Anthracene	420
Benzo (b) Fluoranthene	460
Benzo (k) Fluoranthene	400
Benzo (a) Pyrene	540
Benzoic Acid	ND<1600
Benzo (g,h,i) Perylene	510
Benzyl alcohol	ND<330
4-Bromophenylphenyl ether	ND<330
Butylbenzylphthalate	ND<330
di-n-Butyl phthalate	ND<330
Carbazole	ND<330
4-Chloroaniline	ND<330
bis (2-Chloroethoxy) Methane	ND<330
bis (2-Chloroethyl) Ether	ND<330
bis (2-Chloroisopropyl) Ether	ND<330
4-Chloro-3-Methylphenol	ND<330
2-Chloronaphthalene	ND<330
2-Chlorophenol	ND<330
4-Chlorophenylphenyl ether	ND<330
Chrysene	510
Dibenz (a,h) Anthracene	ND<330
Dibenzofuran	ND<330
1,2-Dichlorobenzene	ND<330
1,3-Dichlorobenzene	ND<330
1,4-Dichlorobenzene	ND<330
3,3'-Dichlorobenzidine	ND<330
2,4-Dichlorophenol	ND<330
Diethylphthalate	ND<330
2,4-Dimethylphenol	ND<330
Dimethyl Phthalate	ND<330
4,6-Dinitro-2-Methylphenol	ND<800
2,4-Dinitrophenol	ND<800
2,4-Dinitrotoluene	ND<330
2,6-Dinitrotoluene	ND<330
1,2-Diphenylhydrazine	ND<330
bis (2-Ethylhexyl)Phthalate	ND<330

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Client:	Montgomery Watson	**Report Date:**	3/7/97
Client Address:	250 N. Madison Avenue Pasadena, CA 91101	**Date(s) Received:**	2/28/97
		Date(s) Sampled:	2/28/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	3/4/97
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-A5-3ft.
Fluoranthene	570
Fluorene	ND<330
Hexachlorobenzene	ND<330
Hexachlorobutadiene	ND<330
Hexachloroethane	ND<330
Hexachlorocyclopentadiene	ND<330
Indeno(1,2,3-cd)Pyrene	420
Isophorone	ND<330
2-Methylnaphthalene	ND<330
2-Methylphenol	ND<330
4-Methylphenol	ND<330
Napthalene	ND<330
2-Nitroaniline	ND<800
3-Nitroaniline	ND<800
4-Nitroaniline	ND<800
Nitrobenzene	ND<330
2-Nitrophenol	ND<330
4-Nitrophenol	ND<800
N-Nitrosodiphenylamine	ND<330
N-Nitroso-Di-n-Propylamine	ND<330
Di-n-Octyl Phthalate	ND<330
Pentachlorophenol	ND<800
Phenanthrene	ND<330
Phenol	ND<330
Pyrene	390
Pyridine	ND<330
1,2,4-Trichlorobenzene	ND<330
2,4,5-Trichlorophenol	ND<800
2,4,6-Trichlorophenol	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 LABORATORY
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** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 03/03/97
Analyzed on: 03/03/97
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
9702222-01A	ND	260	500	693	86.6	686	85.2	1.6	20	80 -120

PETHS030397 -9703001

Samples in batch:

9702222-01A 9702222-02A 9702227-01A 9702228-01A

COMMENTS:

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** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 03/03/97
Analyzed on: 03/03/97
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	482	96.4	80 - 120

PETHS030397 -9703001

Samples in batch:

9702222-01A 9702222-02A 9702227-01A 9702228-01A

COMMENTS:

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QUALITY CONTROL INFORMATION
METALS

MS/MSD Results

Date: 3/6/97
Sample ID: 9702226-14

Matrix: Soil
Includes: 9702215-1-2; 9702216-1-3; 9702227-1; 9702226-7-8, 11-13; 9702228-1; 9703017-1-3

Parameter	LMB	LCS Rec. (%)	Acceptability Range (%)	MS Rec. (%)		MSD Rec. (%)		Acceptability Range (%)	RPD	RPD Range (%)
Antimony, Sb	ND	103	84-117	56.1	**	57.1	**	80-120	1.8	20
Arsenic, As	ND	106	85-117	73.3	**	74.2	**	80-120	1.2	20
Barium, Ba	ND	103	62-136	77.8	**	76.2	**	80-120	2.0	20
Beryllium, Be	ND	102	85-111	85.4		84.9		80-120	0.5	20
Cadmium, Cd	ND	100	86-112	86.1		85.9		80-120	0.2	20
Chromium, Cr	ND	102	83-110	82.8		81.8		80-120	1.1	20
Cobalt, Co	ND	101	85-112	79.0	**	78.6	**	80-120	0.5	20
Copper, Cu	ND	102	84-111	88.2		86.6		80-120	1.9	20
Lead, Pb	ND	102	85-110	77.6	**	77.5	**	80-120	0.2	20
Molybdenum, Mo	ND	99.0	83-110	81.4		81.2		80-120	0.2	20
Nickel, Ni	ND	102	86-110	80.1		79.2	**	80-120	1.1	20
Selenium, Se	ND	102	84-111	74.9	**	73.9	**	80-120	1.3	20
Silver, Ag	ND	105	80-125	69.5	**	69.4	**	80-120	0.2	20
Thallium, Tl	ND	100	83-109	72.8	**	73.4	**	80-120	0.9	20
Vanadium, V	ND	101	84-109	86.5		84.6		80-120	2.2	20
Zinc, Zn	ND	106	88-117	88.9		86.8		80-120	2.3	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: 03/07/97
Analyzed on: 03/05/97
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
9702226-14A	ND	ND	.0010	.00104	104	.00102	102	1.9	20	80 -120

HGS030597 -9703020

Samples in batch:

9702205-01B	9702205-02B	9702205-03B	9702215-01A
9702215-02A	9702216-01A	9702216-02A	9702216-03A
9702226-07A	9702226-08A	9702226-11A	9702226-14A
9702227-01A	9702228-01A	9703017-01A	9703017-02A
9703017-03A	9703017-04A		

COMMENTS:

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** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 03/07/97
Analyzed on: 03/05/97
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	.0010	100	80 - 120

HGS030597 -9703020

ıples in batch:

9702205-01B	9702205-02B	9702205-03B	9702215-01A
9702215-02A	9702216-01A	9702216-02A	9702216-03A
9702226-07A	9702226-08A	9702226-11A	9702226-14A
9702227-01A	9702228-01A	9703017-01A	9703017-02A
9703017-03A	9703017-04A		

COMMENTS:

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QUALITY CONTROL INFORMATION

03/04/97

EPA 8240/8260 Compounds by EPA 8260 Method

9702215, 9702216, 9702226, 9702227, 9702228

Parameter	Laboratory Method Blank (ug/Kg)	Reporting Limits (ug/Kg)	LCS Rec. (%)	Acceptability Range (%)
Dichlorodifluoromethane	ND	5.0	122	70 - 130
Chloromethane	ND	5.0	122	70 - 130
Vinyl chloride	ND	5.0	110	70 - 130
Bromomethane	ND	5.0	110	70 - 130
Chloroethane	ND	5.0	106	70 - 130
Trichlorofluoromethane	ND	5.0	106	70 - 130
Acrolein	ND	50	90	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	50	NA	70 - 130
Acetone	ND	100	96	70 - 130
1,1-Dichloroethene	ND	5.0	94	70 - 130
Acetonitrile	ND	50	NA	70 - 130
Iodomethane	ND	5.0	104	70 - 130
Allyl chloride	ND	50	NA	70 - 130
Methylene chloride	ND	5.0	94	70 - 130
Carbon disulfide	ND	5.0	96	70 - 130
Acrylonitrile	ND	50	110	70 - 130
2-Methoxy-2-methylpropane	ND	5.0	98	70 - 130
trans-1,2-dichloroethene	ND	5.0	96	70 - 130
Vinyl acetate	ND	10	90	70 - 130
1,1-Dichloroethane	ND	5.0	98	70 - 130
2-Butanone	ND	10	92	70 - 130
Propionitrile	ND	50	NA	70 - 130
2,2-Dichloropropane	ND	5.0	92	70 - 130
cis-1,2-dichloroethene	ND	5.0	102	70 - 130
Methacrylonitrile	ND	50	NA	70 - 130
Isobutyl alcohol	ND	100	NA	70 - 130
Chloroform	ND	5.0	96	70 - 130
Bromochloromethane	ND	5.0	102	70 - 130
1,1,1-Trichloroethane	ND	5.0	94	70 - 130
1,1-Dichloropropene	ND	5.0	100	70 - 130
Carbon tetrachloride	ND	5.0	98	70 - 130
1,2-Dichloroethane	ND	5.0	96	70 - 130
Benzene	ND	5.0	102	70 - 130
Trichloroethene	ND	5.0	100	70 - 130

ND = Not Detected

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QUALITY CONTROL INFORMATION

03/04/97

EPA 8240/8260 Compounds by EPA 8260 Method

9702215, 9702216, 9702226, 9702227, 9702228

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	102	70 - 130
1,4-Dioxane	ND	100	NA	70 - 130
Bromodichloromethane	ND	5.0	96	70 - 130
Dibromomethane	ND	5.0	100	70 - 130
2-Chloroethyl vinyl ether	ND	10	126	70 - 130
4-Methyl-2-pentanone	ND	10	114	70 - 130
cis-1,3-Dichloropropene	ND	5.0	104	70 - 130
Toluene	ND	5.0	106	70 - 130
Ethyl methacrylate	ND	50	NA	70 - 130
trans-1,3-Dichloropropene	ND	5.0	100	70 - 130
2-Hexanone	ND	10	98	70 - 130
1,1,2-trichloroethane	ND	5.0	102	70 - 130
1,2-Dibromoethane	ND	5.0	100	70 - 130
1,3-Dichloropropane	ND	5.0	104	70 - 130
Tetrachloroethene	ND	5.0	108	70 - 130
Dibromochloromethane	ND	5.0	102	70 - 130
Chlorobenzene	ND	5.0	110	70 - 130
1,1,1,2-Tetrachloroethane	ND	5.0	104	70 - 130
Ethylbenzene	ND	5.0	114	70 - 130
m,p-Xylene	ND	5.0	117	70 - 130
o-Xylene	ND	5.0	116	70 - 130
Styrene	ND	5.0	118	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	106	70 - 130
1,1,2,2-Tetrachloroethane	ND	5.0	96	70 - 130
1,2,3-Trichloropropane	ND	5.0	96	70 - 130
n-Propylbenzene	ND	5.0	104	70 - 130

ND = Not Detected

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QUALITY CONTROL INFORMATION

03/04/ 97

EPA 8240/8260 Compounds by EPA 8260 Method

9702215, 9702216, 9702226, 9702227, 9702228

Parameter	Laboratory Method Blank (ug/Kg)	Reporting Limits (ug/Kg)	LCS Rec. (%)	Acceptability Range (%)
Bromobenzene	ND	5.0	106	70 - 130
1,3,5-Trimethylbenzene	ND	5.0	112	70 - 130
2-Chlorotoluene	ND	5.0	104	70 - 130
4-Chlorotoluene	ND	5.0	104	70 - 130
tert-Butylbenzene	ND	5.0	104	70 - 130
1,2,4-Trimethylbenzene	ND	5.0	112	70 - 130
sec-Butylbenzene	ND	5.0	104	70 - 130
p-Isopropyltoluene	ND	5.0	106	70 - 130
1,3-Dichlorobenzene	ND	5.0	100	70 - 130
1,4-Dichlorobenzene	ND	5.0	100	70 - 130
n-Butylbenzene	ND	5.0	100	70 - 130
1,2-Dichlorobenzene	ND	5.0	98	70 - 130
1,2-Dibromo-3-chloropropane	ND	5.0	86	70 - 130
1,2,4-Trichlorobenzene	ND	5.0	82	70 - 130
Hexachlorobutadiene	ND	5.0	88	70 - 130
Naphthalene	ND	5.0	90	70 - 130
1,2,3-Trichlorobenzene	ND	5.0	90	70 - 130
DBFM Surrogate Rec. (%)	90	----	94	60 - 140
Toluene-d8 Surrogate Rec. (%)	101	----	101	60 - 140
BFB Surrogate Rec. (%)	82	----	119	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

03/04/97

EPA 8240/8260 Compounds by EPA 8260 Method

9702215, 9702216, 9702226, 9702227, 9702228

Sample Spiked: 9702215-01A

Parameter	MS Recovery (%)	MSD Recovery (%)	RPD	Acceptability Range (%)	RPD Range (%)
1,1-Dichloroethene	103	99	4.0	70 - 130	30
Benzene	101	101	0.0	70 - 130	30
Trichloroethene	97	98	1.0	70 - 130	30
Toluene	96	96	0.0	70 - 130	30
Chlorobenzene	95	95	0.0	70 - 130	30
DBFM Surrogate Rec. (%)	94	95	---	60 - 140	---
Toluene-d8 Surrogate Rec. (%)	98	100	---	60 - 140	---
BFB Surrogate Rec. (%)	119	123	---	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: E970304044703

Reported on: 03/06/97 16:33
Analyzed on: 03/04/97 16:58
Analyst: LH

METHOD 8270 BLANK H063B02

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) 660-0901

SPL Blank QC Report

Matrix: Soil
Sample ID: BLANK
Batch: E970304044703

Reported on: 03/06/97 16:33
Analyzed on: 03/04/97 16:58
Analyst: LH

METHOD 8270 BLANK H063B02

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: E970304044703

Reported on: 03/06/97 16:33
Analyzed on: 03/04/97 16:58
Analyst: LH

METHOD 8270 BLANK H063B02

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

Surrogate	Result	QC Criteria	Units
Nitrobenzene-d5	96	23-120	% Recovery
2-Fluorobiphenyl	91	30-115	% Recovery
Terphenyl-d14	80	18-137	% Recovery
Phenol-d5	71	24-113	% Recovery
2-Fluorophenol	70	25-121	% Recovery
2,4,6-Tribromophenol	101	19-122	% Recovery

Samples in Batch 9703072-01

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/h970303.b/h8270sQ.m
Misc Info: E061S1/H061B02/H06IC3

Client SDG: h970303
Fraction: SV

Operator: LH
SampleType: MS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
5 Phenol	2500	1500	60.71	12-110
9 2-Chlorophenol	2500	1600	63.58	27-123
12 1,4-Dichlorobenzen	1600	1100	68.37	36-97
21 N-Nitroso-di-n-pro	1600	1200	78.51	41-116
31 1,2,4-Trichloroben	1600	1400	86.01	39-98
36 4-Chloro-3-methylp	2500	1900	76.73	23-97
49 Acenaphthene	1600	1200	72.75	46-118
51 4-Nitrophenol	2500	1600	63.81	30-150
53 2,4-Dinitrotoluene	1600	1300	82.23	50-150
64 Pentachlorophenol	2500	1800	72.59	9-103
71 Pyrene	1600	760	47.75	26-127

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 23 Nitrobenzene-d5	1600	1400	89.41	23-120
$ 41 2-Fluorobiphenyl	1600	1200	77.92	30-115
$ 72 Terphenyl-d14	1600	1200	75.80	18-137
$ 3 2-Fluorophenol	2500	1700	67.49	25-121
$ 4 Phenol-d5	2500	1600	65.58	24-113
$ 61 2,4,6-Tribromophen	2500	2600	104.41	19-122

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPL Contract:

Lab Code: Case No.: 9703006 SAS No.: SDG No.:

Matrix Spike - EPA Sample No.: 9702216-03B 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	1600	64	12-110
2-Chlorophenol	2500	0	1700	68	27-123
1,4-Dichlorobenzene	1600	0	1100	69	36- 97
N-Nitroso-di-n-prop.(1)	1600	0	1400	88	41-116
1,2,4-Trichlorobenzene	1600	0	1500	94	39- 98
4-Chloro-3-methylphenol	2500	0	2300	92	23- 97
Acenaphthene	1600	0	1300	81	46-118
4-Nitrophenol	2500	0	1800	72	30-150
2,4-Dinitrotoluene	1600	0	1900	119	50-150
Pentachlorophenol	2500	0	1200	48	9-103
Pyrene	1600	150	1400	78	26-127

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	2500	1600	64	0	42	12-11
2-Chlorophenol	2500	1700	68	0	40	27-12
1,4-Dichlorobenzene	1600	1100	69	0	28	36- 97
N-Nitroso-di-n-prop.(1)	1600	1500	94	7	38	41-116
1,2,4-Trichlorobenzene	1600	1500	94	0	28	39- 98
4-Chloro-3-methylphenol	2500	2200	88	4	42	23- 97
Acenaphthene	1600	1100	69	16	31	46-118
4-Nitrophenol	2500	1900	76	5	50	30-150
2,4-Dinitrotoluene	1600	1700	106	12	50	50-150
Pentachlorophenol	2500	1400	56	15	50	9-103
Pyrene	1600	1600	91	15	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: 0 out of 22 outside limits

BOE-C6-0109549

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

FED-EX 3925303602

9703072

SPL

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

INTEROFFICE SAMPLE TRANSFER CHAIN-OF-CUSTODY FORM

PAGE 1 OF 1

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

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

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

CLIENT NAME: Montgomery Water PROJECT #: 9702228 DATE NEEDED: 3/6/97

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
	2/28/97 14:20	9702228-01B	Soil	8270/PRPGMS	$205.00

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
1. [illegible]	3/3/97	1014	S. West	3/4/97	1000
2.					

NOTES: 5°C

BOE-C6-0109551

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No: 9702228

C- 02512

page 1 of 1

Client Name: Montgomery - Watson

Address/Phone: 250 N. Madison Ave.

Client Contact: Fred Strauss

Project Name: C-6 Facility

Project Number: 1266035 01090010

Project Location: 17503 S. Normandie Ave. Torrance, CA

Invoice To: Fred Strauss

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)	VOCs 8260	SVOCs 8270	Title 22 metals					
B37-A5-3'	2-28-97	1420		X	S	1 x 6" SS Sleeve	~12oz	Ice	2	X	X	X	X					

Client/Consultant Remarks:

Laboratory remarks:

Intact? ☑ Y ☐ N

Temp: 2.0

Requested TAT

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):

1. Relinquished by Sampler: [signature]	date 2-28-97	time 1645	2. Received by: [signature] 2/28/97 @ 18:2
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

☐ 45(ghes 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 (447-6868

BOE-C6-0109552

SPL Houston Environmental Laboratory

Sample Login Checklist

Date:	Time:
3/4/97	1000

SPL Sample ID:
9703072

			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:		5° C	
10	Method of sample delivery to SPL:	SPL Delivery		
		Client Delivery		
		FedEx Delivery (airbill #)	3925803602	
		Other:		
11	Method of sample disposal:	SPL Disposal	✓	
		HOLD		
		Return to Client		

Name:	Date:
L. West	3/4/97

SPL Fullerton Environmental Laboratory
Sample Receiving Checklist

SPL Workorder Number: 9702228

Date: 2-28-97 Time: 18:20

	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 2.0 °C

Samples Were Delivered by:

SPL Courier	G. Molano
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

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

SPL, INC.

REPORT APPROVAL SHEET

WORK ORDER NUMBER: *97 - 02 - 118*

Approved for release by:

Joel Grice, Laboratory Manager — *Date:* 2/27/97

Michael J. Crisostomo, Project Manager — *Date:* 2-26-97

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

CASE NARRATIVE

SPL Workorder Number: 9702118

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 February 14, 1997, two (2) soil samples were received by the laboratory. 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.

On February 19, 1997, instructions were received to analyze samples B37-GS-33 and B37-GS-34 by EPA Methods 8260 and 8270. The results of these additional analyses are presented under this SPL workorder.

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 the following elements: antimony, thallium and zinc. 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.

If you have any questions regarding information presented in this report please call me at (714) 447-6868. Please refer to workorder 9702118 to expedite service.

Michael J. Crisostomo
Project Manager

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

Certificate of Analysis No. 9702118

Client: Montgomery Watson
Client Address: 250 N. Madison Avenue
Pasadena CA 91101
Attention: Nancy Matsumoto
Project Name MDRC C-6 Facility
Site: Bldg. 37 Area, Torrance, CA
Method: 418.1*

Report Date: 2/26/97
Date(s) Received: 2/14/97
Date(s) Sampled: 2/14/97
Date(s) Analyzed: 2/17/97
Project Number: 120603501090010
Matrix: SOIL

Units: mg/Kg

Sample ID	Petroleum Extractables
B37-GS-33	9900
B37-GS-34	4600

Results reported at Practical Quantitation Limit 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.

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

Certificate of Analysis No. 9702118

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

Report Date: 2/26/97
Date(s) Received: 2/14/97
Date(s) Sampled: 2/14/97
Date(s) Analyzed: 2/21/97,2/20/97,2/18/9
Project Number: 12060350109001
Matrix: SOIL

Analyte	Units	EPA Method	B37-GS-33	B37-GS-34
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***	52.5	35.6
Beryllium, Total	mg/Kg	6010A***	ND<0.06	ND<0.06
Cadmium, Total	mg/Kg	6010A***	ND<0.05	ND<0.05
Chromium, Total	mg/Kg	6010A***	7.02	6.15
Cobalt, Total	mg/Kg	6010A***	3.41	ND<2.50
Copper, Total	mg/Kg	6010A***	7.42	4.79
Digestion-Solids 3050A	N/A	3050A***	02/17/97	02/17/97
Lead, Total	mg/Kg	6010A***	3.14	1.94
Mercury Digestion in Soil	N/A	7471A***	02/21/97	02/21/97
Mercury, Total	mg/Kg	7471A***	ND<0.200	ND<0.200
Molybdenum,Total	mg/Kg	6010A***	ND<2.50	ND<2.50
Nickel, Total	mg/Kg	6010A ***	5.09	ND<5.00
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***	ND<0.500	ND<0.500
Ultrasonic Extraction 3550A	N/A	3550A	02/20/97	02/20/97
Vanadium, Total	mg/Kg	6010A***	13.6	11.2
Zinc, Total	mg/Kg	6010A***	18.7	29.8

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.

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

SPL California License Number 2178

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

Certificate of Analysis No. 9702118

Client:	Montgomery Watson	**Report Date:**	2/26/97
Client Address:	250 N. Madison Avenue	**Date(s) Received:**	2/14/97
	Pasadena, CA 91101	**Date(s) Sampled:**	2/14/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	2/20/97
Project Name	MDRC C-6 Facility	**Project Number:**	120603501090010
Site:	Bldg. 37 Area, Torrance, CA	**Matrix:**	SOIL
Method:	8260 Soil, Volatile Organics	**Units:**	UG/KG

Analyte	B37-GS-33	B37-GS-34
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	ND<5	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

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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FULLERTON, CA 92831
PHONE (714) 447-6868

Certificate of Analysis No. 9702118

Client:	Montgomery Watson	**Report Date:**	2/26/97
Client Address:	250 N. Madison Avenue	**Date(s) Received:**	2/14/97
	Pasadena, CA 91101	**Date(s) Sampled:**	2/14/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	2/20/97
Project Name	MDRC C-6 Facility	**Project Number:**	120603501090010
Site:	Bldg. 37 Area, Torrance, CA	**Matrix:**	SOIL
Method:	8260 Soil, Volatile Organics	**Units:**	UG/KG

Analyte	B37-GS-33	B37-GS-34
1,1,1,2-Tetrachloroethane	ND<5	ND<5
Ethylbenzene	ND<5	ND<5
m,p-Xylene	ND<5	5.7
o-Xylene	ND<5	ND<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	40
2-Chlorotoluene	ND<5	ND<5
4-Chlorotoluene	ND<5	ND<5
tert-Butylbenzene	ND<5	ND<5
1,2,4-Trimethylbenzene	ND<5	90
sec-Butylbenzene	ND<5	ND<5
p-Isopropyltoluene	ND<5	8.6
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	70
1,2,3-Trichlorobenzene	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

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

Certificate of Analysis No. 9702118

Client:	Montgomery Watson	**Report Date:**	2/25/97
Client Address:	250 N. Madison Avenue Pasadena, CA 91101	**Date(s) Received:**	2/14/97
		Date(s) Sampled:	2/14/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	2/21/97
Project Name:	MDRC C6-Facility	**Project Number:**	120603501090010
Site:	Bldg. 37 Area, Torrance, CA	**Matrix:**	SOIL
Method:	8270 Soil, Semivolatile Organics	**Units:**	ug/Kg

Analyte	B37-GS-33	B37-GS-34
Acenaphthene	ND<6600	ND<3300
Acenaphthylene	ND<6600	ND<3300
Aniline	ND<6600	ND<3300
Anthracene	ND<6600	ND<3300
Benzo (a) Anthracene	ND<6600	ND<3300
Benzo (b) Fluoranthene	ND<6600	ND<3300
Benzo (k) Fluoranthene	ND<6600	ND<3300
Benzo (a) Pyrene	ND<6600	ND<3300
Benzoic Acid	ND<32000	ND<16000
Benzo (g,h,i) Perylene	ND<6600	ND<3300
Benzyl alcohol	ND<6600	ND<3300
4-Bromophenylphenyl ether	ND<6600	ND<3300
Butylbenzylphthalate	ND<6600	ND<3300
di-n-Butyl phthalate	ND<6600	ND<3300
Carbazole	ND<6600	ND<3300
4-Chloroaniline	ND<6600	ND<3300
bis (2-Chloroethoxy) Methane	ND<6600	ND<3300
bis (2-Chloroethyl) Ether	ND<6600	ND<3300
bis (2-Chloroisopropyl) Ether	ND<6600	ND<3300
4-Chloro-3-Methylphenol	7500	ND<3300
2-Chloronaphthalene	ND<6600	ND<3300
2-Chlorophenol	ND<6600	ND<3300
4-Chlorophenylphenyl ether	ND<6600	ND<3300
Chrysene	ND<6600	ND<3300
Dibenz (a,h) Anthracene	ND<6600	ND<3300
Dibenzofuran	ND<6600	ND<3300
1,2-Dichlorobenzene	ND<6600	ND<3300
1,3-Dichlorobenzene	ND<6600	ND<3300
1,4-Dichlorobenzene	ND<6600	ND<3300
3,3'-Dichlorobenzidine	ND<6600	ND<3300
2,4-Dichlorophenol	ND<6600	ND<3300
Diethylphthalate	ND<6600	ND<3300
2,4-Dimethylphenol	ND<6600	ND<3300

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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FULLERTON, CA 92831
PHONE (714) 447-6868

Certificate of Analysis No. 9702118

Client:	Montgomery Watson	**Report Date:**	2/25/97
Client Address:	250 N. Madison Avenue	**Date(s) Received:**	2/13/97
	Pasadena, CA 91101	**Date(s) Sampled:**	2/13/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	2/21/97
Project Name:	MDRC C6-Facility	**Project Number:**	120603501090010
Site:	Bldg. 37 Area, Torrance, CA	**Matrix:**	SOIL
Method:	8270 Soil, Semivolatile Organics	**Units:**	ug/Kg

Analyte	B37-GS-33	B37-GS-34
Dimethyl Phthalate	ND<6600	ND<3300
4,6-Dinitro-2-Methylphenol	ND<16000	ND<8000
2,4-Dinitrophenol	ND<16000	ND<8000
2,4-Dinitrotoluene	ND<6600	ND<3300
2,6-Dinitrotoluene	ND<6600	ND<3300
1,2-Diphenylhydrazine	ND<6600	ND<3300
bis (2-Ethylhexyl)Phthalate	210000	4600
Fluoranthene	ND<6600	ND<3300
Fluorene	ND<6600	ND<3300
Hexachlorobenzene	ND<6600	ND<3300
Hexachlorobutadiene	ND<6600	ND<3300
Hexachloroethane	ND<6600	ND<3300
Hexachlorocyclopentadiene	ND<6600	ND<3300
Indeno(1,2,3-cd)Pyrene	ND<6600	ND<3300
Isophorone	ND<6600	ND<3300
2-Methylnaphthalene	ND<6600	ND<3300
2-Methylphenol	ND<6600	ND<3300
4-Methylphenol	ND<6600	ND<3300
Napthalene	ND<6600	ND<3300
2-Nitroaniline	ND<16000	ND<8000
3-Nitroaniline	ND<16000	ND<8000
4-Nitroaniline	ND<16000	ND<8000
Nitrobenzene	ND<6600	ND<3300
2-Nitrophenol	ND<6600	ND<3300
4-Nitrophenol	ND<16000	ND<8000
N-Nitrosodiphenylamine	ND<6600	ND<3300
N-Nitroso-Di-n-Propylamine	ND<6600	ND<3300
Di-n-Octyl Phthalate	ND<6600	ND<3300
Pentachlorophenol	ND<16000	ND<8000
Phenanthrene	ND<6600	ND<3300
Phenol	ND<6600	ND<3300
Pyrene	ND<6600	ND<3300
Pyridine	ND<6600	ND<3300
1,2,4-Trichlorobenzene	ND<6600	ND<3300
2,4,5-Trichlorophenol	ND<16000	ND<8000
2,4,6-Trichlorophenol	ND<6600	ND<3300

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/17/97
Analyzed on: 02/17/97
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
9702111-01A	ND	140	500	569	85.8	557	83.4	2.8	20	80 -120

PETHS021797 -9702030

Samples in batch:

9702111-01A 9702118-01A 9702118-02A

COMMENTS:

FULLERTON LABORATORY
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** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/17/97
Analyzed on: 02/17/97
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	458	91.6	80 - 120

PETHS021797 -9702030

Samples in batch:

9702111-01A 9702118-01A 9702118-02A

COMMENTS:

FULLERTON LABORATORY
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QUALITY CONTROL INFORMATION

02/20/97

EPA 8240/8260 Compounds by EPA 8260 Method

9702112, 9702118, 9702136, 9702121

Parameter	Laboratory Method Blank (ug/Kg)	Reporting Limits (ug/Kg)	LCS Rec. (%)	Acceptability Range (%)
Dichlorodifluoromethane	ND	5.0	130	70 - 130
Chloromethane	ND	5.0	130	70 - 130
Vinyl chloride	ND	5.0	110	70 - 130
Bromomethane	ND	5.0	106	70 - 130
Chloroethane	ND	5.0	108	70 - 130
Trichlorofluoromethane	ND	5.0	104	70 - 130
Acrolein	ND	50	78	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	50	NA	70 - 130
Acetone	ND	100	94	70 - 130
1,1-Dichloroethene	ND	5.0	96	70 - 130
Acetonitrile	ND	50	NA	70 - 130
Iodomethane	ND	5.0	104	70 - 130
Allyl chloride	ND	50	NA	70 - 130
Methylene chloride	ND	5.0	92	70 - 130
Carbon disulfide	ND	5.0	94	70 - 130
Acrylonitrile	ND	50	114	70 - 130
2-Methoxy-2-methylpropane	ND	5.0	104	70 - 130
trans-1,2-dichloroethene	ND	5.0	94	70 - 130
Vinyl acetate	ND	10	92	70 - 130
1,1-Dichloroethane	ND	5.0	96	70 - 130
2-Butanone	ND	10	92	70 - 130
Propionitrile	ND	50	NA	70 - 130
2,2-Dichloropropane	ND	5.0	90	70 - 130
cis-1,2-dichloroethene	ND	5.0	102	70 - 130
Methacrylonitrile	ND	50	NA	70 - 130
Isobutyl alcohol	ND	100	NA	70 - 130
Chloroform	ND	5.0	94	70 - 130
Bromochloromethane	ND	5.0	100	70 - 130
1,1,1-Trichloroethane	ND	5.0	90	70 - 130
1,1-Dichloropropene	ND	5.0	98	70 - 130
Carbon tetrachloride	ND	5.0	90	70 - 130
1,2-Dichloroethane	ND	5.0	88	70 - 130
Benzene	ND	5.0	98	70 - 130
Trichloroethene	ND	5.0	96	70 - 130

ND = Not Detected

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QUALITY CONTROL INFORMATION

02/20/97

EPA 8240/8260 Compounds by EPA 8260 Method

9702112, 9702118, 9702136, 9702121

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	98	70 - 130
1,4-Dioxane	ND	100	NA	70 - 130
Bromodichloromethane	ND	5.0	92	70 - 130
Dibromomethane	ND	5.0	94	70 - 130
2-Chloroethyl vinyl ether	ND	10	130	70 - 130
4-Methyl-2-pentanone	ND	10	114	70 - 130
cis-1,3-Dichloropropene	ND	5.0	100	70 - 130
Toluene	ND	5.0	102	70 - 130
Ethyl methacrylate	ND	50	NA	70 - 130
trans-1,3-Dichloropropene	ND	5.0	96	70 - 130
2-Hexanone	ND	10	98	70 - 130
1,1,2-trichloroethane	ND	5.0	96	70 - 130
1,2-Dibromoethane	ND	5.0	96	70 - 130
1,3-Dichloropropane	ND	5.0	100	70 - 130
Tetrachloroethene	ND	5.0	96	70 - 130
Dibromochloromethane	ND	5.0	94	70 - 130
Chlorobenzene	ND	5.0	102	70 - 130
1,1,1,2-Tetrachloroethane	ND	5.0	96	70 - 130
Ethylbenzene	ND	5.0	108	70 - 130
m,p-Xylene	ND	5.0	110	70 - 130
o-Xylene	ND	5.0	110	70 - 130
Styrene	ND	5.0	112	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	112	70 - 130
1,1,2,2-Tetrachloroethane	ND	5.0	98	70 - 130
1,2,3-Trichloropropane	ND	5.0	98	70 - 130
n-Propylbenzene	ND	5.0	110	70 - 130

ND = Not Detected

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QUALITY CONTROL INFORMATION

02/20/ 97

EPA 8240/8260 Compounds by EPA 8260 Method

9702112, 9702118, 9702136, 9702121

Parameter	Laboratory Method Blank (ug/Kg)	Reporting Limits (ug/Kg)	LCS Rec. (%)	Acceptability Range (%)
Bromobenzene	ND	5.0	106	70 - 130
1,3,5-Trimethylbenzene	ND	5.0	116	70 - 130
2-Chlorotoluene	ND	5.0	104	70 - 130
4-Chlorotoluene	ND	5.0	104	70 - 130
tert-Butylbenzene	ND	5.0	108	70 - 130
1,2,4-Trimethylbenzene	ND	5.0	118	70 - 130
sec-Butylbenzene	ND	5.0	108	70 - 130
p-Isopropyltoluene	ND	5.0	108	70 - 130
1,3-Dichlorobenzene	ND	5.0	100	70 - 130
1,4-Dichlorobenzene	ND	5.0	100	70 - 130
n-Butylbenzene	ND	5.0	102	70 - 130
1,2-Dichlorobenzene	ND	5.0	100	70 - 130
1,2-Dibromo-3-chloropropane	ND	5.0	86	70 - 130
1,2,4-Trichlorobenzene	ND	5.0	82	70 - 130
Hexachlorobutadiene	ND	5.0	80	70 - 130
Naphthalene	ND	5.0	92	70 - 130
1,2,3-Trichlorobenzene	ND	5.0	84	70 - 130
DBFM Surrogate Rec. (%)	116	----	94	60 - 140
Toluene-d8 Surrogate Rec. (%)	102	----	102	60 - 140
BFB Surrogate Rec. (%)	77	----	117	60 - 140

LCS = Laboratory Control Sample
ND = Not Detected

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QUALITY CONTROL INFORMATION

02/20/97

EPA 8240/8260 Compounds by EPA 8260 Method

9702112, 9702118, 9702136, 9702121

Sample Spiked: 9702112-01A

Parameter	MS Recovery (%)	MSD Recovery (%)	RPD	Acceptability Range (%)	RPD Range (%)
1,1-Dichloroethene	90	89	1.1	70 - 130	30
Benzene	96	96	0.0	70 - 130	30
Trichloroethene	94	98	4.2	70 - 130	30
Toluene	98	94	4.2	70 - 130	30
Chlorobenzene	96	93	3.2	70 - 130	30
DBFM Surrogate Rec. (%)	84	90	---	60 - 140	---
Toluene-d8 Surrogate Rec. (%)	104	101	---	60 - 140	---
BFB Surrogate Rec. (%)	110	106	---	60 - 140	---

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

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QUALITY CONTROL INFORMATION
METALS

MS/MSD Results

Date: 2/18/97
Sample ID: 9702104-1

Matrix: Soil
Includes: 9702104-1,3,4,6; 9702080-1; 9702102-1-4; 9702118-1-2; 9702111-1; 9702112-1

Parameter	LMB	LCS Recovery (%)	MS Recovery (%)		MSD Recovery (%)		*Acceptability Range (%)	RPD	RPD Range (%)
Antimony, Sb	ND	96	57	**	60	**	80-120	5.7	20
Arsenic, As	ND	98	84		88		80-120	4.4	20
Barium, Ba	ND	96	82		91		80-120	10	20
Beryllium, Be	ND	92	85		90		80-120	4.9	20
Cadmium, Cd	ND	95	85		91		80-120	5.7	20
Chromium, Cr	ND	96	84		103		80-120	20	20
Cobalt, Co	ND	94	80		86		80-120	6.9	20
Copper, Cu	ND	97	92		102		80-120	10	20
Lead, Pb	ND	92	81		86		80-120	6.3	20
Molybdenum, Mo	ND	94	84		89		80-120	5.9	20
Nickel, Ni	ND	96	82		89		80-120	7.8	20
Selenium, Se	ND	90	80		85		80-120	5.5	20
Silver, Ag	ND	106	89		98		80-120	10	20
Thallium, Tl	ND	94	77	**	80		80-120	3.8	20
Vanadium, V	ND	94	86		94		80-120	9.0	20
Zinc, Zn	ND	99	74	**	84		80-120	13	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

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** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/24/97
Analyzed on: 02/21/97
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
9702121-03A	ND	ND	.0010	.00097	97.0	.00097	97.0	0	20	80 -120

HGS022197 -9702044

Samples in batch:

9702118-01A	9702118-02A	9702121-01A	9702121-02A
9702121-03A	9702121-04A	9702121-05A	9702121-06A
9702125-01A	9702136-01A	9702139-01A	9702139-02A
9702148-01A	9702153-01A	9702153-02A	9702153-03A

COMMENTS:

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/24/97
Analyzed on: 02/21/97
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	0.00097	97.0	80 - 120

HGS022197 -9702044

Samples in batch:

9702118-01A	9702118-02A	9702121-01A	9702121-02A
9702121-03A	9702121-04A	9702121-05A	9702121-06A
9702125-01A	9702136-01A	9702139-01A	9702139-02A
9702148-01A	9702153-01A	9702153-02A	9702153-03A

COMMENTS:

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPL Contract:

Lab Code: Case No.:9702165 SAS No.: SDG No.:

Matrix Spike - EPA Sample No.:1222-GVD-HA 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	1500	60	27-123
1,4-Dichlorobenzene	1600	0	1100	69	36- 97
N-Nitroso-di-n-prop.(1)	1600	0	1800	112	41-116
1,2,4-Trichlorobenzene	1600	0	1400	88	39- 98
4-Chloro-3-methylphenol	2500	0	2000	80	23- 97
Acenaphthene	1600	0	1300	81	46-118
4-Nitrophenol	2500	0	1500	60	30-150
2,4-Dinitrotoluene	1600	0	1500	94	50-150
Pentachlorophenol	2500	0	2100	84	9-103
Pyrene	1600	0	970	61	26-127

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	2500	1900	76	0	42	12-110
2-Chlorophenol	2500	1400	56	7	40	27-123
1,4-Dichlorobenzene	1600	1100	69	0	28	36- 97
N-Nitroso-di-n-prop.(1)	1600	1800	112	0	38	41-116
1,2,4-Trichlorobenzene	1600	1400	88	0	28	39- 98
4-Chloro-3-methylphenol	2500	2000	80	0	42	23- 97
Acenaphthene	1600	1300	81	0	31	46-118
4-Nitrophenol	2500	1500	60	0	50	30-150
2,4-Dinitrotoluene	1600	1500	94	0	50	50-150
Pentachlorophenol	2500	2100	84	0	50	9-103
Pyrene	1600	970	61	0	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: 0 out of 22 outside limits

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/p.i/p970220.b/p8270sQ.m
Misc Info: E050S1/P050B02/P051CC1

Client SDG: p970220
Fraction: SV

Operator: PC
SampleType: METHSPIKE
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
5 Phenol	2500	1800	72.02	12-110
9 2-Chlorophenol	2500	1500	58.65	27-123
12 1,4-Dichlorobenzen	1600	1100	71.09	36-97
21 N-Nitroso-di-n-pro	1600	1800	110.57	41-116
31 1,2,4-Trichloroben	1600	1400	87.62	39-98
36 4-Chloro-3-methylp	2500	1900	75.90	23-97
49 Acenaphthene	1600	1200	73.22	46-118
51 4-Nitrophenol	2500	2200	88.07	30-150
53 2,4-Dinitrotoluene	1600	1400	85.76	50-150
64 Pentachlorophenol	2500	1900	76.67	9-103
71 Pyrene	1600	910	56.72	26-127

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 23 Nitrobenzene-d5	1600	1300	82.59	23-120
$ 41 2-Fluorobiphenyl	1600	1100	67.93	30-115
$ 72 Terphenyl-d14	1600	960	60.09	18-137
$ 3 2-Fluorophenol	2500	1800	70.69	25-121
$ 4 Phenol-d5	2500	2200	89.91	24-113
$ 61 2,4,6-Tribromophen	2500	2300	92.90	19-122

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

SPL Blank QC Report

Matrix: Soil
Sample ID: BLANK
Batch: E970220044703

Reported on: 02/21/97 17:34
Analyzed on: 02/21/97 11:04
Analyst: LH

METHOD 8270 BLANK H051B02

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) 660-0901

SPL Blank QC Report

Matrix: Soil
Sample ID: BLANK
Batch: E970220044703

Reported on: 02/21/97 17:34
Analyzed on: 02/21/97 11:04
Analyst: LH

METHOD 8270 BLANK H051B02

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: E970220044703

Reported on: 02/21/97 17:34
Analyzed on: 02/21/97 11:04
Analyst: LH

METHOD 8270 BLANK H051B02

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

Surrogate	Result	QC Criteria	Units
Nitrobenzene-d5	86	23-120	% Recovery
2-Fluorobiphenyl	92	30-115	% Recovery
Terphenyl-d14	81	18-137	% Recovery
Phenol-d5	84	24-113	% Recovery
2-Fluorophenol	76	25-121	% Recovery
2,4,6-Tribromophenol	90	19-122	% Recovery

Samples in Batch 9702831-01 9702831-02

Notes

ND - Not detected.

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/21/97
Analyzed on: 02/20/97
Analyst: LAR

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.
9702744-01A	82	81	1.2	20

-9702637

Samples in batch:

9702744-01A 9702744-02A 9702744-03A 9702744-04A
9702744-05A 9702744-06A 9702744-07A 9702831-01A
9702831-02A

COMMENTS:

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

F A X

MONTGOMERY WATSON

250 N. Madison Avenue
Pasadena, California 91101

Tel: 818-796-9141
Fax: 818-568-6515

Date: 2/19/97

To: MIKE CRISOSTOMO

Fax No: 714-447-6700

From: STEVE REINERS

Reference: MDLC

Subject: ADDITIONAL ANALYSES

No. of Pages: (including cover) 4

Comments: PLEASE RUN THE FOLLOWING SAMPLES FOR VOCs (8260) AND SVOCs (8270):

-837-GS-32
-837-GS-33
-837-GS-34
-837-GS-37
-837-GS-39
-837-GS-40

COCs FOLLOW. PLEASE CALL ME AT 818-568-6534 TO CONFIRM 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: 9702118

C 04445

page 1 of 1

Client Name: Montgomery Watson

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

Client Contact: Fred Strauss (818) 568-6582

Project Name: MDRC C-6 Facility, Torrance, CA

Project Number: 1206035.01090010

Project Location: C-6 Facility, Bldg. 37 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	CAM Metals							
B37-GS-33	2-14-97	1155		X	S	2"x6" sleeve	Approx 12	ICE	2	X	X							
B37-GS-34	2-14-97	1255		X	S	2"x6" sleeve	Approx 12	ICE	2	X	X							

Client/Consultant Remarks: 24 Hr. TAT TRPH only, Standard TAT on Others

Laboratory remarks:

Intact? ☑ Y ☐ N

Temp: 4.7°C

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: Joshua Thomas	date 2-14-97	time 16:40	2. Received by: [signature] 2/14/97 16:40
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-C6-0109581

SPL Fullerton Environmental Laboratory
Sample Receiving Checklist

9702118

SPL Workorder Number: _____

Date: 2/14/97 Time: 1740

	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 4.7 °C

Samples Were Delivered by:

SPL Courier	George Molano
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

97-02-831

SPL

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

INTEROFFICE SAMPLE TRANSFER
CHAIN-OF-CUSTODY FORM

PAGE 1 OF 1

ORIGINATING LAB: Fullerton RECEIVING LAB: Houston DATE: 2/19/97

ATTENTION: Brent Barron REPORT RESULTS TO: Mike Crisostomo

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

CLIENT NAME: Montgomery Watson PROJECT #: DATE NEEDED: 2/27/97

HEADING FOR ANALYSIS:	INVOICE TO:
COMPANY: Montgomery Watson	COMPANY: SPL Fullerton
ADDRESS: 250 N. Pasadena Avenue	ADDRESS:
Pasadena, CA 91101	
ATTN: Steve Reiners	ATTN: Mike Crisostomo

SAMPLE NO. IDENTIFICATION	DATE/TIME COLLECTED	LAB SAMPLE NUMBER	SAMPLE MATRIX	ANALYSES REQUESTED	QUOTED PRICE
B37-GS-33	2/14/97	9702118-01A	Soil	8270S/PRP6MS	$205.00
B37-GS-34	↓	↓ -02A	↓	↓	↓

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
1. [signature]	2/19/97	12:18	[signature]	2/20/97	1000
2.			Vial not intact		

OTES: FED-EX 3925303313

BOE-C6-0109583

SPL Houston Environmental Laboratory

Sample Login Checklist

Date:	Time:
2-20-97	1000

SPL Sample ID:
97-02-831

			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 #)	3925303313	
		Other:		
11	Method of sample disposal:	SPL Disposal	✓	
		HOLD		
		Return to Client		

Name:	Date:
[illegible]	2-20-97

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

SPL, INC.

REPORT APPROVAL SHEET

WORK ORDER NUMBER: *97 - 02 - 121*

Approved for release by:

Joel Grice, Laboratory Manager — *Date:* 2/27/97

Michael J. Crisostomo, Project Manager — *Date:* 2-27-97

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

Certificate of Analysis No. 9702121

Client: Montgomery Watson
Client Address: 250 N. Madison Avenue
Pasadena CA 91101
Attention: Nancy Matsumoto
Project Name MDRC C-6 Facility
Site: Bldg. 37 Area, Torrance, CA
Method: 418.1*

Report Date: 2/26/97
Date(s) Received: 2/17/97
Date(s) Sampled: 2/17/97
Date(s) Analyzed: 2/18/97
Project Number: 120603501090010
Matrix: SOIL

Units: mg/Kg

Sample ID	Petroleum Extractables
B37-GS-35	ND<10
B37-GS-36	ND<10
B37-GS-37	80
B37-GS-38	ND<10
B37-GS-39	ND<10
B37-GS-40	9300

Results reported at Practical Quantitation Limit 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.

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

Certificate of Analysis No. 9702121

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

Report Date: 2/26/97
Date(s) Received: 2/17/97
Date(s) Sampled: 2/17/97
Date(s) Analyzed: 2/21/97,2/20/97,2/17/9
Project Number: 12060350109001
Matrix: SOIL

Analyte	Units	EPA Method	B37-GS-35	B37-GS-36	B37-GS-37	B37-GS-38	B37-GS-39
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***	107	94.8	109	84.0	104
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***	0.106	ND<0.05	ND<0.05	ND<0.05	ND<0.05
Chromium, Total	mg/Kg	6010A***	16.8	12.3	17.8	15.9	14.7
Cobalt, Total	mg/Kg	6010A***	8.25	8.86	8.50	8.03	7.39
Copper, Total	mg/Kg	6010A***	21.8	13.2	14.8	15.7	12.8
Digestion-Solids 3050A	N/A	3050A***	02/17/97	02/17/97	02/17/97	02/17/97	02/17/97
Lead, Total	mg/Kg	6010A***	3.84	4.43	4.12	3.43	3.82
Mercury Digestion in Soil	N/A	7471A***	02/21/97	02/21/97	02/21/97	02/21/97	02/21/97
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 ***	14.4	7.86	13.3	11.0	7.87
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
Vanadium, Total	mg/Kg	6010A***	35	27.5	40.4	36.1	33.0
Zinc, Total	mg/Kg	6010A***	51.8	30.0	45.3	39.7	32.3

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.

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

SPL California License Number 2178

Certificate of Analysis No. 9702121

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
Site: Bldg. 37 Area, Torrance, CA

Report Date: 2/26/97
Date(s) Received: 2/17/97
Date(s) Sampled: 2/17/97
Date(s) Analyzed: 2/21/97,2/20/97,2/17/9
Project Number: 12060350109001
Matrix: SOIL

Analyte	Units	EPA Method	B37-GS-40
Antimony, Total	mg/Kg	6010A***	ND<0.500
Arsenic, Total	mg/Kg	6010A***	ND<0.11
Barium, Total	mg/Kg	6010A***	123
Beryllium, Total	mg/Kg	6010A***	ND<0.06
Cadmium, Total	mg/Kg	6010A***	ND<0.05
Chromium, Total	mg/Kg	6010A***	8.42
Cobalt, Total	mg/Kg	6010A***	4.96
Copper, Total	mg/Kg	6010A***	11.8
Digestion-Solids 3050A	N/A	3050A***	02/17/97
Lead, Total	mg/Kg	6010A***	2.39
Mercury Digestion in Soil	N/A	7471A***	02/21/97
Mercury, Total	mg/Kg	7471A***	ND<0.200
Molybdenum,Total	mg/Kg	6010A***	ND<2.50
Nickel, Total	mg/Kg	6010A ***	6.51
Selenium, Total	mg/Kg	6010A***	ND<5.00
Silver, Total	mg/Kg	6010A***	ND<5.00
Thallium, Total	mg/Kg	6010A***	ND<0.500
Vanadium, Total	mg/Kg	6010A***	23.8
Zinc, Total	mg/Kg	6010A***	31.8

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.

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

SPL California License Number 2178

Certificate of Analysis No. 9702121

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
Site: Bldg. 37 Area, Torrance, CA

Report Date: 2/26/97
Date(s) Received: 2/17/97
Date(s) Sampled: 2/17/97
Date(s) Analyzed: 2/21/97,2/20/97,2/17/9
Project Number: 12060350109001
Matrix: SOIL

Analyte	Units	EPA Method	B37-GS-37	B37-GS-39	B37-GS-40
Ultrasonic Extraction 3550A	N/A	3550A	02/20/97	02/20/97	02/20/97

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.

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

SPL California License Number 2178

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

Certificate of Analysis No. 9702121

Client:	Montgomery Watson	**Report Date:**	2/26/97
Client Address:	250 N. Madison Avenue	**Date(s) Received:**	2/17/97
	Pasadena, CA 91101	**Date(s) Sampled:**	2/17/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	2/20/97
Project Name	MDRC C-6 Facility	**Project Number:**	120603501090010
Site:	Bldg. 37 Area, Torrance, CA	**Matrix:**	SOIL

Method: 8260 Soil, Volatile Organics **Units:** UG/KG

Analyte	B37-GS-37	B37-GS-39	B37-GS-40
Dichlorodifluoromethane	ND<5	ND<5	ND<5
Chloromethane	ND<5	ND<5	ND<5
Vinyl chloride	ND<5	ND<5	ND<5
Bromomethane	ND<5	ND<5	ND<5
Chloroethane	ND<5	ND<5	ND<5
Trichlorofluoromethane	ND<5	ND<5	ND<5
1,1-Dichloroethene	ND<5	ND<5	ND<5
Methylene chloride	ND<5	ND<5	ND<5
trans-1,2-Dichloroethene	ND<5	ND<5	ND<5
1,1-Dichloroethane	ND<5	ND<5	ND<5
2,2-Dichloropropane	ND<5	ND<5	ND<5
cis-1,2-Dichloroethene	ND<5	ND<5	ND<5
Chloroform	ND<5	ND<5	ND<5
Bromochloromethane	ND<5	ND<5	ND<5
1,1,1-Trichloroethane	ND<5	ND<5	ND<5
1,1-Dichloropropene	ND<5	ND<5	ND<5
Carbon tetrachloride	ND<5	ND<5	ND<5
1,2-Dichloroethane	ND<5	ND<5	ND<5
Benzene	ND<5	ND<5	ND<5
Trichloroethene	ND<5	8.3	ND<5
1,2-Dichloropropane	ND<5	ND<5	ND<5
Bromodichloromethane	ND<5	ND<5	ND<5
Dibromomethane	ND<5	ND<5	ND<5
cis-1,3-Dichloropropene	ND<5	ND<5	ND<5
Toluene	ND<5	ND<5	ND<5
trans-1,3-Dichloropropene	ND<5	ND<5	ND<5
1,1,2-Trichloroethane	ND<5	ND<5	ND<5
1,2-Dibromoethane	ND<5	ND<5	ND<5
1,3-Dichloropropane	ND<5	ND<5	ND<5
Tetrachloroethene	ND<5	ND<5	ND<5
Dibromochloromethane	ND<5	ND<5	ND<5
Chlorobenzene	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

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

Certificate of Analysis No. 9702121

Client:	Montgomery Watson	**Report Date:**	2/26/97
Client Address:	250 N. Madison Avenue	**Date(s) Received:**	2/17/97
	Pasadena, CA 91101	**Date(s) Sampled:**	2/17/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	2/20/97
Project Name	MDRC C-6 Facility	**Project Number:**	120603501090010
Site:	Bldg. 37 Area, Torrance, CA	**Matrix:**	SOIL
Method:	8260 Soil, Volatile Organics	**Units:**	UG/KG

Analyte	B37-GS-37	B37-GS-39	B37-GS-40
1,1,1,2-Tetrachloroethane	ND<5	ND<5	ND<5
Ethylbenzene	ND<5	ND<5	ND<5
m,p-Xylene	ND<5	ND<5	ND<5
o-Xylene	ND<5	ND<5	ND<5
Styrene	ND<5	ND<5	ND<5
Bromoform	ND<5	ND<5	ND<5
Isopropylbenzene	ND<5	ND<5	ND<5
1,1,2,2-Tetrachloroethane	ND<5	ND<5	ND<5
1,2,3-Trichloropropane	ND<5	ND<5	ND<5
n-Propylbenzene	ND<5	ND<5	ND<5
Bromobenzene	ND<5	ND<5	ND<5
1,3,5-Trimethylbenzene	ND<5	ND<5	ND<5
2-Chlorotoluene	ND<5	ND<5	ND<5
4-Chlorotoluene	ND<5	ND<5	ND<5
tert-Butylbenzene	ND<5	ND<5	ND<5
1,2,4-Trimethylbenzene	ND<5	ND<5	12
sec-Butylbenzene	ND<5	ND<5	ND<5
p-Isopropyltoluene	ND<5	ND<5	ND<5
1,3-Dichlorobenzene	ND<5	ND<5	ND<5
1,4-Dichlorobenzene	ND<5	ND<5	ND<5
n-Butylbenzene	ND<5	ND<5	ND<5
1,2-Dichlorobenzene	ND<5	ND<5	ND<5
1,2-Dibromo-3-chloropropa	ND<5	ND<5	ND<5
1,2,4-Trichlorobenzene	ND<5	ND<5	ND<5
Hexachlorobutadiene	ND<5	ND<5	ND<5
Naphthalene	ND<5	ND<5	30
1,2,3-Trichlorobenzene	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

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

Certificate of Analysis No. 9702121

Client:	Montgomery Watson	**Report Date:**	2/25/97
Client Address:	250 N. Madison Avenue Pasadena, CA 91101	**Date(s) Received:**	2/17/97
		Date(s) Sampled:	2/17/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	2/21/97
Project Name:	MDRC C6-Facility	**Project Number:**	120603501090010
Site:	Bldg. 37 Area, Torrance, CA	**Matrix:**	SOIL
Method:	8270 Soil, Semivolatile Organics	**Units:**	ug/Kg

Analyte	B37-GS-37	B37-GS-39	B37-GS-40
Acenaphthene	ND<330	ND<330	ND<660
Acenaphthylene	ND<330	ND<330	ND<660
Aniline	ND<330	ND<330	ND<660
Anthracene	ND<330	ND<330	ND<660
Benzo (a) Anthracene	ND<330	ND<330	ND<660
Benzo (b) Fluoranthene	ND<330	ND<330	ND<660
Benzo (k) Fluoranthene	ND<330	ND<330	ND<660
Benzo (a) Pyrene	ND<330	ND<330	ND<660
Benzoic Acid	ND<1600	ND<1600	ND<3200
Benzo (g,h,i) Perylene	ND<330	ND<330	ND<660
Benzyl alcohol	ND<330	ND<330	ND<660
4-Bromophenylphenyl ether	ND<330	ND<330	ND<660
Butylbenzylphthalate	ND<330	ND<330	ND<660
di-n-Butyl phthalate	ND<330	ND<330	ND<660
Carbazole	ND<330	ND<330	ND<660
4-Chloroaniline	ND<330	ND<330	ND<660
bis (2-Chloroethoxy) Methane	ND<330	ND<330	ND<660
bis (2-Chloroethyl) Ether	ND<330	ND<330	ND<660
bis (2-Chloroisopropyl) Ether	ND<330	ND<330	ND<660
4-Chloro-3-Methylphenol	ND<330	ND<330	ND<660
2-Chloronaphthalene	ND<330	ND<330	ND<660
2-Chlorophenol	ND<330	ND<330	ND<660
4-Chlorophenylphenyl ether	ND<330	ND<330	ND<660
Chrysene	ND<330	ND<330	ND<660
Dibenz (a,h) Anthracene	ND<330	ND<330	ND<660
Dibenzofuran	ND<330	ND<330	ND<660
1,2-Dichlorobenzene	ND<330	ND<330	ND<660
1,3-Dichlorobenzene	ND<330	ND<330	ND<660
1,4-Dichlorobenzene	ND<330	ND<330	ND<660
3,3'-Dichlorobenzidine	ND<330	ND<330	ND<660
2,4-Dichlorophenol	ND<330	ND<330	ND<660
Diethylphthalate	ND<330	ND<330	ND<660
2,4-Dimethylphenol	ND<330	ND<330	ND<660

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. 9702121

Client:	Montgomery Watson	**Report Date:**	2/25/97
Client Address:	250 N. Madison Avenue	**Date(s) Received:**	2/17/97
	Pasadena, CA 91101	**Date(s) Sampled:**	2/17/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	2/21/97
Project Name:	MDRC C6-Facility	**Project Number:**	120603501090010
Site:	Bldg. 37 Area, Torrance, CA	**Matrix:**	SOIL
Method:	8270 Soil, Semivolatile Organics	**Units:**	ug/Kg

Analyte	B37-GS-37	B37-GS-39	B37-GS-40
Dimethyl Phthalate	ND<330	ND<330	ND<660
4,6-Dinitro-2-Methylphenol	ND<800	ND<800	ND<1600
2,4-Dinitrophenol	ND<800	ND<800	ND<1600
2,4-Dinitrotoluene	ND<330	ND<330	ND<660
2,6-Dinitrotoluene	ND<330	ND<330	ND<660
1,2-Diphenylhydrazine	ND<330	ND<330	ND<660
bis (2-Ethylhexyl)Phthalate	ND<330	ND<330	1700
Fluoranthene	ND<330	ND<330	ND<660
Fluorene	ND<330	ND<330	ND<660
Hexachlorobenzene	ND<330	ND<330	ND<660
Hexachlorobutadiene	ND<330	ND<330	ND<660
Hexachloroethane	ND<330	ND<330	ND<660
Hexachlorocyclopentadiene	ND<330	ND<330	ND<660
Indeno(1,2,3-cd)Pyrene	ND<330	ND<330	ND<660
Isophorone	ND<330	ND<330	ND<660
2-Methylnaphthalene	ND<330	ND<330	810
2-Methylphenol	ND<330	ND<330	ND<660
4-Methylphenol	ND<330	ND<330	ND<660
Napthalene	ND<330	ND<330	ND<660
2-Nitroaniline	ND<800	ND<800	ND<1600
3-Nitroaniline	ND<800	ND<800	ND<1600
4-Nitroaniline	ND<800	ND<800	ND<1600
Nitrobenzene	ND<330	ND<330	ND<660
2-Nitrophenol	ND<330	ND<330	ND<660
4-Nitrophenol	ND<800	ND<800	ND<1600
N-Nitrosodiphenylamine	ND<330	ND<330	ND<660
N-Nitroso-Di-n-Propylamine	ND<330	ND<330	ND<660
Di-n-Octyl Phthalate	ND<330	ND<330	ND<660
Pentachlorophenol	ND<800	ND<800	ND<1600
Phenanthrene	ND<330	ND<330	ND<660
Phenol	ND<330	ND<330	ND<660
Pyrene	ND<330	ND<330	ND<660
Pyridine	ND<330	ND<330	ND<660
1,2,4-Trichlorobenzene	ND<330	ND<330	ND<660
2,4,5-Trichlorophenol	ND<800	ND<800	ND<1600
2,4,6-Trichlorophenol	ND<330	ND<330	ND<660

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
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FULLERTON, CA 92831
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QUALITY CONTROL INFORMATION
METALS

MS/MSD Results

Date: 2/20/97
Sample ID: 9702104-1
Matrix: Soil
Includes: 9702121-1-6; 9702125-1

Parameter	LMB	LCS Recovery (%)	MS Recovery (%)		MSD Recovery (%)		*Acceptability Range (%)	RPD	RPD Range (%)
Antimony, Sb	ND	102	57	**	60	**	80-120	5.7	20
Arsenic, As	ND	105	84		88		80-120	4.4	20
Barium, Ba	ND	97	82		91		80-120	10	20
Beryllium, Be	ND	100	85		90		80-120	4.9	20
Cadmium, Cd	ND	100	85		91		80-120	5.7	20
Chromium, Cr	ND	99	84		103		80-120	20	20
Cobalt, Co	ND	96	80		86		80-120	6.9	20
Copper, Cu	ND	105	92		102		80-120	10	20
Lead, Pb	ND	93	81		86		80-120	6.3	20
Molybdenum, Mo	ND	95	84		89		80-120	5.9	20
Nickel, Ni	ND	99	82		89		80-120	7.8	20
Selenium, Se	ND	98	80		85		80-120	5.5	20
Silver, Ag	ND	107	89		98		80-120	10	20
Thallium, Tl	ND	96	77	**	80		80-120	3.8	20
Vanadium, V	ND	98	86		94		80-120	9.0	20
Zinc, Zn	ND	104	74	**	84		80-120	13	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
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FULLERTON, CA 92831
PHONE (714) 447-6868

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/24/97
Analyzed on: 02/21/97
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
9702121-03A	ND	ND	.0010	.00097	97.0	.00097	97.0	0	20	80 -120

HGS022197 -9702044

Samples in batch:

9702118-01A	9702118-02A	9702121-01A	9702121-02A
9702121-03A	9702121-04A	9702121-05A	9702121-06A
9702125-01A	9702136-01A	9702139-01A	9702139-02A
9702148-01A	9702153-01A	9702153-02A	9702153-03A

COMMENTS:

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/24/97
Analyzed on: 02/21/97
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	0.00097	97.0	80 - 120

HGS022197 -9702044

ples in batch:

9702118-01A	9702118-02A	9702121-01A	9702121-02A
9702121-03A	9702121-04A	9702121-05A	9702121-06A
9702125-01A	9702136-01A	9702139-01A	9702139-02A
9702148-01A	9702153-01A	9702153-02A	9702153-03A

COMMENTS:

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/18/97
Analyzed on: 02/18/97
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
9702121-01A	ND	ND	500	458	91.6	489	97.8	6.6	20	80 -120

PETHS021897 -9702033

Samples in batch:

9702121-01A 9702121-02A 9702121-03A 9702121-04A
9702121-05A 9702121-06A

COMMENTS:

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/18/97
Analyzed on: 02/18/97
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	507	101	80 - 120

PETHS021897 -9702033

Samples in batch:

9702121-01A 9702121-02A 9702121-03A 9702121-04A
9702121-05A 9702121-06A

COMMENTS:

QUALITY CONTROL

DOCUMENTATION

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPL Contract:

Lab Code: Case No.:9702165 SAS No.: SDG No.:

Matrix Spike - EPA Sample No.:1222-GVD-HA 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	1500	60	27-123
1,4-Dichlorobenzene	1600	0	1100	69	36- 97
N-Nitroso-di-n-prop.(1)	1600	0	1800	112	41-116
1,2,4-Trichlorobenzene	1600	0	1400	88	39- 98
4-Chloro-3-methylphenol	2500	0	2000	80	23- 97
Acenaphthene	1600	0	1300	81	46-118
4-Nitrophenol	2500	0	1500	60	30-150
2,4-Dinitrotoluene	1600	0	1500	94	50-150
Pentachlorophenol	2500	0	2100	84	9-103
Pyrene	1600	0	970	61	26-127

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	2500	1900	76	0	42	12-110
2-Chlorophenol	2500	1400	56	7	40	27-123
1,4-Dichlorobenzene	1600	1100	69	0	28	36- 97
N-Nitroso-di-n-prop.(1)	1600	1800	112	0	38	41-116
1,2,4-Trichlorobenzene	1600	1400	88	0	28	39- 98
4-Chloro-3-methylphenol	2500	2000	80	0	42	23- 97
Acenaphthene	1600	1300	81	0	31	46-118
4-Nitrophenol	2500	1500	60	0	50	30-150
2,4-Dinitrotoluene	1600	1500	94	0	50	50-150
Pentachlorophenol	2500	2100	84	0	50	9-103
Pyrene	1600	970	61	0	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: 0 out of 22 outside limits

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/p.i/p970220.b/p8270sQ.m
Misc Info: E050S1/P050B02/P051CC1

Client SDG: p970220
Fraction: SV

Operator: PC
SampleType: METHSPIKE
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
5 Phenol	2500	1800	72.02	12-110
9 2-Chlorophenol	2500	1500	58.65	27-123
12 1,4-Dichlorobenzen	1600	1100	71.09	36-97
21 N-Nitroso-di-n-pro	1600	1800	110.57	41-116
31 1,2,4-Trichloroben	1600	1400	87.62	39-98
36 4-Chloro-3-methylp	2500	1900	75.90	23-97
49 Acenaphthene	1600	1200	73.22	46-118
51 4-Nitrophenol	2500	2200	88.07	30-150
53 2,4-Dinitrotoluene	1600	1400	85.76	50-150
64 Pentachlorophenol	2500	1900	76.67	9-103
71 Pyrene	1600	910	56.72	26-127

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 23 Nitrobenzene-d5	1600	1300	82.59	23-120
$ 41 2-Fluorobiphenyl	1600	1100	67.93	30-115
$ 72 Terphenyl-d14	1600	960	60.09	18-137
$ 3 2-Fluorophenol	2500	1800	70.69	25-121
$ 4 Phenol-d5	2500	2200	89.91	24-113
$ 61 2,4,6-Tribromophen	2500	2300	92.90	19-122

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

SPL Blank QC Report

Matrix: Soil
Sample ID: BLANK
Batch: E970220044703

Reported on: 02/24/97 15:55
Analyzed on: 02/21/97 11:04
Analyst: LH

METHOD 8270 BLANK H051B02

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
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SPL Blank QC Report

Matrix: Soil
Sample ID: BLANK
Batch: E970220044703

Reported on: 02/24/97 15:55
Analyzed on: 02/21/97 11:04
Analyst: LH

METHOD 8270 BLANK H051B02

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.

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HOUSTON, TEXAS 77054
PHONE (713) 660-0901

SPL Blank QC Report

Matrix: Soil
Sample ID: BLANK
Batch: E970220044703

Reported on: 02/24/97 15:55
Analyzed on: 02/21/97 11:04
Analyst: LH

METHOD 8270 BLANK H051B02

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

Surrogate	Result	QC Criteria	Units
Nitrobenzene-d5	86	23-120	% Recovery
2-Fluorobiphenyl	92	30-115	% Recovery
Terphenyl-d14	81	18-137	% Recovery
Phenol-d5	84	24-113	% Recovery
2-Fluorophenol	76	25-121	% Recovery
2,4,6-Tribromophenol	90	19-122	% Recovery

Samples in Batch 9702830-01 9702830-02 9702830-03

Notes

ND - Not detected.

SPL Houston Labs

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: h.i
Lab File ID: h051b02.d
Lab Smp Id:
Analysis Type: SV
Quant Type: ISTD
Operator: LH
Method File: /chem1/h.i/h970221.b/h8270s.m
Misc Info: E051S1/H051B02/H052CC2

Calibration Date: 02/21/97
Calibration Time: 0950

Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	398336	199168	796672	347862	-12.67
32 Naphthalene-d8	1371797	685898	2743594	1103897	-19.53
48 Acenaphthene-d10	720040	360020	1440080	549866	-23.63
65 Phenanthrene-d10	1184321	592160	2368642	827720	-30.11
76 Chrysene-d12	928622	464311	1857244	555359	-40.20
83 Perylene-d12	977619	488810	1955238	577777	-40.90

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIF
11 1,4-Dichlorobenzene-	4.75	4.25	5.25	4.75	0.07
32 Naphthalene-d8	6.56	6.06	7.06	6.57	0.05
48 Acenaphthene-d10	9.31	8.81	9.81	9.31	0.04
65 Phenanthrene-d10	11.66	11.16	12.16	11.66	0.03
76 Chrysene-d12	15.90	15.40	16.40	15.91	0.09
83 Perylene-d12	18.10	17.60	18.60	18.12	0.08

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/h.i/h970217.b/h048df7.d

Date : 17-FEB-1997 10:49

Client ID:

Instrument: h.i

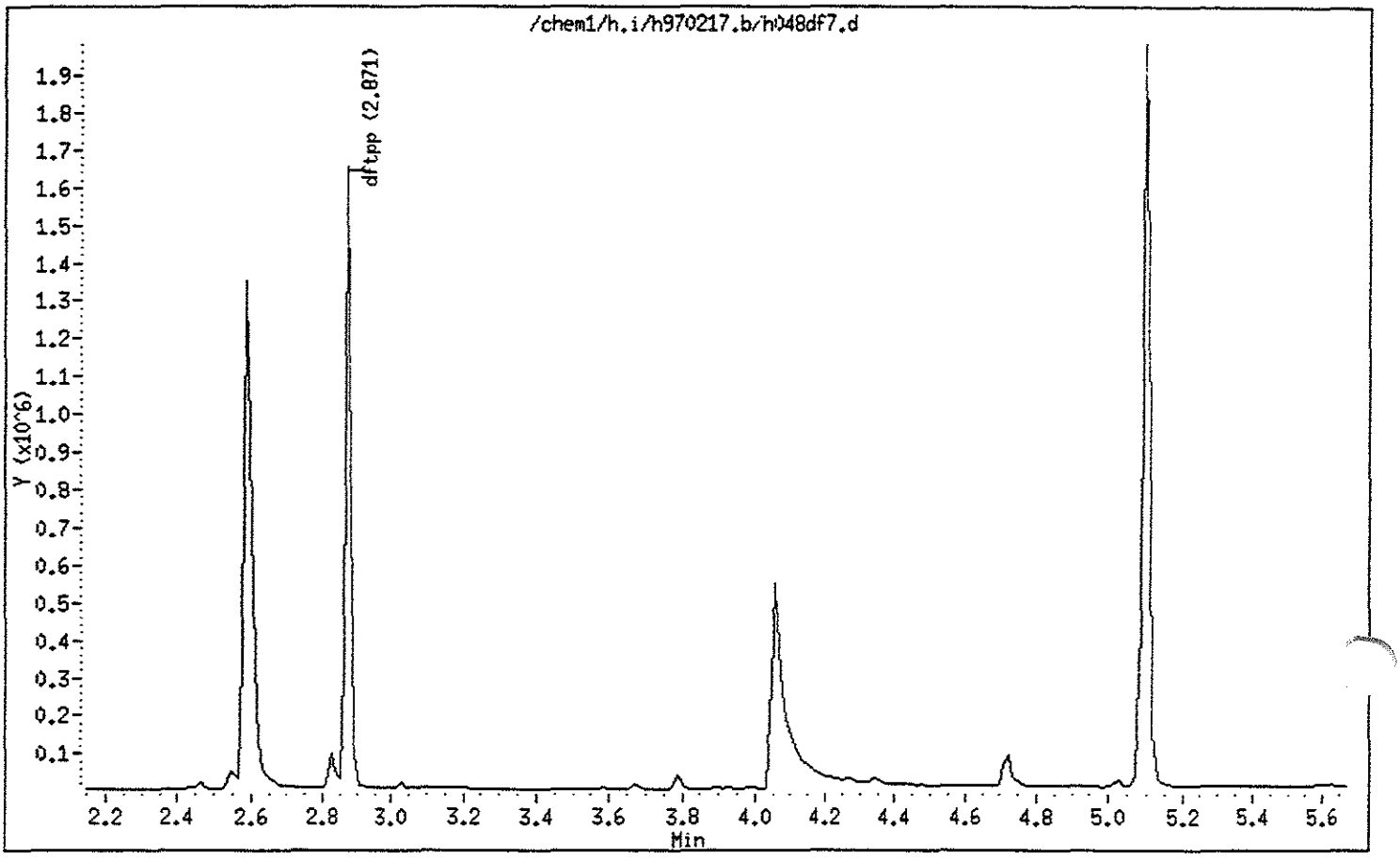
Sample Info: dftpp

Volume Injected (uL): 2.0

Operator: LH

Column phase:

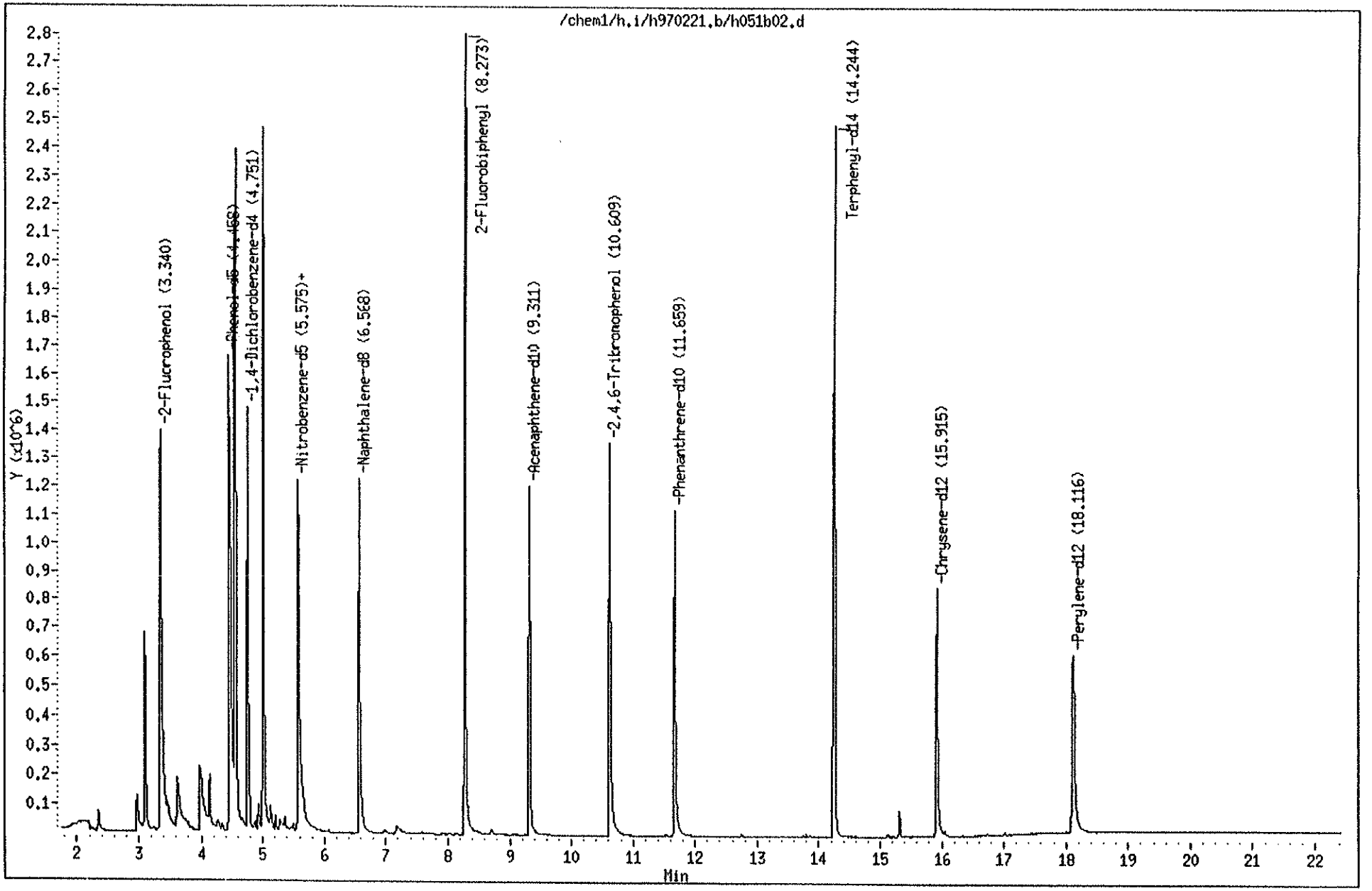
Column diameter: 2.00



Data File: /chem1/h.i/h970221.b/h051b02.d
Date : 21-FEB-97 11:04
Client ID:
Sample Info: BLANK-8270S/1X
Volume Injected (uL): 2.0
Column phase:

Instrument: h.i

Operator: LH
Column diameter: 0.25



Data File: /chem1/h.i/h970217.b/h048df7.d

Date : 17-FEB-1997 10:49

Client ID:

Instrument: h.i

Sample Info: dftpp

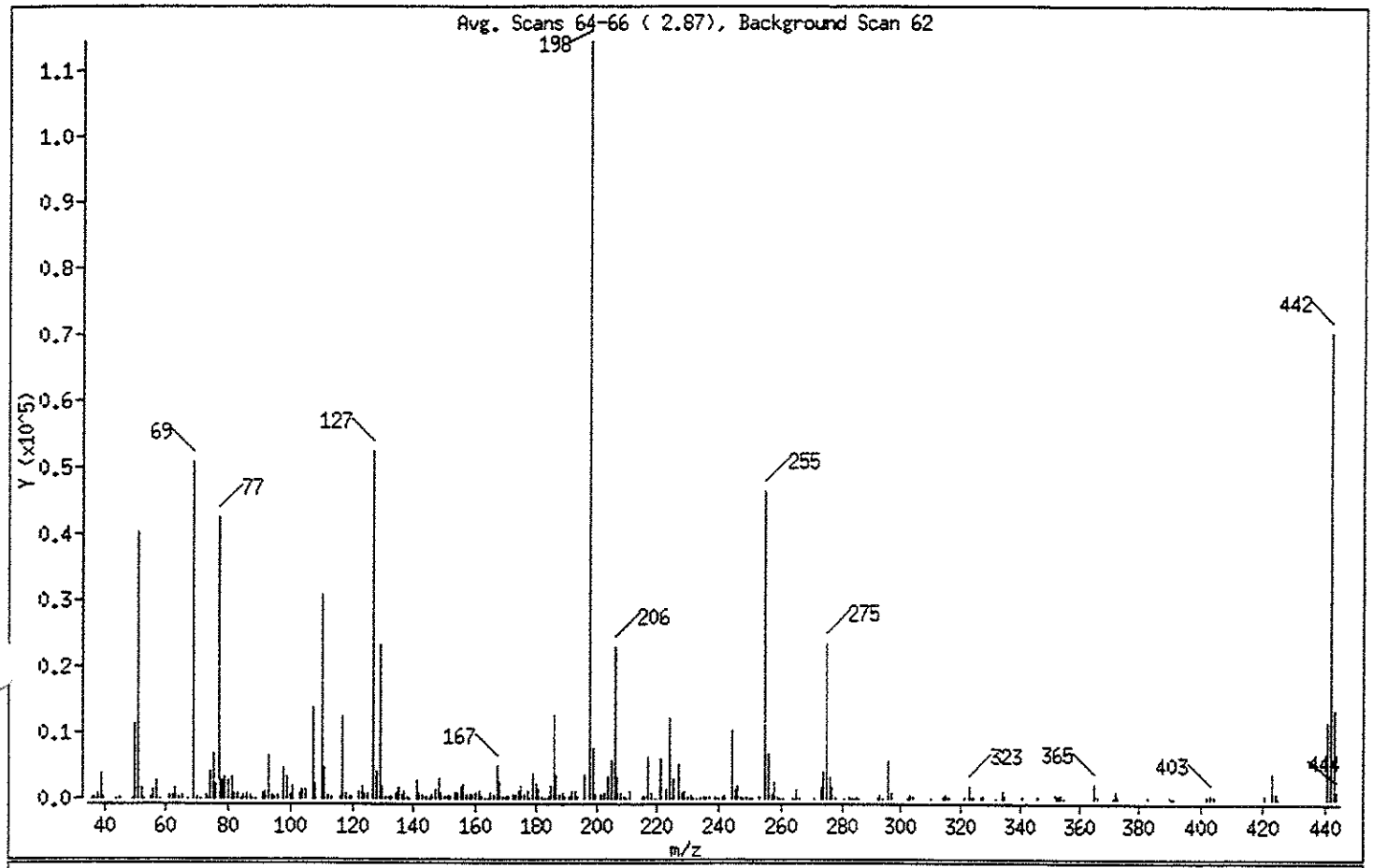
Volume Injected (uL): 2.0

Operator: LH

Column phase:

Column diameter: 2.00

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	35.25
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	44.45
70	Less than 2.00% of mass 69	0.20 (0.46)
127	40.00 - 60.00% of mass 198	45.77
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.51
275	10.00 - 30.00% of mass 198	20.53
365	Greater than 1.00% of mass 198	1.99
441	Present, but less than mass 443	10.07
442	40.00 - 110.00% of mass 198	61.81
443	17.00 - 23.00% of mass 442	11.84 (19.15)

Data File: /chem1/h.i/h970217.b/h048df7.d
Date : 17-FEB-1997 10:49
Client ID: Instrument: h.i
Sample Info: dftpp
Volume Injected (uL): 2.0 Operator: LH
Column phase: Column diameter: 2.00

Data File: h048df7.d
Spectrum : Avg. Scans 64-66 (2.87), Background Scan 62
Largest m/z: 197.90
Number of peaks: 251

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.95	70	117.95	895	184.05	297	259.80	51
36.95	325	118.85	146	185.05	1952	261.00	54
37.95	717	119.95	199	186.05	12707	263.90	83
38.95	3734	121.95	1112	186.90	3575	265.00	1217
39.95	249	122.95	1801	187.90	440	265.90	49
43.85	9	123.95	889	188.90	863	270.90	108
44.95	140	124.95	822	189.90	176	273.00	1562
48.95	64	126.90	52312	191.00	279	274.00	4172
50.05	11283	128.00	4090	191.90	1213	275.00	23464
51.05	40288	128.90	23152	193.00	1088	276.00	3126
52.05	1742	129.90	1904	194.00	241	277.00	1643
52.95	79	130.90	168	196.00	3487	277.95	271
54.95	190	131.90	224	197.90	114296	280.95	60
55.95	1312	132.80	202	198.90	7442	282.85	206
57.05	2761	133.90	689	199.90	610	283.95	125
57.95	79	135.00	1656	201.50	672	285.05	277
61.05	613	136.00	657	202.90	685	285.85	50
62.05	669	137.00	975	204.00	3156	292.05	55
63.05	1597	138.00	152	205.00	5641	292.95	433
63.95	239	138.80	105	206.00	22848	293.95	79
65.05	665	140.90	2727	207.00	3160	295.95	5554
67.00	46	141.90	940	208.00	746	296.85	711
68.90	50808	143.00	616	209.00	274	302.05	68
69.90	233	144.00	141	209.90	125	303.05	620
71.00	30	145.10	109	211.00	983	303.95	195
73.00	410	146.00	439	215.00	271	309.90	50
74.00	4022	147.00	1430	215.90	214	314.00	274
75.00	6651	148.00	2973	216.85	6253	314.90	583
76.10	2074	149.00	743	217.95	736	316.00	281
77.00	42320	150.00	167	219.05	52	320.90	195
78.00	2699	151.00	406	220.95	5881	323.00	1972
79.00	3333	151.90	395	222.95	1473	324.00	332
80.00	2665	153.00	890	223.95	12189	326.90	333
81.00	3293	154.00	731	224.95	2878	327.90	160
81.90	900	155.00	1538	226.95	5112	331.90	70

Data File: /chem1/h.i/h970217.b/h048df7.d
Date : 17-FEB-1997 10:49
Client ID:
Instrument: h.i
Sample Info: dftpp
Volume Injected (uL): 2.0
Operator: LH
Column phase:
Column diameter: 2.00

Data File: h048df7.d
Spectrum : Avg. Scans 64-66 (2.87), Background Scan 62
Largest m/z: 197.90
Number of peaks: 251

m/z	Y	m/z	Y	m/z	Y	m/z	Y
83.00	747	156.00	2099	227.95	812	334.00	1075
84.00	18	156.95	493	228.95	1080	335.00	247
85.00	585	157.95	507	230.05	197	340.95	217
86.00	917	158.85	458	230.95	460	345.95	364
87.00	476	159.85	832	231.85	64	352.05	517
87.80	125	160.95	1173	232.95	54	352.95	358
89.00	62	161.85	354	233.85	305	353.95	569
91.00	691	162.95	76	234.95	382	354.95	55
92.00	995	164.05	111	235.85	248	364.95	2269
93.00	6406	164.95	909	236.95	365	365.95	320
94.00	433	166.05	501	238.95	215	370.80	64
95.00	227	166.95	4960	239.95	76	372.00	955
95.95	431	167.95	2423	240.95	247	373.00	197
97.95	4485	168.95	302	241.95	651	383.00	254
98.95	3116	169.95	207	244.05	10326	390.00	137
99.95	432	170.85	234	245.05	1402	391.00	58
100.95	1781	171.95	534	245.95	1856	401.95	337
103.05	714	172.95	642	246.95	308	402.95	541
103.95	1319	173.95	1111	247.90	80	403.95	205
104.95	1433	174.95	1880	248.90	379	420.95	479
106.95	13780	175.95	577	249.90	68	423.05	3794
107.95	2116	176.95	1005	250.90	58	424.05	794
109.95	30776	178.05	101	253.00	243	425.05	57
110.95	4459	178.95	3712	254.90	46512	441.10	11505
111.95	553	179.95	2247	256.00	6824	442.00	70640
112.95	258	180.95	1298	257.00	582	443.00	13530
115.95	397	181.95	209	257.90	2530	444.00	1164
116.95	12336	182.95	79	258.90	382		

Data File: /chem1/h.i/h970221.b/h052df4.d

Date : 21-FEB-97 09:08

Client ID:

Instrument: h.i

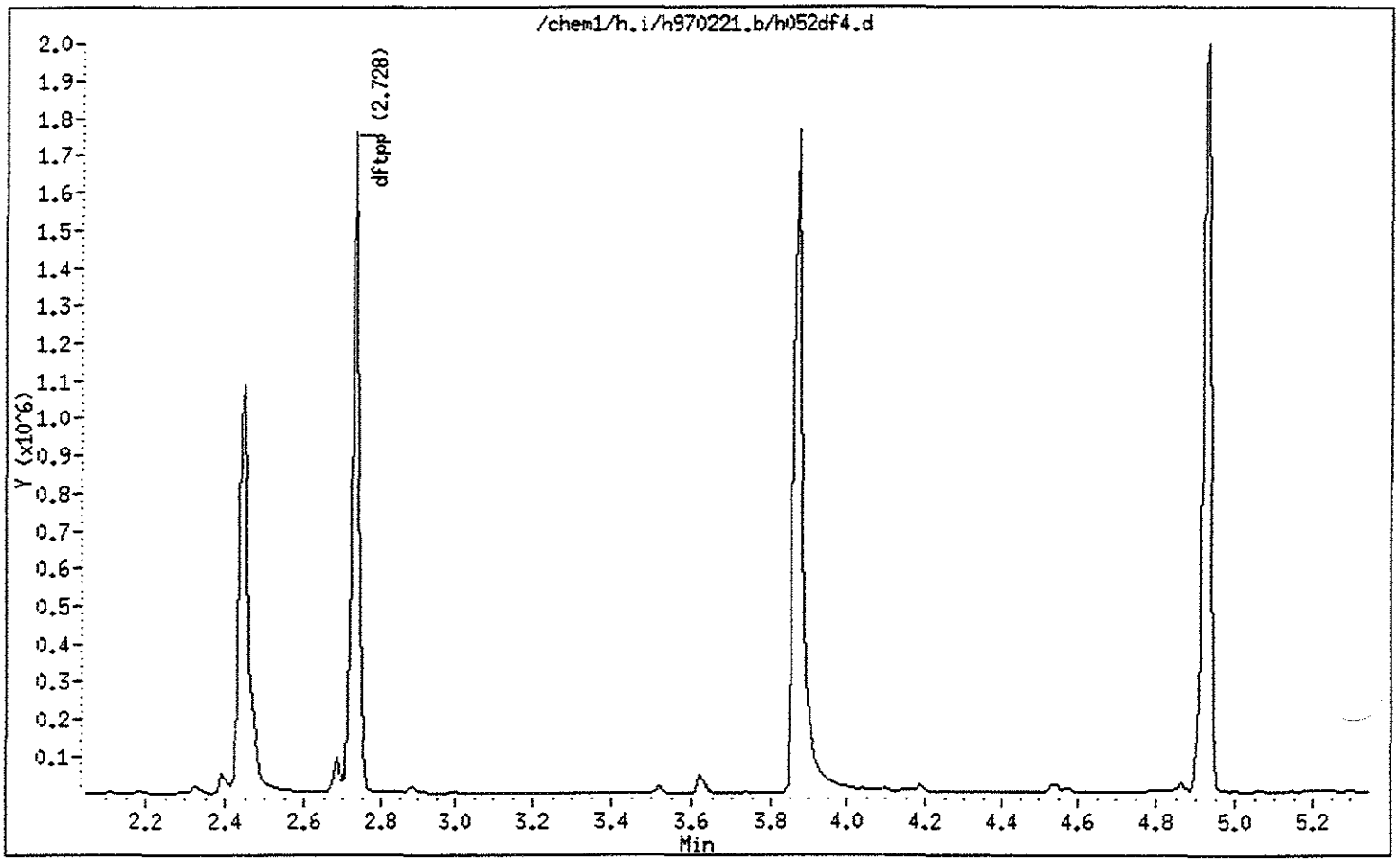
Sample Info: dftpp

Volume Injected (uL): 2.0

Operator: LH

Column phase:

Column diameter: 2.00



Data File: /chem1/h.i/h970221.b/h052df4.d

Date : 21-FEB-97 09:08

Client ID:

Instrument: h.i

Sample Info: dftpp

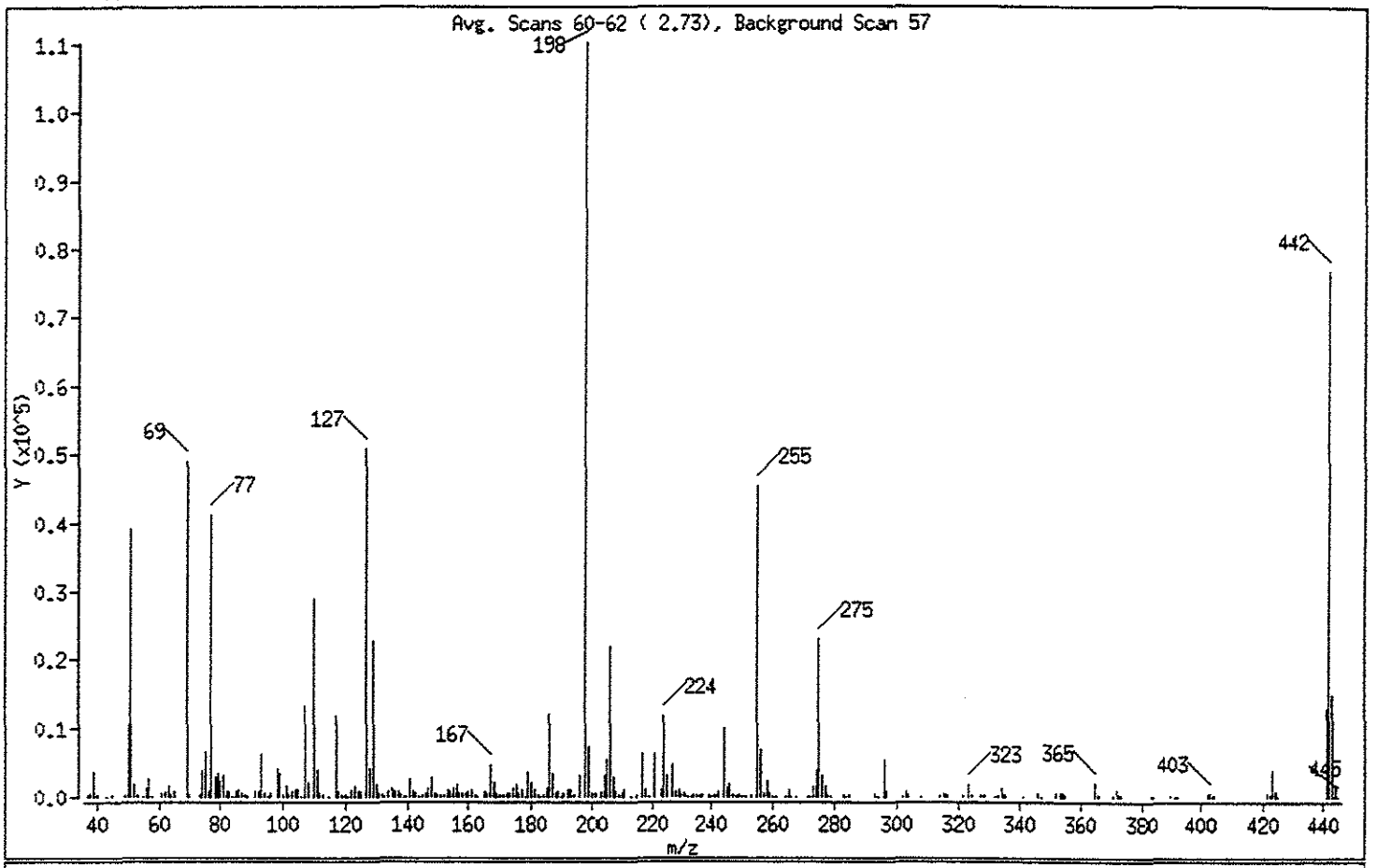
Volume Injected (uL): 2.0

Operator: LH

Column phase:

Column diameter: 2.00

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	35.40
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	44.54
70	Less than 2.00% of mass 69	0.23 (0.51)
127	40.00 - 60.00% of mass 198	46.05
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.71
275	10.00 - 30.00% of mass 198	20.69
365	Greater than 1.00% of mass 198	1.98
441	Present, but less than mass 443	11.59
442	40.00 - 110.00% of mass 198	69.85
443	17.00 - 23.00% of mass 442	13.41 (19.19)

Data File: /chem1/h.i/h970221.b/h052df4.d
Date : 21-FEB-97 09:08
Client ID:
Instrument: h.i
Sample Info: dftpp
Volume Injected (uL): 2.0
Operator: LH
Column phase:
Column diameter: 2.00

Data File: h052df4.d
Spectrum : Avg. Scans 60-62 (2.73), Background Scan 57
Largest m/z: 197.90
Number of peaks: 257

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.95	246	120.95	52	188.00	413	270.90	89
37.95	589	121.95	1132	188.90	871	271.90	118
38.95	3597	122.95	1523	189.90	92	273.00	1459
39.95	282	123.95	806	190.90	467	274.10	4025
42.95	9	124.95	697	191.90	1008	275.00	22816
44.85	215	126.90	50768	192.90	1129	276.00	3163
49.05	259	128.00	4089	194.00	289	277.00	1537
49.95	10337	128.90	22672	196.00	3030	277.85	284
51.05	39032	129.90	1696	197.90	110256	278.85	52
52.05	1898	131.00	458	198.90	7402	282.95	143
52.95	149	132.00	306	199.90	422	283.85	102
55.05	78	132.70	107	201.40	615	284.95	325
55.95	1336	133.90	676	203.00	807	292.95	452
56.95	2705	134.90	1422	204.00	2998	294.05	93
58.05	130	135.90	709	205.00	5367	295.95	5346
61.05	522	137.00	836	206.00	21848	296.95	814
62.05	698	137.80	233	207.00	2842	302.05	90
63.05	1571	138.90	69	207.90	854	302.95	711
63.95	194	139.90	79	208.90	304	303.95	168
65.05	824	140.90	2528	210.10	509	307.90	67
68.90	49112	142.00	777	210.90	1077	314.00	220
69.90	251	142.90	606	213.00	56	314.90	629
73.00	233	144.00	103	215.00	287	316.00	267
74.00	3847	144.90	178	216.85	6242	321.00	136
74.90	6542	145.90	573	217.85	985	323.00	1942
76.00	791	147.00	1301	218.95	55	324.00	313
77.00	41312	148.00	2894	220.95	6171	326.90	350
78.00	2836	148.90	410	223.05	1099	327.90	186
79.00	3337	149.90	153	223.95	11854	331.90	94
80.00	2380	151.00	249	224.95	3138	333.00	148
81.00	3165	151.80	335	226.95	4736	334.00	1249
81.90	884	153.00	937	227.95	787	335.00	300
83.00	685	153.90	732	228.95	1169	341.05	130
83.90	24	155.00	1274	229.85	174	345.95	422
84.90	751	156.00	1834	230.95	458	346.85	60

Data File: /chem1/h.i/h970221.b/h052df4.d
Date : 21-FEB-97 09:08
Client ID: Instrument: h.i
Sample Info: dftpp
Volume Injected (uL): 2.0 Operator: LH
Column phase: Column diameter: 2.00

Data File: h052df4.d
Spectrum : Avg. Scans 60-62 (2.73), Background Scan 57
Largest m/z: 197.90
Number of peaks: 257

m/z	Y	m/z	Y	m/z	Y	m/z	Y
86.00	1101	156.95	453	231.85	97	351.95	502
86.90	449	157.85	504	233.05	71	352.95	427
87.90	206	158.95	394	233.95	361	354.05	593
88.90	56	159.95	877	234.95	361	354.95	179
91.00	764	160.95	1047	235.95	161	364.95	2181
92.00	883	161.95	360	236.95	313	365.95	325
93.00	6244	162.95	87	238.95	197	371.00	137
94.00	556	164.95	835	239.95	113	372.00	1090
95.00	49	165.95	558	240.95	202	372.90	264
95.95	401	166.95	4604	241.95	712	383.00	234
97.95	4130	167.95	2163	244.05	10033	384.00	51
98.95	3286	168.95	451	245.05	1275	389.90	157
99.85	191	170.05	136	245.95	1729	390.90	63
100.95	1600	170.95	225	246.95	374	391.90	59
101.95	167	171.95	496	247.90	59	401.95	472
102.95	863	172.95	580	248.90	384	402.95	532
103.95	1103	173.95	1194	249.80	52	403.95	232
104.95	1104	175.05	1706	250.90	69	420.95	523
105.95	79	176.05	584	252.90	133	422.05	212
106.95	13238	176.95	979	254.90	45440	423.05	3855
107.95	2183	177.95	95	256.00	6658	423.95	871
109.95	28864	178.95	3607	257.10	618	424.95	54
110.95	3987	179.95	2178	257.90	2431	441.10	12782
111.95	535	180.95	1077	258.90	514	442.00	77016
113.05	204	182.55	231	260.00	60	443.00	14781
114.95	84	183.15	78	261.00	57	444.00	1471
116.95	11746	183.95	381	263.90	56	445.00	53
117.95	716	185.05	1380	265.00	913		
118.95	138	186.05	11919	265.80	68		
119.95	171	186.90	3409	267.80	64		

SPL Houston Labs

INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-1997 11:02
End Cal Date : 17-FEB-1997 13:02
Quant Method : ISTD
Target Version : 3.10
Integrator : HP RTE
Method file : /chem1/h.i/h970217.b/h8270wQ.m
Cal Date : 17-Feb-1997 14:12 liping

Calibration File Names:
Level 1: /chem1/h.i/h970217.b/h048ic5.d
Level 2: /chem1/h.i/h970217.b/h048ic1.d
Level 3: /chem1/h.i/h970217.b/h048ic2.d
Level 4: /chem1/h.i/h970217.b/h048ic3.d
Level 5: /chem1/h.i/h970217.b/h048ic4.d

Compound	20 Level 1	50 Level 2	80 Level 3	120 Level 4	160 Level 5	Curve	Coefficients a0	a1	a2	%RSD or R^2
2 Pyridine	182574	420128	717574	981641	1159936	QUAD	0.13985	0.59076	0.02877	0.99954
5 Phenol	283672	525576	938770	1211159	1465023	QUAD	0.01924	0.51761	0.01368	0.99966
6 Aniline	234920	438964	840040	1164057	1355894	QUAD	0.13772	0.53059	0.01606	0.99724
7 bis(2-Chloroethyl)ether	245960	489644	808512	1019027	1289035	QUAD	-0.07626	0.66403	0.00842	0.99751
9 2-Chlorophenol	207603	396505	711793	942525	1163871	QUAD	0.00948	0.72633	0.00771	0.99982
10 1,3-Dichlorobenzene	216362	428355	757109	994853	1242084	QUAD	0.00261	0.69009	0.00558	0.99965
12 1,4-Dichlorobenzene	235146	454697	788340	1035663	1287587	QUAD	-0.02588	0.66808	0.00563	0.99971
13 Benzyl alcohol	86222	182449	367806	465630	556126	QUAD	0.21926	1.09943	0.16717	0.99770
15 1,2-Dichlorobenzene	208006	407318	711911	921739	1129463	QUAD	0.01460	0.69506	0.01886	0.99970

BOE-C6-0109616

SPL Houston Labs

INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-1997 11:02
End Cal Date : 17-FEB-1997 13:02
Quant Method : ISTD
Target Version : 3.10
Integrator : HP RTE
Method file : /chem1/h.i/h970217.b/h8270wQ.m
Cal Date : 17-Feb-1997 14:12 liping

Compound	20 Level 1	50 Level 2	80 Level 3	120 Level 4	160 Level 5	Curve	Coefficients a0	a1	a2	%RSD or R^2
16 2-Methylphenol	186549	342448	621595	826104	1001821	QUAD	0.02127	0.80690	0.01750	0.99967
17 ortho-Cresol	186549	342448	621595	826104	1001821	QUAD	0.02127	0.80690	0.01750	0.99967
18 bis(2-chloroisopropyl)ether	259975	473832	813566	1063256	1302868	QUAD	-0.05772	0.64517	0.00887	0.99988
19 4-Methylphenol	195109	339255	609685	825290	1009685	QUAD	-0.04185	0.88263	0.00201	0.99967
20 meta,para-Cresol	195109	339255	609685	825290	1009685	QUAD	-0.04185	0.88263	0.00201	0.99967
21 N-Nitroso-di-n-propylamine	126907	234398	406582	516791	598355	QUAD	0.08261	0.97797	0.17882	0.99964
22 Hexachloroethane	89263	175343	295835	375896	463745	QUAD	-0.02424	1.69396	0.12331	0.99904
24 Nitrobenzene	188087	334198	608215	817702	972283	QUAD	-0.01672	2.91238	0.11454	0.99998
25 Isophorone	372965	661262	1194887	1548031	1920263	QUAD	-0.09133	1.63220	-0.01680	0.99871
26 2-Nitrophenol	109226	185106	363979	495228	627443	QUAD	-0.04931	5.55300	-0.90093	0.99959
27 2,4-Dimethylphenol	173405	327691	614177	813689	981210	QUAD	0.03083	2.84708	0.11979	0.99979
28 Benzoic acid	49949	135036	311446	424150	546022	QUAD	0.26345	5.43965	-0.47868	0.99833
29 bis(2-Chloroethoxy)methane	227820	432089	768791	1010772	1206580	QUAD	0.00420	2.21995	0.14981	0.99955
30 2,4-Dichlorophenol	102875	276716	521928	698105	857342	QUAD	0.18257	3.02844	0.25239	0.99905
31 1,2,4-Trichlorobenzene	162311	309299	551207	737759	910055	QUAD	-0.03772	3.38915	-0.06944	0.99915
33 Naphthalene	550829	1011671	1779922	2242322	2752062	QUAD	-0.07256	1.03591	0.01898	0.99754
34 4-Chloroaniline	198751	355271	711459	958865	1138252	QUAD	0.07907	2.39506	0.09884	0.99946

BOE-C6-0109617

SPL Houston Labs

INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-1997 11:02
End Cal Date : 17-FEB-1997 13:02
Quant Method : ISTD
Target Version : 3.10
Integrator : HP RTE
Method file : /chem1/h.i/h970217.b/h8270wQ.m
Cal Date : 17-Feb-1997 14:12 liping

Compound	20 Level 1	50 Level 2	80 Level 3	120 Level 4	160 Level 5	Curve	Coefficients a0	a1	a2	%RSD or R^2
35 Hexachlorobutadiene	76610	146090	263312	354472	432670	QUAD	-0.01267	6.91708	-0.03490	0.99956
36 4-Chloro-3-methylphenol	141137	267380	504385	683127	817744	QUAD	0.04873	3.42649	0.14033	0.99999
37 2-Methylnaphthalene	356814	643645	1105598	1466997	1745370	QUAD	-0.05909	1.59794	0.05577	0.99934
38 Hexachlorocyclopentadiene	63005	130892	269231	365696	455141	QUAD	0.11179	3.07485	-0.01782	0.99994
39 2,4,6-Trichlorophenol	88301	171364	330906	439359	507802	QUAD	0.12451	2.10113	0.42742	0.99939
40 2,4,5-Trichlorophenol	99384	190798	367636	487437	575427	QUAD	0.08497	2.04179	0.23706	0.99986
42 2-Chloronaphthalene	288276	540589	983299	1318508	1535186	QUAD	0.04490	0.75478	0.03760	0.99929
43 2-Nitroaniline	78501	151265	279395	373543	442123	QUAD	0.04941	2.74086	0.35990	0.99968
44 Dimethylphthalate	328430	615741	1113489	1396222	1545166	QUAD	0.17255	0.44267	0.10041	0.99908
45 2,6-Dinitrotoluene	78206	149853	275225	366804	445002	QUAD	0.00442	2.99525	0.17424	0.99966
46 Acenaphthylene	481463	880482	1617923	2147286	2235845	QUAD	0.21831	0.28016	0.04786	0.98847
47 3-Nitroaniline	74518	143129	286389	386719	484378	QUAD	0.03975	3.04948	-0.09293	0.99996
49 Acenaphthene	286797	531845	952774	1256744	1522311	QUAD	-0.03802	0.87720	0.01709	0.99940
50 2,4-Dinitrophenol	31866	78566	170472	224962	294237	QUAD	0.17036	4.95887	-0.34601	0.99874
51 4-Nitrophenol	24068	56728	119406	156798	209223	QUAD	0.11469	7.47008	-1.35462	0.99823
52 Dibenzofuran	393646	731827	1356359	1762201	2139712	QUAD	-0.00998	0.60982	0.01030	0.99973
53 2,4-Dinitrotoluene	96212	184815	358774	456714	565534	QUAD	0.02316	2.33996	0.11699	0.99924

SPL Houston Labs

INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-1997 11:02
End Cal Date : 17-FEB-1997 13:02
Quant Method : ISTD
Target Version : 3.10
Integrator : HP RTE
Method file : /chem1/h.i/h970217.b/h8270wQ.m
Cal Date : 17-Feb-1997 14:12 liping

Compound	20 Level 1	50 Level 2	80 Level 3	120 Level 4	160 Level 5	Curve	Coefficients a0	a1	a2	%RSD or R^2
54 Diethylphthalate	325147	596229	1006000	1329150	1528156	QUAD	0.00028	0.69990	0.05441	0.99824
55 4-Chlorophenyl-phenylether	140574	262574	488159	592159	701964	QUAD	0.05819	1.41477	0.30729	0.99912
56 Fluorene	308981	562651	1043630	1213991	1438409	QUAD	0.06382	0.61331	0.09273	0.99753
57 4-Nitroaniline	48429	130150	252965	320904	419933	QUAD	0.12980	3.27404	0.04682	0.99612
58 4,6-Dinitro-2-methylphenol	48148	104614	202204	271915	354182	QUAD	0.10944	5.49976	-0.48717	0.99993
59 n-Nitrosodiphenylamine	191109	362629	659679	798786	944035	QUAD	0.13286	1.24348	0.32843	0.99971
60 1,2-Diphenylhydrazine	347930	617172	1106145	1385265	1516189	QUAD	0.19684	0.57623	0.17197	0.99144
62 4-Bromophenyl-phenylether	66502	129271	240260	284703	359627	QUAD	0.05005	4.31301	1.10975	0.99904
63 Hexachlorobenzene	77821	144906	268783	323610	389652	QUAD	0.10294	3.33938	1.59635	0.99989
64 Pentachlorophenol	39759	83072	162636	204738	270533	QUAD	0.07328	7.07151	-0.44537	0.99947
66 Phenanthrene	388327	727200	1401230	1650759	2125312	QUAD	0.02691	0.79411	0.01881	0.99834
67 Anthracene	417657	766569	1374426	1747594	2184186	QUAD	-0.00869	0.80304	0.01176	0.99985
68 Carbazole	347587	640653	1172287	1512684	1949055	QUAD	-0.02754	1.01053	-0.01043	0.99990
69 Di-n-butylphthalate	512076	958492	1606965	2052632	2611412	QUAD	-0.07893	0.72070	0.00216	0.99855
70 Fluoranthene	351441	670609	1190303	1538117	2020137	QUAD	-0.05420	1.02351	-0.01902	0.99933
71 Pyrene	345927	669218	1192520	1560726	2046776	QUAD	-0.01431	0.53194	0.01212	0.99977
73 Butylbenzylphthalate	180287	356723	604308	794424	1085370	QUAD	-0.11100	1.17836	0.00259	0.99889

BOE-C6-0109619

SPL Houston Labs

INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-1997 11:02
End Cal Date : 17-FEB-1997 13:02
Quant Method : ISTD
Target Version : 3.10
Integrator : HP RTE
Method file : /chem1/h.i/h970217.b/h8270wQ.m
Cal Date : 17-Feb-1997 14:12 liping

Compound	20 Level 1	50 Level 2	80 Level 3	120 Level 4	160 Level 5	Curve	Coefficients a0	a1	a2	%RSD or R^2
74 3,3'-Dichlorobenzidine	75465	153103	286606	370368	537216	QUAD	-0.07612	2.69863	-0.18333	0.99889
75 Benzo[a]anthracene	226743	464874	845519	1138952	1492127	QUAD	0.04387	0.73465	0.01874	0.99940
77 Chrysene	222250	444363	797720	1052824	1395743	QUAD	-0.00148	0.80840	0.01924	0.99981
78 bis(2-Ethylhexyl)phthalate	255047	504591	863955	1113667	1495136	QUAD	-0.07184	0.77451	0.01654	0.99931
79 Di-n-octylphthalate	369370	743850	1265782	1658102	2237965	QUAD	-0.12872	0.41321	0.00139	0.99790
80 Benzo[b]fluoranthene	152201	320691	651316	917372	1312280	QUAD	0.02207	0.83829	-0.02473	0.99977
81 Benzo[k]fluoranthene	202005	409671	744473	926326	1218206	QUAD	-0.01163	0.60982	0.02872	0.99976
82 Benzo[a]pyrene	133127	273920	537364	708959	976952	QUAD	-0.00759	0.97943	-0.00779	0.99999
84 Indeno[1,2,3-cd]pyrene	127664	261210	537508	693110	972451	QUAD	0.00869	0.99924	-0.01198	0.99971
85 Dibenz[a,h]anthracene	104627	210093	441423	564877	797545	QUAD	0.00866	1.23241	-0.02178	0.99939
86 Benzo[g,h,i]perylene	102947	207166	424524	554638	761518	QUAD	0.02300	1.22248	-0.00560	0.99984
96 Benzidine	+++++	138427	296202	406438	673117	QUAD	-0.13047	2.98995	-0.49729	0.99822
$ 3 2-Fluorophenol	165311	406536	729570	922177	1164452	QUAD	0.12310	0.64575	0.01998	0.99792
$ 4 Phenol-d5	206657	419283	759498	974575	1201506	QUAD	0.06034	0.63997	0.01765	0.99931
$ 23 Nitrobenzene-d5	196364	358238	643265	850662	1014275	QUAD	-0.01406	2.71406	0.16550	0.99979
$ 41 2-Fluorobiphenyl	350537	640196	1142357	1513468	1808814	QUAD	-0.03156	0.71286	0.01658	0.99946
$ 61 2,4,6-Tribromophenol	39467	74251	145967	184793	229639	QUAD	0.09561	7.14227	1.59962	0.99968
$ 72 Terphenyl-d14	215997	414346	715731	955276	1239610	QUAD	-0.03400	0.88348	0.03236	0.99904

BOE-C6-0109620

Curve	Formula	Units
Quad	y = a0 + (a1 * x) + (a2 * (x^2))	Response

BOE-C6-0109621

SPL Houston Labs

INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-1997 11:02
End Cal Date : 17-FEB-1997 13:02
Quant Method : ISTD
Target Version : 3.10
Integrator : HP RTE
Method file : /chem1/h.i/h970217.b/h8270w.m
Cal Date : 17-Feb-1997 13:41 liping
Curve Type : Average

Calibration File Names:
Level 1: /chem1/h.i/h970217.b/h048ic5.d
Level 2: /chem1/h.i/h970217.b/h048ic1.d
Level 3: /chem1/h.i/h970217.b/h048ic2.d
Level 4: /chem1/h.i/h970217.b/h048ic3.d
Level 5: /chem1/h.i/h970217.b/h048ic4.d

Compound	20 Level 1	50 Level 2	80 Level 3	120 Level 4	160 Level 5	RRF	% RSD
2 Pyridine	0.95162	0.93719	0.93402	0.91989	0.89941	0.92842	2.128
5 Phenol	1.10324	1.20924	1.21694	1.20918	1.16419	1.18056	4.065
6 Aniline	0.37628	0.46409	0.69256	0.99775	0.91474	0.68908	39.389
7 bis(2-Chloroethyl)ether	1.42735	1.42968	1.41634	1.23335	1.26078	1.35350	7.224
9 2-Chlorophenol	1.19005	1.14394	1.18441	1.22082	1.16396	1.18063	2.448
10 1,3-Dichlorobenzene	1.36520	1.28959	1.38428	1.39634	1.36695	1.36047	3.062
12 1,4-Dichlorobenzene	1.42262	1.36859	1.45792	1.46591	1.39515	1.42204	2.898
13 Benzyl alcohol	0.33626	0.44781	0.47987	0.51636	0.51329	0.45872	16.117
15 1,2-Dichlorobenzene	1.23651	1.15906	1.21002	1.30467	1.24002	1.23005	4.292
16 2-Methylphenol	0.83841	0.85463	0.87140	0.88944	0.86700	0.86418	2.206
17 ortho-Cresol	0.83841	0.85463	0.87140	0.88944	0.86700	0.86418	2.206
18 bis(2-chloroisopropyl)ether	0.87240	0.89985	0.87690	0.92980	0.93870	0.90353	3.329
19 4-Methylphenol	0.72507	0.81791	0.80725	0.89190	0.88071	0.82457	8.119
20 meta,para-Cresol	0.72469	0.81791	0.80725	0.89190	0.88071	0.82449	8.137
21 N-Nitroso-di-n-propylamine	0.41640	0.47311	0.42906	0.46845	0.45903	0.44921	5.588
22 Hexachloroethane	0.51840	0.50288	0.51533	0.51296	0.49616	0.50915	1.828
24 Nitrobenzene	0.30851	0.27562	0.29878	0.29609	0.29571	0.29494	4.061
25 Isophorone	0.45258	0.47983	0.49110	0.50200	0.51131	0.48737	4.666
26 2-Nitrophenol	0.18488	0.18299	0.19407	0.17159	0.19379	0.18546	4.988
27 2,4-Dimethylphenol	0.24298	0.27449	0.28823	0.28764	0.30324	0.27931	8.135
28 Benzoic acid	0.10054	0.12119	0.12494	0.15361	0.16082	0.13222	18.732
29 bis(2-Chloroethoxy)methane	0.24114	0.30324	0.31771	0.32999	0.33281	0.30498	12.313
30 2,4-Dichlorophenol	0.24977	0.24719	0.26257	0.24102	0.28909	0.25793	7.408
31 1,2,4-Trichlorobenzene	0.31177	0.30017	0.31814	0.32263	0.32062	0.31467	2.884
33 Naphthalene	0.98451	0.93711	0.98177	0.95192	0.93347	0.95776	2.527
34 4-Chloroaniline	0.26811	0.20926	0.23739	0.27593	0.30184	0.25851	13.874

SPL Houston Labs

INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-1997 11:02
End Cal Date : 17-FEB-1997 13:02
Quant Method : ISTD
Target Version : 3.10
Integrator : HP RTE
Method file : /chem1/h.i/h970217.b/h8270w.m
Cal Date : 17-Feb-1997 13:41 liping
Curve Type : Average

Compound	20 Level 1	50 Level 2	80 Level 3	120 Level 4	160 Level 5	RRF	% RSD
35 Hexachlorobutadiene	0.16469	0.15913	0.17082	0.17165	0.17375	0.16801	3.572
36 4-Chloro-3-methylphenol	0.19830	0.20470	0.21488	0.22053	0.23642	0.21497	6.877
37 2-Methylnaphthalene	0.65952	0.56714	0.58309	0.62014	0.67074	0.62013	7.342
38 Hexachlorocyclopentadiene	0.29008	0.36964	0.38444	0.39326	0.40542	0.36857	12.419
39 2,4,6-Trichlorophenol	0.31701	0.34369	0.36339	0.37794	0.40002	0.36041	8.827
40 2,4,5-Trichlorophenol	0.33676	0.37197	0.39938	0.40531	0.43827	0.39034	9.764
42 2-Chloronaphthalene	0.80311	1.06849	1.18065	1.17578	1.19236	1.08408	15.203
43 2-Nitroaniline	0.17543	0.20903	0.23725	0.24828	0.26577	0.22715	15.632
44 Dimethylphthalate	1.12892	1.19861	1.22720	1.21954	1.24576	1.20401	3.758
45 2,6-Dinitrotoluene	0.22732	0.27132	0.29315	0.31074	0.32400	0.28531	13.306
46 Acenaphthylene	1.65076	1.62997	1.71381	1.78963	1.75558	1.70795	3.963
47 3-Nitroaniline	0.22190	0.19708	0.23702	0.28178	0.30516	0.24859	17.764
49 Acenaphthene	1.02585	1.03464	1.07151	1.05789	1.04360	1.04670	1.742
50 2,4-Dinitrophenol	0.13435	0.16160	0.16615	0.18999	0.21382	0.17318	17.384
51 4-Nitrophenol	0.12300	0.12165	0.11850	0.13753	0.14416	0.12897	8.694
52 Dibenzofuran	1.42465	1.42376	1.49277	1.50889	1.51747	1.47351	3.113
53 2,4-Dinitrotoluene	0.32382	0.34320	0.37833	0.36940	0.38549	0.36005	7.169
54 Diethylphthalate	1.14915	1.18765	1.21321	1.20112	1.10860	1.17195	3.653
55 4-Chlorophenyl-phenylether	0.53186	0.52488	0.54467	0.54971	0.56534	0.54329	2.908
56 Fluorene	1.09418	1.11219	1.15373	1.14936	1.14734	1.13136	2.351
57 4-Nitroaniline	0.25671	0.24352	0.25927	0.26370	0.29673	0.26399	7.496
58 4,6-Dinitro-2-methylphenol	0.11091	0.12183	0.14596	0.16101	0.16624	0.14119	17.111
59 n-Nitrosodiphenylamine	0.48941	0.47950	0.48737	0.51658	0.51657	0.49789	3.506
60 1,2-Diphenylhydrazine	0.62877	0.63988	0.64501	0.68442	0.65402	0.65042	3.242
62 4-Bromophenyl-phenylether	0.19625	0.19275	0.19554	0.21840	0.21214	0.20302	5.654
63 Hexachlorobenzene	0.21975	0.21627	0.21853	0.23306	0.23530	0.22458	3.955
64 Pentachlorophenol	0.11549	0.12899	0.13289	0.15221	0.15366	0.13665	11.869
66 Phenanthrene	0.93400	0.87659	0.93709	1.00811	0.98316	0.94779	5.345
67 Anthracene	1.04248	0.98919	1.03726	1.09923	1.08800	1.05123	4.194
68 Carbazole	0.83751	0.79578	0.86570	0.96630	0.97915	0.88889	9.068
69 Di-n-butylphthalate	1.15299	1.17183	1.20966	1.27501	1.26014	1.21393	4.392
70 Fluoranthene	0.88699	0.83828	0.90666	0.97517	0.98217	0.91785	6.634
71 Pyrene	1.21608	1.28005	1.25646	1.27610	1.28779	1.26330	2.281
73 Butylbenzylphthalate	0.61131	0.61013	0.64223	0.66807	0.69660	0.64567	5.769

SPL Houston Labs

INITIAL CALIBRATION DATA

Start Cal Date : 17-FEB-1997 11:02
End Cal Date : 17-FEB-1997 13:02
Quant Method : ISTD
Target Version : 3.10
Integrator : HP RTE
Method file : /chem1/h.i/h970217.b/h8270w.m
Cal Date : 17-Feb-1997 13:41 liping
Curve Type : Average

Compound	20 Level 1	50 Level 2	80 Level 3	120 Level 4	160 Level 5	___ RRF	% RSD
74 3,3'-Dichlorobenzidine	0.32903	0.32528	0.37089	0.39848	0.42167	0.36907	11.460
75 Benzo[a]anthracene	1.00502	0.99313	1.04778	1.10914	1.11774	1.05456	5.457
77 Chrysene	1.13972	1.08397	1.10281	1.11137	1.08519	1.10461	2.067
78 bis(2-Ethylhexyl)phthalate	0.88545	0.86665	0.90755	0.92420	0.93598	0.90397	3.120
79 Di-n-octylphthalate	1.31664	1.42253	1.30789	1.48189	1.55500	1.41679	7.508
80 Benzo[b]fluoranthene	0.76688	0.84964	0.85273	1.16302	1.10755	0.94797	18.517
81 Benzo[k]fluoranthene	1.34933	1.26887	1.32695	1.27268	1.36938	1.31744	3.430
82 Benzo[a]pyrene	0.90901	0.83665	0.95866	1.05870	1.06858	0.96632	10.237
84 Indeno[1,2,3-cd]pyrene	1.22565	1.02774	1.37729	1.39675	1.41107	1.28770	12.676
85 Dibenz[a,h]anthracene	0.90639	0.80603	1.10821	1.14892	1.15135	1.02418	15.458
86 Benzo[g,h,i]perylene	0.84947	0.78264	1.12062	1.12486	1.16998	1.00951	17.753
96 Benzidine	0.21721	0.17632	0.16998	0.17488	0.20776	0.18923	11.425
$ 3 2-Fluorophenol	1.17523	1.12311	1.23709	1.06089	1.07247	1.13376	6.478
$ 4 Phenol-d5	1.26163	1.18250	1.19684	1.02186	0.98736	1.13004	10.526
$ 23 Nitrobenzene-d5	0.27465	0.26908	0.30113	0.29284	0.29919	0.28738	5.088
$ 41 2-Fluorobiphenyl	1.31090	1.29136	1.35825	1.38620	1.37220	1.34379	3.033
$ 61 2,4,6-Tribromophenol	0.10961	0.10902	0.11620	0.12382	0.12657	0.11705	6.851
$ 72 Terphenyl-d14	0.96698	0.99009	0.97119	0.96860	0.98038	0.97545	0.993

SPL Houston Labs

Data file : /chem1/h.i/h970217.b/h048ic5.d
Lab Smp Id:
Inj Date : 17-FEB-1997 13:02
Operator : LH Inst ID: h.i
Smp Info : SSTD020-8270W/1X
Misc Info : 970217
Comment :
Method : /chem1/h.i/h970217.b/h8270w.m
Meth Date : 17-Feb-1997 13:58 liping Quant Type: ISTD
Cal Date : 17-FEB-1997 11:02 Cal File: h048ic1.d
Als bottle: 6 Calibration Sample, Level: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: std.sub
Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
2 Pyridine	79.00	2.265	2.265	(0.461)	149204	20	20(M)
5 Phenol	94.00	4.703	4.703	(0.956)	172976	20	19
6 Aniline	93.00	4.647	4.647	(0.945)	58996	20	11(M)
7 bis(2-Chloroethyl)ether	93.00	4.658	4.658	(0.947)	223792	20	21(M)
9 2-Chlorophenol	128.00	4.771	4.771	(0.970)	186586	20	20
10 1,3-Dichlorobenzene	146.00	4.873	4.873	(0.991)	214048	20	20
12 1,4-Dichlorobenzene	146.00	4.940	4.940	(1.005)	223051	20	20
13 Benzyl alcohol	108.00	5.347	5.347	(1.087)	52722	20	15(M)
15 1,2-Dichlorobenzene	146.00	5.200	5.200	(1.057)	193871	20	20
16 2-Methylphenol	108.00	5.471	5.471	(1.112)	131454	20	19
18 bis(2-chloroisopropyl)ether	45.00	5.369	5.369	(1.092)	136783	20	19
19 4-Methylphenol	108.00	5.742	5.742	(1.168)	113683	20	18(M)
21 N-Nitroso-di-n-propylamine	70.00	5.606	5.606	(1.140)	65287	20	18
22 Hexachloroethane	116.50	5.584	5.584	(1.135)	81280	20	20
24 Nitrobenzene	77.00	5.855	5.855	(0.868)	136110	20	21
25 Isophorone	82.00	6.148	6.148	(0.911)	199675	20	18
26 2-Nitrophenol	139.00	6.340	6.340	(0.940)	81568	20	20
27 2,4-Dimethylphenol	107.00	6.430	6.430	(0.953)	107199	20	17
28 Benzoic acid	122.00	7.029	7.029	(1.042)	44357	20	15(M)
29 bis(2-Chloroethoxy)methane	93.00	6.487	6.487	(0.962)	106390	20	16
30 2,4-Dichlorophenol	162.00	6.803	6.803	(1.008)	110195	20	19(M)
31 1,2,4-Trichlorobenzene	180.00	6.690	6.690	(0.992)	137552	20	20
33 Naphthalene	128.00	6.780	6.780	(1.005)	434356	20	20
34 4-Chloroaniline	127.00	7.085	7.085	(1.050)	118287	20	21(M)
35 Hexachlorobutadiene	224.50	7.029	7.029	(1.042)	72658	20	20
36 4-Chloro-3-methylphenol	107.00	7.920	7.920	(1.174)	87488	20	18
37 2-Methylnaphthalene	142.00	7.875	7.875	(1.167)	290974	20	21(M)
38 Hexachlorocyclopentadiene	237.00	8.180	8.180	(0.861)	56383	20	16
39 2,4,6-Trichlorophenol	196.00	8.462	8.462	(0.891)	61617	20	18

	Compounds	QUANT SIC MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	40 2,4,5-Trichlorophenol	196.00	8.643	8.643	(0.910)	65456	20	17
	42 2-Chloronaphthalene	162.00	8.631	8.631	(0.908)	156100	20	15
	43 2-Nitroaniline	65.00	9.049	9.049	(0.952)	34098	20	15
	44 Dimethylphthalate	163.00	9.230	9.230	(0.971)	219428	20	19
	45 2,6-Dinitrotoluene	165.00	9.376	9.376	(0.987)	44183	20	16
	46 Acenaphthylene	152.00	9.275	9.275	(0.976)	320856	20	19
	47 3-Nitroaniline	138.00	9.783	9.783	(1.030)	43131	20	18 (M)
	49 Acenaphthene	153.00	9.557	9.557	(1.006)	199394	20	20
	50 2,4-Dinitrophenol	184.00	9.907	9.907	(1.043)	26114	20	16 (M)
	51 4-Nitrophenol	109.00	10.370	10.370	(1.091)	23908	20	19 (M)
	52 Dibenzofuran	168.00	9.850	9.850	(1.037)	276908	20	19
	53 2,4-Dinitrotoluene	165.00	10.065	10.065	(1.059)	62941	20	18
	54 Diethylphthalate	149.00	10.325	10.325	(1.087)	223359	20	20
	55 4-Chlorophenyl-phenylether	204.00	10.381	10.381	(1.093)	103378	20	20
	56 Fluorene	166.00	10.381	10.381	(1.093)	212674	20	19
	57 4-Nitroaniline	138.00	10.866	10.866	(1.144)	49897	20	19 (M)
	58 4,6-Dinitro-2-methylphenol	198.00	10.697	10.697	(0.902)	31861	20	16
	59 n-Nitrosodiphenylamine	169.00	10.629	10.629	(0.896)	140590	20	20
	60 1,2-Diphenylhydrazine	77.00	10.641	10.641	(0.897)	180622	20	19
	62 4-Bromophenyl-phenylether	248.00	11.149	11.149	(0.940)	56375	20	19
	63 Hexachlorobenzene	283.70	11.363	11.363	(0.958)	63127	20	20
	64 Pentachlorophenol	265.50	11.747	11.747	(0.990)	33175	20	17
	66 Phenanthrene	178.00	11.905	11.905	(1.004)	268303	20	20
	67 Anthracene	178.00	11.995	11.995	(1.011)	299467	20	20
	68 Carbazole	167.00	12.402	12.402	(1.046)	240585	20	19
	69 Di-n-butylphthalate	149.00	12.909	12.909	(1.089)	331212	20	19
	70 Fluoranthene	202.00	13.846	13.846	(1.167)	254800	20	19
	71 Pyrene	202.00	14.196	14.196	(0.880)	250264	20	19
	73 Butylbenzylphthalate	149.00	15.291	15.291	(0.948)	125806	20	19
	74 3,3'-Dichlorobenzidine	252.00	16.194	16.194	(1.004)	67714	20	18
	75 Benzo[a]anthracene	228.00	16.104	16.104	(0.999)	206830	20	19
	77 Chrysene	228.00	16.183	16.183	(1.004)	234551	20	21
	78 bis(2-Ethylhexyl)phthalate	149.00	16.228	16.228	(1.006)	182222	20	20
	79 Di-n-octylphthalate	149.00	17.154	17.154	(0.932)	290007	20	18
	80 Benzo[b]fluoranthene	252.00	17.786	17.786	(0.967)	168916	20	16
	81 Benzo[k]fluoranthene	252.00	17.831	17.831	(0.969)	297209	20	20
	82 Benzo[a]pyrene	252.00	18.305	18.305	(0.995)	200222	20	19
	84 Indeno[1,2,3-cd]pyrene	276.00	20.585	20.585	(1.119)	269965	20	19
	85 Dibenz[a,h]anthracene	278.00	20.608	20.608	(1.120)	199645	20	18
	86 Benzo[g,h,i]perylene	276.00	21.262	21.262	(1.156)	187107	20	17
$	3 2-Fluorophenol	112.00	3.744	3.744	(0.761)	184263	20	21 (M)
$	4 Phenol-d5	99.00	4.681	4.681	(0.952)	197809	20	22 (M)
$	61 2,4,6-Tribromophenol	329.70	10.832	10.832	(0.913)	31486	20	19
$	23 Nitrobenzene-d5	82.00	5.798	5.798	(0.859)	121175	20	19 (M)
$	41 2-Fluorobiphenyl	172.00	8.473	8.473	(0.892)	254799	20	20
$	72 Terphenyl-d14	244.00	14.456	14.456	(0.896)	199001	20	20
*	11 1,4-Dichlorobenzene-d4	152.00	4.918	4.918	(1.000)	313578	40	
*	32 Naphthalene-d8	136.00	6.746	6.746	(1.000)	882383	40	
*	48 Acenaphthene-d10	164.00	9.501	9.501	(1.000)	388738	40	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 65 Phenanthrene-d10	188.00	11.860	11.860	(1.000)	574526	40	
* 76 Chrysene-d12	240.00	16.126	16.126	(1.000)	411593	40	
* 83 Perylene-d12	264.00	18.395	18.395	(1.000)	440527	40	
17 ortho-Cresol	108.00	5.471	5.471	(1.112)	131454	20	19
20 meta,para-Cresol	108.00	5.742	5.742	(1.168)	113623	20	18(M)
96 Benzidine	184.00	14.456	14.456	(0.896)	44702	20	23(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem1/h.i/h970217.b/h048ic5.d
Report Date: 17-Feb-1997 13:33

SPL Houston Labs

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: h.i
Lab File ID: h048ic5.d
Lab Smp Id:
Analysis Type: SV
Quant Type: ISTD
Operator: LH
Method File: /chem1/h.i/h970217.b/h8270w.m
Misc Info: 970217

Calibration Date: 02/17/97
Calibration Time: 1102

Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	267359	133680	534718	313578	17.29
32 Naphthalene-d8	797978	398989	1595956	882383	10.58
48 Acenaphthene-d10	355174	177587	710348	388738	9.45
65 Phenanthrene-d10	538601	269300	1077202	574526	6.67
76 Chrysene-d12	342859	171430	685718	411593	20.05
83 Perylene-d12	330072	165036	660144	440527	33.46

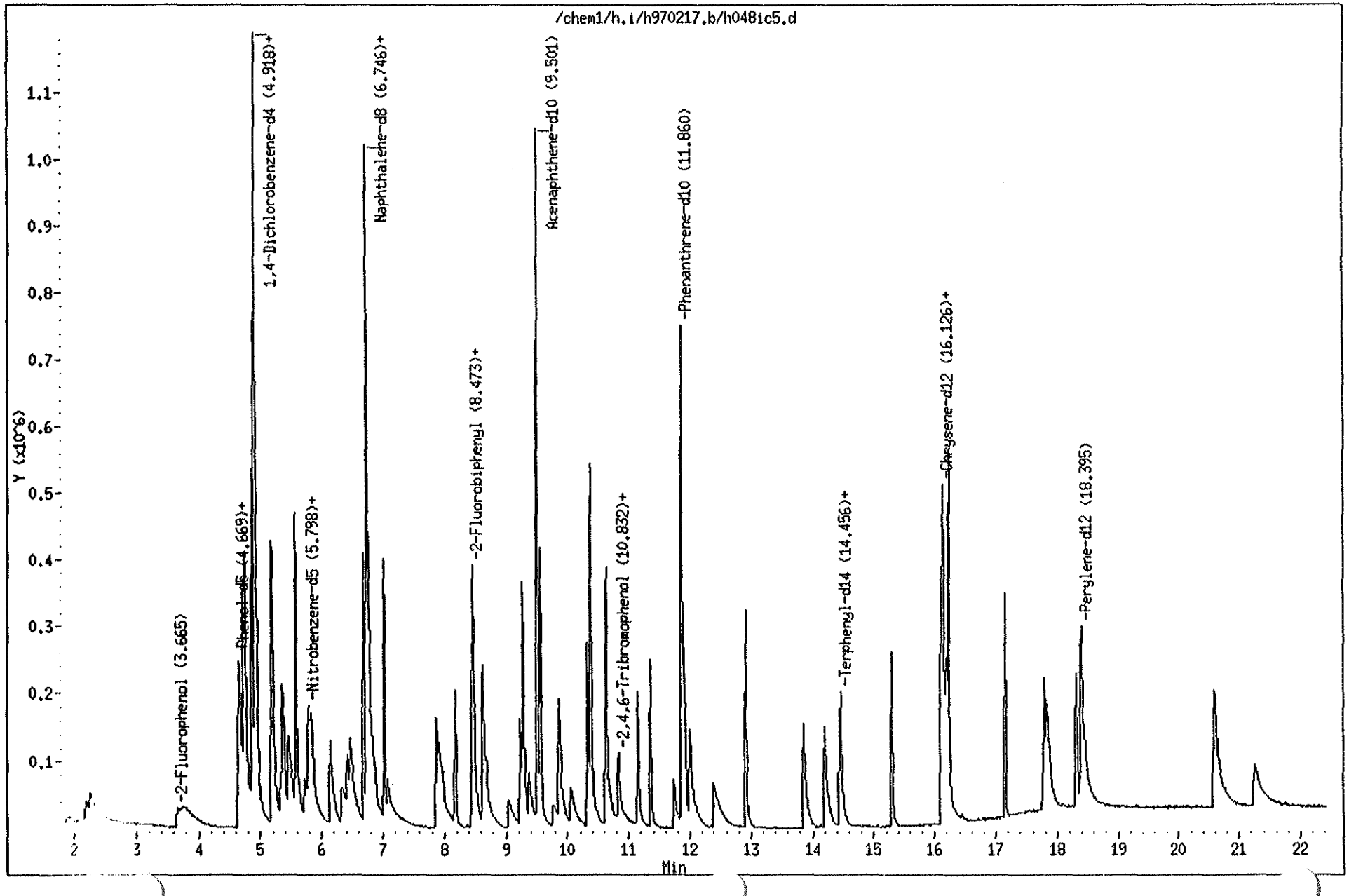
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	4.91	4.41	5.41	4.92	0.24
32 Naphthalene-d8	6.73	6.23	7.23	6.75	0.17
48 Acenaphthene-d10	9.49	8.99	9.99	9.50	0.12
65 Phenanthrene-d10	11.85	11.35	12.35	11.86	0.10
76 Chrysene-d12	16.11	15.61	16.61	16.13	0.07
83 Perylene-d12	18.38	17.88	18.88	18.40	0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/h.i/h970217.b/h048ic5.d
Date : 17-FEB-97 13:02
Client ID:
Sample Info: SSTD020-8270W/1X
Volume Injected (uL): 2.0
Column phase:

Instrument: h.i

Operator: LH
Column diameter: 0.25



BOE-C6-0109629

SPL Houston Labs

Data file : /chem1/h.i/h970217.b/h048ic1.d
Lab Smp Id:
Inj Date : 17-FEB-1997 11:02
Operator : LH Inst ID: h.i
Smp Info : SSTD050-8270W/1X
Misc Info : 970217
Comment :
Method : /chem1/h.i/h970217.b/h8270w.m
Meth Date : 17-Feb-1997 13:43 liping Quant Type: ISTD
Cal Date : 17-FEB-1997 11:02 Cal File: h048ic1.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: std.sub
Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
2 Pyridine	79.00	2.186	2.186	(0.446)	313207	50	50 (M)
5 Phenol	94.00	4.658	4.658	(0.949)	404127	50	51
6 Aniline	93.00	4.613	4.613	(0.940)	155097	50	34 (M)
7 bis(2-Chloroethyl)ether	93.00	4.635	4.635	(0.945)	477798	50	53 (M)
9 2-Chlorophenol	128.00	4.737	4.737	(0.965)	382303	50	48
10 1,3-Dichlorobenzene	146.00	4.861	4.861	(0.991)	430979	50	47
12 1,4-Dichlorobenzene	146.00	4.929	4.929	(1.005)	457381	50	48
13 Benzyl alcohol	108.00	5.279	5.279	(1.076)	149658	50	49
15 1,2-Dichlorobenzene	146.00	5.188	5.188	(1.058)	387355	50	47
16 2-Methylphenol	108.00	5.425	5.425	(1.106)	285617	50	49
18 bis(2-chloroisopropyl)ether	45.00	5.346	5.346	(1.090)	300729	50	50
19 4-Methylphenol	108.00	5.674	5.674	(1.156)	273344	50	50
21 N-Nitroso-di-n-propylamine	70.00	5.572	5.572	(1.136)	158114	50	53
22 Hexachloroethane	116.50	5.572	5.572	(1.136)	168063	50	49
24 Nitrobenzene	77.00	5.798	5.798	(0.861)	274926	50	47
25 Isophorone	82.00	6.114	6.114	(0.908)	478622	50	49
26 2-Nitrophenol	139.00	6.283	6.283	(0.933)	182531	50	49 (M)
27 2,4-Dimethylphenol	107.00	6.373	6.373	(0.946)	273793	50	49
28 Benzoic acid	122.00	6.701	6.701	(0.995)	120884	50	46
29 bis(2-Chloroethoxy)methane	93.00	6.452	6.452	(0.958)	302470	50	50
30 2,4-Dichlorophenol	162.00	6.791	6.791	(1.008)	246566	50	48 (M)
31 1,2,4-Trichlorobenzene	180.00	6.678	6.678	(0.992)	299413	50	48
33 Naphthalene	128.00	6.768	6.768	(1.005)	934737	50	49
34 4-Chloroaniline	127.00	7.028	7.028	(1.044)	208732	50	40
35 Hexachlorobutadiene	224.50	7.028	7.028	(1.044)	158728	50	47
36 4-Chloro-3-methylphenol	107.00	7.841	7.841	(1.164)	204184	50	48
37 2-Methylnaphthalene	142.00	7.841	7.841	(1.164)	565706	50	46
38 Hexachlorocyclopentadiene	237.00	8.168	8.168	(0.861)	164109	50	50
39 2,4,6-Trichlorophenol	196.00	8.394	8.394	(0.885)	152585	50	48

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
40 2,4,5-Trichlorophenol	196.00	8.552	8.552	(0.901)	165144	50	48
42 2-Chloronaphthalene	162.00	8.597	8.597	(0.906)	474373	50	49
43 2-Nitroaniline	65.00	8.970	8.970	(0.945)	92801	50	46
44 Dimethylphthalate	163.00	9.207	9.207	(0.970)	532145	50	50
45 2,6-Dinitrotoluene	165.00	9.342	9.342	(0.985)	120458	50	48
46 Acenaphthylene	152.00	9.252	9.252	(0.975)	723654	50	48
47 3-Nitroaniline	138.00	9.681	9.681	(1.020)	87498	50	40
49 Acenaphthene	153.00	9.534	9.534	(1.005)	459345	50	49
50 2,4-Dinitrophenol	184.00	9.827	9.827	(1.036)	71745	50	47(M)
51 4-Nitrophenol	109.00	10.166	10.166	(1.071)	54007	50	47(M)
52 Dibenzofuran	168.00	9.816	9.816	(1.034)	632104	50	48
53 2,4-Dinitrotoluene	165.00	10.008	10.008	(1.055)	152370	50	48
54 Diethylphthalate	149.00	10.313	10.313	(1.087)	527280	50	51
55 4-Chlorophenyl-phenylether	204.00	10.358	10.358	(1.092)	233031	50	48
56 Fluorene	166.00	10.358	10.358	(1.092)	493776	50	49
57 4-Nitroaniline	138.00	10.753	10.753	(1.133)	108114	50	46(M)
58 4,6-Dinitro-2-methylphenol	198.00	10.629	10.629	(0.897)	82022	50	43
59 n-Nitrosodiphenylamine	169.00	10.595	10.595	(0.894)	322827	50	48
60 1,2-Diphenylhydrazine	77.00	10.606	10.606	(0.895)	430799	50	49
62 4-Bromophenyl-phenylether	248.00	11.137	11.137	(0.940)	129771	50	47
63 Hexachlorobenzene	283.70	11.351	11.351	(0.958)	145606	50	48
64 Pentachlorophenol	265.50	11.713	11.713	(0.989)	86843	50	47
66 Phenanthrene	178.00	11.882	11.882	(1.003)	590163	50	46
67 Anthracene	178.00	11.961	11.961	(1.010)	665972	50	47
68 Carbazole	167.00	12.333	12.333	(1.041)	535761	50	45
69 Di-n-butylphthalate	149.00	12.898	12.898	(1.089)	788936	50	48
70 Fluoranthene	202.00	13.812	13.812	(1.166)	564371	50	46
71 Pyrene	202.00	14.162	14.162	(0.879)	548597	50	51
73 Butylbenzylphthalate	149.00	15.279	15.279	(0.948)	261485	50	47
74 3,3'-Dichlorobenzidine	252.00	16.149	16.149	(1.002)	139405	50	44
75 Benzo[a]anthracene	228.00	16.081	16.081	(0.998)	425630	50	47
77 Chrysene	228.00	16.160	16.160	(1.003)	464559	50	49
78 bis(2-Ethylhexyl)phthalate	149.00	16.216	16.216	(1.006)	371424	50	48
79 Di-n-octylphthalate	149.00	17.131	17.131	(0.932)	586920	50	50
80 Benzo[b]fluoranthene	252.00	17.751	17.751	(0.966)	350553	50	45
81 Benzo[k]fluoranthene	252.00	17.797	17.797	(0.968)	523525	50	48
82 Benzo[a]pyrene	252.00	18.282	18.282	(0.994)	345195	50	43
84 Indeno[1,2,3-cd]pyrene	276.00	20.528	20.528	(1.117)	424037	50	40
85 Dibenz[a,h]anthracene	278.00	20.551	20.551	(1.118)	332561	50	39
86 Benzo[g,h,i]perylene	276.00	21.194	21.194	(1.153)	322909	50	39
$ 3 2-Fluorophenol	112.00	3.563	3.563	(0.726)	375342	50	50(M)
$ 4 Phenol-d5	99.00	4.635	4.635	(0.945)	395190	50	52(M)
$ 61 2,4,6-Tribromophenol	329.70	10.798	10.798	(0.911)	73398	50	46
$ 23 Nitrobenzene-d5	82.00	5.764	5.764	(0.856)	268395	50	47
$ 41 2-Fluorobiphenyl	172.00	8.439	8.439	(0.889)	573324	50	48
$ 72 Terphenyl-d14	244.00	14.433	14.433	(0.896)	424326	50	51
* 11 1,4-Dichlorobenzene-d4	152.00	4.906	4.906	(1.000)	267359	40	
* 32 Naphthalene-d8	136.00	6.735	6.735	(1.000)	797978	40	
* 48 Acenaphthene-d10	164.00	9.489	9.489	(1.000)	355174	40	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT ng	ON-COL ng
* 65 Phenanthrene-d10	188.00	11.848	11.848	(1.000)	538601	40	
* 76 Chrysene-d12	240.00	16.115	16.115	(1.000)	342859	40	
* 83 Perylene-d12	264.00	18.384	18.384	(1.000)	330072	40	
17 ortho-Cresol	108.00	5.425	5.425	(1.106)	285617	50	49
20 meta,para-Cresol	108.00	5.674	5.674	(1.156)	273344	50	50
96 Benzidine	184.00	14.433	14.433	(0.896)	75567	50	46(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem1/h.i/h970217.b/h048ic1.d
Report Date: 17-Feb-1997 11:39

SPL Houston Labs

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: h.i
Lab File ID: h048ic1.d
Lab Smp Id:
Analysis Type: SV
Quant Type: ISTD
Operator: LH
Method File: /chem1/h.i/h970217.b/h8270w.m
Misc Info: 970217

Calibration Date: 02/17/97
Calibration Time: 1102

Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	267359	133680	534718	267359	0.00
32 Naphthalene-d8	797978	398989	1595956	797978	0.00
48 Acenaphthene-d10	355174	177587	710348	355174	0.00
65 Phenanthrene-d10	538601	269300	1077202	538601	0.00
76 Chrysene-d12	342859	171430	685718	342859	0.00
83 Perylene-d12	330072	165036	660144	330072	0.00

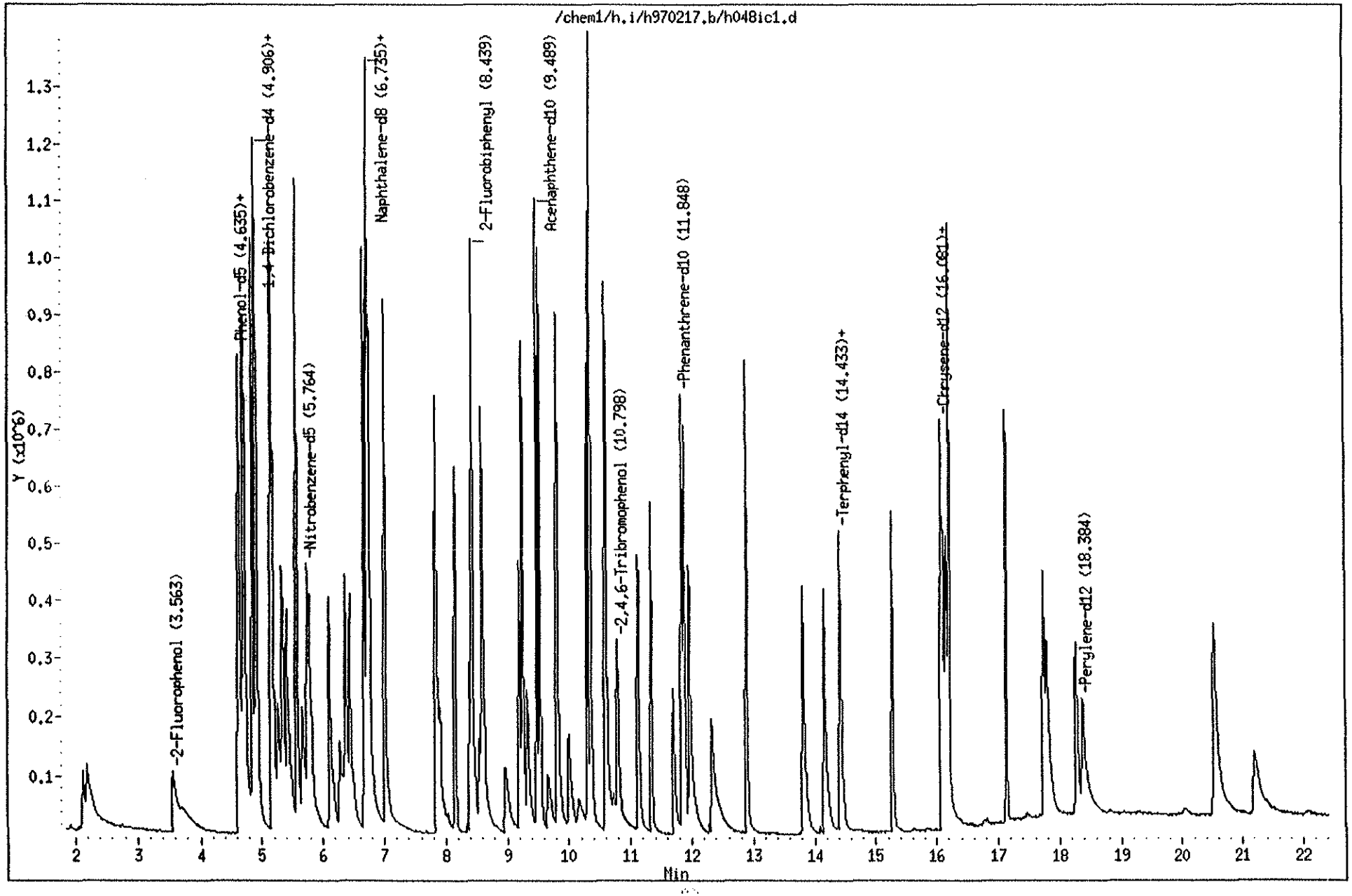
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	4.91	4.41	5.41	4.91	0.00
32 Naphthalene-d8	6.73	6.23	7.23	6.73	0.00
48 Acenaphthene-d10	9.49	8.99	9.99	9.49	0.00
65 Phenanthrene-d10	11.85	11.35	12.35	11.85	0.00
76 Chrysene-d12	16.11	15.61	16.61	16.11	0.00
83 Perylene-d12	18.38	17.88	18.88	18.38	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data F /chem1/h.i/h970217.b/h048ic1.d
Date : 17-FEB-97 11:02
Client ID:
Sample Info: SSTD050-8270W/1X
Volume Injected (uL): 2.0
Column phase:

Instrument: h.i

Operator: LH
Column diameter: 0.25



BOE-C6-0109634

SPL Houston Labs

Data file : /chem1/h.i/h970217.b/h048ic2.d
Lab Smp Id:
Inj Date : 17-FEB-1997 11:31
Operator : LH Inst ID: h.i
Smp Info : SSTD080-8270W/1X
Misc Info : 970217
Comment :
Method : /chem1/h.i/h970217.b/h8270w.m
Meth Date : 17-Feb-1997 13:58 liping Quant Type: ISTD
Cal Date : 17-FEB-1997 11:02 Cal File: h048ic1.d
Als bottle: 3 Calibration Sample, Level: 3
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: std.sub
Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
2 Pyridine	79.00	2.121	2.121	(0.432)	496288	80	80(M)
5 Phenol	94.00	4.638	4.638	(0.945)	646621	80	82
6 Aniline	93.00	4.604	4.604	(0.938)	367992	80	80
7 bis(2-Chloroethyl)ether	93.00	4.638	4.638	(0.945)	752572	80	84
9 2-Chlorophenol	128.00	4.728	4.728	(0.963)	629333	80	80
10 1,3-Dichlorobenzene	146.00	4.852	4.852	(0.989)	735537	80	81
12 1,4-Dichlorobenzene	146.00	4.931	4.931	(1.005)	774661	80	82
13 Benzyl alcohol	108.00	5.247	5.247	(1.069)	254978	80	84
15 1,2-Dichlorobenzene	146.00	5.180	5.180	(1.055)	642940	80	79
16 2-Methylphenol	108.00	5.417	5.417	(1.103)	463014	80	81
18 bis(2-chloroisopropyl)ether	45.00	5.349	5.349	(1.090)	465941	80	78
19 4-Methylphenol	108.00	5.654	5.654	(1.152)	428933	80	78
21 N-Nitroso-di-n-propylamine	70.00	5.575	5.575	(1.136)	227982	80	76
22 Hexachloroethane	116.50	5.575	5.575	(1.136)	273817	80	81
24 Nitrobenzene	77.00	5.778	5.778	(0.858)	433996	80	81
25 Isophorone	82.00	6.117	6.117	(0.908)	713344	80	81
26 2-Nitrophenol	139.00	6.263	6.263	(0.930)	281891	80	84(M)
27 2,4-Dimethylphenol	107.00	6.365	6.365	(0.945)	418661	80	82
28 Benzoic acid	122.00	6.692	6.692	(0.993)	181475	80	76(M)
29 bis(2-Chloroethoxy)methane	93.00	6.444	6.444	(0.956)	461493	80	83
30 2,4-Dichlorophenol	162.00	6.681	6.681	(0.992)	381400	80	81(M)
31 1,2,4-Trichlorobenzene	180.00	6.681	6.681	(0.992)	462111	80	81
33 Naphthalene	128.00	6.760	6.760	(1.003)	1426068	80	82
34 4-Chloroaniline	127.00	7.008	7.008	(1.040)	344820	80	73
35 Hexachlorobutadiene	224.50	7.020	7.020	(1.042)	248130	80	81
36 4-Chloro-3-methylphenol	107.00	7.821	7.821	(1.161)	312129	80	80
37 2-Methylnaphthalene	142.00	7.832	7.832	(1.163)	846968	80	75
38 Hexachlorocyclopentadiene	237.00	8.160	8.160	(0.860)	238716	80	83
39 2,4,6-Trichlorophenol	196.00	8.385	8.385	(0.883)	225644	80	81

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	40 2,4,5-Trichlorophenol	196.00	8.532	8.532	(0.899)	247993	80	82
	42 2-Chloronaphthalene	162.00	8.600	8.600	(0.906)	733112	80	87
	43 2-Nitroaniline	65.00	8.950	8.950	(0.943)	147315	80	84
	44 Dimethylphthalate	163.00	9.198	9.198	(0.969)	762017	80	82
	45 2,6-Dinitrotoluene	165.00	9.334	9.334	(0.983)	182029	80	82
	46 Acenaphthylene	152.00	9.255	9.255	(0.975)	1064175	80	80
	47 3-Nitroaniline	138.00	9.638	9.638	(1.015)	147178	80	76
	49 Acenaphthene	153.00	9.537	9.537	(1.005)	665343	80	82
	50 2,4-Dinitrophenol	184.00	9.808	9.808	(1.033)	103171	80	77
	51 4-Nitrophenol	109.00	10.124	10.124	(1.067)	73580	80	74
	52 Dibenzofuran	168.00	9.808	9.808	(1.033)	926922	80	81
	53 2,4-Dinitrotoluene	165.00	9.988	9.988	(1.052)	234921	80	84
	54 Diethylphthalate	149.00	10.316	10.316	(1.087)	753328	80	83
	55 4-Chlorophenyl-phenylether	204.00	10.361	10.361	(1.092)	338207	80	80
	56 Fluorene	166.00	10.349	10.349	(1.090)	716398	80	82
	57 4-Nitroaniline	138.00	10.699	10.699	(1.127)	160994	80	78 (M)
	58 4,6-Dinitro-2-methylphenol	198.00	10.620	10.620	(0.897)	141541	80	83
	59 n-Nitrosodiphenylamine	169.00	10.586	10.586	(0.894)	472630	80	78
	60 1,2-Diphenylhydrazine	77.00	10.609	10.609	(0.896)	625498	80	79
	62 4-Bromophenyl-phenylether	248.00	11.128	11.128	(0.940)	189624	80	77
	63 Hexachlorobenzene	283.70	11.354	11.354	(0.959)	211921	80	78
	64 Pentachlorophenol	265.50	11.704	11.704	(0.989)	128873	80	78
	66 Phenanthrene	178.00	11.873	11.873	(1.003)	908739	80	79
	67 Anthracene	178.00	11.964	11.964	(1.010)	1005881	80	79
	68 Carbazole	167.00	12.313	12.313	(1.040)	839506	80	78
	69 Di-n-butylphthalate	149.00	12.900	12.900	(1.090)	1173064	80	80
	70 Fluoranthene	202.00	13.803	13.803	(1.166)	879235	80	79
	71 Pyrene	202.00	14.153	14.153	(0.879)	869773	80	80
	73 Butylbenzylphthalate	149.00	15.271	15.271	(0.948)	444580	80	80
	74 3,3'-Dichlorobenzidine	252.00	16.129	16.129	(1.001)	256748	80	80
	75 Benzo[a]anthracene	228.00	16.084	16.084	(0.999)	725316	80	79
	77 Chrysene	228.00	16.151	16.151	(1.003)	763407	80	80
	78 bis(2-Ethylhexyl)phthalate	149.00	16.219	16.219	(1.007)	628241	80	80
	79 Di-n-octylphthalate	149.00	17.133	17.133	(0.932)	1021295	80	74
	80 Benzo[b]fluoranthene	252.00	17.732	17.732	(0.964)	665872	80	72
	81 Benzo[k]fluoranthene	252.00	17.777	17.777	(0.967)	1036177	80	80
	82 Benzo[a]pyrene	252.00	18.262	18.262	(0.993)	748591	80	79
	84 Indeno[1,2,3-cd]pyrene	276.00	20.497	20.497	(1.115)	1075491	80	86
	85 Dibenz[a,h]anthracene	278.00	20.520	20.520	(1.116)	865373	80	86
	86 Benzo[g,h,i]perylene	276.00	21.152	21.152	(1.150)	875057	80	89
$	3 2-Fluorophenol	112.00	3.520	3.520	(0.717)	657326	80	87 (M)
$	4 Phenol-d5	99.00	4.615	4.615	(0.940)	635939	80	85 (M)
$	61 2,4,6-Tribromophenol	329.70	10.801	10.801	(0.912)	112688	80	79
$	23 Nitrobenzene-d5	82.00	5.755	5.755	(0.854)	437402	80	84
$	41 2-Fluorobiphenyl	172.00	8.442	8.442	(0.889)	843394	80	81
$	72 Terphenyl-d14	244.00	14.424	14.424	(0.896)	672297	80	80
*	11 1,4-Dichlorobenzene-d4	152.00	4.909	4.909	(1.000)	265674	40	
*	32 Naphthalene-d8	136.00	6.737	6.737	(1.000)	726271	40	
*	48 Acenaphthene-d10	164.00	9.492	9.492	(1.000)	310470	40	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 65 Phenanthrene-d10	188.00	11.839	11.839	(1.000)	484874	40	
* 76 Chrysene-d12	240.00	16.106	16.106	(1.000)	346120	40	
* 83 Perylene-d12	264.00	18.386	18.386	(1.000)	390436	40	
17 ortho-Cresol	108.00	5.417	5.417	(1.103)	463014	80	81
20 meta,para-Cresol	108.00	5.654	5.654	(1.152)	428933	80	78
96 Benzidine	184.00	14.424	14.424	(0.896)	117665	80	72(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem1/h.i/h970217.b/h048ic2.d
Report Date: 17-Feb-1997 12:02

SPL Houston Labs

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: h.i
Lab File ID: h048ic2.d
Lab Smp Id:
Analysis Type: SV
Quant Type: ISTD
Operator: LH
Method File: /chem1/h.i/h970217.b/h8270w.m
Misc Info: 970217

Calibration Date: 02/17/97
Calibration Time: 1102

Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	267359	133680	534718	265674	-0.63
32 Naphthalene-d8	797978	398989	1595956	726271	-8.99
48 Acenaphthene-d10	355174	177587	710348	310470	-12.59
65 Phenanthrene-d10	538601	269300	1077202	484874	-9.98
76 Chrysene-d12	342859	171430	685718	346120	0.95
83 Perylene-d12	330072	165036	660144	390436	18.29

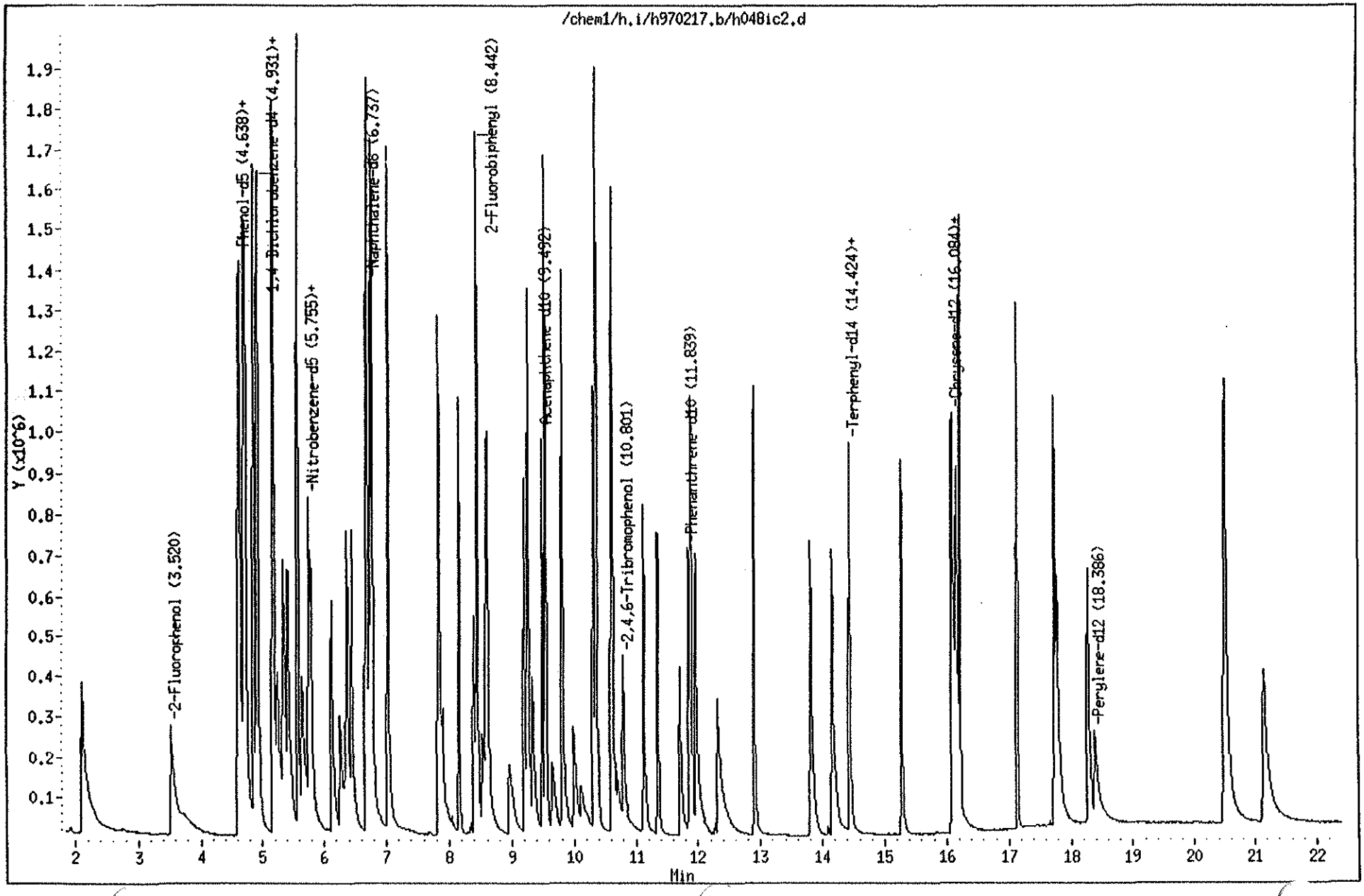
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	4.91	4.41	5.41	4.91	0.06
32 Naphthalene-d8	6.73	6.23	7.23	6.74	0.04
48 Acenaphthene-d10	9.49	8.99	9.99	9.49	0.03
65 Phenanthrene-d10	11.85	11.35	12.35	11.84	-0.07
76 Chrysene-d12	16.11	15.61	16.61	16.11	-0.05
83 Perylene-d12	18.38	17.88	18.88	18.39	0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/h.i/h970217.b/h048ic2.d
Date : 17-FEB-97 11:31
Client ID:
Sample Info: SSTD080-8270W/1X
Volume Injected (uL): 2.0
Column phase:

Instrument: h.i

Operator: LH
Column diameter: 0.25



BOE-C6-0109639

SPL Houston Labs

Data file : /chem1/h.i/h970217.b/h048ic3.d
Lab Smp Id:
Inj Date : 17-FEB-1997 12:00
Operator : LH Inst ID: h.i
Smp Info : SSTD120-8270W/1X
Misc Info : 970217
Comment :
Method : /chem1/h.i/h970217.b/h8270w.m
Meth Date : 17-Feb-1997 13:58 liping Quant Type: ISTD
Cal Date : 17-FEB-1997 11:02 Cal File: h048ic1.d
Als bottle: 4 Calibration Sample, Level: 4
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: std.sub
Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
2 Pyridine	79.00	2.090	2.090	(0.425)	855603	120	120
5 Phenol	94.00	4.630	4.630	(0.943)	1124682	120	120
6 Aniline	93.00	4.596	4.596	(0.936)	928020	120	170
7 bis(2-Chloroethyl)ether	93.00	4.630	4.630	(0.943)	1147162	120	110
9 2-Chlorophenol	128.00	4.720	4.720	(0.961)	1135506	120	120
10 1,3-Dichlorobenzene	146.00	4.855	4.855	(0.989)	1298755	120	120
12 1,4-Dichlorobenzene	146.00	4.923	4.923	(1.002)	1363467	120	120
13 Benzyl alcohol	108.00	5.217	5.217	(1.062)	480279	120	140
15 1,2-Dichlorobenzene	146.00	5.183	5.183	(1.055)	1213499	120	130
16 2-Methylphenol	108.00	5.397	5.397	(1.099)	827285	120	120
18 bis(2-chloroisopropyl)ether	45.00	5.341	5.341	(1.087)	864819	120	120
19 4-Methylphenol	108.00	5.623	5.623	(1.145)	829570	120	130
21 N-Nitroso-di-n-propylamine	70.00	5.578	5.578	(1.136)	435710	120	120
22 Hexachloroethane	116.50	5.578	5.578	(1.136)	477117	120	120
24 Nitrobenzene	77.00	5.770	5.770	(0.856)	795420	120	120
25 Isophorone	82.00	6.108	6.108	(0.906)	1348575	120	120
26 2-Nitrophenol	139.00	6.244	6.244	(0.926)	460955	120	110
27 2,4-Dimethylphenol	107.00	6.357	6.357	(0.943)	772715	120	120
28 Benzoic acid	122.00	6.729	6.729	(0.998)	412662	120	140
29 bis(2-Chloroethoxy)methane	93.00	6.447	6.447	(0.956)	886494	120	130
30 2,4-Dichlorophenol	162.00	6.639	6.639	(0.985)	647481	120	110
31 1,2,4-Trichlorobenzene	180.00	6.684	6.684	(0.992)	866721	120	120
33 Naphthalene	128.00	6.763	6.763	(1.003)	2557234	120	120
34 4-Chloroaniline	127.00	6.977	6.977	(1.035)	741265	120	130
35 Hexachlorobutadiene	224.50	7.023	7.023	(1.042)	461113	120	120
36 4-Chloro-3-methylphenol	107.00	7.790	7.790	(1.156)	592439	120	120
37 2-Methylnaphthalene	142.00	7.824	7.824	(1.161)	1665933	120	120(M)
38 Hexachlorocyclopentadiene	237.00	8.163	8.163	(0.860)	444952	120	130
39 2,4,6-Trichlorophenol	196.00	8.377	8.377	(0.882)	427608	120	120

	Compounds	QUANT SIC MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	40 2,4,5-Trichlorophenol	196.00	8.490	8.490	(0.894)	458576	120	120
	42 2-Chloronaphthalene	162.00	8.592	8.592	(0.905)	1330318	120	130
	43 2-Nitroaniline	65.00	8.919	8.919	(0.939)	280913	120	130
	44 Dimethylphthalate	163.00	9.201	9.201	(0.969)	1379826	120	120
	45 2,6-Dinitrotoluene	165.00	9.325	9.325	(0.982)	351579	120	130
	46 Acenaphthylene	152.00	9.258	9.258	(0.975)	2024842	120	120
	47 3-Nitroaniline	138.00	9.607	9.607	(1.012)	318813	120	140
	49 Acenaphthene	153.00	9.540	9.540	(1.005)	1196934	120	120
	50 2,4-Dinitrophenol	184.00	9.765	9.765	(1.029)	214964	120	130
	51 4-Nitrophenol	109.00	10.048	10.048	(1.058)	155606	120	130
	52 Dibenzofuran	168.00	9.799	9.799	(1.032)	1707208	120	120
	53 2,4-Dinitrotoluene	165.00	9.969	9.969	(1.050)	417949	120	120
	54 Diethylphthalate	149.00	10.319	10.319	(1.087)	1358986	120	120
	55 4-Chlorophenyl-phenylether	204.00	10.364	10.364	(1.092)	621955	120	120
	56 Fluorene	166.00	10.352	10.352	(1.090)	1300420	120	120
	57 4-Nitroaniline	138.00	10.635	10.635	(1.120)	298360	120	120
	58 4,6-Dinitro-2-methylphenol	198.00	10.601	10.601	(0.895)	265879	120	140
	59 n-Nitrosodiphenylamine	169.00	10.589	10.589	(0.894)	853040	120	120
	60 1,2-Diphenylhydrazine	77.00	10.612	10.612	(0.896)	1130203	120	130
	62 4-Bromophenyl-phenylether	248.00	11.131	11.131	(0.940)	360659	120	130
	63 Hexachlorobenzene	283.70	11.346	11.346	(0.958)	384860	120	120
	64 Pentachlorophenol	265.50	11.696	11.696	(0.988)	251345	120	130
	66 Phenanthrene	178.00	11.876	11.876	(1.003)	1664729	120	130
	67 Anthracene	178.00	11.955	11.955	(1.010)	1815193	120	120
	68 Carbazole	167.00	12.294	12.294	(1.038)	1595674	120	130
	69 Di-n-butylphthalate	149.00	12.892	12.892	(1.089)	2105461	120	130
	70 Fluoranthene	202.00	13.795	13.795	(1.165)	1610328	120	130
	71 Pyrene	202.00	14.145	14.145	(0.878)	1614477	120	120
	73 Butylbenzylphthalate	149.00	15.274	15.274	(0.948)	845214	120	120
	74 3,3'-Dichlorobenzidine	252.00	16.109	16.109	(1.000)	504139	120	130
	75 Benzo[a]anthracene	228.00	16.075	16.075	(0.998)	1403245	120	130
	77 Chrysene	228.00	16.143	16.143	(1.002)	1406061	120	120
	78 bis(2-Ethylhexyl)phthalate	149.00	16.222	16.222	(1.007)	1169269	120	120
	79 Di-n-octylphthalate	149.00	17.148	17.148	(0.932)	1925374	120	120
	80 Benzo[b]fluoranthene	252.00	17.735	17.735	(0.964)	1511084	120	150
	81 Benzo[k]fluoranthene	252.00	17.768	17.768	(0.966)	1653561	120	120
	82 Benzo[a]pyrene	252.00	18.254	18.254	(0.993)	1375536	120	130
	84 Indeno[1,2,3-cd]pyrene	276.00	20.511	20.511	(1.115)	1814763	120	130
	85 Dibenz[a,h]anthracene	278.00	20.523	20.523	(1.116)	1492765	120	130
	86 Benzo[g,h,i]perylene	276.00	21.132	21.132	(1.149)	1461501	120	130
$	3 2-Fluorophenol	112.00	3.501	3.501	(0.713)	986748	120	110
$	4 Phenol-d5	99.00	4.607	4.607	(0.938)	950453	120	110
$	61 2,4,6-Tribromophenol	329.70	10.793	10.793	(0.911)	204475	120	130
$	23 Nitrobenzene-d5	82.00	5.747	5.747	(0.853)	786671	120	120
$	41 2-Fluorobiphenyl	172.00	8.445	8.445	(0.889)	1568395	120	120
$	72 Terphenyl-d14	244.00	14.427	14.427	(0.896)	1225442	120	120
*	11 1,4-Dichlorobenzene-d4	152.00	4.912	4.912	(1.000)	310039	40	
*	32 Naphthalene-d8	136.00	6.740	6.740	(1.000)	895464	40	
*	48 Acenaphthene-d10	164.00	9.495	9.495	(1.000)	377144	40	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 65 Phenanthrene-d10	188.00	11.842	11.842	(1.000)	550444	40	
* 76 Chrysene-d12	240.00	16.109	16.109	(1.000)	421721	40	
* 83 Perylene-d12	264.00	18.389	18.389	(1.000)	433091	40	
17 ortho-Cresol	108.00	5.397	5.397	(1.099)	827285	120	120
20 meta,para-Cresol	108.00	5.623	5.623	(1.145)	829570	120	130
96 Benzidine	184.00	14.427	14.427	(0.896)	221248	120	110(M)

QC Flag Legend

M - Compound response manually integrated.

SPL Houston Labs

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: h.i
Lab File ID: h048ic3.d
Lab Smp Id:
Analysis Type: SV
Quant Type: ISTD
Operator: LH
Method File: /chem1/h.i/h970217.b/h8270w.m
Misc Info: 970217

Calibration Date: 02/17/97
Calibration Time: 1102

Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	267359	133680	534718	310039	15.96
32 Naphthalene-d8	797978	398989	1595956	895464	12.22
48 Acenaphthene-d10	355174	177587	710348	377144	6.19
65 Phenanthrene-d10	538601	269300	1077202	550444	2.20
76 Chrysene-d12	342859	171430	685718	421721	23.00
83 Perylene-d12	330072	165036	660144	433091	31.21

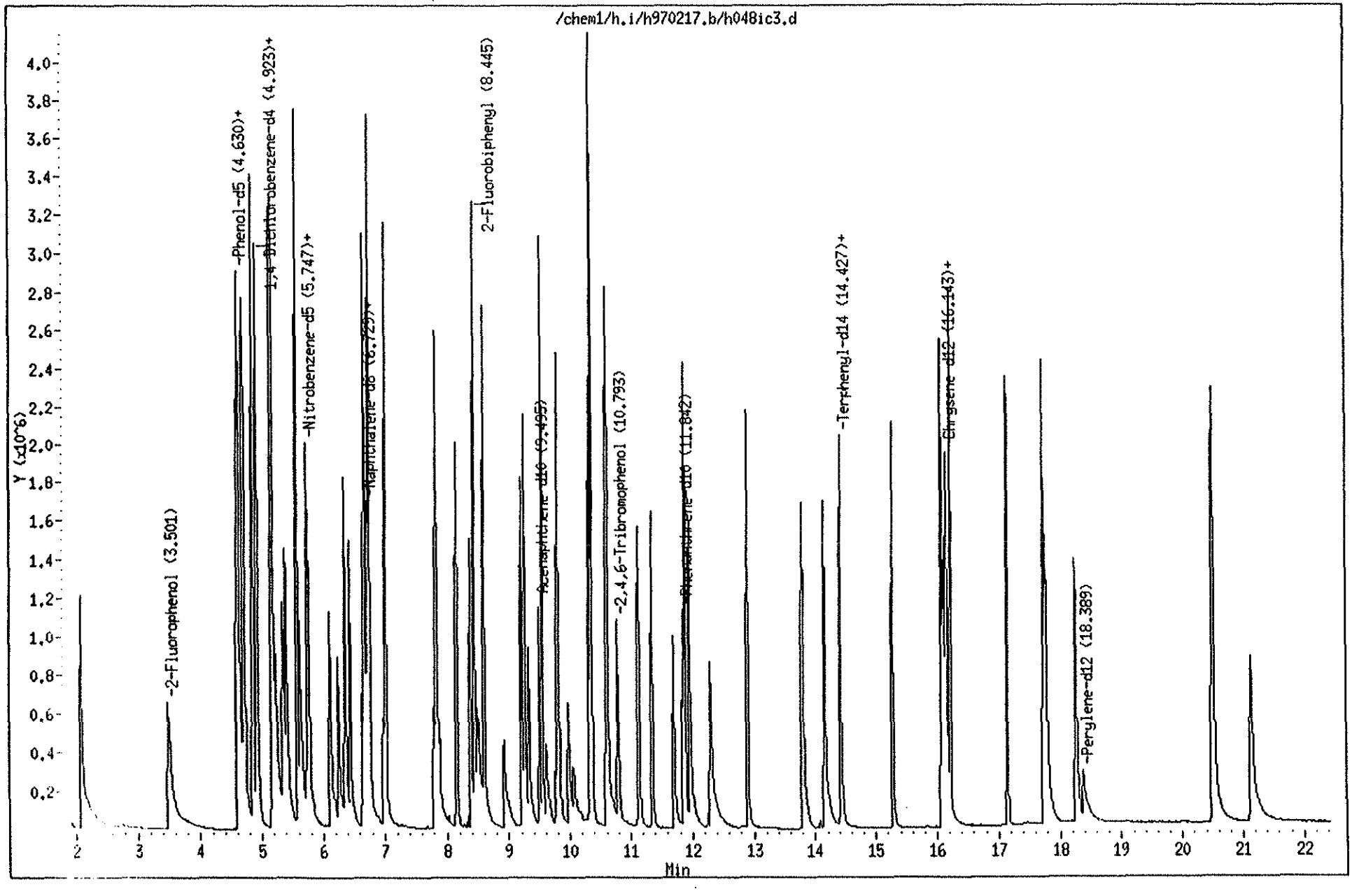
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	4.91	4.41	5.41	4.91	0.12
32 Naphthalene-d8	6.73	6.23	7.23	6.74	0.09
48 Acenaphthene-d10	9.49	8.99	9.99	9.49	0.06
65 Phenanthrene-d10	11.85	11.35	12.35	11.84	-0.05
76 Chrysene-d12	16.11	15.61	16.61	16.11	-0.03
83 Perylene-d12	18.38	17.88	18.88	18.39	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/h.i/h970217.b/h048ic3.d
Date : 17-FEB-97 12:00
Client ID:
Sample Info: SSTD120-8270W/1X
Volume Injected (uL): 2.0
Column phase:

Instrument: h.i

Operator: LH
Column diameter: 0.25



BOE-C6-0109644

SPL Houston Labs

Data file : /chem1/h.i/h970217.b/h048ic4.d
Lab Smp Id:
Inj Date : 17-FEB-1997 12:31
Operator : LH Inst ID: h.i
Smp Info : SSTD160-8270W/1X
Misc Info : 970217
Comment :
Method : /chem1/h.i/h970217.b/h8270w.m
Meth Date : 17-Feb-1997 13:58 liping Quant Type: ISTD
Cal Date : 17-FEB-1997 11:02 Cal File: h048ic1.d
Als bottle: 5 Calibration Sample, Level: 5
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: std.sub
Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
2 Pyridine	79.00	2.084	2.084	(0.425)	1199252	160	150
5 Phenol	94.00	4.624	4.624	(0.942)	1552313	160	160
6 Aniline	93.00	4.590	4.590	(0.936)	1219700	160	210
7 bis(2-Chloroethyl)ether	93.00	4.635	4.635	(0.945)	1681100	160	150
9 2-Chlorophenol	128.00	4.725	4.725	(0.963)	1552001	160	160
10 1,3-Dichlorobenzene	146.00	4.861	4.861	(0.991)	1822669	160	160
12 1,4-Dichlorobenzene	146.00	4.929	4.929	(1.005)	1860269	160	160
13 Benzyl alcohol	108.00	5.211	5.211	(1.062)	684407	160	180
15 1,2-Dichlorobenzene	146.00	5.188	5.188	(1.058)	1653415	160	160
16 2-Methylphenol	108.00	5.403	5.403	(1.101)	1156039	160	160
18 bis(2-chloroisopropyl)ether	45.00	5.346	5.346	(1.090)	1251639	160	170(M)
19 4-Methylphenol	108.00	5.617	5.617	(1.145)	1174320	160	170
21 N-Nitroso-di-n-propylamine	70.00	5.583	5.583	(1.138)	612066	160	160
22 Hexachloroethane	116.50	5.583	5.583	(1.138)	661567	160	160
24 Nitrobenzene	77.00	5.775	5.775	(0.858)	1107645	160	160
25 Isophorone	82.00	6.114	6.114	(0.908)	1915200	160	170
26 2-Nitrophenol	139.00	6.238	6.238	(0.926)	725873	160	170
27 2,4-Dimethylphenol	107.00	6.362	6.362	(0.945)	1135847	160	170
28 Benzoic acid	122.00	6.757	6.757	(1.003)	602363	160	190
29 bis(2-Chloroethoxy)methane	93.00	6.452	6.452	(0.958)	1246611	160	170
30 2,4-Dichlorophenol	162.00	6.633	6.633	(0.985)	1082840	160	180
31 1,2,4-Trichlorobenzene	180.00	6.678	6.678	(0.992)	1200955	160	160
33 Naphthalene	128.00	6.769	6.769	(1.005)	3496479	160	160
34 4-Chloroaniline	127.00	6.960	6.960	(1.034)	1130613	160	190
35 Hexachlorobutadiene	224.50	7.028	7.028	(1.044)	650829	160	160
36 4-Chloro-3-methylphenol	107.00	7.784	7.784	(1.156)	885543	160	180
37 2-Methylnaphthalene	142.00	7.830	7.830	(1.163)	2512391	160	170
38 Hexachlorocyclopentadiene	237.00	8.168	8.168	(0.860)	647197	160	180
39 2,4,6-Trichlorophenol	196.00	8.383	8.383	(0.882)	638586	160	180

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	40 2,4,5-Trichlorophenol	196.00	8.473	8.473	(0.892)	699635	160	180
	42 2-Chloronaphthalene	162.00	8.597	8.597	(0.905)	1903442	160	180
	43 2-Nitroaniline	65.00	8.902	8.902	(0.937)	424268	160	190
	44 Dimethylphthalate	163.00	9.207	9.207	(0.969)	1988688	160	160
	45 2,6-Dinitrotoluene	165.00	9.320	9.320	(0.981)	517229	160	180
	46 Acenaphthylene	152.00	9.252	9.252	(0.974)	2802546	160	160
	47 3-Nitroaniline	138.00	9.590	9.590	(1.010)	487140	160	200
	49 Acenaphthene	153.00	9.545	9.545	(1.005)	1665964	160	160
	50 2,4-Dinitrophenol	184.00	9.760	9.760	(1.027)	341336	160	200
	51 4-Nitrophenol	109.00	10.031	10.031	(1.056)	230132	160	180
	52 Dibenzofuran	168.00	9.805	9.805	(1.032)	2422446	160	160
	53 2,4-Dinitrotoluene	165.00	9.963	9.963	(1.049)	615383	160	170
	54 Diethylphthalate	149.00	10.324	10.324	(1.087)	1769737	160	150
	55 4-Chlorophenyl-phenylether	204.00	10.369	10.369	(1.091)	902485	160	170
	56 Fluorene	166.00	10.358	10.358	(1.090)	1831569	160	160
	57 4-Nitroaniline	138.00	10.606	10.606	(1.116)	473688	160	180
	58 4,6-Dinitro-2-methylphenol	198.00	10.606	10.606	(0.895)	399391	160	190
	59 n-Nitrosodiphenylamine	169.00	10.595	10.595	(0.894)	1241018	160	170
	60 1,2-Diphenylhydrazine	77.00	10.618	10.618	(0.896)	1571246	160	160
	62 4-Bromophenyl-phenylether	248.00	11.137	11.137	(0.940)	509650	160	170
	63 Hexachlorobenzene	283.70	11.351	11.351	(0.958)	565285	160	170
	64 Pentachlorophenol	265.50	11.701	11.701	(0.988)	369166	160	180
	66 Phenanthrene	178.00	11.882	11.882	(1.003)	2361979	160	160
	67 Anthracene	178.00	11.961	11.961	(1.010)	2613851	160	160
	68 Carbazole	167.00	12.288	12.288	(1.037)	2352342	160	180
	69 Di-n-butylphthalate	149.00	12.909	12.909	(1.090)	3027411	160	170
	70 Fluoranthene	202.00	13.801	13.801	(1.165)	2359590	160	170
	71 Pyrene	202.00	14.151	14.151	(0.878)	2363179	160	160
	73 Butylbenzylphthalate	149.00	15.291	15.291	(0.949)	1278302	160	170
	74 3,3'-Dichlorobenzidine	252.00	16.115	16.115	(1.000)	773798	160	180
	75 Benzo[a]anthracene	228.00	16.092	16.092	(0.999)	2051140	160	170
	77 Chrysene	228.00	16.149	16.149	(1.002)	1991404	160	160
	78 bis(2-Ethylhexyl)phthalate	149.00	16.228	16.228	(1.007)	1717595	160	160
	79 Di-n-octylphthalate	149.00	17.153	17.153	(0.932)	2896061	160	180
	80 Benzo[b]fluoranthene	252.00	17.751	17.751	(0.965)	2062735	160	190
	81 Benzo[k]fluoranthene	252.00	17.785	17.785	(0.967)	2550364	160	170
	82 Benzo[a]pyrene	252.00	18.271	18.271	(0.993)	1990143	160	180
	84 Indeno[1,2,3-cd]pyrene	276.00	20.551	20.551	(1.117)	2628009	160	180
	85 Dibenz[a,h]anthracene	278.00	20.551	20.551	(1.117)	2144302	160	180
	86 Benzo[g,h,i]perylene	276.00	21.160	21.160	(1.150)	2178993	160	180
$	3 2-Fluorophenol	112.00	3.484	3.484	(0.710)	1430015	160	150
$	4 Phenol-d5	99.00	4.613	4.613	(0.940)	1316524	160	140
$	61 2,4,6-Tribromophenol	329.70	10.798	10.798	(0.911)	304084	160	170
$	23 Nitrobenzene-d5	82.00	5.753	5.753	(0.854)	1120662	160	170
$	41 2-Fluorobiphenyl	172.00	8.450	8.450	(0.889)	2190539	160	160
$	72 Terphenyl-d14	244.00	14.433	14.433	(0.896)	1799068	160	160
*	11 1,4-Dichlorobenzene-d4	152.00	4.906	4.906	(1.000)	333345	40	
*	32 Naphthalene-d8	136.00	6.735	6.735	(1.000)	936422	40	
*	48 Acenaphthene-d10	164.00	9.500	9.500	(1.000)	399092	40	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
* 65 Phenanthrene-d10	188.00	11.848	11.848	(1.000)	600609	40	
* 76 Chrysene-d12	240.00	16.115	16.115	(1.000)	458768	40	
* 83 Perylene-d12	264.00	18.395	18.395	(1.000)	465606	40	
17 ortho-Cresol	108.00	5.403	5.403	(1.101)	1156039	160	160
20 meta,para-Cresol	108.00	5.617	5.617	(1.145)	1174320	160	170
96 Benzidine	184.00	14.196	14.196	(0.881)	381246	160	180(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem1/h.i/h970217.b/h048ic4.d
Report Date: 17-Feb-1997 13:03

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: h.i
Lab File ID: h048ic4.d
Lab Smp Id:
Analysis Type: SV
Quant Type: ISTD
Operator: LH
Method File: /chem1/h.i/h970217.b/h8270w.m
Misc Info: 970217

Calibration Date: 02/17/97
Calibration Time: 1102

Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	267359	133680	534718	333345	24.68
32 Naphthalene-d8	797978	398989	1595956	936422	17.35
48 Acenaphthene-d10	355174	177587	710348	399092	12.37
65 Phenanthrene-d10	538601	269300	1077202	600609	11.51
76 Chrysene-d12	342859	171430	685718	458768	33.81
83 Perylene-d12	330072	165036	660144	465606	41.06

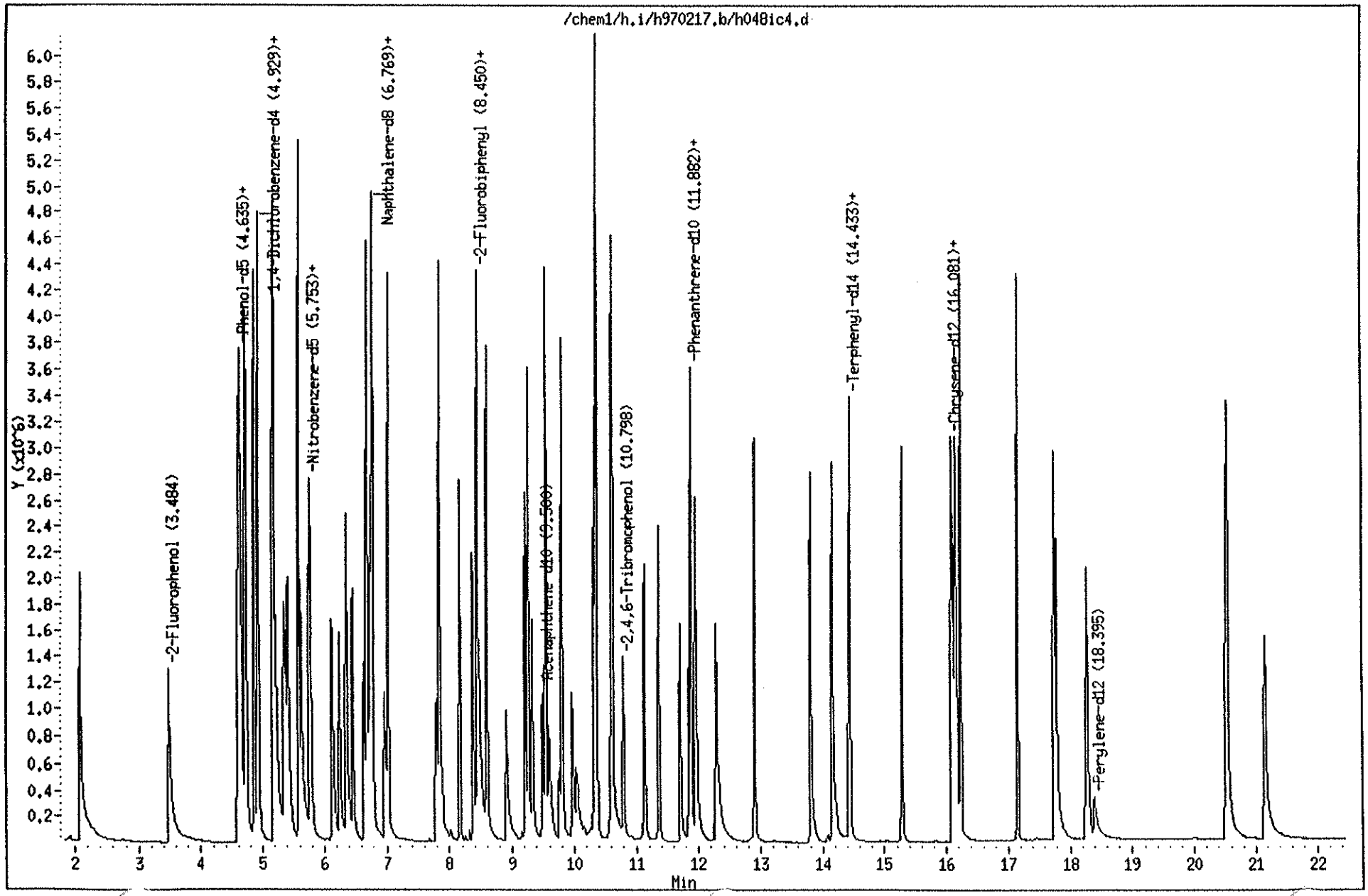
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	4.91	4.41	5.41	4.91	0.00
32 Naphthalene-d8	6.73	6.23	7.23	6.73	0.00
48 Acenaphthene-d10	9.49	8.99	9.99	9.50	0.12
65 Phenanthrene-d10	11.85	11.35	12.35	11.85	0.00
76 Chrysene-d12	16.11	15.61	16.61	16.11	0.00
83 Perylene-d12	18.38	17.88	18.88	18.39	0.06

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/h.i/h970217.b/h048ic4.d
Date : 17-FEB-97 12:31
Client ID:
Sample Info: SSTD160-8270W/1X
Volume Injected (uL): 2.0
Column phase:

Instrument: h.i

Operator: LH
Column diameter: 0.25



BOE-C6-0109649

SPL Houston Labs

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: h.i
Lab File ID: h052cc2.d
Analysis Type: WATER
Lab Sample ID:
Quant Type: ISTD

Injection Date: 21-FEB-1997 09:50
Init. Calibration Date(s): 02/17/97 02/17/97
Init. Calibration Times: 11:02 13:02
Method File: /chem1/h.i/h970221.b/h8270w.m

COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
2 Pyridine	0.928	0.922	0.010	0.6	40.0
5 Phenol	1.181	1.330	0.800	12.7	20.0
6 Aniline	0.689	1.278	0.010	85.5	90.0
7 bis(2-Chloroethyl)ether	1.354	1.273	0.700	5.9	25.0
9 2-Chlorophenol	1.181	1.216	0.800	3.0	25.0
10 1,3-Dichlorobenzene	1.360	1.320	0.600	2.9	25.0
12 1,4-Dichlorobenzene	1.422	1.401	0.500	1.5	20.0
13 Benzyl alcohol	0.459	0.572	0.010	24.7	40.0
15 1,2-Dichlorobenzene	1.230	1.264	0.400	2.7	25.0
16 2-Methylphenol	0.864	0.940	0.700	8.8	25.0
18 bis(2-chloroisopropyl)ether	0.904	1.078	0.010	19.3	40.0
19 4-Methylphenol	0.825	0.994	0.600	20.6	40.0
21 N-Nitroso-di-n-propylamine	0.449	0.609	0.050	35.5	40.0
22 Hexachloroethane	0.509	0.504	0.300	1.0	25.0
24 Nitrobenzene	0.295	0.287	0.200	2.6	40.0
25 Isophorone	0.487	0.524	0.400	7.6	25.0
26 2-Nitrophenol	0.185	0.180	0.100	3.1	20.0
27 2,4-Dimethylphenol	0.279	0.295	0.200	5.6	25.0
28 Benzoic acid	0.132	0.166	0.010	25.8	100.0
29 bis(2-Chloroethoxy)methane	0.305	0.339	0.300	11.2	25.0
30 2,4-Dichlorophenol	0.258	0.251	0.200	2.8	20.0
31 1,2,4-Trichlorobenzene	0.315	0.293	0.200	7.0	25.0
33 Naphthalene	0.958	0.929	0.700	3.0	25.0
34 4-Chloroaniline	0.259	0.369	0.010	42.6	100.0
35 Hexachlorobutadiene	0.168	0.150	0.010	10.7	20.0
36 4-Chloro-3-methylphenol	0.215	0.246	0.200	14.3	20.0
37 2-Methylnaphthalene	0.620	0.750	0.400	20.9	25.0
38 Hexachlorocyclopentadiene	0.369	0.248	0.050	32.6	40.0
39 2,4,6-Trichlorophenol	0.360	0.334	0.200	7.2	20.0
40 2,4,5-Trichlorophenol	0.390	0.375	0.200	4.0	25.0
42 2-Chloronaphthalene	1.084	1.041	0.800	4.0	25.0
43 2-Nitroaniline	0.227	0.253	0.010	11.3	40.0
44 Dimethylphthalate	1.204	1.200	0.010	0.3	40.0
45 2,6-Dinitrotoluene	0.285	0.307	0.200	7.4	25.0
46 Acenaphthylene	1.708	1.658	1.300	2.9	25.0
47 3-Nitroaniline	0.249	0.320	0.010	28.9	40.0
49 Acenaphthene	1.047	1.000	0.800	4.4	20.0
50 2,4-Dinitrophenol	0.173	0.173	0.050	0.2	40.0
51 4-Nitrophenol	0.129	0.125	0.050	3.0	40.0
52 Dibenzofuran	1.474	1.417	0.100	3.8	40.0

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: h.i
Lab File ID: h052cc2.d
Analysis Type: WATER
Lab Sample ID:
Quant Type: ISTD

Injection Date: 21-FEB-1997 09:50
Init. Calibration Date(s): 02/17/97 02/17/97
Init. Calibration Times: 11:02 13:02
Method File: /chem1/h.i/h970221.b/h8270w.m

COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
53 2,4-Dinitrotoluene	0.360	0.398	0.200	10.6	25.0
54 Diethylphthalate	1.172	1.195	0.010	2.0	40.0
55 4-Chlorophenyl-phenylether	0.543	0.524	0.400	3.6	25.0
56 Fluorene	1.131	1.149	0.900	1.6	25.0
57 4-Nitroaniline	0.264	0.309	0.010	16.9	40.0
58 4,6-Dinitro-2-methylphenol	0.141	0.146	0.010	3.1	40.0
59 n-Nitrosodiphenylamine	0.498	0.474	0.010	4.7	20.0
60 1,2-Diphenylhydrazine	0.650	0.620	0.010	4.7	40.0
62 4-Bromophenyl-phenylether	0.203	0.189	0.100	6.7	25.0
63 Hexachlorobenzene	0.225	0.213	0.100	5.3	25.0
64 Pentachlorophenol	0.137	0.119	0.050	13.0	20.0
66 Phenanthrene	0.948	0.930	0.700	1.9	25.0
67 Anthracene	1.051	1.010	0.700	3.9	25.0
68 Carbazole	0.889	0.904	0.010	1.7	40.0
69 Di-n-butylphthalate	1.214	1.201	0.010	1.0	40.0
70 Fluoranthene	0.918	0.936	0.600	2.0	20.0
71 Pyrene	1.263	1.199	0.600	5.1	25.0
73 Butylbenzylphthalate	0.646	0.660	0.010	2.2	40.0
74 3,3'-Dichlorobenzidine	0.369	0.430	0.010	16.5	40.0
75 Benzo[a]anthracene	1.055	1.039	0.800	1.5	25.0
77 Chrysene	1.105	1.016	0.700	8.0	25.0
78 bis(2-Ethylhexyl)phthalate	0.904	0.939	0.010	3.9	40.0
79 Di-n-octylphthalate	1.417	1.533	0.010	8.2	20.0
80 Benzo[b]fluoranthene	0.948	1.052	0.700	10.9	25.0
81 Benzo[k]fluoranthene	1.317	1.090	0.700	17.2	40.0
82 Benzo[a]pyrene	0.966	0.899	0.700	7.0	20.0
84 Indeno[1,2,3-cd]pyrene	1.288	1.115	0.500	13.4	25.0
85 Dibenz[a,h]anthracene	1.024	0.932	0.400	9.0	25.0
86 Benzo[g,h,i]perylene	1.010	0.902	0.500	10.7	25.0
$ 3 2-Fluorophenol	1.134	0.930	0.600	18.0	40.0
$ 4 Phenol-d5	1.130	1.125	0.800	0.5	25.0
$ 61 2,4,6-Tribromophenol	0.117	0.111	0.010	5.1	40.0
$ 23 Nitrobenzene-d5	0.287	0.290	0.200	0.9	25.0
$ 41 2-Fluorobiphenyl	1.344	1.184	0.700	11.9	25.0
$ 72 Terphenyl-d14	0.975	0.909	0.500	6.8	25.0
17 ortho-Cresol	0.864	0.940	0.700	8.8	25.0
20 meta,para-Cresol	0.824	0.994	0.600	20.6	40.0
96 Benzidine	0.189	0.458	0.010	141.9	150.0

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Data file : /chem1/h.i/h970221.b/h052cc2.d
Lab Smp Id:
Inj Date : 21-FEB-1997 09:50
Operator : LH
Inst ID: h.i
Smp Info : SSTD050-8270W/1X
Misc Info : 970221
Comment :
Method : /chem1/h.i/h970221.b/h8270w.m
Meth Date : 22-Feb-1997 09:17 liping
Quant Type: ISTD
Cal Date : 21-FEB-1997 09:50
Cal File: h052cc2.d
Als bottle: 2
Continuing Calibration Sample
Dil Factor: 1.000
Integrator: HP RTE
Compound Sublist: std.sub
Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
2 Pyridine	79.00	1.903	1.903	(0.401)	459294	50	50
5 Phenol	94.00	4.477	4.477	(0.943)	662454	50	56
6 Aniline	93.00	4.420	4.420	(0.931)	636405	50	93
7 bis(2-Chloroethyl)ether	93.00	4.477	4.477	(0.943)	634041	50	47
9 2-Chlorophenol	128.00	4.567	4.567	(0.962)	605598	50	52
10 1,3-Dichlorobenzene	146.00	4.691	4.691	(0.988)	657483	50	48
12 1,4-Dichlorobenzene	146.00	4.770	4.770	(1.005)	697494	50	49
13 Benzyl alcohol	108.00	5.041	5.041	(1.062)	284732	50	62
15 1,2-Dichlorobenzene	146.00	5.019	5.019	(1.057)	629214	50	51
16 2-Methylphenol	108.00	5.244	5.244	(1.105)	468075	50	54
18 bis(2-chloroisopropyl)ether	45.00	5.188	5.188	(1.093)	536682	50	60
19 4-Methylphenol	108.00	5.470	5.470	(1.152)	495067	50	60
21 N-Nitroso-di-n-propylamine	70.00	5.402	5.402	(1.138)	302987	50	68
22 Hexachloroethane	116.50	5.414	5.414	(1.140)	251031	50	50
24 Nitrobenzene	77.00	5.606	5.606	(0.854)	492795	50	49
25 Isophorone	82.00	5.933	5.933	(0.904)	899144	50	54
26 2-Nitrophenol	139.00	6.068	6.068	(0.924)	308088	50	48
27 2,4-Dimethylphenol	107.00	6.192	6.192	(0.943)	505993	50	53
28 Benzoic acid	122.00	6.531	6.531	(0.995)	285282	50	63
29 bis(2-Chloroethoxy)methane	93.00	6.283	6.283	(0.957)	581287	50	56
30 2,4-Dichlorophenol	162.00	6.475	6.475	(0.986)	430099	50	49
31 1,2,4-Trichlorobenzene	180.00	6.509	6.509	(0.991)	501782	50	46
33 Naphthalene	128.00	6.588	6.588	(1.003)	1593251	50	48
34 4-Chloroaniline	127.00	6.791	6.791	(1.034)	631927	50	71
35 Hexachlorobutadiene	224.50	6.858	6.858	(1.045)	257387	50	45
36 4-Chloro-3-methylphenol	107.00	7.626	7.626	(1.162)	421143	50	57
37 2-Methylnaphthalene	142.00	7.649	7.649	(1.165)	1285700	50	60
38 Hexachlorocyclopentadiene	237.00	7.998	7.998	(0.859)	223512	50	34
39 2,4,6-Trichlorophenol	196.00	8.202	8.202	(0.881)	301039	50	46

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
40 2,4,5-Trichlorophenol	196.00	8.315	8.315	(0.893)	337163	50	48
42 2-Chloronaphthalene	162.00	8.416	8.416	(0.904)	936667	50	48
43 2-Nitroaniline	65.00	8.721	8.721	(0.937)	227505	50	56
44 Dimethylphthalate	163.00	9.026	9.026	(0.970)	1080115	50	50
45 2,6-Dinitrotoluene	165.00	9.150	9.150	(0.983)	275884	50	54
46 Acenaphthylene	152.00	9.071	9.071	(0.975)	1492229	50	48
47 3-Nitroaniline	138.00	9.398	9.398	(1.010)	288423	50	64
49 Acenaphthene	153.00	9.364	9.364	(1.006)	900200	50	48
50 2,4-Dinitrophenol	184.00	9.579	9.579	(1.029)	155573	50	50
51 4-Nitrophenol	109.00	9.884	9.884	(1.062)	112606	50	48
52 Dibenzofuran	168.00	9.624	9.624	(1.034)	1275523	50	48
53 2,4-Dinitrotoluene	165.00	9.782	9.782	(1.051)	358383	50	55
54 Diethylphthalate	149.00	10.143	10.143	(1.090)	1075990	50	51
55 4-Chlorophenyl-phenylether	204.00	10.188	10.188	(1.095)	471215	50	48
56 Fluorene	166.00	10.166	10.166	(1.092)	1034093	50	51
57 4-Nitroaniline	138.00	10.403	10.403	(1.118)	277860	50	58
58 4,6-Dinitro-2-methylphenol	198.00	10.425	10.425	(0.894)	215547	50	52
59 n-Nitrosodiphenylamine	169.00	10.414	10.414	(0.893)	702343	50	48
60 1,2-Diphenylhydrazine	77.00	10.437	10.437	(0.895)	917660	50	48
62 4-Bromophenyl-phenylether	248.00	10.956	10.956	(0.940)	280442	50	47
63 Hexachlorobenzene	283.70	11.170	11.170	(0.958)	314688	50	47
64 Pentachlorophenol	265.50	11.520	11.520	(0.988)	175989	50	43
66 Phenanthrene	178.00	11.690	11.690	(1.003)	1377028	50	49
67 Anthracene	178.00	11.757	11.757	(1.009)	1495268	50	48
68 Carbazole	167.00	12.096	12.096	(1.038)	1337824	50	51
69 Di-n-butylphthalate	149.00	12.728	12.728	(1.092)	1778673	50	49
70 Fluoranthene	202.00	13.597	13.597	(1.167)	1385787	50	51
71 Pyrene	202.00	13.947	13.947	(0.877)	1392174	50	47
73 Butylbenzylphthalate	149.00	15.098	15.098	(0.950)	766266	50	51
74 3,3'-Dichlorobenzidine	252.00	15.911	15.911	(1.001)	499297	50	58
75 Benzo[a]anthracene	228.00	15.877	15.877	(0.999)	1206109	50	49
77 Chrysene	228.00	15.945	15.945	(1.003)	1179268	50	46
78 bis(2-Ethylhexyl)phthalate	149.00	16.047	16.047	(1.009)	1090371	50	52
79 Di-n-octylphthalate	149.00	16.972	16.972	(0.938)	1873787	50	54
80 Benzo[b]fluoranthene	252.00	17.514	17.514	(0.968)	1285224	50	55
81 Benzo[k]fluoranthene	252.00	17.548	17.548	(0.969)	1332532	50	41
82 Benzo[a]pyrene	252.00	18.011	18.011	(0.995)	1098220	50	46
84 Indeno[1,2,3-cd]pyrene	276.00	20.133	20.133	(1.112)	1361996	50	43(M)
85 Dibenz[a,h]anthracene	278.00	20.144	20.144	(1.113)	1139046	50	46
86 Benzo[g,h,i]perylene	276.00	20.708	20.708	(1.144)	1101984	50	45
$ 3 2-Fluorophenol	112.00	3.337	3.337	(0.703)	462823	50	41
$ 4 Phenol-d5	99.00	4.465	4.465	(0.941)	560106	50	50
$ 61 2,4,6-Tribromophenol	329.70	10.606	10.606	(0.910)	164409	50	47
$ 23 Nitrobenzene-d5	82.00	5.583	5.583	(0.850)	497427	50	50
$ 41 2-Fluorobiphenyl	172.00	8.269	8.269	(0.888)	1065231	50	44
$ 72 Terphenyl-d14	244.00	14.241	14.241	(0.896)	1055704	50	47
* 11 1,4-Dichlorobenzene-d4	152.00	4.748	4.748	(1.000)	398336	40	
* 32 Naphthalene-d8	136.00	6.565	6.565	(1.000)	1371797	40	
* 48 Acenaphthene-d10	164.00	9.308	9.308	(1.000)	720040	40	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 65 Phenanthrene-d10	188.00	11.656	11.656	(1.000)	1184321	40	
* 76 Chrysene-d12	240.00	15.900	15.900	(1.000)	928622	40	
* 83 Perylene-d12	264.00	18.101	18.101	(1.000)	977619	40	
17 ortho-Cresol	108.00	5.244	5.244	(1.105)	468075	50	54
20 meta,para-Cresol	108.00	5.470	5.470	(1.152)	495067	50	60
96 Benzidine	184.00	13.902	13.902	(0.874)	531268	50	120

QC Flag Legend

M - Compound response manually integrated.

SPL Houston Labs

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: h.i
Lab File ID: h052cc2.d
Lab Smp Id:
Analysis Type: SV
Quant Type: ISTD
Operator: LH
Method File: /chem1/h.i/h970221.b/h8270w.m
Misc Info: 970221

Calibration Date: 02/21/97
Calibration Time: 0950

Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	398336	199168	796672	398336	0.00
32 Naphthalene-d8	1371797	685898	2743594	1371797	0.00
48 Acenaphthene-d10	720040	360020	1440080	720040	0.00
65 Phenanthrene-d10	1184321	592160	2368642	1184321	0.00
76 Chrysene-d12	928622	464311	1857244	928622	0.00
83 Perylene-d12	977619	488810	1955238	977619	0.00

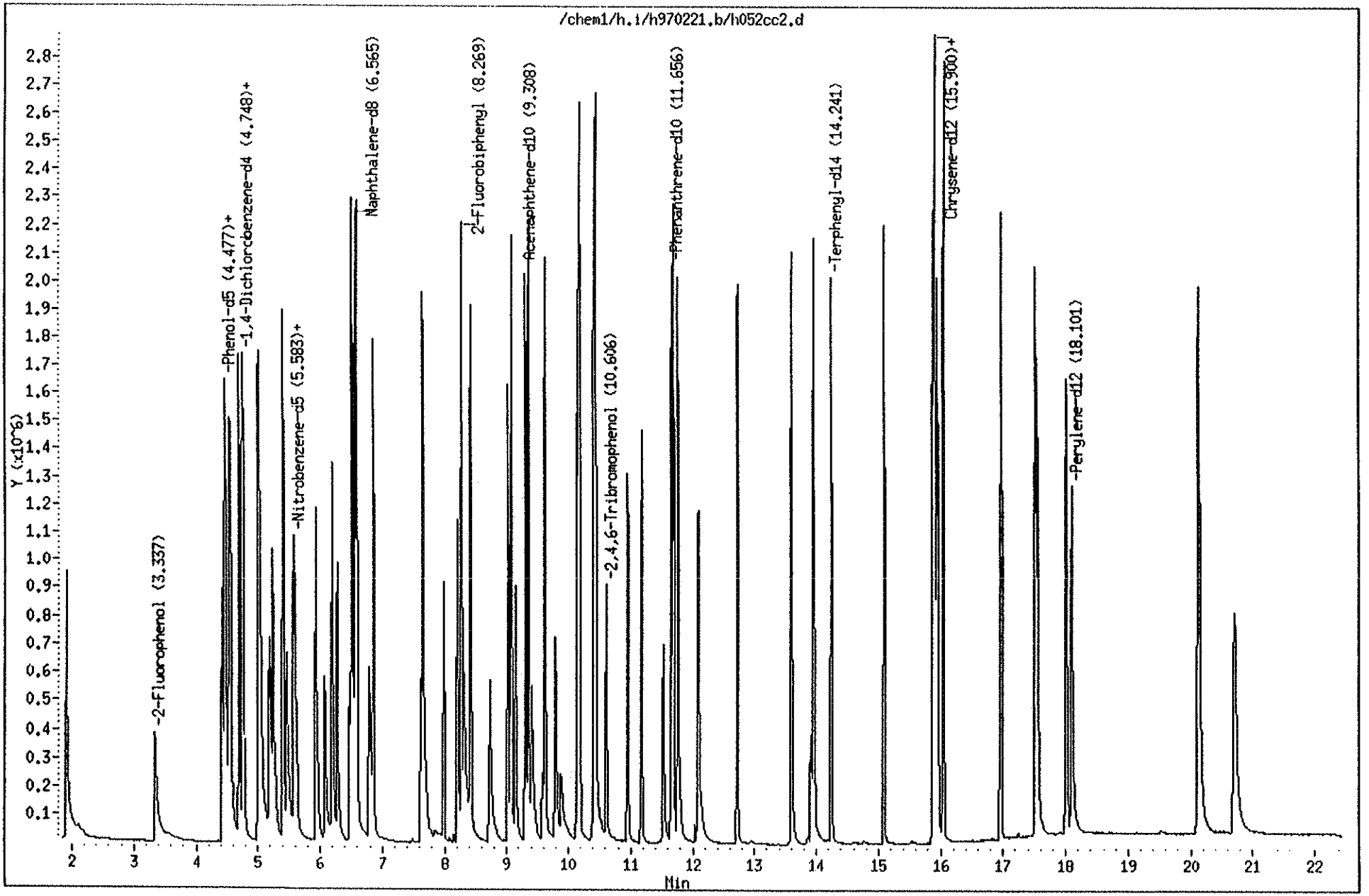
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	4.75	4.25	5.25	4.75	0.00
32 Naphthalene-d8	6.56	6.06	7.06	6.56	0.00
48 Acenaphthene-d10	9.31	8.81	9.81	9.31	0.00
65 Phenanthrene-d10	11.66	11.16	12.16	11.66	0.00
76 Chrysene-d12	15.90	15.40	16.40	15.90	0.00
83 Perylene-d12	18.10	17.60	18.60	18.10	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data F /chem1/h.i/h970221.b/h052cc2.d
Date : rEB-97 09:50
Client ID:
Sample Info: SSTD050-8270W/1X
Volume Injected (uL): 2.0
Column phase:

Instrument: h.i

Operator: LH
Column diameter: 0.25



BOE-C6-0109656

SPL Houston Labs

Data file : /chem1/h.i/h970221.b/h052s04.d
Lab Smp Id:
Inj Date : 21-FEB-1997 13:06
Operator : LH Inst ID: h.i
Smp Info : 9702830-01A-8270S/1X
Misc Info : E051S1/H051B02/H052CC2
Comment :
Method : /chem1/h.i/h970221.b/h8270sQ.m
Meth Date : 21-Feb-1997 10:46 liping Quant Type: ISTD
Cal Date : 17-FEB-1997 13:02 Cal File: h048ic5.d
Als bottle: 6
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
66 Phenanthrene	178.00	11.706	11.905	(1.004)	56052	2	37(a)
* 11 1,4-Dichlorobenzene-d4	152.00	4.752	4.918	(1.000)	663271	40	
* 32 Naphthalene-d8	136.00	6.570	6.746	(1.000)	2125055	40	
* 48 Acenaphthene-d10	164.00	9.313	9.501	(1.000)	1026306	40	
* 65 Phenanthrene-d10	188.00	11.661	11.860	(1.000)	1531348	40	
* 76 Chrysene-d12	240.00	15.916	16.126	(1.000)	1020208	40	
* 83 Perylene-d12	264.00	18.117	18.395	(1.000)	1029612	40	
$ 23 Nitrobenzene-d5	82.00	5.576	5.798	(0.849)	1353907	71	1200
$ 41 2-Fluorobiphenyl	172.00	8.274	8.473	(0.888)	2824110	82	1400
$ 72 Terphenyl-d14	244.00	14.257	14.456	(0.896)	2005604	73	1200
$ 4 Phenol-d5	99.00	4.470	4.681	(0.941)	2656549	120	1900
$ 3 2-Fluorophenol	112.00	3.341	3.744	(0.703)	2212198	100	1700
$ 61 2,4,6-Tribromophenol	329.70	10.622	10.832	(0.911)	641936	130	2200

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

SPL Houston Labs

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: h.i
Lab File ID: h052s04.d
Lab Smp Id:
Analysis Type: SV
Quant Type: ISTD
Operator: LH
Method File: /chem1/h.i/h970221.b/h8270s.m
Misc Info: E051S1/H051B02/H052CC2

Calibration Date: 02/21/97
Calibration Time: 0950

Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	398336	199168	796672	663271	66.51
32 Naphthalene-d8	1371797	685898	2743594	2125055	54.91
48 Acenaphthene-d10	720040	360020	1440080	1026306	42.53
65 Phenanthrene-d10	1184321	592160	2368642	1531348	29.30
76 Chrysene-d12	928622	464311	1857244	1020208	9.86
83 Perylene-d12	977619	488810	1955238	1029612	5.32

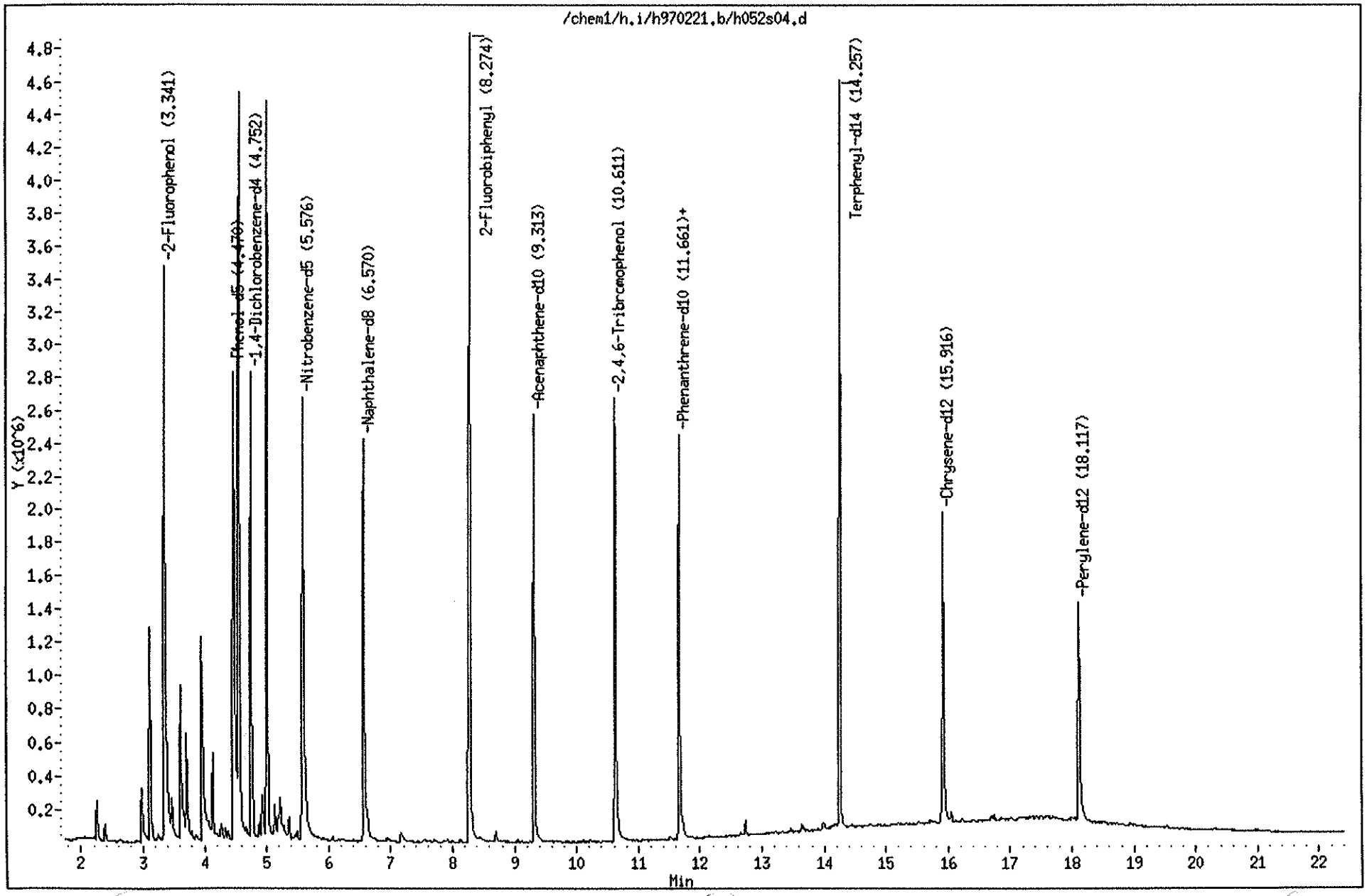
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	4.75	4.25	5.25	4.75	0.10
32 Naphthalene-d8	6.56	6.06	7.06	6.57	0.07
48 Acenaphthene-d10	9.31	8.81	9.81	9.31	0.05
65 Phenanthrene-d10	11.66	11.16	12.16	11.66	0.04
76 Chrysene-d12	15.90	15.40	16.40	15.92	0.10
83 Perylene-d12	18.10	17.60	18.60	18.12	0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/h.i/h970221.b/h052s04.d
Date : 21-FEB-1997 13:06
Client ID:
Sample Info: 9702830-01A-8270S/1X
Volume Injected (uL): 2.0
Column phase:

Instrument: h.i

Operator: LH
Column diameter: 0.25



BOE-C6-0109659

Data File: /chem1/h.i/h970221.b/h052s04.d

Date : 21-FEB-1997 13:06

Client ID:

Instrument: h.i

Sample Info: 9702830-01A-8270S/1X

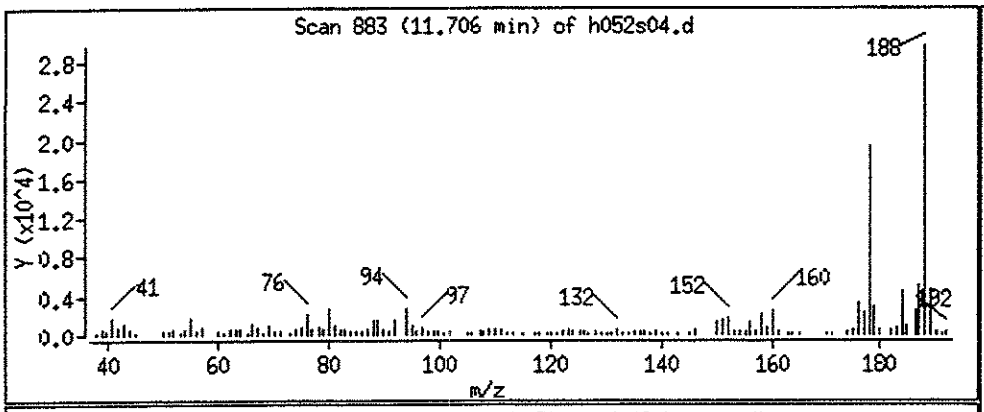
Volume Injected (uL): 2.0

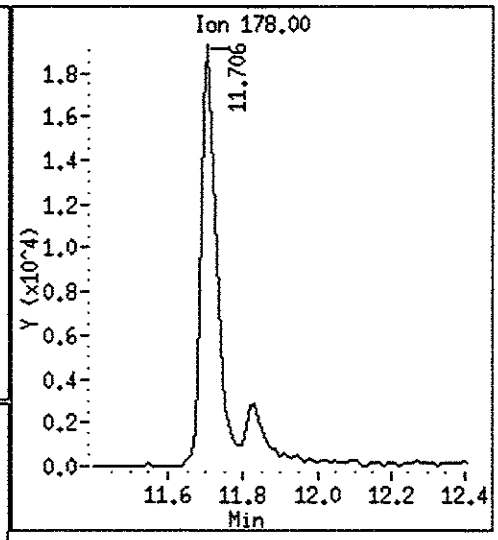
Operator: LH

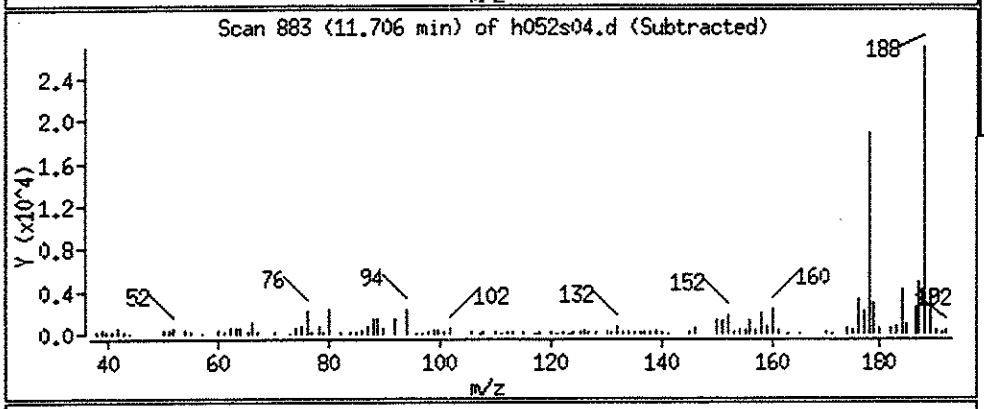
Column phase:

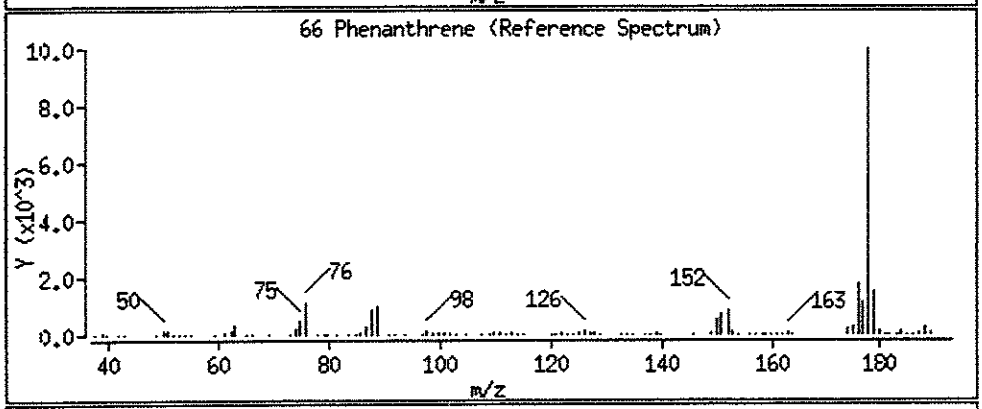
Column diameter: 0.25

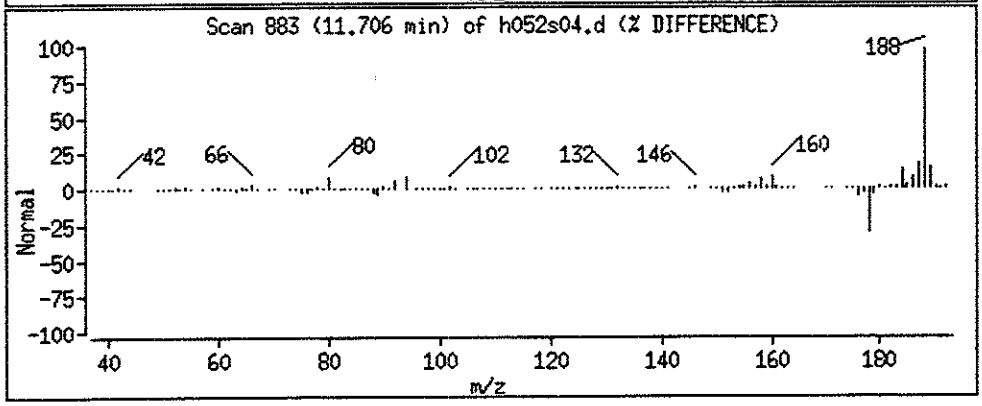
66 Phenanthrene











SPL Houston Labs

Data file : /chem1/h.i/h970221.b/h052s05.d
Lab Smp Id:
Inj Date : 21-FEB-1997 13:35
Operator : LH Inst ID: h.i
Smp Info : 9702830-02A-8270S/1X
Misc Info : E051S1/H051B02/H052CC2
Comment :
Method : /chem1/h.i/h970221.b/h8270sQ.m
Meth Date : 21-Feb-1997 10:46 liping Quant Type: ISTD
Cal Date : 17-FEB-1997 13:02 Cal File: h048ic5.d
Als bottle: 7
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 11 1,4-Dichlorobenzene-d4	152.00	4.753	4.918	(1.000)	445070	40	
* 32 Naphthalene-d8	136.00	6.570	6.746	(1.000)	1469032	40	
* 48 Acenaphthene-d10	164.00	9.313	9.501	(1.000)	745875	40	
* 65 Phenanthrene-d10	188.00	11.650	11.860	(1.000)	1185306	40	
* 76 Chrysene-d12	240.00	15.905	16.126	(1.000)	836130	40	
* 83 Perylene-d12	264.00	18.106	18.395	(1.000)	873549	40	
$ 23 Nitrobenzene-d5	82.00	5.577	5.798	(0.849)	936170	71	1200
$ 41 2-Fluorobiphenyl	172.00	8.275	8.473	(0.888)	2028885	81	1400
$ 72 Terphenyl-d14	244.00	14.246	14.456	(0.896)	1626252	72	1200
$ 4 Phenol-d5	99.00	4.471	4.681	(0.941)	1818969	120	2000
$ 3 2-Fluorophenol	112.00	3.342	3.744	(0.703)	1477286	99	1600
$ 61 2,4,6-Tribromophenol	329.70	10.611	10.832	(0.911)	482603	130	2200

SPL Houston Labs

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: h.i
Lab File ID: h052s05.d
Lab Smp Id:
Analysis Type: SV
Quant Type: ISTD
Operator: LH
Method File: /chem1/h.i/h970221.b/h8270s.m
Misc Info: E051S1/H051B02/H052CC2

Calibration Date: 02/21/97
Calibration Time: 0950

Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	398336	199168	796672	445070	11.73
32 Naphthalene-d8	1371797	685898	2743594	1469032	7.09
48 Acenaphthene-d10	720040	360020	1440080	745875	3.59
65 Phenanthrene-d10	1184321	592160	2368642	1185306	0.08
76 Chrysene-d12	928622	464311	1857244	836130	-9.96
83 Perylene-d12	977619	488810	1955238	873549	-10.65

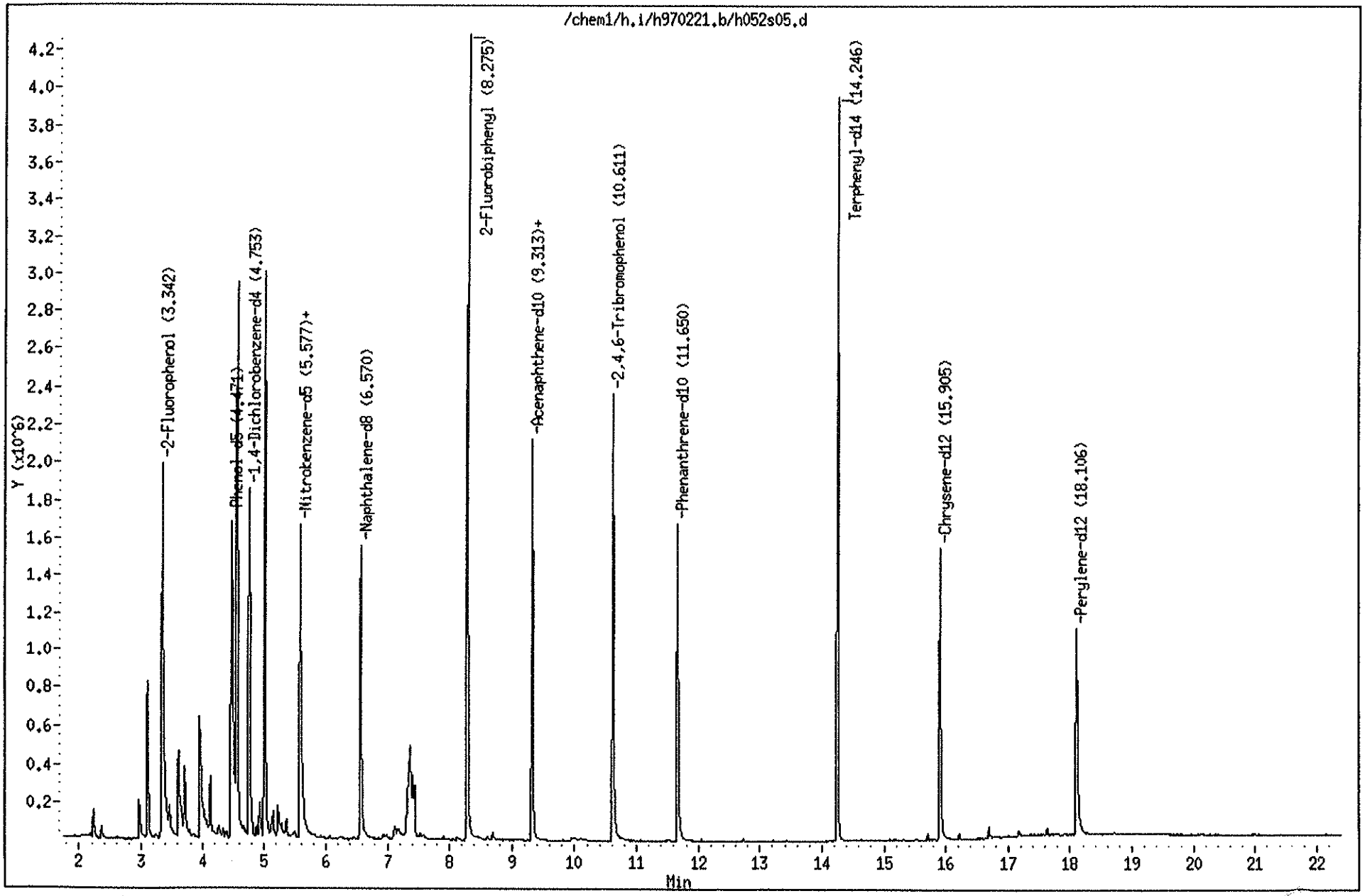
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	4.75	4.25	5.25	4.75	0.12
32 Naphthalene-d8	6.56	6.06	7.06	6.57	0.08
48 Acenaphthene-d10	9.31	8.81	9.81	9.31	0.06
65 Phenanthrene-d10	11.66	11.16	12.16	11.65	-0.05
76 Chrysene-d12	15.90	15.40	16.40	15.91	0.03
83 Perylene-d12	18.10	17.60	18.60	18.11	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/h.i/h970221.b/h052s05.d
Date : 21-FEB-97 13:35
Client ID:
Sample Info: 9702830-02A-8270S/1X
Volume Injected (uL): 2.0
Column phase:

Instrument: h.i

Operator: LH
Column diameter: 0.25



BOE-C6-0109663

SPL Houston Labs

Data file : /chem1/h.i/h970221.b/h052s06.d
Lab Smp Id:
Inj Date : 21-FEB-1997 14:33
Operator : LH Inst ID: h.i
Smp Info : 9702830-03A-8270S/1X
Misc Info : E051S1/H051B02/H052CC2
Comment :
Method : /chem1/h.i/h970221.b/h8270sQ.m
Meth Date : 21-Feb-1997 10:46 liping Quant Type: ISTD
Cal Date : 17-FEB-1997 13:02 Cal File: h048ic5.d
Als bottle: 8
Dil Factor: 2.000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
37 2-Methylnaphthalene	142.00	7.672	7.875	(1.166)	677767	24	810
78 bis(2-Ethylhexyl)phthalate	149.00	16.217	16.228	(1.004)	665525	52	1700(M)
* 11 1,4-Dichlorobenzene-d4	152.00	4.749	4.918	(1.000)	529386	40	
* 32 Naphthalene-d8	136.00	6.578	6.746	(1.000)	1645941	40	
* 48 Acenaphthene-d10	164.00	9.320	9.501	(1.000)	748071	40	(M)
* 65 Phenanthrene-d10	188.00	11.770	11.860	(1.000)	978837	40	(M)
* 76 Chrysene-d12	240.00	16.150	16.126	(1.000)	389246	40	
* 83 Perylene-d12	264.00	18.418	18.395	(1.000)	517347	40	(M)
$ 23 Nitrobenzene-d5	82.00	6.002	5.798	(0.912)	328101	21	710
$ 41 2-Fluorobiphenyl	172.00	8.282	8.473	(0.891)	1295711	50	1700
$ 72 Terphenyl-d14	244.00	14.502	14.456	(0.898)	338393	30	1000(M)
$ 4 Phenol-d5	99.00	4.501	4.681	(0.948)	1188103	63	2100
$ 3 2-Fluorophenol	112.00	3.361	3.744	(0.708)	873874	50	1600
$ 61 2,4,6-Tribromophenol	329.70	10.607	10.832	(0.901)	258661	84	2800(M)

QC Flag Legend

M - Compound response manually integrated.

SPL Houston Labs

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: h.i
Lab File ID: h052s06.d
Lab Smp Id:
Analysis Type: SV
Quant Type: ISTD
Operator: LH
Method File: /chem1/h.i/h970221.b/h8270s.m
Misc Info: E051S1/H051B02/H052CC2

Calibration Date: 02/21/97
Calibration Time: 0950

Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF	
11 1,4-Dichlorobenzene-	398336	199168	796672	529386	32.90	
32 Naphthalene-d8	1371797	685898	2743594	1645941	19.98	
48 Acenaphthene-d10	720040	360020	1440080	748071	3.89	
65 Phenanthrene-d10	1184321	592160	2368642	978837	-17.35	
76 Chrysene-d12	928622	464311	1857244	389246	-58.08	<-
83 Perylene-d12	977619	488810	1955238	517347	-47.08	

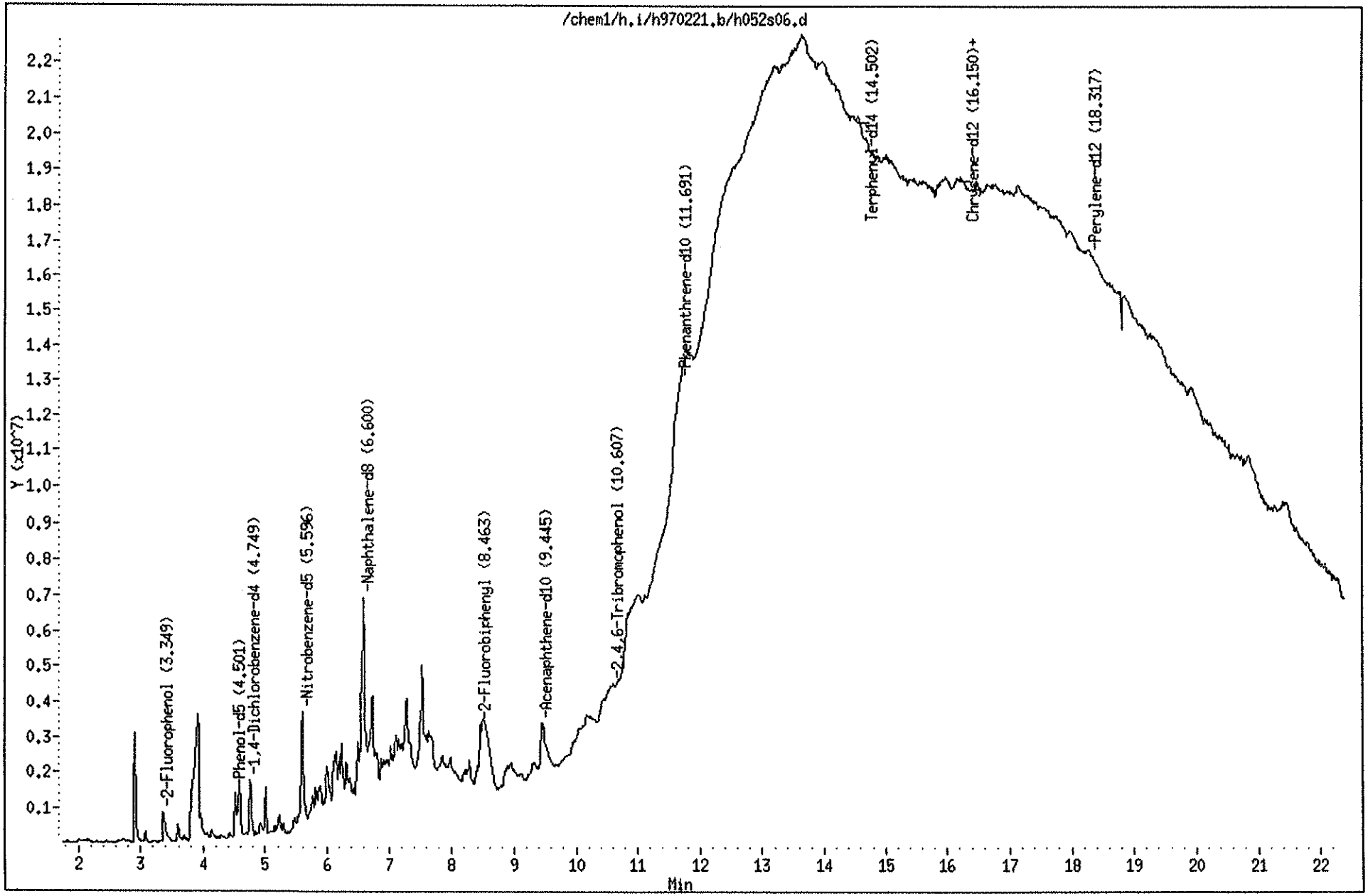
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	4.75	4.25	5.25	4.75	0.03
32 Naphthalene-d8	6.56	6.06	7.06	6.58	0.19
48 Acenaphthene-d10	9.31	8.81	9.81	9.32	0.14
65 Phenanthrene-d10	11.66	11.16	12.16	11.77	0.98
76 Chrysene-d12	15.90	15.40	16.40	16.15	1.57
83 Perylene-d12	18.10	17.60	18.60	18.42	1.75

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data Fi /chem1/h.i/h970221.b/h052s06.d
Date : 21-FEB-1997 14:33
Client ID:
Sample Info: 9702830-03A-8270S/1X
Volume Injected (uL): 2.0
Column phase:

Instrument: h.i

Operator: LH
Column diameter: 0.25



BOE-C6-0109666

Data File: /chem1/h.i/h970221.b/h052s06.d

Date : 21-FEB-1997 14:33

Client ID:

Instrument: h.i

Sample Info: 9702830-03A-8270S/1X

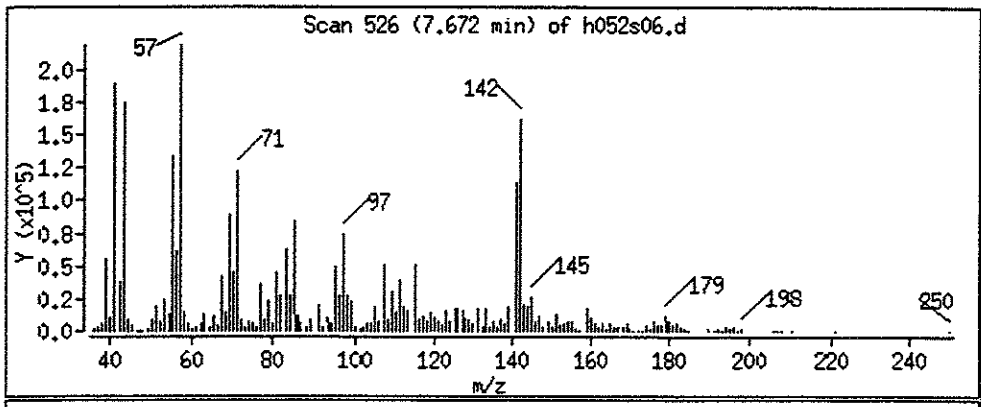
Volume Injected (uL): 2.0

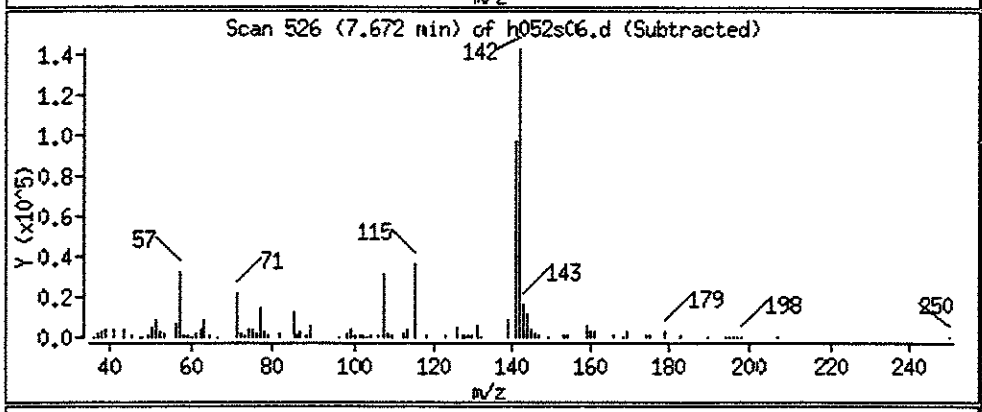
Operator: LH

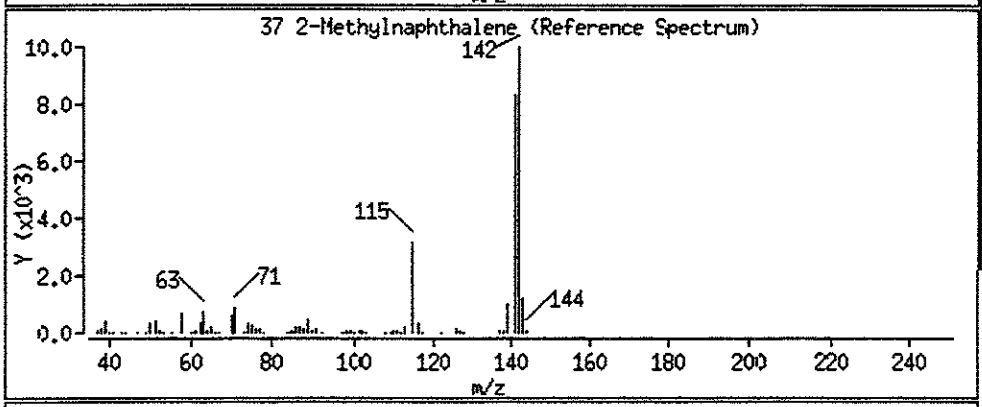
Column phase:

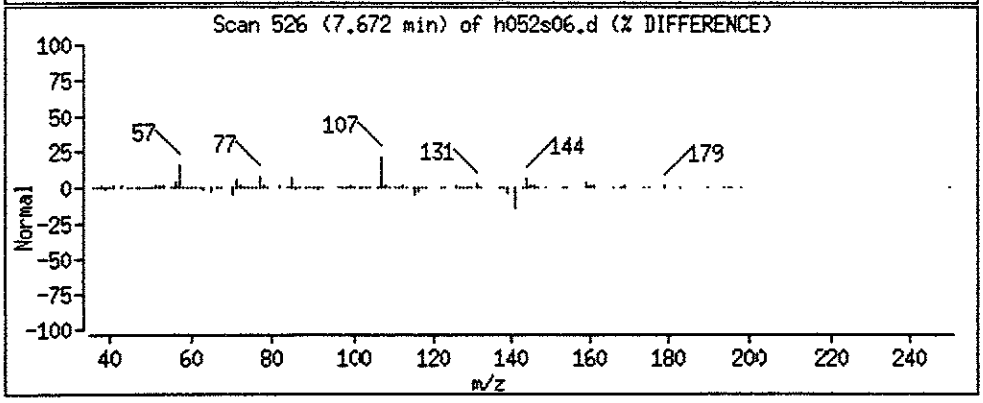
Column diameter: 0.25

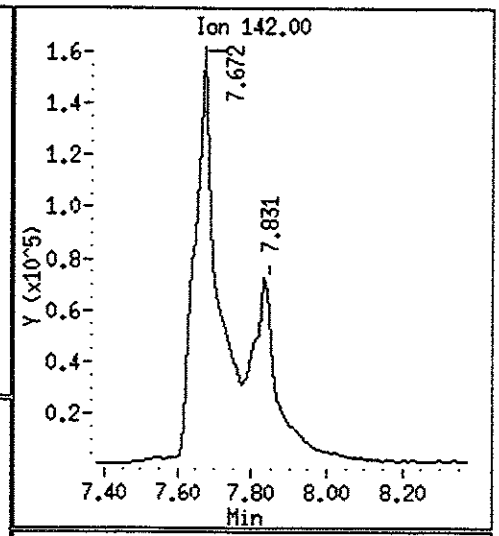
37 2-Methylnaphthalene

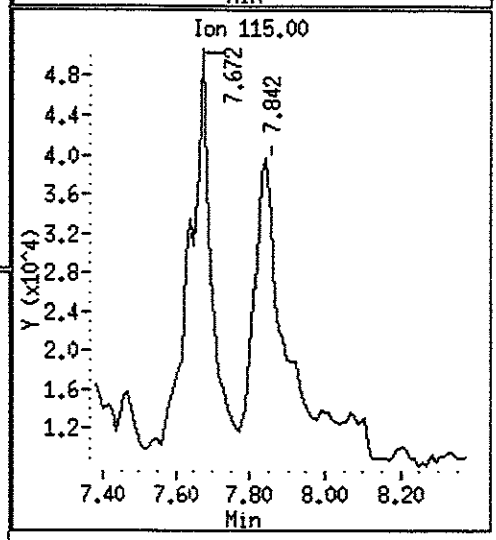












Data File: /chem1/h.i/h970221.b/h052s06.d

Date : 21-FEB-1997 14:33

Client ID:

Instrument: h.i

Sample Info: 9702830-03A-8270S/1X

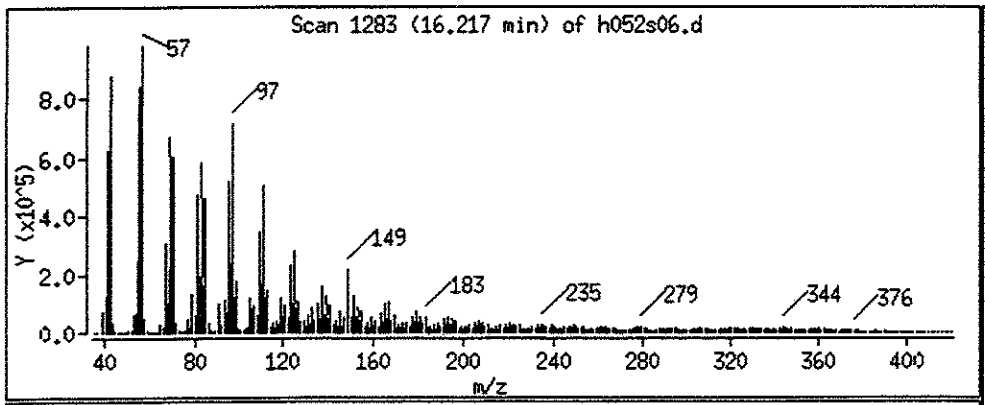
Volume Injected (uL): 2.0

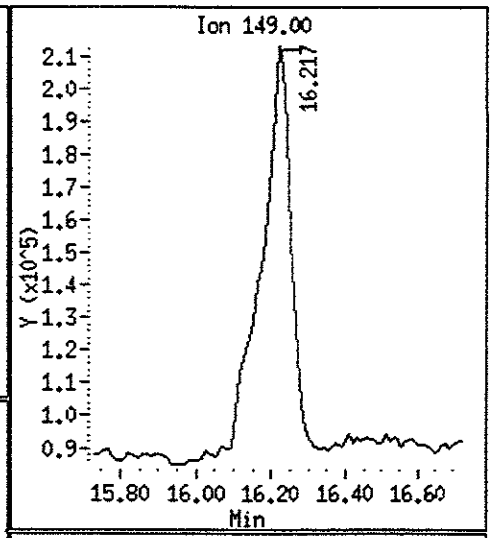
Operator: LH

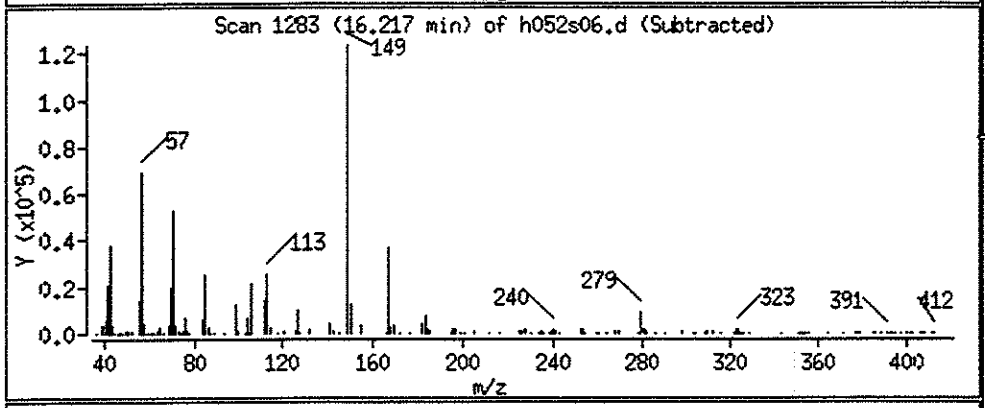
Column phase:

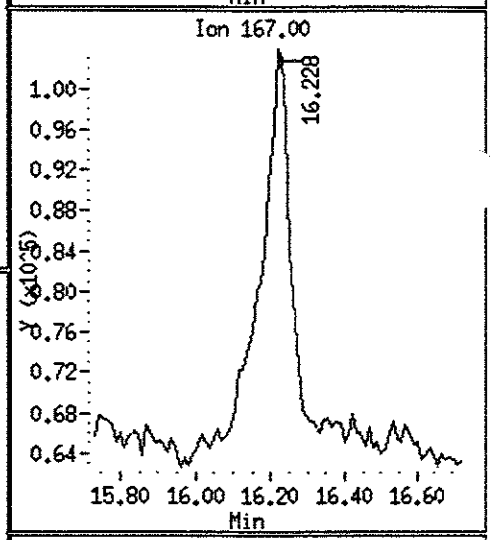
Column diameter: 0.25

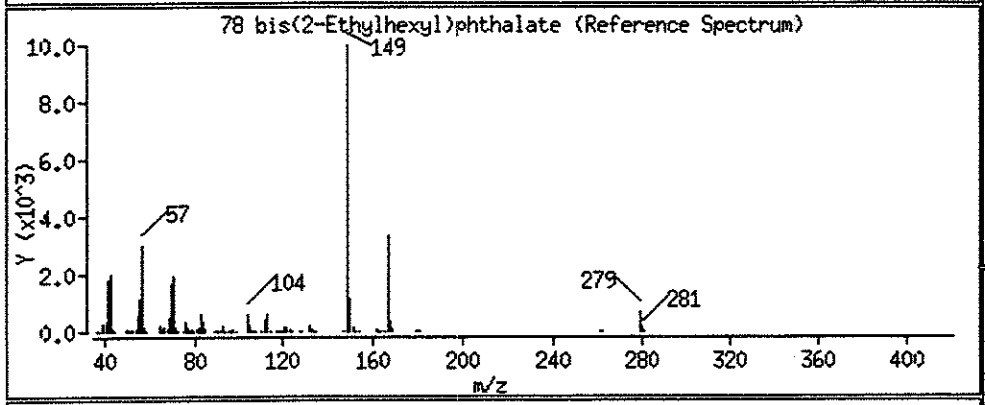
78 bis(2-Ethylhexyl)phthalate

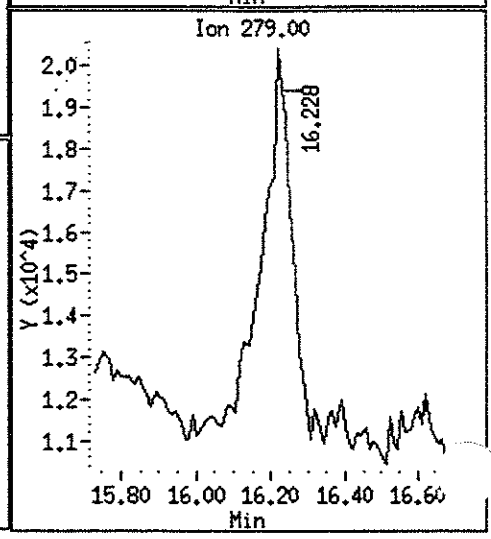


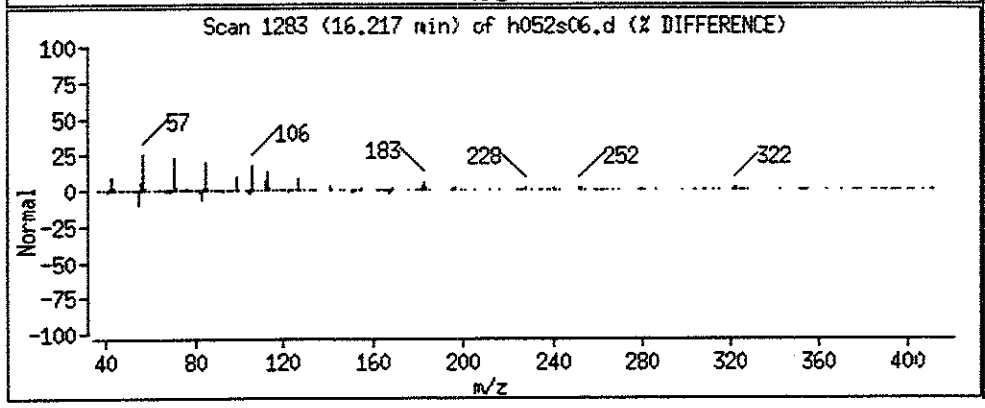












SPL Houston Labs

Data file : /chem1/h.i/h970221.b/h052s06a.d
Lab Smp Id:
Inj Date : 21-FEB-1997 15:02
Operator : LH Inst ID: h.i
Smp Info : 9702830-03A-8270S/10X
Misc Info : E051S1/H051B02/H052CC2
Comment :
Method : /chem1/h.i/h970221.b/h8270sQ.m
Meth Date : 21-Feb-1997 10:46 liping Quant Type: ISTD
Cal Date : 17-FEB-1997 13:02 Cal File: h048ic5.d
Als bottle: 8
Dil Factor: 20.000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
78 bis(2-Ethylhexyl)phthalate	149.00	16.098	16.228	(1.008)	247982	3	1100(a)
* 11 1,4-Dichlorobenzene-d4	152.00	4.754	4.918	(1.000)	588100	40	
* 32 Naphthalene-d8	136.00	6.572	6.746	(1.000)	2063822	40	
* 48 Acenaphthene-d10	164.00	9.337	9.501	(1.000)	1092750	40	
* [illegible] Phenanthrene-d10	188.00	11.696	11.860	(1.000)	1772065	40	
Chrysene-d12	240.00	15.974	16.126	(1.000)	1268425	40	
* 83 Perylene-d12	264.00	18.198	18.395	(1.000)	1362315	40	

SPL Houston Labs

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: h.i
Lab File ID: h052s06a.d
Lab Smp Id:
Analysis Type: SV
Quant Type: ISTD
Operator: LH
Method File: /chem1/h.i/h970221.b/h8270s.m
Misc Info: E051S1/H051B02/H052CC2

Calibration Date: 02/21/97
Calibration Time: 0950

Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	398336	199168	796672	588100	47.64
32 Naphthalene-d8	1371797	685898	2743594	2063822	50.45
48 Acenaphthene-d10	720040	360020	1440080	1092750	51.76
65 Phenanthrene-d10	1184321	592160	2368642	1772065	49.63
76 Chrysene-d12	928622	464311	1857244	1268425	36.59
83 Perylene-d12	977619	488810	1955238	1362315	39.35

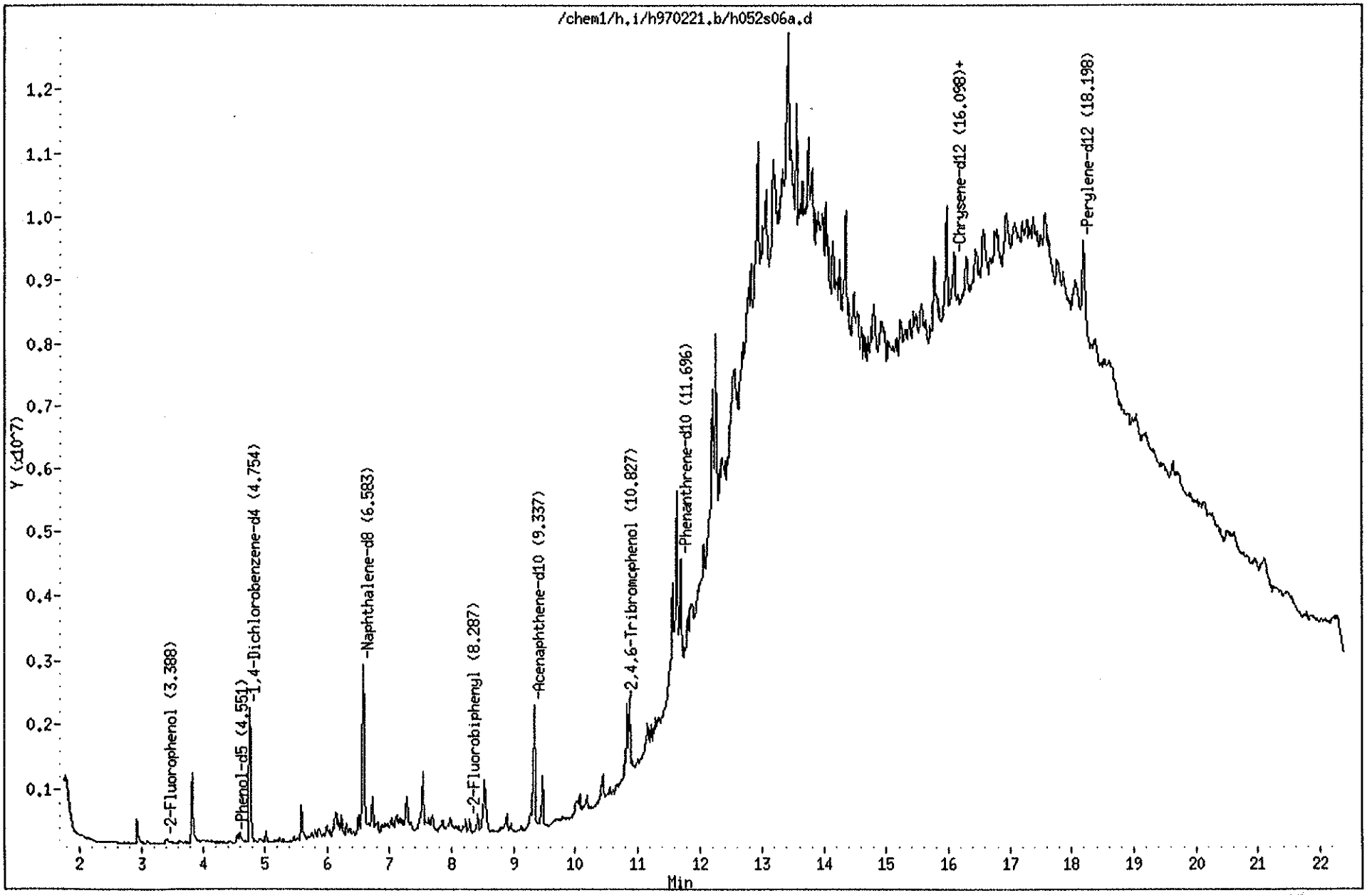
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	4.75	4.25	5.25	4.75	0.14
32 Naphthalene-d8	6.56	6.06	7.06	6.57	0.10
48 Acenaphthene-d10	9.31	8.81	9.81	9.34	0.31
65 Phenanthrene-d10	11.66	11.16	12.16	11.70	0.35
76 Chrysene-d12	15.90	15.40	16.40	15.97	0.47
83 Perylene-d12	18.10	17.60	18.60	18.20	0.54

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/h.i/h970221.b/h052s06a.d
Date : 21-FEB-1997 15:02
Client ID:
Sample Info: 9702830-03A-8270S/10X
Volume Injected (uL): 2.0
Column phase:

Instrument: h.i

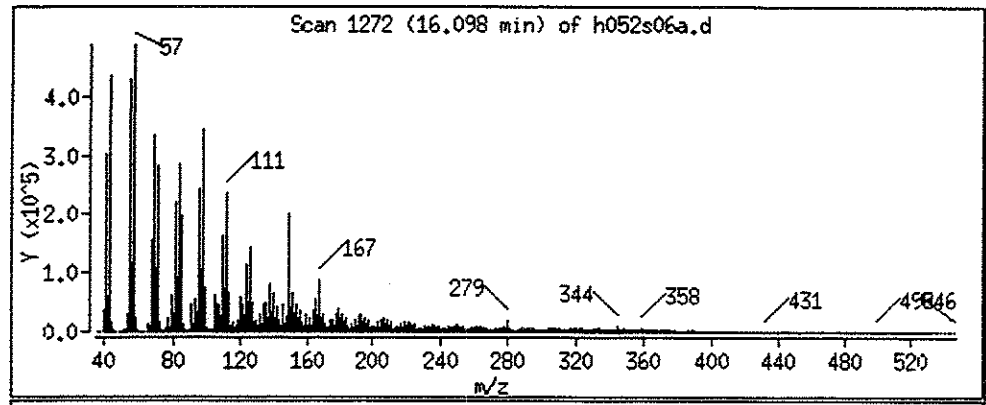
Operator: LH
Column diameter: 0.25

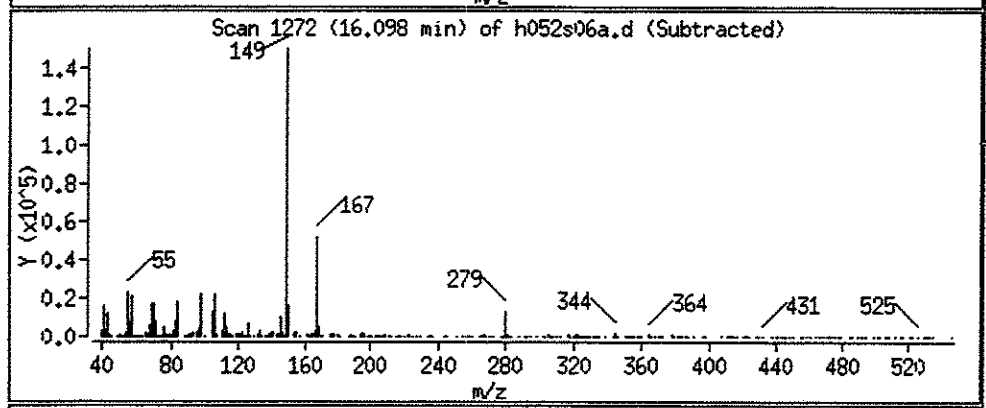


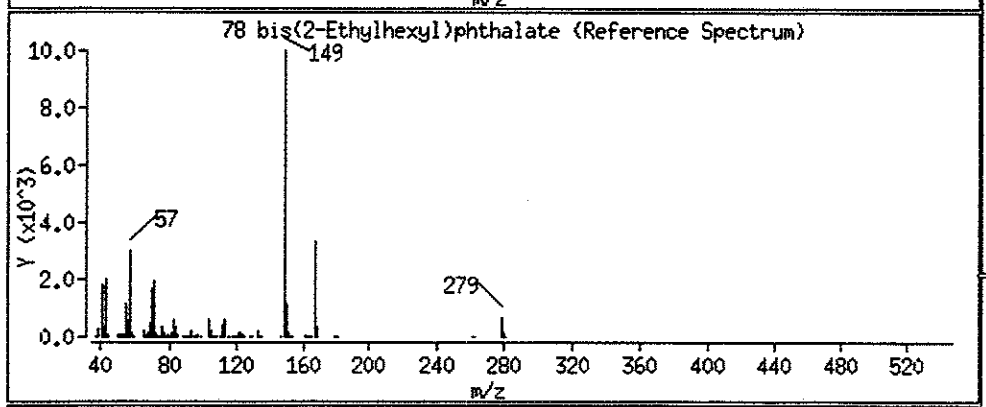
BOE-C6-0109671

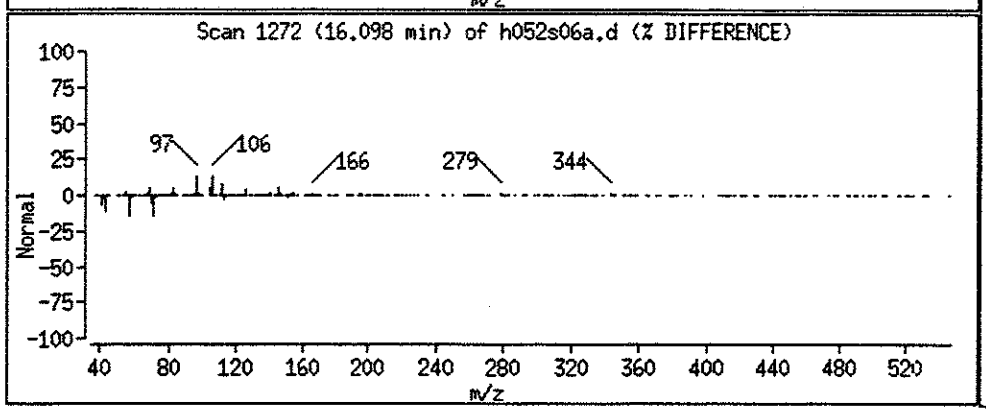
Data File: /chem1/h.i/h970221.b/h052s06a.d
Date : 21-FEB-1997 15:02
Client ID:
Instrument: h.i
Sample Info: 9702830-03A-8270S/10X
Volume Injected (uL): 2.0
Operator: LH
Column phase:
Column diameter: 0.25

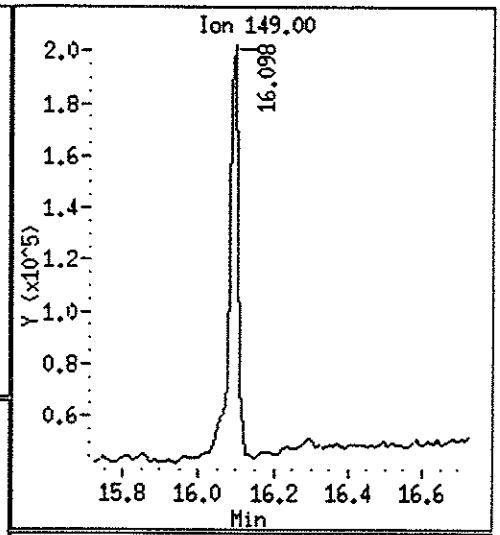
78 bis(2-Ethylhexyl)phthalate

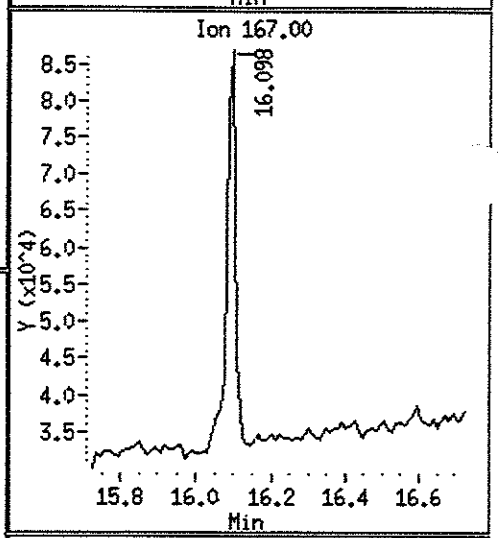


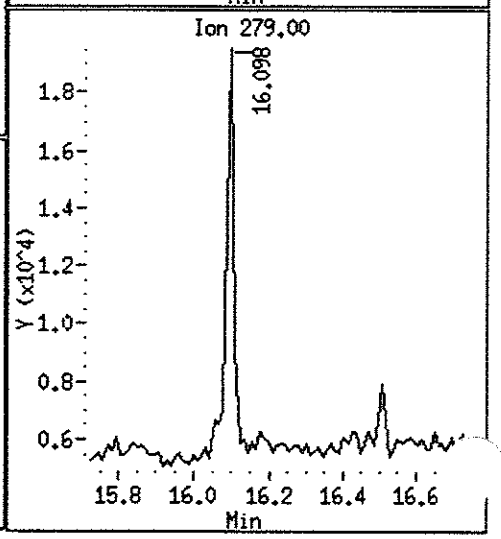












SPL Houston Labs

Data file : /chem1/h.i/h970221.b/h051tl2.d
Lab Smp Id: LCS
Inj Date : 21-FEB-1997 10:31
Operator : LH Inst ID: h.i
Smp Info : METHSPIKE-8270S/1X
Misc Info : E051S1/H051B02/H052CC2
Comment :
Method : /chem1/h.i/h970221.b/h8270sQ.m
Meth Date : 21-Feb-1997 10:46 liping Quant Type: ISTD
Cal Date : 17-FEB-1997 13:02 Cal File: h048ic5.d
Als bottle: 1 QC Sample: MS
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: lcs.sub
Target Version: 3.10

LCS

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 11 1,4-Dichlorobenzene-d4	152.00	4.754	4.918	(1.000)	731155	40	
* 32 Naphthalene-d8	136.00	6.571	6.746	(1.000)	2503119	40	
* 48 Acenaphthene-d10	164.00	9.314	9.501	(1.000)	1280257	40	
* 65 Phenanthrene-d10	188.00	11.662	11.860	(1.000)	2130031	40	
* 76 Chrysene-d12	240.00	15.906	16.126	(1.000)	1662769	40	
* 83 Perylene-d12	264.00	18.107	18.395	(1.000)	1804461	40	
$ 23 Nitrobenzene-d5	82.00	5.578	5.798	(0.849)	1773137	80	1300
$ 41 2-Fluorobiphenyl	172.00	8.276	8.473	(0.888)	3631732	85	1400
$ 72 Terphenyl-d14	244.00	14.258	14.456	(0.896)	3115137	69	1200
$ 3 2-Fluorophenol	112.00	3.354	3.744	(0.706)	2823471	120	1900
$ 4 Phenol-d5	99.00	4.472	4.681	(0.941)	2961589	120	2000
$ 61 2,4,6-Tribromophenol	329.70	10.612	10.832	(0.910)	922315	140	2300
5 Phenol	94.00	4.494	4.703	(0.945)	3008324	95	1600
9 2-Chlorophenol	128.00	4.573	4.771	(0.962)	2876899	120	2000
12 1,4-Dichlorobenzene	146.00	4.777	4.940	(1.005)	2227560	82	1400
21 N-Nitroso-di-n-propylamine	70.00	5.409	5.606	(1.138)	1091641	78	1300
31 1,2,4-Trichlorobenzene	180.00	6.515	6.690	(0.991)	1770298	93	1500
36 4-Chloro-3-methylphenol	107.00	7.599	7.920	(1.156)	2169691	120	2100
49 Acenaphthene	153.00	9.371	9.557	(1.006)	2915631	82	1400
51 4-Nitrophenol	109.00	9.811	10.370	(1.053)	653491	140	2400
53 2,4-Dinitrotoluene	165.00	9.777	10.065	(1.050)	1209223	94	1600
64 Pentachlorophenol	265.50	11.515	11.747	(0.987)	1015020	130	2200
71 Pyrene	202.00	13.954	14.196	(0.877)	3445845	46	760

SPL Houston Labs

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: h.i
Lab File ID: h051tl2.d
Lab Smp Id:
Analysis Type: SV
Quant Type: ISTD
Operator: LH
Method File: /chem1/h.i/h970221.b/h8270s.m
Misc Info: E051S1/H051B02/H052CC2

Calibration Date: 02/21/97
Calibration Time: 0950

Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	398336	199168	796672	731155	83.55
32 Naphthalene-d8	1371797	685898	2743594	2503119	82.47
48 Acenaphthene-d10	720040	360020	1440080	1280257	77.80
65 Phenanthrene-d10	1184321	592160	2368642	2130031	79.85
76 Chrysene-d12	928622	464311	1857244	1662769	79.06
83 Perylene-d12	977619	488810	1955238	1804461	84.58

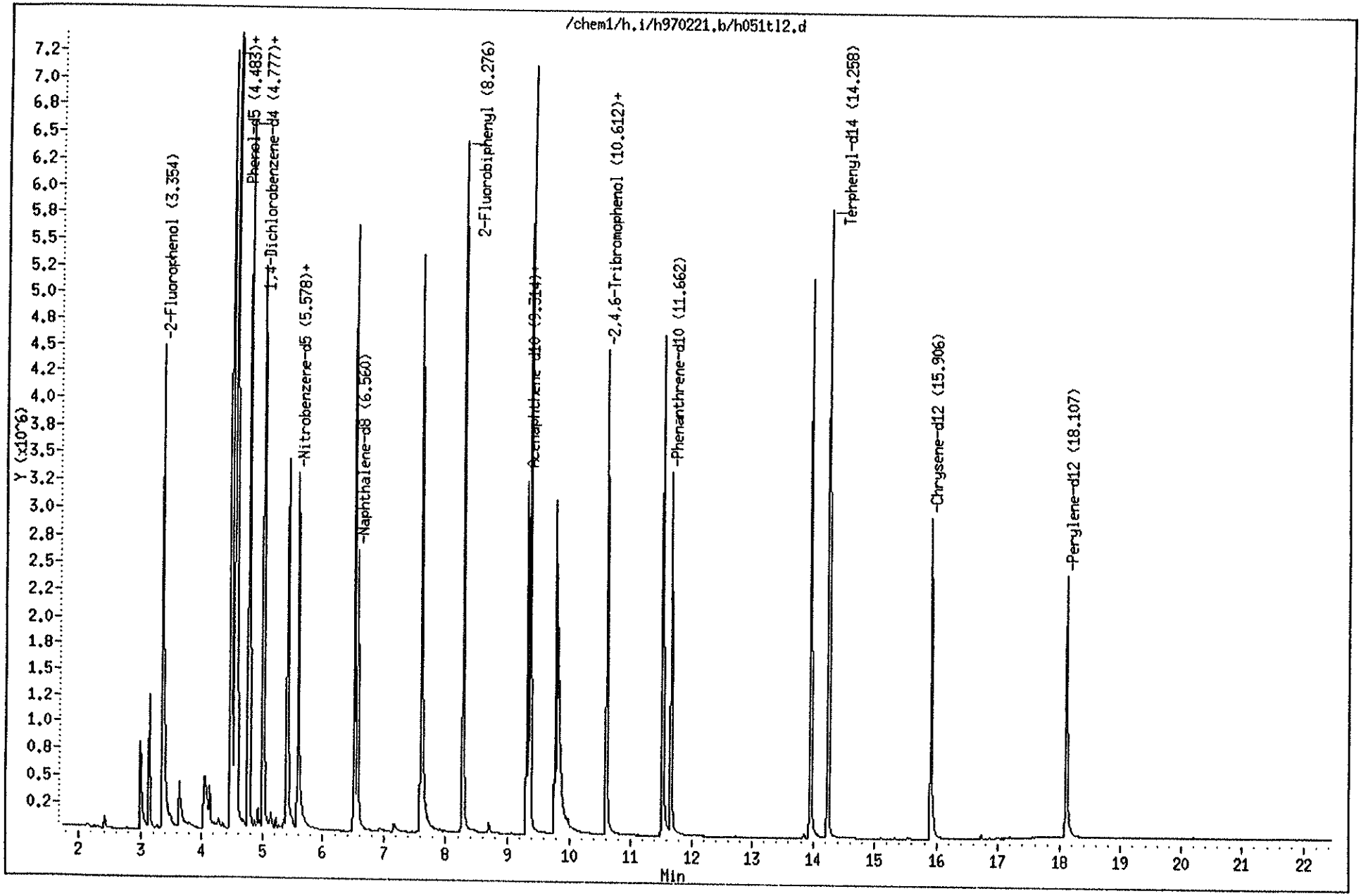
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	4.75	4.25	5.25	4.75	0.13
32 Naphthalene-d8	6.56	6.06	7.06	6.57	0.10
48 Acenaphthene-d10	9.31	8.81	9.81	9.31	0.07
65 Phenanthrene-d10	11.66	11.16	12.16	11.66	0.06
76 Chrysene-d12	15.90	15.40	16.40	15.91	0.04
83 Perylene-d12	18.10	17.60	18.60	18.11	0.04

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/h.i/h970221.b/h051t12.d
Date : 21-FEB-97 10:31
Client ID:
Sample Info: METHSPIKE-8270S/1X
Volume Injected (uL): 2.0
Column phase:

Instrument: h.i

Operator: LH
Column diameter: 0.25



BOE-C6-0109675

SPL Houston Labs

Data file : /chem1/p.i/p970220.b/p051s01.d
Lab Smp Id: 9702165-10A
Inj Date : 20-FEB-1997 11:17
Operator : PC
Smp Info : 9702165-10A-8270S/1X
Misc Info : E050S1/P050B02/P051CC1
Comment :
Method : /chem1/p.i/p970220.b/p8270sQ.m
Meth Date : 20-Feb-1997 10:48 patti
Cal Date : 14-FEB-1997 10:38
Als bottle: 6
Dil Factor: 1.000
Integrator: HP RTE
Target Version: 3.10

Inst ID: p.i

Quant Type: ISTD
Cal File: p045ic5.d

Compound Sublist: 8270.sub

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 11 1,4-Dichlorobenzene-d4	152.00	4.861	4.922	(1.000)	281346	40	
* 32 Naphthalene-d8	136.00	6.630	6.697	(1.000)	1133862	40	
* 48 Acenaphthene-d10	164.00	9.373	9.429	(1.000)	546826	40	
* 65 Phenanthrene-d10	188.00	11.694	11.755	(1.000)	896215	40	
* 76 Chrysene-d12	240.00	15.930	15.992	(1.000)	532931	40	
* 83 Perylene-d12	264.00	18.122	18.189	(1.000)	537127	40	
$ 3 2-Fluorophenol	112.00	3.492	3.506	(0.715)	951840	37	1600
$ 4 Phenol-d5	99.00	4.479	4.523	(0.921)	1406441	130	2100
$ 61 2,4,6-Tribromophenol	329.70	10.643	10.692	(0.910)	217176	160	2600
$ 23 Nitrobenzene-d5	82.00	5.637	5.704	(0.850)	812781	76	1300
$ 41 2-Fluorobiphenyl	172.00	8.345	8.401	(0.890)	1268990	75	1200
$ 72 Terphenyl-d14	244.00	14.321	14.358	(0.899)	874880	61	1000

Data File: /chem1/p.i/p970220.b/p051s01.d
Report Date: 20-Feb-1997 11:49

SPL Houston Labs

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: p.i
Lab File ID: p051s01.d
Lab Smp Id: 9702165-10A
Analysis Type: SV
Quant Type: ISTD
Operator: PC
Method File: /chem1/p.i/p970220.b/p8270s.m
Misc Info: E050S1/P050B02/P051CC1

Calibration Date: 02/20/97
Calibration Time: 0947

Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	277412	138706	554824	281846	1.60
32 Naphthalene-d8	1120723	560362	2241446	1133862	1.17
48 Acenaphthene-d10	593092	296546	1186184	546806	-7.80
65 Phenanthrene-d10	985549	492774	1971098	896215	-9.06
76 Chrysene-d12	478103	239052	956206	532931	11.47
83 Perylene-d12	622157	311078	1244314	537127	-13.67

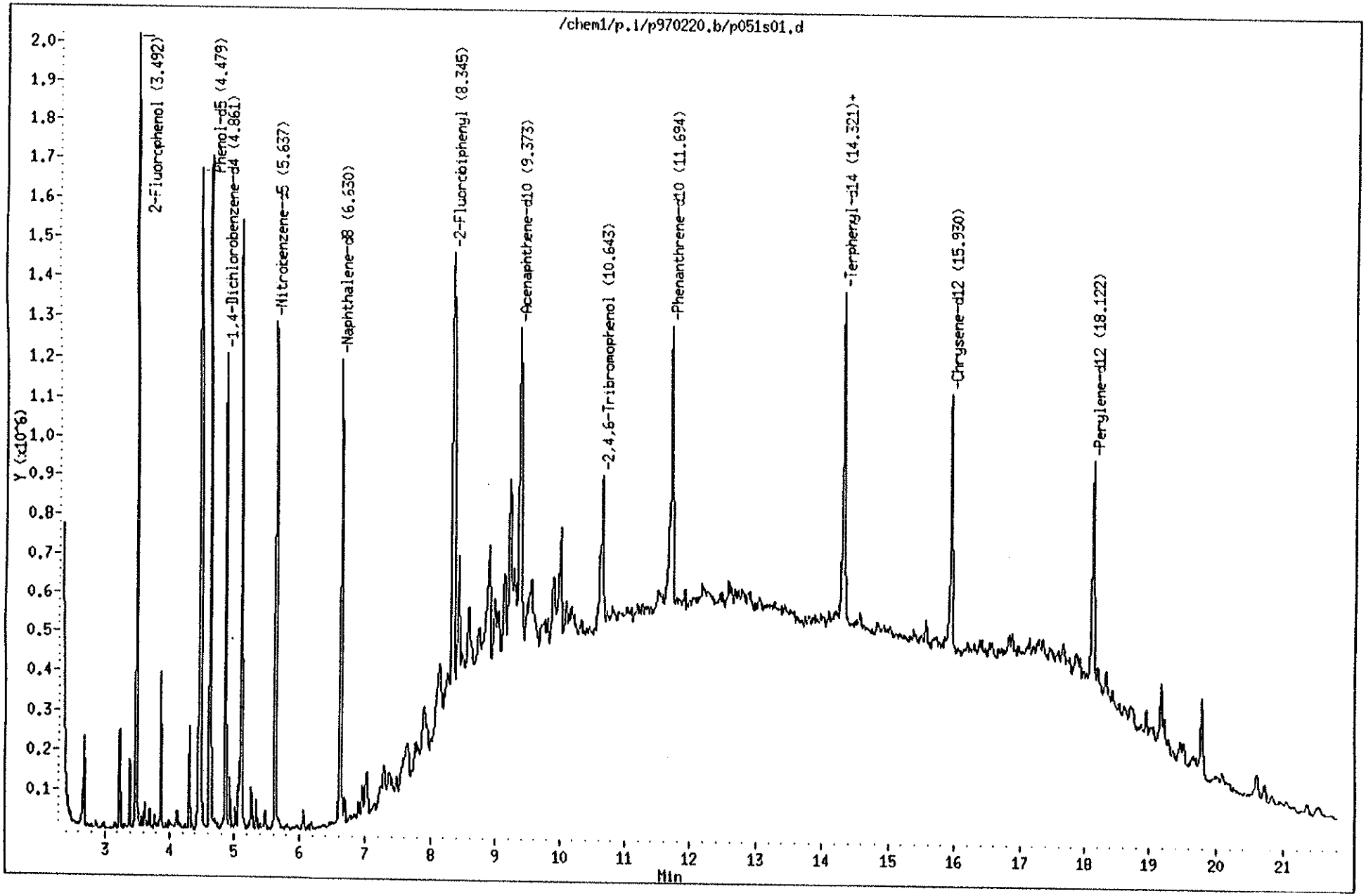
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	4.87	4.37	5.37	4.86	-0.12
32 Naphthalene-d8	6.64	6.14	7.14	6.63	-0.18
48 Acenaphthene-d10	9.38	8.88	9.88	9.37	-0.06
65 Phenanthrene-d10	11.70	11.20	12.20	11.69	-0.05
76 Chrysene-d12	15.94	15.44	16.44	15.93	-0.07
83 Perylene-d12	18.12	17.62	18.62	18.12	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/p.1/p970220.b/p051s01.d
Date : 20-FEB-1997 11:17
Client ID:
Sample Info: 9702165-10A-8270S/1X
Volume Injected (uL): 2.0
Column phase:

Instrument: p.1

Operator: PC
Column diameter: 0.25



BOE-C6-0109678

SPL Houston Labs

Data file : /chem1/p.i/p970220.b/p051k01.d
Lab Smp Id: 9702165-10AMS
Inj Date : 20-FEB-1997 11:47
Operator : PC pc Inst ID: p.i
Smp Info : 9702165-10AMS-8270S/1X
Misc Info : E050S1/P050B02/P051CC1
Comment :
Method : /chem1/p.i/p970220.b/p8270sQ.m
Meth Date : 20-Feb-1997 10:48 patti Quant Type: ISTD
Cal Date : 14-FEB-1997 10:38 Cal File: p045ic5.d
Als bottle: 7 QC Sample: MS
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: LCS.sub
Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)	
* 11 1,4-Dichlorobenzene-d4	152.00	4.870	4.922	(1.000)	269328	40		
* 32 Naphthalene-d8	136.00	6.632	6.697	(1.000)	1126481	40		
* 48 Acenaphthene-d10	164.00	9.382	9.429	(1.000)	518511	40		(M)
5 Phenanthrene-d10	188.00	11.709	11.756	(1.000)	842584	40		(M)
* 76 Chrysene-d12	240.00	15.939	15.992	(1.000)	522337	40		
* 83 Perylene-d12	264.00	18.130	18.189	(1.000)	528736	40		
S 23 Nitrobenzene-d5	82.00	5.645	5.704	(0.851)	799990	76	1300	
S 41 2-Fluorobiphenyl	172.00	8.348	8.401	(0.890)	1273313	81	1300	
S 72 Terphenyl-d14	244.00	14.323	14.356	(0.899)	850851	60	1000	
S 3 2-Fluorophenol	112.00	3.495	3.506	(0.718)	955240	130	1700	
S 4 Phenol-d5	99.00	4.488	4.523	(0.922)	1352709	130	2200	
S 61 2,4,6-Tribromophenol	329.70	10.645	10.692	(0.909)	218262	170	2900	
5 Phenol	94.00	4.517	4.540	(0.928)	1286178	110	1900	
9 2-Chlorophenol	128.00	4.558	4.599	(0.957)	756344	89	1500	
12 1,4-Dichlorobenzene	146.00	4.893	4.940	(1.005)	601475	68	1100	
21 N-Nitroso-di-n-propylamine	70.00	5.492	5.557	(1.128)	611365	100	1800	
31 1,2,4-Trichlorobenzene	180.00	6.579	6.538	(0.992)	633313	85	1400	
36 4-Chloro-3-methylphenol	107.00	7.561	7.607	(1.140)	979697	120	2000	(M)
49 Acenaphthene	153.00	9.435	9.482	(1.006)	994102	80	1300	
51 4-Nitrophenol	109.00	9.682	9.723	(1.032)	112183	90	1500	
53 2,4-Dinitrotoluene	165.00	9.793	9.834	(1.044)	501729	90	1500	
64 Pentachlorophenol	266.00	11.532	11.573	(0.985)	327459	130	2100	(M)
71 Pyrene	202.00	14.300	14.335	(0.878)	1265443	58	970	

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem1/p.i/p970220.b/p051k01.d
Report Date: 20-Feb-1997 12:57

SPL Houston Labs

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: p.i
Lab File ID: p051k01.d
Lab Smp Id: 9702165-10AMS
Analysis Type: SV
Quant Type: ISTD
Operator: PC
Method File: /chem1/p.i/p970220.b/p8270s.m
Misc Info: E050S1/P050B02/P051CC1

Calibration Date: 02/20/97
Calibration Time: 0947

Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	277412	138706	554824	269328	-2.91
32 Naphthalene-d8	1120723	560362	2241446	1126481	0.51
48 Acenaphthene-d10	593092	296546	1186184	518511	-12.57
65 Phenanthrene-d10	985549	492774	1971098	842584	-14.51
76 Chrysene-d12	478103	239052	956206	522337	9.25
83 Perylene-d12	622157	311078	1244314	528736	-15.02

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	4.87	4.37	5.37	4.87	0.05
32 Naphthalene-d8	6.64	6.14	7.14	6.63	-0.14
48 Acenaphthene-d10	9.38	8.88	9.88	9.38	0.03
65 Phenanthrene-d10	11.70	11.20	12.20	11.71	0.07
76 Chrysene-d12	15.94	15.44	16.44	15.94	-0.02
83 Perylene-d12	18.12	17.62	18.62	18.13	0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

SPL Houston Labs

Data file : /chem1/p.i/p970220.b/p051kd1.d
Lab Smp Id: 9702165-10AMSD
Inj Date : 20-FEB-1997 12:18
Operator : PC
Inst ID: p.i
Smp Info : 9702165-10AMSD-8270S/1X
Misc Info : E050S1/P050B02/P051CC1
Comment :
Method : /chem1/p.i/p970220.b/p8270sQ.m
Meth Date : 20-Feb-1997 10:48 patti
Quant Type: ISTD
Cal Date : 14-FEB-1997 10:38
Cal File: p045ic5.d
Als bottle: 7
QC Sample: MSD
Dil Factor: 1.000
Integrator: HP RTE
Compound Sublist: LCS.sub
Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
* 11 1,4-Dichlorobenzene-d4	152.00	4.870	4.922	(1.000)	276994	40	
* 32 Naphthalene-d8	136.00	6.632	6.597	(1.000)	1162010	40	
* 48 Acenaphthene-d10	164.00	9.382	9.429	(1.000)	529988	40	
* 65 Phenanthrene-d10	188.00	11.709	11.756	(1.000)	878622	40	
* 76 Chrysene-d12	240.00	15.939	15.992	(1.000)	519651	40	
* 83 Perylene-d12	264.00	18.136	18.189	(1.000)	525155	40	
$ 23 Nitrobenzene-d5	82.00	5.645	5.704	(0.851)	813397	74	1200
$ 41 2-Fluorobiphenyl	172.00	8.348	8.401	(0.890)	1314664	82	1400
$ 72 Terphenyl-d14	244.00	14.323	14.358	(0.899)	866714	62	1000
$ 3 2-Fluorophenol	112.00	3.501	3.506	(0.719)	978767	100	1700
$ 4 Phenol-d5	99.00	4.488	4.523	(0.922)	1400988	130	2200
$ 61 2,4,6-Tribromophenol	329.70	10.651	10.692	(0.910)	223182	170	2800
5 Phenol	94.00	4.517	4.540	(0.928)	1313433	110	1900
9 2-Chlorophenol	128.00	4.664	4.699	(0.958)	767053	87	1400
12 1,4-Dichlorobenzene	146.00	4.893	4.940	(1.005)	617736	68	1100
21 N-Nitroso-di-n-propylamine	70.00	5.492	5.557	(1.128)	631722	100	1800
31 1,2,4-Trichlorobenzene	180.00	6.585	6.638	(0.993)	645310	83	1400
36 4-Chloro-3-methylphenol	107.00	7.560	7.607	(1.140)	1003068	120	2000
49 Acenaphthene	153.00	9.435	9.482	(1.006)	1012027	79	1300
51 4-Nitrophenol	109.00	9.687	9.723	(1.033)	118213	92	1500
53 2,4-Dinitrotoluene	165.00	9.793	9.834	(1.044)	513627	90	1500
64 Pentachlorophenol	266.00	11.532	11.573	(0.985)	336397	130	2100(M)
71 Pyrene	202.00	14.000	14.035	(0.878)	1261742	58	970

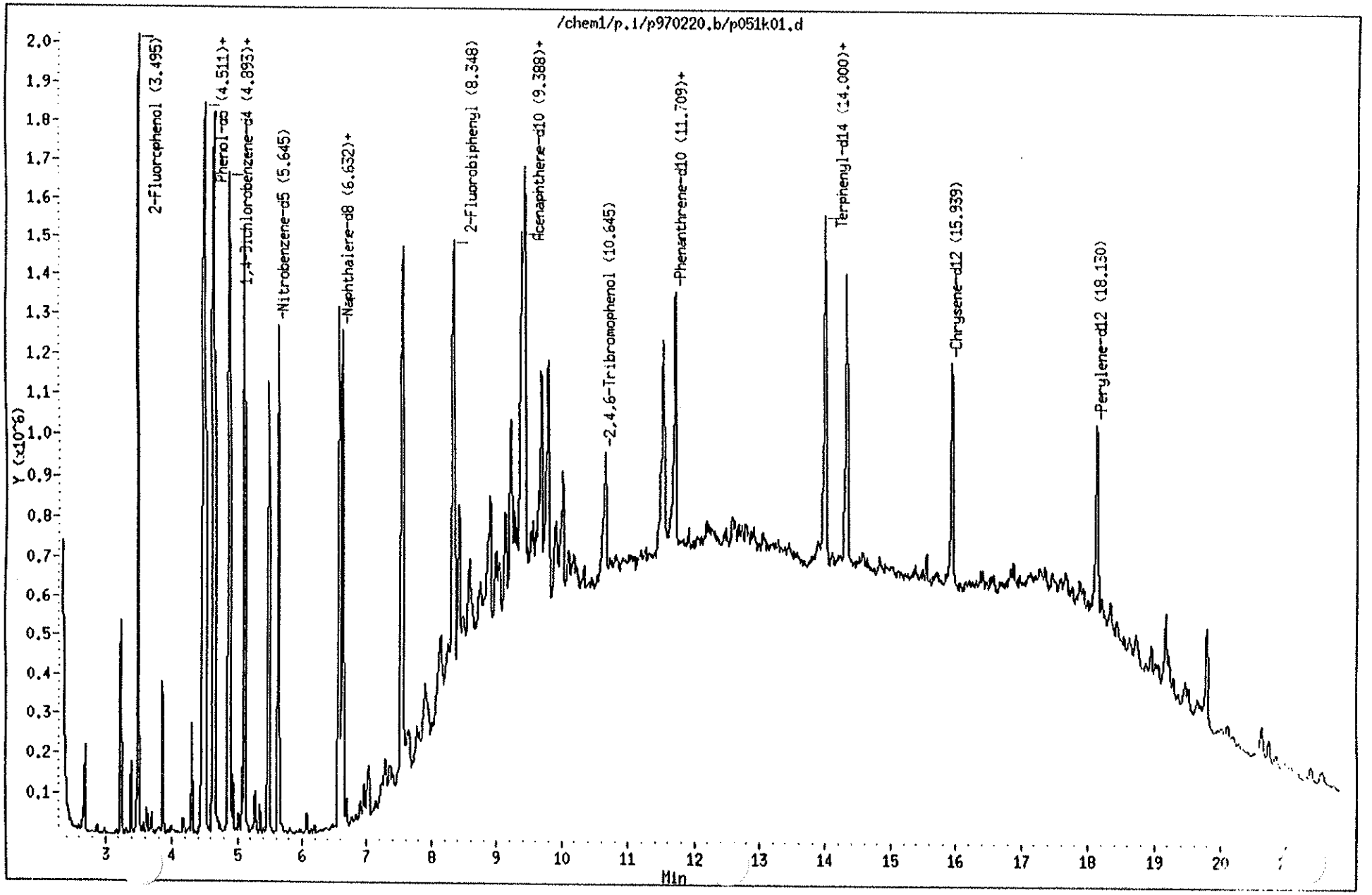
QC Flag Legend

M - Compound response manually integrated.

Data File: /chem1/p.1/p970220.b/p051k01.d
Date : 20-FEB-1997 11:47
Client ID:
Sample Info: 9702165-10ANS-8270S/1X
Volume Injected (uL): 2.0
Column phase:

Instrument: p.1

Operator: PC
Column diameter: 0.25



Data File: /chem1/p.i/p970220.b/p051kd1.d
Report Date: 20-Feb-1997 12:54

SPL Houston Labs

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: p.i
Lab File ID: p051kd1.d
Lab Smp Id: 9702165-10AMSD
Analysis Type: SV
Quant Type: ISTD
Operator: PC
Method File: /chem1/p.i/p970220.b/p8270s.m
Misc Info: E050S1/P050B02/P051CC1

Calibration Date: 02/20/97
Calibration Time: 0947

Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	277412	138706	554824	276994	-0.15
32 Naphthalene-d8	1120723	560362	2241446	1162010	3.68
48 Acenaphthene-d10	593092	296546	1186184	529988	-10.64
65 Phenanthrene-d10	985549	492774	1971098	878622	-10.85
76 Chrysene-d12	478103	239052	956206	519651	8.69
83 Perylene-d12	622157	311078	1244314	525155	-15.59

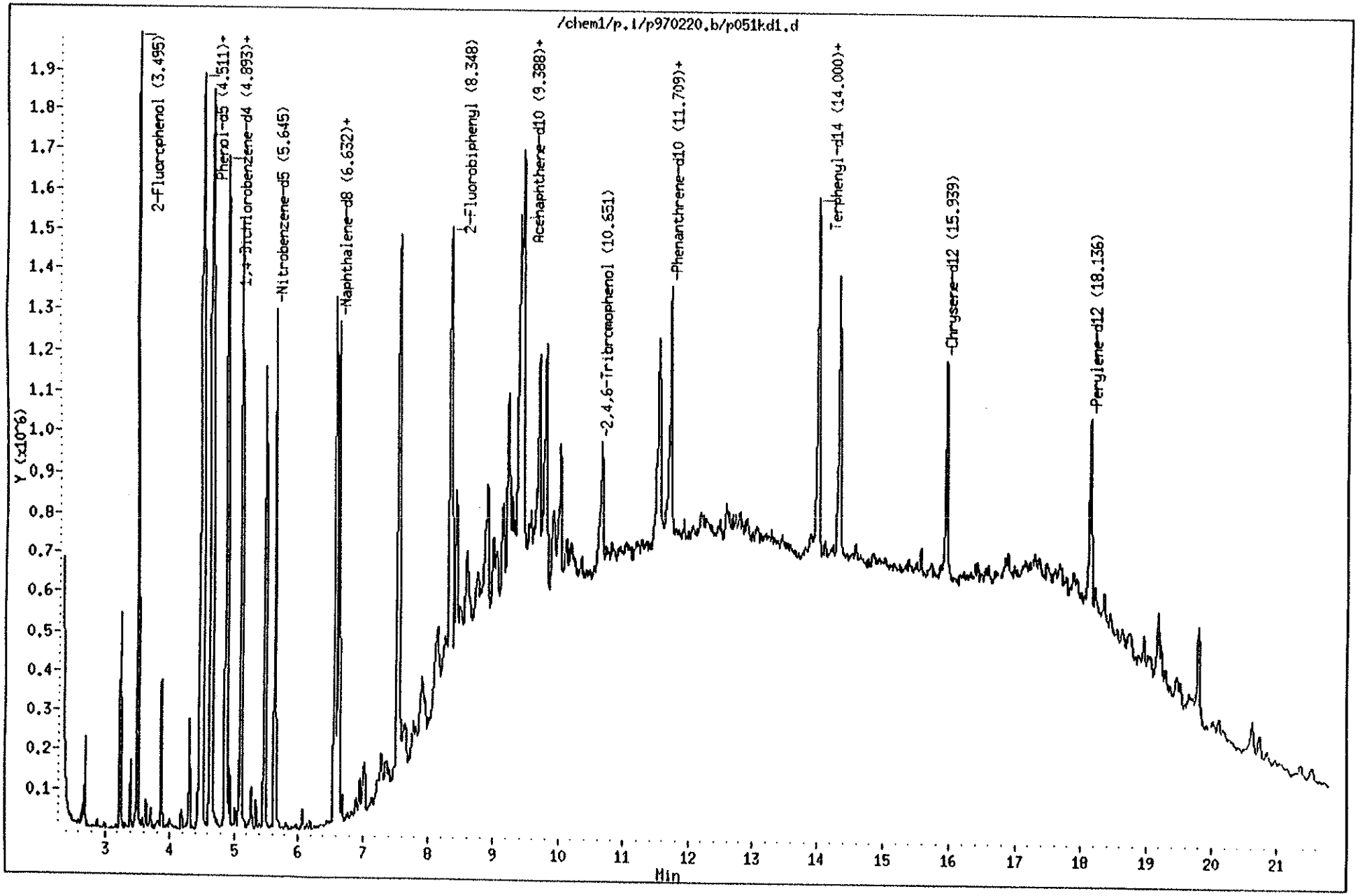
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	4.87	4.37	5.37	4.87	0.05
32 Naphthalene-d8	6.64	6.14	7.14	6.63	-0.14
48 Acenaphthene-d10	9.38	8.88	9.88	9.38	0.03
65 Phenanthrene-d10	11.70	11.20	12.20	11.71	0.07
76 Chrysene-d12	15.94	15.44	16.44	15.94	-0.02
83 Perylene-d12	18.12	17.62	18.62	18.14	0.08

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/p.i/p970220.b/p051kd1.d
Date : 20-FEB-1997 12:18
Client ID:
Sample Info: 9702165-10AMSD-8270S/1X
Volume Injected (uL): 2.0
Column phase:

Instrument: p.i

Operator: PC
Column diameter: 0.25



BOE-C6-0109684

SPL Houston Labs

Data file : /chem1/p.i/p970220.b/p050t12.d
Lab Smp Id: LCS
Inj Date : 20-FEB-1997 10:17
Operator : PC PC Inst ID: p.i
Smp Info : METHSPIKE-8270S/1X
Misc Info : E050S1/P050B02/P051CC1
Comment :
Method : /chem1/p.i/p970220.b/p8270sQ.m
Meth Date : 20-Feb-1997 10:48 patti Quant Type: ISTD
Cal Date : 14-FEB-1997 10:38 Cal File: p045ic5.d
Als bottle: 1 QC Sample: METHSPIKE
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: LCS.sub
Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
* 11 1,4-Dichlorobenzene-d4	152.00	4.865	4.922	(1.000)	272058	40	
* 32 Naphthalene-d8	136.00	6.627	6.697	(1.000)	1123890	40	
8 Acenaphthene-d10	164.00	9.365	9.429	(1.000)	657289	40	
5 Phenanthrene-d10	188.00	11.692	11.756	(1.000)	1036690	40	
* 76 Chrysene-d12	240.00	15.922	15.992	(1.000)	756820	40	
* 83 Perylene-d12	264.00	18.102	18.189	(1.000)	723733	40	
S 23 Nitrobenzene-d5	82.00	5.640	5.704	(0.851)	832470	79	1300
S 41 2-Fluorobiphenyl	172.00	8.337	8.401	(0.890)	1354923	65	1100
S 72 Terphenyl-d14	244.00	14.307	14.355	(0.899)	1184577	58	960
S 3 2-Fluorophenol	112.00	3.508	3.506	(0.721)	989043	110	1800
S 4 Phenol-d5	99.00	4.489	4.523	(0.923)	1399947	130	2200
S 51 2,4,6-Tribromophenol	329.70	10.634	10.692	(0.910)	228246	140	2300
5 Phenol	94.00	4.518	4.540	(0.929)	1247770	110	1800
9 2-Chlorophenol	128.00	4.659	4.699	(0.958)	756816	88	1500
12 1,4-Dichlorobenzene	146.00	4.894	4.940	(1.006)	606555	68	1100
21 N-Nitroso-di-n-propylamine	70.00	5.488	5.557	(1.128)	621605	110	1800
31 1,2,4-Trichlorobenzene	180.00	6.575	6.638	(0.992)	627767	84	1400
36 4-Chloro-3-methylphenol	107.00	7.550	7.607	(1.139)	916705	110	1900
49 Acenaphthene	153.00	9.418	9.482	(1.006)	1122414	70	1200
51 4-Nitrophenol	109.00	9.677	9.723	(1.033)	235420	130	2200
53 2,4-Dinitrotoluene	165.00	9.783	9.834	(1.045)	580890	82	1400
54 Pentachlorophenol	266.00	11.516	11.573	(0.985)	368144	120	1900
71 Pyrene	202.00	13.978	14.035	(0.878)	1733250	54	910

Data File: /chem1/p.i/p970220.b/p050t12.d
Report Date: 20-Feb-1997 10:50

SPL Houston Labs

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: p.i
Lab File ID: p050t12.d
Lab Smp Id: LCS
Analysis Type: SV
Quant Type: ISTD
Operator: PC
Method File: /chem1/p.i/p970220.b/p8270s.m
Misc Info: E050S1/P050B02/P051CC1

Calibration Date: 02/20/97
Calibration Time: 0947

Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	277412	138706	554824	272058	-1.93
32 Naphthalene-d8	1120723	560362	2241446	1123890	0.28
48 Acenaphthene-d10	593092	296546	1186184	657289	10.82
65 Phenanthrene-d10	985549	492774	1971098	1036690	5.19
76 Chrysene-d12	478103	239052	956206	756820	58.30
83 Perylene-d12	622157	311078	1244314	723733	16.33

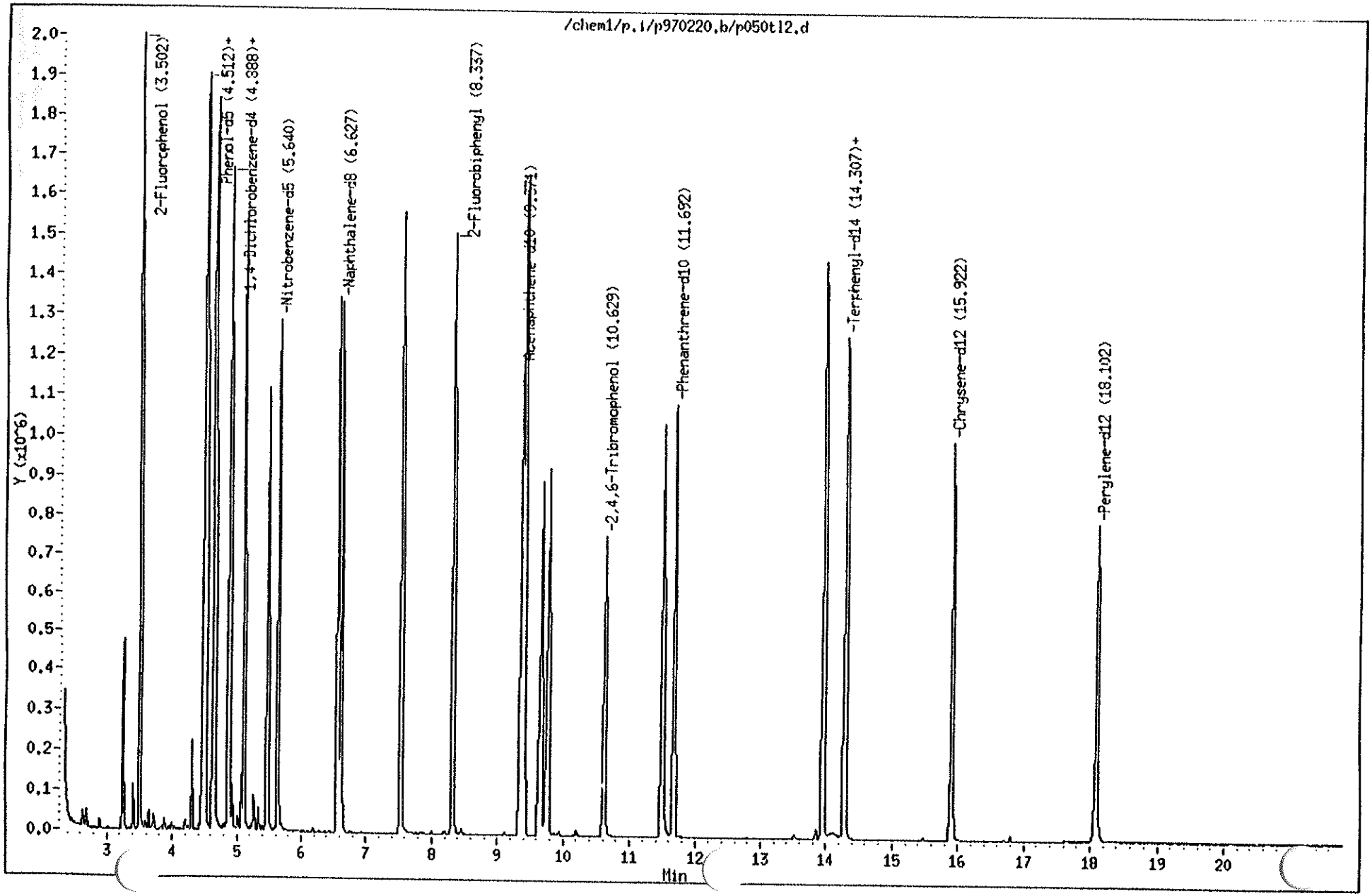
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	4.87	4.37	5.37	4.86	-0.04
32 Naphthalene-d8	6.64	6.14	7.14	6.63	-0.21
48 Acenaphthene-d10	9.38	8.88	9.88	9.37	-0.15
65 Phenanthrene-d10	11.70	11.20	12.20	11.69	-0.07
76 Chrysene-d12	15.94	15.44	16.44	15.92	-0.12
83 Perylene-d12	18.12	17.62	18.62	18.10	-0.11

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem1/p.i/p970220.b/p050t12.d
Date : 20-FEB-1997 10:17
Client ID:
Sample Info: METHSPIKE-8270S/1X
Volume Injected (uL): 2.0
Column phase:

Instrument: p.i

Operator: PC
Column diameter: 0.25



BOE-C6-0109687

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/21/97
Analyzed on: 02/20/97
Analyst: LAR

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.
9702829-01A	87	87	0	20

-9702636

Samples in batch:

9702829-01A 9702830-01A 9702830-02A 9702830-03A

COMMENTS:

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

FAX

MONTGOMERY WATSON

250 N. Madison Avenue
Pasadena, California 91101

Tel: 818-796-9141
Fax: 818-568-6515

Date: 2/19/97

To: MIKE CRISOSTOMO

Fax No: 714-447-6900

From: STEVE REINERS

Reference: MDLC

Subject: ADDITIONAL ANALYSES

No. of Pages: (including cover) 4

Comments: PLEASE RUN THE FOLLOWING SAMPLES FOR VOCs (8260) AND SVOCs (8270):

-837-GS-32
-837-GS-33
-837-GS-34
-837-GS-37
-837-GS-39
-837-GS-40

COCs FOLLOW. PLEASE CALL ME AT 818-568-6334 TO CONFIRM 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 Fullerton Environmental Laboratory
Sample Receiving Checklist

SPL Workorder Number: 9702121

Date: 2-12-97 Time: 15:26

	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 2.0 °C

Samples Were Delivered by:

SPL Courier	G. Holaw
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

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No: 9702121

C- 04446

page 1 of 1

Client Name: Montgomery Watson

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

Client Contact: Fred Strauss (818) 568-6582

Project Name: MDRC C-6 Facility, Torrance, CA

Project Number: 1206035.01090010

Project Location: C-6 Facility, Building 37 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 (previously noted as CAM metals)							
B37-GS-35	2/17/97	1330		X	S	2"x6" SS Sleeve	Approx 120g	ICE	2	X	X							
B37-GS-36	2/17/97	1430		X	S	2"x6" SS Sleeve	"	ICE	2	X	X							
B37-GS-37	2/17/97	1440		X	S	2"x6" SS Sleeve	"	ICE	2	X	X							
B37-GS-38	2/17/97	1450		X	S	2"x6" SS Sleeve	"	ICE	2	X	X							
B37-GS-39	2/17/97	1500		X	S	2"x6" SS Sleeve	"	ICE	2	X	X							
B37-GS-40	2/17/97	1600		X	S	2"x6" SS Sleeve	"	ICE	2	X	X							

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

Laboratory remarks:

Intact? ☑ Y ☐ N

Temp: 2.0 °C

Requested TAT

TRPH only

24hr ☒ 72hr ☐

All others Standard ☒

48hr ☐

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. Venis	date 2/17/97	time 1745	2. Received by: [signature] 2/17/97 18:20
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-C6-0109692

97-02-830

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

INTEROFFICE SAMPLE TRANSFER
CHAIN-OF-CUSTODY FORM

PAGE 1 OF 1

ORIGINATING LAB: Fullerton RECEIVING LAB: Houston DATE: 2/19/97

ATTENTION: Brent Barron REPORT RESULTS TO: Mike Crisostomo

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

CLIENT NAME: Montgomery Watson PROJECT #: DATE NEEDED: 2/27/97

HEADING FOR ANALYSIS:	INVOICE TO:
COMPANY: Montgomery Watson	COMPANY: SPL - Fullerton
ADDRESS: 250 N. Pasadena Avenue	ADDRESS:
Pasadena, CA 91101	
ATTN: Steve Reinero	ATTN: Mike Crisostomo

SAMPLE NO. IDENTIFICATION	DATE/TIME COLLECTED	LAB SAMPLE NUMBER	SAMPLE MATRIX	ANALYSES REQUESTED	QUOTED PRICE
B37-GS-37	2/17/97	9702121-03A	soil	8270S/PRPGNS	$205.00
B37-GS-39	↓	-05A	↓	↓	
B37-GS-40	↓	-06A	↓	↓	

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
1. [signature]	2/19/97	12:27	[signature]	2/20/97	1000
2.			40C ok, in front		

NOTES: FED-EX 3925303313

BOE-C6-0109693

SPL Houston Environmental Laboratory

Sample Login Checklist

Date: 2/20/97	Time: 1000

SPL Sample ID: 97-02-830

			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.		✓	
	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 #)	3925303313	
		Other:		
11	Method of sample disposal:	SPL Disposal	✓	
		HOLD		
		Return to Client		

Name: [signature]	Date: 2/20/97

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

SPL, INC.

REPORT APPROVAL SHEET

WORK ORDER NUMBER: *97 - 02 - 136*

Approved for release by:

Joel Grice, Laboratory Manager — *Date:* 3/15/97

Michael J. Crisostomo, Project Manager — *Date:* 3-12-97

Certificate of Analysis No. 9702136

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
Site: Bldg. 37 Area, Torrance, CA
Method: 418.1*

Report Date: 3/12/97
Date(s) Received: 2/18/97
Date(s) Sampled: 2/18/97
Date(s) Analyzed: 2/19/97
Project Number: 120603501090010
Matrix: SOIL

Units: mg/Kg

Sample ID	Petroleum Extractables
B37-GS-41-3 ft.	1900

Results reported at Practical Quantitation Limit 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
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FULLERTON, CA 92831
PHONE (714) 447-6868

Certificate of Analysis No. 9702136

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

Report Date: 3/12/97
Date(s) Received: 2/18/97
Date(s) Sampled: 2/18/97
Date(s) Analyzed: 2/25/97,2/21/97
Project Number: 120603501090010
Matrix: SOIL

Analyte	Units	EPA Method	B37-GS-41-3 ft.
Antimony, Total	mg/Kg	6010A***	ND<0.500
Arsenic, Total	mg/Kg	6010A***	ND<0.11
Barium, Total	mg/Kg	6010A***	117
Beryllium, Total	mg/Kg	6010A***	ND<0.06
Cadmium, Total	mg/Kg	6010A***	0.23
Chromium, Total	mg/Kg	6010A***	18.8
Cobalt, Total	mg/Kg	6010A***	9.76
Copper, Total	mg/Kg	6010A***	21.3
Digestion-Solids 3050A	N/A	3050A***	02/21/97
Lead, Total	mg/Kg	6010A***	5.43
Mercury Digestion in Soil	N/A	7471A***	02/21/97
Mercury, Total	mg/Kg	7471A***	ND<0.200
Molybdenum,Total	mg/Kg	6010A***	ND<2.50
Nickel, Total	mg/Kg	6010A ***	13.8
Selenium, Total	mg/Kg	6010A***	ND<5.00
Silver, Total	mg/Kg	6010A***	ND<5.00
Thallium, Total	mg/Kg	6010A***	ND<0.500
Vanadium, Total	mg/Kg	6010A***	38.3
Zinc, Total	mg/Kg	6010A***	60.5

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.

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

SPL California License Number 2178

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

Certificate of Analysis No. 9702136

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

Report Date: 3/12/97
Date(s) Received: 2/18/97
Date(s) Sampled: 2/18/97
Date(s) Analyzed: 2/20/97
Project Number: 120603501090010
Matrix: SOIL

Method: 8260 Soil, Volatile Organics

Units: UG/KG

Analyte	B37-GS-41-3 ft.
Benzene	ND<5
Bromobenzene	ND<5
Bromochloromethane	ND<5
Bromodichloromethane	ND<5
Bromoform	ND<5
Bromomethane	ND<5
n-Butylbenzene	ND<5
sec-Butylbenzene	ND<5
tert-Butylbenzene	ND<5
Carbon tetrachloride	ND<5
Chlorobenzene	ND<5
Chlorodibromomethane	ND<5
Chloroethane	ND<5
Chloroform	ND<5
Chloromethane	ND<5
2-Chlorotoluene	ND<5
4-Chlorotoluene	ND<5
1,2-Dibromo-3-chloroprop	ND<5
1,2-Dibromoethane	ND<5
Dibromomethane	ND<5
1,2-Dichlorobenzene	ND<5
1,3-Dichlorobenzene	ND<5
1,4-Dichlorobenzene	ND<5
Dichlorodifluoromethane	ND<5
1,1-Dichloroethane	6.6
1,2-Dichloroethane	ND<5
1,1-Dichloroethene	ND<5
cis-1,2-Dichloroethene	ND<5
trans-1,2-Dichloroethene	ND<5
1,2-Dichloropropane	ND<5
1,3-Dichloropropane	ND<5
2,2-Dichloropropane	ND<5
1,1-Dichloropropene	ND<5
Ethylbenzene	ND<5
Hexachlorobutadiene	ND<5
Isopropylbenzene	ND<5
p-Isopropyltoluene	6.0
Methylene chloride	ND<5

Certificate of Analysis No. 9702136

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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
Site: Bldg. 37 Area, Torrance, CA

Report Date: 3/12/97
Date(s) Received: 2/18/97
Date(s) Sampled: 2/18/97
Date(s) Analyzed: 2/20/97
Project Number: 120603501090010
Matrix: SOIL

Method: 8260 Soil, Volatile Organics

Units: UG/KG

Analyte	B37-GS-41-3 ft.
Naphthalene	15
n-Propylbenzene	ND<5
Styrene	ND<5
1,1,1,2-Tetrachloroethane	ND<5
1,1,2,2-Tetrachloroethane	ND<5
Tetrachloroethene	27
Toluene	ND<5
1,2,3-Trichlorobenzene	ND<5
1,2,4-Trichlorobenzene	ND<5
1,1,1-Trichloroethane	ND<5
1,1,2-Trichloroethane	ND<5
Trichloroethene	ND<5
1,2,3-Trichloropropane	ND<5
1,2,4-Trimethylbenzene	ND<5
1,3,5-Trimethylbenzene	ND<5
Vinyl chloride	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

02/20/97

EPA 8240/8260 Compounds by EPA 8260 Method

9702112, 9702118, 9702136, 9702121

Parameter	Laboratory Method Blank (ug/Kg)	Reporting Limits (ug/Kg)	LCS Rec. (%)	Acceptability Range (%)
Dichlorodifluoromethane	ND	5.0	130	70 - 130
Chloromethane	ND	5.0	130	70 - 130
Vinyl chloride	ND	5.0	110	70 - 130
Bromomethane	ND	5.0	106	70 - 130
Chloroethane	ND	5.0	108	70 - 130
Trichlorofluoromethane	ND	5.0	104	70 - 130
Acrolein	ND	50	78	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	50	NA	70 - 130
Acetone	ND	100	94	70 - 130
1,1-Dichloroethene	ND	5.0	96	70 - 130
etonitrile	ND	50	NA	70 - 130
odomethane	ND	5.0	104	70 - 130
Allyl chloride	ND	50	NA	70 - 130
Methylene chloride	ND	5.0	92	70 - 130
Carbon disulfide	ND	5.0	94	70 - 130
Acrylonitrile	ND	50	114	70 - 130
2-Methoxy-2-methylpropane	ND	5.0	104	70 - 130
trans-1,2-dichloroethene	ND	5.0	94	70 - 130
Vinyl acetate	ND	10	92	70 - 130
1,1-Dichloroethane	ND	5.0	96	70 - 130
2-Butanone	ND	10	92	70 - 130
Propionitrile	ND	50	NA	70 - 130
2,2-Dichloropropane	ND	5.0	90	70 - 130
cis-1,2-dichloroethene	ND	5.0	102	70 - 130
Methacrylonitrile	ND	50	NA	70 - 130
Isobutyl alcohol	ND	100	NA	70 - 130
Chloroform	ND	5.0	94	70 - 130
Bromochloromethane	ND	5.0	100	70 - 130
1,1,1-Trichloroethane	ND	5.0	90	70 - 130
1,1-Dichloropropene	ND	5.0	98	70 - 130
Carbon tetrachloride	ND	5.0	90	70 - 130
1,2-Dichloroethane	ND	5.0	88	70 - 130
Benzene	ND	5.0	98	70 - 130
Trichloroethene	ND	5.0	96	70 - 130

ND = Not Detected

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QUALITY CONTROL INFORMATION

02/20/97

EPA 8240/8260 Compounds by EPA 8260 Method

9702112, 9702118, 9702136, 9702121

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	98	70 - 130
1,4-Dioxane	ND	100	NA	70 - 130
Bromodichloromethane	ND	5.0	92	70 - 130
Dibromomethane	ND	5.0	94	70 - 130
2-Chloroethyl vinyl ether	ND	10	130	70 - 130
4-Methyl-2-pentanone	ND	10	114	70 - 130
cis-1,3-Dichloropropene	ND	5.0	100	70 - 130
Toluene	ND	5.0	102	70 - 130
Ethyl methacrylate	ND	50	NA	70 - 130
trans-1,3-Dichloropropene	ND	5.0	96	70 - 130
2-Hexanone	ND	10	98	70 - 130
1,1,2-trichloroethane	ND	5.0	96	70 - 130
1,2-Dibromoethane	ND	5.0	96	70 - 130
1,3-Dichloropropane	ND	5.0	100	70 - 130
Tetrachloroethene	ND	5.0	96	70 - 130
Dibromochloromethane	ND	5.0	94	70 - 130
Chlorobenzene	ND	5.0	102	70 - 130
1,1,1,2-Tetrachloroethane	ND	5.0	96	70 - 130
Ethylbenzene	ND	5.0	108	70 - 130
m,p-Xylene	ND	5.0	110	70 - 130
o-Xylene	ND	5.0	110	70 - 130
Styrene	ND	5.0	112	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	112	70 - 130
1,1,2,2-Tetrachloroethane	ND	5.0	98	70 - 130
1,2,3-Trichloropropane	ND	5.0	98	70 - 130
n-Propylbenzene	ND	5.0	110	70 - 130

ND = Not Detected

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QUALITY CONTROL INFORMATION

02/20/ 97

EPA 8240/8260 Compounds by EPA 8260 Method

9702112, 9702118, 9702136, 9702121

Parameter	Laboratory Method Blank (ug/Kg)	Reporting Limits (ug/Kg)	LCS Rec. (%)	Acceptability Range (%)
Bromobenzene	ND	5.0	106	70 - 130
1,3,5-Trimethylbenzene	ND	5.0	116	70 - 130
2-Chlorotoluene	ND	5.0	104	70 - 130
4-Chlorotoluene	ND	5.0	104	70 - 130
tert-Butylbenzene	ND	5.0	108	70 - 130
1,2,4-Trimethylbenzene	ND	5.0	118	70 - 130
sec-Butylbenzene	ND	5.0	108	70 - 130
p-Isopropyltoluene	ND	5.0	108	70 - 130
1,3-Dichlorobenzene	ND	5.0	100	70 - 130
1,4-Dichlorobenzene	ND	5.0	100	70 - 130
n-Butylbenzene	ND	5.0	102	70 - 130
1,2-Dichlorobenzene	ND	5.0	100	70 - 130
1,2-Dibromo-3-chloropropane	ND	5.0	86	70 - 130
1,2,4-Trichlorobenzene	ND	5.0	82	70 - 130
Hexachlorobutadiene	ND	5.0	80	70 - 130
Naphthalene	ND	5.0	92	70 - 130
1,2,3-Trichlorobenzene	ND	5.0	84	70 - 130
DBFM Surrogate Rec. (%)	116	----	94	60 - 140
Toluene-d8 Surrogate Rec. (%)	102	----	102	60 - 140
BFB Surrogate Rec. (%)	77	----	117	60 - 140

LCS = Laboratory Control Sample
ND = Not Detected

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QUALITY CONTROL INFORMATION

02/20/97

EPA 8240/8260 Compounds by EPA 8260 Method

9702112, 9702118, 9702136, 9702121

Sample Spiked: 9702112-01A

Parameter	MS Recovery (%)	MSD Recovery (%)	RPD	Acceptability Range (%)	RPD Range (%)
1,1-Dichloroethene	90	89	1.1	70 - 130	30
Benzene	96	96	0.0	70 - 130	30
Trichloroethene	94	98	4.2	70 - 130	30
Toluene	98	94	4.2	70 - 130	30
Chlorobenzene	96	93	3.2	70 - 130	30
DBFM Surrogate Rec. (%)	84	90	---	60 - 140	---
Toluene-d8 Surrogate Rec. (%)	104	101	---	60 - 140	---
BFB Surrogate Rec. (%)	110	106	---	60 - 140	---

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

FULLERTON LABORATORY
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QUALITY CONTROL INFORMATION
METALS

MS/MSD Results

Date: 2/25/97
Sample ID: 9702153-3

Matrix: Soil
Includes: 9702136-1; 9702139-1-2; 9702148-1; 9702153-1-3

Parameter	LMB	LCS Rec. (%)	Acceptability Range (%)	MS Rec. (%)	MSD Rec. (%)	Acceptability Range (%)	RPD	RPD Range (%)
Antimony, Sb	ND	104.0	84-117	86.6	85.3	80-120	1.5	20
Arsenic, As	ND	107.2	85-117	101	101	80-120	0.1	20
Barium, Ba	ND	100.1	62-136	96.4	92.5	80-120	4.1	20
Beryllium, Be	ND	101.3	85-111	99.4	99.4	80-120	0.0	20
Cadmium, Cd	ND	103.4	86-112	98.7	98.5	80-120	0.2	20
Chromium, Cr	ND	101.0	83-110	96.5	96.7	80-120	0.2	20
Cobalt, Co	ND	102.4	85-112	96.2	96.4	80-120	0.2	20
Copper, Cu	ND	100.7	84-111	98.0	98.1	80-120	0.1	20
Lead, Pb	ND	102.0	85-110	93.1	92.1	80-120	1.1	20
Molybdenum, Mo	ND	101.9	83-110	94.8	94.4	80-120	0.5	20
Nickel, Ni	ND	102.1	86-110	96.0	96.6	80-120	0.6	20
Selenium, Se	ND	101.6	84-111	96.1	96.3	80-120	0.2	20
Silver, Ag	ND	107.0	80-125	98.7	98.8	80-120	0.1	20
Thallium, Tl	ND	101.2	83-109	92.5	92.6	80-120	0.1	20
Vanadium, V	ND	101.4	84-109	96.3	96.4	80-120	0.1	20
Zinc, Zn	ND	107.4	88-117	98.3	99.4	80-120	1.1	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

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/24/97
Analyzed on: 02/21/97
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
9702121-03A	ND	ND	.0010	.00097	97.0	.00097	97.0	0	20	80 -120

HGS022197 -9702044

Samples in batch:

9702118-01A	9702118-02A	9702121-01A	9702121-02A
9702121-03A	9702121-04A	9702121-05A	9702121-06A
9702125-01A	9702136-01A	9702139-01A	9702139-02A
9702148-01A	9702153-01A	9702153-02A	9702153-03A

COMMENTS:

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/24/97
Analyzed on: 02/21/97
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	0.00097	97.0	80 - 120

HGS022197 -9702044

Samples in batch:

9702118-01A	9702118-02A	9702121-01A	9702121-02A
9702121-03A	9702121-04A	9702121-05A	9702121-06A
9702125-01A	9702136-01A	9702139-01A	9702139-02A
9702148-01A	9702153-01A	9702153-02A	9702153-03A

COMMENTS:

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/19/97
Analyzed on: 02/19/97
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
9702137-08A	ND	25	500	557	106	519	98.8	7.0	20	80 -120

PETHS021997 -9702037

Samples in batch:

9702125-01A 9702136-01A 9702137-04A 9702137-08A

COMMENTS:

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/19/97
Analyzed on: 02/19/97
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	439	87.8	80 - 120

PETHS021997 -9702037

Samples in batch:

9702125-01A 9702136-01A 9702137-04A 9702137-08A

COMMENTS:

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No: 9702136

C 04447

page 1 of 1

Client Name: Montgomery Watson

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

Client Contact: Fred Strauss (818) 568-6582

Project Name: MDRC C-6 Facility, Torrance, CA

Project Number: 1206035.01090010

Project Location: C-6 Facility, Building 37 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							
B37-GS-41-3'	2/18/97	1540		X	S	2" x 6" ss sleeve	Approx 12oz.	ICE	2	X	X							

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

Laboratory remarks:

Intact? ☑ Y ☐ N

Temp: 4.3°C

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. Harris	date 2/18/97	time 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

☐ 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-C6-010971

SPL Fullerton Environmental Laboratory
Sample Receiving Checklist

9702136

SPL Workorder Number: _____

Date: 2/18/97 Time: 1826

	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 4.3 °C

Samples Were Delivered by:

SPL Courier	George Molano
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

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

SPL, INC.

REPORT APPROVAL SHEET

WORK ORDER NUMBER: *97 - 02 - 139*

Approved for release by:

Joel Grice, Laboratory Manager — *Date:* 3/13/97

Michael J. Crisostomo, Project Manager — *Date:* 3-12-97

Certificate of Analysis No. 9702139

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
Method: 418.1*

Report Date: 3/12/97
Date(s) Received: 2/19/97
Date(s) Sampled: 2/19/97
Date(s) Analyzed: 2/20/97
Project Number: 120603501090010
Matrix: SOIL

Units: mg/Kg

Sample ID	Petroleum Extractables
B37-GS-42-3ft	130
B37-GS-43-3ft	170

Results reported at Practical Quantitation Limit 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

Certificate of Analysis No. 9702139

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: 3/12/97
Date(s) Received: 2/19/97
Date(s) Sampled: 2/19/97
Date(s) Analyzed: 2/25/97,2/21/97
Project Number: 120603501090010
Matrix: SOIL

Analyte	Units	EPA Method	B37-GS-42-3ft	B37-GS-43-3ft
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***	149	100
Beryllium, Total	mg/Kg	6010A***	ND<0.06	ND<0.06
Cadmium, Total	mg/Kg	6010A***	0.126	0.338
Chromium, Total	mg/Kg	6010A***	18.0	11.8
Cobalt, Total	mg/Kg	6010A***	9.39	14.5
Copper, Total	mg/Kg	6010A***	22.0	12.4
Digestion-Solids 3050A	N/A	3050A***	02/21/97	02/21/97
Lead, Total	mg/Kg	6010A***	10.9	8.66
Mercury Digestion in Soil	N/A	7471A***	02/21/97	02/21/97
Mercury, Total	mg/Kg	7471A***	ND<0.200	ND<0.200
Molybdenum,Total	mg/Kg	6010A***	ND<2.50	ND<2.50
Nickel, Total	mg/Kg	6010A ***	13.2	11.4
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***	ND<0.500	ND<0.500
Vanadium, Total	mg/Kg	6010A***	38.9	31.4
Zinc, Total	mg/Kg	6010A***	80.9	45.2

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.

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

SPL California License Number 2178

QUALITY CONTROL

DOCUMENTATION

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

QUALITY CONTROL INFORMATION

02 /21/97

EPA 8240/8260 Compounds by EPA 8260 Method

9702139

Parameter	Laboratory Method Blank (ug/Kg)	Reporting Limits (ug/Kg)	LCS Rec. (%)	Acceptability Range (%)
Dichlorodifluoromethane	ND	5.0	108	70 - 130
Chloromethane	ND	5.0	100	70 - 130
Vinyl chloride	ND	5.0	86	70 - 130
Bromomethane	ND	5.0	88	70 - 130
Chloroethane	ND	5.0	92	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	96	70 - 130
1,1-Dichloroethene	ND	5.0	86	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	82	70 - 130
Carbon disulfide	ND	5.0	84	70 - 130
Acrylonitrile	ND	50	102	70 - 130
2-Methoxy-2-methylpropane	ND	5.0	96	70 - 130
trans-1,2-dichloroethene	ND	5.0	86	70 - 130
Vinyl acetate	ND	10	90	70 - 130
1,1-Dichloroethane	ND	5.0	86	70 - 130
2-Butanone	ND	10	100	70 - 130
Propionitrile	ND	50	NA	70 - 130
2,2-Dichloropropane	ND	5.0	84	70 - 130
cis-1,2-dichloroethene	ND	5.0	92	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	90	70 - 130
1,1,1-Trichloroethane	ND	5.0	82	70 - 130
1,1-Dichloropropene	ND	5.0	98	70 - 130
Carbon tetrachloride	ND	5.0	92	70 - 130
1,2-Dichloroethane	ND	5.0	86	70 - 130
Benzene	ND	5.0	94	70 - 130
Trichloroethene	ND	5.0	94	70 - 130

ND = Not Detected

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

QUALITY CONTROL INFORMATION

02/21/97

EPA 8240/8260 Compounds by EPA 8260 Method

9702139

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	94	70 - 130
1,4-Dioxane	ND	100	NA	70 - 130
Bromodichloromethane	ND	5.0	88	70 - 130
Dibromomethane	ND	5.0	92	70 - 130
2-Chloroethyl vinyl ether	ND	10	118	70 - 130
4-Methyl-2-pentanone	ND	10	126	70 - 130
cis-1,3-Dichloropropene	ND	5.0	100	70 - 130
Toluene	ND	5.0	102	70 - 130
Ethyl methacrylate	ND	50	NA	70 - 130
trans-1,3-Dichloropropene	ND	5.0	98	70 - 130
2-Hexanone	ND	10	118	70 - 130
1,1,2-trichloroethane	ND	5.0	92	70 - 130
1,2-Dibromoethane	ND	5.0	98	70 - 130
1,3-Dichloropropane	ND	5.0	98	70 - 130
Tetrachloroethene	ND	5.0	102	70 - 130
Dibromochloromethane	ND	5.0	94	70 - 130
Chlorobenzene	ND	5.0	100	70 - 130
1,1,1,2-Tetrachloroethane	ND	5.0	94	70 - 130
Ethylbenzene	ND	5.0	108	70 - 130
m,p-Xylene	ND	5.0	108	70 - 130
o-Xylene	ND	5.0	108	70 - 130
Styrene	ND	5.0	110	70 - 130
Bromoform	ND	5.0	102	70 - 130
trans-1,4-Dichloro-2-butene	ND	50	NA	70 - 130
Pentachloroethane	ND	50	NA	70 - 130
Isopropylbenzene	ND	5.0	106	70 - 130
1,1,2,2-Tetrachloroethane	ND	5.0	98	70 - 130
1,2,3-Trichloropropane	ND	5.0	96	70 - 130
n-Propylbenzene	ND	5.0	106	70 - 130

ND = Not Detected

FULLERTON LABORATORY
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QUALITY CONTROL INFORMATION

02/21/ 97

EPA 8240/8260 Compounds by EPA 8260 Method

9702139

Parameter	Laboratory Method Blank (ug/Kg)	Reporting Limits (ug/Kg)	LCS Rec. (%)	Acceptability Range (%)
Bromobenzene	ND	5.0	102	70 - 130
1,3,5-Trimethylbenzene	ND	5.0	110	70 - 130
2-Chlorotoluene	ND	5.0	100	70 - 130
4-Chlorotoluene	ND	5.0	100	70 - 130
tert-Butylbenzene	ND	5.0	104	70 - 130
1,2,4-Trimethylbenzene	ND	5.0	108	70 - 130
sec-Butylbenzene	ND	5.0	106	70 - 130
p-Isopropyltoluene	ND	5.0	108	70 - 130
1,3-Dichlorobenzene	ND	5.0	100	70 - 130
1,4-Dichlorobenzene	ND	5.0	98	70 - 130
n-Butylbenzene	ND	5.0	104	70 - 130
1,2-Dichlorobenzene	ND	5.0	98	70 - 130
1,2-Dibromo-3-chloropropane	ND	5.0	102	70 - 130
1,2,4-Trichlorobenzene	ND	5.0	94	70 - 130
Hexachlorobutadiene	ND	5.0	94	70 - 130
Naphthalene	ND	5.0	106	70 - 130
1,2,3-Trichlorobenzene	ND	5.0	100	70 - 130
DBFM Surrogate Rec. (%)	108	----	85	60 - 140
Toluene-d8 Surrogate Rec. (%)	102	----	105	60 - 140
BFB Surrogate Rec. (%)	83	----	116	60 - 140

LCS = Laboratory Control Sample
ND = Not Detected

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QUALITY CONTROL INFORMATION

02/21/97

EPA 8240/8260 Compounds by EPA 8260 Method

9702139

Sample Spiked: 9702139-02A

Parameter	MS Recovery (%)	MSD Recovery (%)	RPD	Acceptability Range (%)	RPD Range (%)
1,1-Dichloroethene	107	106	0.9	70 - 130	30
Benzene	112	117	4.4	70 - 130	30
Trichloroethene	104	108	3.8	70 - 130	30
Toluene	98	99	1.0	70 - 130	30
Chlorobenzene	105	106	0.9	70 - 130	30
DBFM Surrogate Rec. (%)	112	112	---	60 - 140	---
Toluene-d8 Surrogate Rec. (%)	102	98	---	60 - 140	---
BFB Surrogate Rec. (%)	108	102	---	60 - 140	---

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

FULLERTON LABORATORY
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QUALITY CONTROL INFORMATION
METALS

MS/MSD Results

Date: 2/25/97
Sample ID: 9702153-3

Matrix: Soil
Includes: 9702136-1; 9702139-1-2; 9702148-1; 9702153-1-3

Parameter	LMB	LCS Rec. (%)	Acceptability Range (%)	MS Rec. (%)	MSD Rec. (%)	Acceptability Range (%)	RPD	RPD Range (%)
Antimony, Sb	ND	104.0	84-117	86.6	85.3	80-120	1.5	20
Arsenic, As	ND	107.2	85-117	101	101	80-120	0.1	20
Barium, Ba	ND	100.1	62-136	96.4	92.5	80-120	4.1	20
Beryllium, Be	ND	101.3	85-111	99.4	99.4	80-120	0.0	20
Cadmium, Cd	ND	103.4	86-112	98.7	98.5	80-120	0.2	20
Chromium, Cr	ND	101.0	83-110	96.5	96.7	80-120	0.2	20
Cobalt, Co	ND	102.4	85-112	96.2	96.4	80-120	0.2	20
Copper, Cu	ND	100.7	84-111	98.0	98.1	80-120	0.1	20
Lead, Pb	ND	102.0	85-110	93.1	92.1	80-120	1.1	20
Molybdenum, Mo	ND	101.9	83-110	94.8	94.4	80-120	0.5	20
Nickel, Ni	ND	102.1	86-110	96.0	96.6	80-120	0.6	20
Selenium, Se	ND	101.6	84-111	96.1	96.3	80-120	0.2	20
Silver, Ag	ND	107.0	80-125	98.7	98.8	80-120	0.1	20
Thallium, Tl	ND	101.2	83-109	92.5	92.6	80-120	0.1	20
Vanadium, V	ND	101.4	84-109	96.3	96.4	80-120	0.1	20
Zinc, Zn	ND	107.4	88-117	98.3	99.4	80-120	1.1	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

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/24/97
Analyzed on: 02/21/97
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
9702121-03A	ND	ND	.0010	.00097	97.0	.00097	97.0	0	20	80 -120

HGS022197 -9702044

Samples in batch:

9702118-01A	9702118-02A	9702121-01A	9702121-02A
9702121-03A	9702121-04A	9702121-05A	9702121-06A
9702125-01A	9702136-01A	9702139-01A	9702139-02A
9702148-01A	9702153-01A	9702153-02A	9702153-03A

COMMENTS:

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/24/97
Analyzed on: 02/21/97
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	0.00097	97.0	80 - 120

HGS022197 -9702044

.mples in batch:

9702118-01A	9702118-02A	9702121-01A	9702121-02A
9702121-03A	9702121-04A	9702121-05A	9702121-06A
9702125-01A	9702136-01A	9702139-01A	9702139-02A
9702148-01A	9702153-01A	9702153-02A	9702153-03A

COMMENTS:

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/20/97
Analyzed on: 02/20/97
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	519	104	489	97.8	6.1	20	80 -120

PETHS022097 -9702039

Samples in batch:

9702139-01A 9702139-02A

COMMENTS:

LCS/LCSD reported due to matrix interference.

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No: 9702139

C- 4448

page 1 of 1

Client Name: Montgomery Watson

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

Client Contact: Fred Strauss (818) 568-6582

Project Name: MDRC C-6 Facility, Torrance, CA

Project Number: 1206035.01090010

Project Location: C-6 facility, Building 37 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 (previously noted as CAM Metals)							
B37-GS-42-3ft.	2/19/97	10:20		X	S	2"x6" SS sleeve	approx 12oz		2	X	X							
B37-GS-43-3ft	2/19/97	13:49		X	S	2"x6" SS sleeve	approx 12oz		2	X	X							

Client/Consultant Remarks: 24hr TAT on TRPH, standard TAT otherwise

Laboratory remarks: Sample IDs changed from B37-GS-42 to B37-GS-42-3ft, and B37-GS-43 to B37-GS-43-3ft per Adam Novas

Intact? ☑ Y ☐ N

Temp:

Requested TAT

TRPH only

24hr ☒ 72hr ☐

48hr ☐ Standard ☒ all other

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. Novas	date 2/19/97	time 1640	2. Received by: 2/19/97 18:10
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-C6-0109726

SPL Fullerton Environmental Laboratory
Sample Receiving Checklist

SPL Workorder Number: 9702139

Date: 2-19-97 Time: 18:10

	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?	✓	*	X 02/20/97
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 2.8 °C

Samples Were Delivered by:

SPL Courier	E. Molano
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]

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

SPL, INC.

REPORT APPROVAL SHEET

WORK ORDER NUMBER: *97 - 02 - 148*

Approved for release by:

Joel Grike, Laboratory Manager — *Date:* 3/12/97

Michael J. Crisostomo, Project Manager — *Date:* 3-11-97

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

CASE NARRATIVE

SPL Workorder Number: 9702148

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 February 20, 1997, one (1) soil sample was received by the laboratory. The sample was received intact and within the 2°C - 6°C preservation temperature range.

The sample was analyzed as initially requested on the accompanying chain of custody record. On February 21, 1997, a notice was received via fax transmittal requesting that this sample be analyzed for Volatile Organics by EPA 8260 and Semivolatile Organics by EPA 8270.

Note that the semi-volatile organics analyses were performed at SPL's Houston laboratory, under Houston workorder number 9703073. The result for the internal standards, Chrysene-d12 and Perylene-d12, were outside the QC control limits for sample B37-GS-44-2ft. bgs. due to matrix interference. Upon reanalysis of the extract at a higher dilution, the internal standards were recovered.

If you have any questions regarding information presented in this report please call me at (714) 447-6868. Please refer to workorder 9702148 to expedite service.

Michael J. Crisostomo
Project Manager

Certificate of Analysis No. 9702148

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
Method: 418.1*

Report Date: 3/6/97
Date(s) Received: 2/20/97
Date(s) Sampled: 2/20/97
Date(s) Analyzed: 2/21/97
Project Number: 120603501090010
Matrix: SOIL

Units: mg/Kg

Sample ID	Petroleum Extractables
B37-GS-44-2 ft bgs	2900

Results reported at Practical Quantitation Limit 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

Certificate of Analysis No. 9702148

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: 3/6/97
Date(s) Received: 2/20/97
Date(s) Sampled: 2/20/97
Date(s) Analyzed: 3/4/97,2/25/97,2/21/97
Project Number: 12060350109001
Matrix: SOIL

Analyte	Units	EPA Method	B37-GS-44-2 ft bgs
Antimony, Total	mg/Kg	6010A***	ND<0.500
Arsenic, Total	mg/Kg	6010A***	ND<0.11
Barium, Total	mg/Kg	6010A***	130
Beryllium, Total	mg/Kg	6010A***	ND<0.06
Cadmium, Total	mg/Kg	6010A***	0.518
Chromium, Total	mg/Kg	6010A***	20.3
Cobalt, Total	mg/Kg	6010A***	9.74
Copper, Total	mg/Kg	6010A***	19.4
Digestion-Solids 3050A	N/A	3050A***	02/21/97
Lead, Total	mg/Kg	6010A***	7.03
Mercury Digestion in Soil	N/A	7471A***	02/21/97
Mercury, Total	mg/Kg	7471A***	ND<0.200
Molybdenum,Total	mg/Kg	6010A***	ND<2.50
Nickel, Total	mg/Kg	6010A ***	12.7
Selenium, Total	mg/Kg	6010A***	ND<5.00
Silver, Total	mg/Kg	6010A***	ND<5.00
Thallium, Total	mg/Kg	6010A***	ND<0.500
Ultrasonic Extraction 3550A	N/A	3550A	03/04/97
Vanadium, Total	mg/Kg	6010A***	36.6
Zinc, Total	mg/Kg	6010A***	59.8

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.

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

SPL California License Number 2178

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Certificate of Analysis No. 9702148

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: 3/6/97
Date(s) Received: 2/20/97
Date(s) Sampled: 2/20/97
Date(s) Analyzed: 2/24/97
Project Number: 120603501090010
Matrix: SOIL

Method: 8260 Soil, Volatile Organics

Units: UG/KG

Analyte	B37-GS-44-2 ft bgs
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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Certificate of Analysis No. 9702148

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: 3/6/97
Date(s) Received: 2/20/97
Date(s) Sampled: 2/20/97
Date(s) Analyzed: 2/24/97
Project Number: 120603501090010
Matrix: SOIL

Method: 8260 Soil, Volatile Organics

Units: UG/KG

Analyte	B37-GS-44-2 ft bgs
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

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. 9702148

Client:	Montgomery Watson	**Report Date:**	3/7/97
Client Address:	250 N. Madison Avenue Pasadena, CA 91101	**Date(s) Received:**	2/20/97
		Date(s) Sampled:	2/20/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	3/4/97
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-GS-44-2ft. bgs
Acenaphthene	ND<330
Acenaphthylene	ND<330
Aniline	ND<330
Anthracene	ND<330
Benzo (a) Anthracene	ND<330
Benzo (b) Fluoranthene	ND<330
Benzo (k) Fluoranthene	ND<330
Benzo (a) Pyrene	ND<330
Benzoic Acid	ND<1600
Benzo (g,h,i) Perylene	ND<330
Benzyl alcohol	ND<330
4-Bromophenylphenyl ether	ND<330
Butylbenzylphthalate	ND<330
di-n-Butyl phthalate	ND<330
Carbazole	ND<330
4-Chloroaniline	ND<330
bis (2-Chloroethoxy) Methane	ND<330
bis (2-Chloroethyl) Ether	ND<330
bis (2-Chloroisopropyl) Ether	ND<330
4-Chloro-3-Methylphenol	ND<330
2-Chloronaphthalene	ND<330
2-Chlorophenol	ND<330
4-Chlorophenylphenyl ether	ND<330
Chrysene	ND<330
Dibenz (a,h) Anthracene	ND<330
Dibenzofuran	ND<330
1,2-Dichlorobenzene	ND<330
1,3-Dichlorobenzene	ND<330
1,4-Dichlorobenzene	ND<330
3,3'-Dichlorobenzidine	ND<330
2,4-Dichlorophenol	ND<330
Diethylphthalate	ND<330
2,4-Dimethylphenol	ND<330
Dimethyl Phthalate	ND<330
4,6-Dinitro-2-Methylphenol	ND<800
2,4-Dinitrophenol	ND<800
2,4-Dinitrotoluene	ND<330
2,6-Dinitrotoluene	ND<330
1,2-Diphenylhydrazine	ND<330
bis (2-Ethylhexyl)Phthalate	ND<330

FULLERTON LABORATORY
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FULLERTON, CA 92831
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Certificate of Analysis No. 9702158

Client:	Montgomery Watson	**Report Date:**	3/7/97
Client Address:	250 N. Madison Avenue Pasadena, CA 91101	**Date(s) Received:**	2/20/97
		Date(s) Sampled:	2/20/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	3/4/97
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-GS-44-2ft. bgs
Fluoranthene	ND<330
Fluorene	ND<330
Hexachlorobenzene	ND<330
Hexachlorobutadiene	ND<330
Hexachloroethane	ND<330
Hexachlorocyclopentadiene	ND<330
Indeno(1,2,3-cd)Pyrene	ND<330
Isophorone	ND<330
2-Methylnaphthalene	ND<330
2-Methylphenol	ND<330
4-Methylphenol	ND<330
Napthalene	ND<330
2-Nitroaniline	ND<800
3-Nitroaniline	ND<800
4-Nitroaniline	ND<800
Nitrobenzene	ND<330
2-Nitrophenol	ND<330
4-Nitrophenol	ND<800
N-Nitrosodiphenylamine	ND<330
N-Nitroso-Di-n-Propylamine	ND<330
Di-n-Octyl Phthalate	ND<330
Pentachlorophenol	ND<800
Phenanthrene	ND<330
Phenol	ND<330
Pyrene	ND<330
Pyridine	ND<330
1,2,4-Trichlorobenzene	ND<330
2,4,5-Trichlorophenol	ND<800
2,4,6-Trichlorophenol	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 LABORATORY
1511 E. ORANGETHORPE AVE.
FULLERTON, CA 92831
PHONE (714) 447-6868

QUALITY CONTROL INFORMATION

02/24/97

EPA 8240/8260 Compounds by EPA 8260 Method

9702153, 9702148, 9702161

Parameter	Laboratory Method Blank (ug/Kg)	Reporting Limits (ug/Kg)	LCS Rec. (%)	Acceptability Range (%)
Dichlorodifluoromethane	ND	5.0	120	70 - 130
Chloromethane	ND	5.0	102	70 - 130
Vinyl chloride	ND	5.0	90	70 - 130
Bromomethane	ND	5.0	86	70 - 130
Chloroethane	ND	5.0	92	70 - 130
Trichlorofluoromethane	ND	5.0	90	70 - 130
Acrolein	ND	50	NA	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	50	NA	70 - 130
Acetone	ND	100	84	70 - 130
1,1-Dichloroethene	ND	5.0	88	70 - 130
etonitrile	ND	50	NA	70 - 130
iodomethane	ND	5.0	90	70 - 130
Allyl chloride	ND	50	NA	70 - 130
Methylene chloride	ND	5.0	82	70 - 130
Carbon disulfide	ND	5.0	80	70 - 130
Acrylonitrile	ND	50	92	70 - 130
2-Methoxy-2-methylpropane	ND	5.0	96	70 - 130
trans-1,2-dichloroethene	ND	5.0	86	70 - 130
Vinyl acetate	ND	10	88	70 - 130
1,1-Dichloroethane	ND	5.0	84	70 - 130
2-Butanone	ND	10	84	70 - 130
Propionitrile	ND	50	NA	70 - 130
2,2-Dichloropropane	ND	5.0	90	70 - 130
cis-1,2-dichloroethene	ND	5.0	92	70 - 130
Methacrylonitrile	ND	50	NA	70 - 130
Isobutyl alcohol	ND	100	NA	70 - 130
Chloroform	ND	5.0	82	70 - 130
Bromochloromethane	ND	5.0	88	70 - 130
1,1,1-Trichloroethane	ND	5.0	82	70 - 130
1,1-Dichloropropene	ND	5.0	98	70 - 130
Carbon tetrachloride	ND	5.0	86	70 - 130
1,2-Dichloroethane	ND	5.0	82	70 - 130
Benzene	ND	5.0	90	70 - 130
Trichloroethene	ND	5.0	92	70 - 130

ND = Not Detected

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QUALITY CONTROL INFORMATION

02 /24/97

EPA 8240/8260 Compounds by EPA 8260 Method

9702153, 9702148, 9702161

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	84	70 - 130
Dibromomethane	ND	5.0	88	70 - 130
2-Chloroethyl vinyl ether	ND	10	128	70 - 130
4-Methyl-2-pentanone	ND	10	108	70 - 130
cis-1,3-Dichloropropene	ND	5.0	100	70 - 130
Toluene	ND	5.0	98	70 - 130
Ethyl methacrylate	ND	50	NA	70 - 130
trans-1,3-Dichloropropene	ND	5.0	98	70 - 130
2-Hexanone	ND	10	96	70 - 130
1,1,2-trichloroethane	ND	5.0	88	70 - 130
1,2-Dibromoethane	ND	5.0	92	70 - 130
1,3-Dichloropropane	ND	5.0	92	70 - 130
Tetrachloroethene	ND	5.0	96	70 - 130
Dibromochloromethane	ND	5.0	88	70 - 130
Chlorobenzene	ND	5.0	96	70 - 130
1,1,1,2-Tetrachloroethane	ND	5.0	88	70 - 130
Ethylbenzene	ND	5.0	104	70 - 130
m,p-Xylene	ND	5.0	102	70 - 130
o-Xylene	ND	5.0	104	70 - 130
Styrene	ND	5.0	104	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	108	70 - 130
1,1,2,2-Tetrachloroethane	ND	5.0	90	70 - 130
1,2,3-Trichloropropane	ND	5.0	90	70 - 130
n-Propylbenzene	ND	5.0	108	70 - 130

ND = Not Detected

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QUALITY CONTROL INFORMATION

02/24/ 97

EPA 8240/8260 Compounds by EPA 8260 Method

9702153, 9702148, 9702161

Parameter	Laboratory Method Blank (ug/Kg)	Reporting Limits (ug/Kg)	LCS Rec. (%)	Acceptability Range (%)
Bromobenzene	ND	5.0	102	70 - 130
1,3,5-Trimethylbenzene	ND	5.0	110	70 - 130
2-Chlorotoluene	ND	5.0	104	70 - 130
4-Chlorotoluene	ND	5.0	104	70 - 130
tert-Butylbenzene	ND	5.0	106	70 - 130
1,2,4-Trimethylbenzene	ND	5.0	108	70 - 130
sec-Butylbenzene	ND	5.0	106	70 - 130
p-Isopropyltoluene	ND	5.0	110	70 - 130
1,3-Dichlorobenzene	ND	5.0	98	70 - 130
1,4-Dichlorobenzene	ND	5.0	98	70 - 130
n-Butylbenzene	ND	5.0	106	70 - 130
1,2-Dichlorobenzene	ND	5.0	98	70 - 130
1,2-Dibromo-3-chloropropane	ND	5.0	88	70 - 130
1,2,4-Trichlorobenzene	ND	5.0	102	70 - 130
Hexachlorobutadiene	ND	5.0	94	70 - 130
Naphthalene	ND	5.0	102	70 - 130
1,2,3-Trichlorobenzene	ND	5.0	100	70 - 130
DBFM Surrogate Rec. (%)	96	----	80	60 - 140
Toluene-d8 Surrogate Rec. (%)	98	----	103	60 - 140
BFB Surrogate Rec. (%)	86	----	117	60 - 140

LCS = Laboratory Control Sample
ND = Not Detected

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QUALITY CONTROL INFORMATION

02/24/97

EPA 8240/8260 Compounds by EPA 8260 Method

9702153, 9702148, 9702161

Sample Spiked: 9702153-01A

Parameter	MS Recovery (%)	MSD Recovery (%)	RPD	Acceptability Range (%)	RPD Range (%)
1,1-Dichloroethene	93	100	7.3	70 - 130	30
Benzene	103	109	5.7	70 - 130	30
Trichloroethene	102	108	5.7	70 - 130	30
Toluene	100	102	2.0	70 - 130	30
Chlorobenzene	100	104	3.9	70 - 130	30
DBFM Surrogate Rec. (%)	92	99	---	60 - 140	---
Toluene-d8 Surrogate Rec. (%)	100	102	---	60 - 140	---
BFB Surrogate Rec. (%)	106	106	---	60 - 140	---

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

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** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/24/97
Analyzed on: 02/21/97
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
9702153-03A	ND	ND	500	489	97.8	470	94.0	4.0	20	80 -120

PETHS022197 -9702045

Samples in batch:

9702148-01A 9702153-01A 9702153-02A 9702153-03A

COMMENTS:

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/24/97
Analyzed on: 02/21/97
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	Blank Value mg/Kg	LCS Concentration mg/Kg	Measured Concentration mg/Kg	% Recovery	QC Limits Recovery
LCS	ND	500	451	90.2	80 - 120

PETHS022197 -9702045

Samples in batch:

9702148-01A 9702153-01A 9702153-02A 9702153-03A

COMMENTS:

QUALITY CONTROL INFORMATION
METALS

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

MS/MSD Results

Date: **2/25/97**
Sample ID: **9702153-3**

Matrix: **Soil**
Includes: **9702136-1; 9702139-1-2; 9702148-1; 9702153-1-3**

Parameter	LMB	LCS Rec. (%)	Acceptability Range (%)	MS Rec. (%)	MSD Rec. (%)	Acceptability Range (%)	RPD	RPD Range (%)
Antimony, Sb	ND	104.0	84-117	86.6	85.3	80-120	1.5	20
Arsenic, As	ND	107.2	85-117	101	101	80-120	0.1	20
Barium, Ba	ND	100.1	62-136	96.4	92.5	80-120	4.1	20
Beryllium, Be	ND	101.3	85-111	99.4	99.4	80-120	0.0	20
Cadmium, Cd	ND	103.4	86-112	98.7	98.5	80-120	0.2	20
Chromium, Cr	ND	101.0	83-110	96.5	96.7	80-120	0.2	20
Cobalt, Co	ND	102.4	85-112	96.2	96.4	80-120	0.2	20
Copper, Cu	ND	100.7	84-111	98.0	98.1	80-120	0.1	20
Lead, Pb	ND	102.0	85-110	93.1	92.1	80-120	1.1	20
Molybdenum, Mo	ND	101.9	83-110	94.8	94.4	80-120	0.5	20
Nickel, Ni	ND	102.1	86-110	96.0	96.6	80-120	0.6	20
Selenium, Se	ND	101.6	84-111	96.1	96.3	80-120	0.2	20
Silver, Ag	ND	107.0	80-125	98.7	98.8	80-120	0.1	20
Thallium, Tl	ND	101.2	83-109	92.5	92.6	80-120	0.1	20
Vanadium, V	ND	101.4	84-109	96.3	96.4	80-120	0.1	20
Zinc, Zn	ND	107.4	88-117	98.3	99.4	80-120	1.1	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

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/24/97
Analyzed on: 02/21/97
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
9702121-03A	ND	ND	.0010	.00097	97.0	.00097	97.0	0	20	80 -120

HGS022197 -9702044

Samples in batch:

9702118-01A	9702118-02A	9702121-01A	9702121-02A
9702121-03A	9702121-04A	9702121-05A	9702121-06A
9702125-01A	9702136-01A	9702139-01A	9702139-02A
9702148-01A	9702153-01A	9702153-02A	9702153-03A

COMMENTS:

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/24/97
Analyzed on: 02/21/97
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	0.00097	97.0	80 - 120

HGS022197 -9702044

Samples in batch:

9702118-01A	9702118-02A	9702121-01A	9702121-02A
9702121-03A	9702121-04A	9702121-05A	9702121-06A
9702125-01A	9702136-01A	9702139-01A	9702139-02A
9702148-01A	9702153-01A	9702153-02A	9702153-03A

COMMENTS:

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

SPL Blank QC Report

Matrix: Soil
Sample ID: BLANK
Batch: E970304044703

Reported on: 03/05/97 12:14
Analyzed on: 03/04/97 16:58
Analyst: LH

METHOD 8270 BLANK H063B02

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) 660-0901

SPL Blank QC Report

Matrix: Soil
Sample ID: BLANK
Batch: E970304044703

Reported on: 03/05/97 12:14
Analyzed on: 03/04/97 16:58
Analyst: LH

METHOD 8270 BLANK H063B02

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: E970304044703

Reported on: 03/05/97 12:14
Analyzed on: 03/04/97 16:58
Analyst: LH

METHOD 8270 BLANK H063B02

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

Surrogate	Result	QC Criteria	Units
Nitrobenzene-d5	96	23-120	% Recovery
2-Fluorobiphenyl	91	30-115	% Recovery
Terphenyl-d14	80	18-137	% Recovery
Phenol-d5	71	24-113	% Recovery
2-Fluorophenol	70	25-121	% Recovery
2,4,6-Tribromophenol	101	19-122	% Recovery

Samples in Batch 9703073-01

Notes

ND - Not detected.

SPL Houston Labs

Data file : /chem1/h.i/h970304.b/h063tl2.d
Lab Smp Id: LCS
Inj Date : 04-MAR-1997 17:27
Operator : LH Inst ID: h.i
Smp Info : METHSPIKE-8270S/1X
Misc Info : E063S1/H063B02/H063CC1
Comment :
Method : /chem1/h.i/h970304.b/h8270sQ.m
Meth Date : 04-Mar-1997 09:58 Quant Type: ISTD
Cal Date : 03-MAR-1997 15:51 Cal File: h062ic5.d
Als bottle: 1 QC Sample: MS
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: lcs.sub
Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 11 1,4-Dichlorobenzene-d4	152.00	4.549	4.541	(1.000)	577631	40	
* 32 Naphthalene-d8	136.00	6.344	6.336	(1.000)	1864127	40	
* 48 Acenaphthene-d10	164.00	9.075	9.068	(1.000)	1047021	40	
* 65 Phenanthrene-d10	188.00	11.401	11.393	(1.000)	1716952	40	
* 76 Chrysene-d12	240.00	15.633	15.626	(1.000)	1428861	40	
* 83 Perylene-d12	264.00	17.789	17.782	(1.000)	1414775	40	
$ 23 Nitrobenzene-d5	82.00	5.373	5.388	(0.847)	1414671	86	1400
$ 41 2-Fluorobiphenyl	172.00	8.048	8.041	(0.887)	2681366	76	1300
$ 72 Terphenyl-d14	244.00	13.985	13.978	(0.895)	2804238	73	1200
$ 3 2-Fluorophenol	112.00	3.172	3.255	(0.697)	1781930	92	1500
$ 4 Phenol-d5	99.00	4.289	4.338	(0.943)	1712600	84	1400
$ 61 2,4,6-Tribromophenol	329.70	10.373	10.388	(0.910)	805840	150	2500
5 Phenol	94.00	4.301	4.372	(0.945)	2287544	91	1500
9 2-Chlorophenol	128.00	4.368	4.417	(0.960)	1890345	99	1600
12 1,4-Dichlorobenzene	146.00	4.560	4.564	(1.002)	1568432	73	1200
21 N-Nitroso-di-n-propylamine	70.00	5.192	5.196	(1.141)	802653	71	1200
31 1,2,4-Trichlorobenzene	180.00	6.287	6.291	(0.991)	1315566	93	1500
36 4-Chloro-3-methylphenol	107.00	7.427	7.476	(1.171)	1681066	130	2200
49 Acenaphthene	153.00	9.120	9.124	(1.005)	2100052	72	1200
51 4-Nitrophenol	109.00	9.730	9.926	(1.072)	294710	84	1400
53 2,4-Dinitrotoluene	165.00	9.561	9.576	(1.053)	841691	79	1300
64 Pentachlorophenol	265.50	11.288	11.314	(0.990)	479272	80	1300
71 Pyrene	202.00	13.681	13.684	(0.875)	2825732	43	720

SPL Houston Labs

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: h.i
Lab File ID: h063tl2.d
Lab Smp Id: LCS
Analysis Type: SV
Quant Type: ISTD
Operator: LH
Method File: /chem1/h.i/h970304.b/h8270s.m
Misc Info: E063S1/H063B02/H063CC1

Calibration Date: 03/04/97
Calibration Time: 0926

Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	499393	249696	998786	577631	15.67
32 Naphthalene-d8	1668074	834037	3336148	1864127	11.75
48 Acenaphthene-d10	952631	476316	1905262	1047021	9.91
65 Phenanthrene-d10	1676872	838436	3353744	1716952	2.39
76 Chrysene-d12	1437063	718532	2874126	1428861	-0.57
83 Perylene-d12	1606021	803010	3212042	1414775	-11.91

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DI
11 1,4-Dichlorobenzene-	4.54	4.04	5.04	4.55	0.31
32 Naphthalene-d8	6.34	5.84	6.84	6.34	0.04
48 Acenaphthene-d10	9.07	8.57	9.57	9.08	0.03
65 Phenanthrene-d10	11.40	10.90	11.90	11.40	0.02
76 Chrysene-d12	15.63	15.13	16.13	15.63	0.02
83 Perylene-d12	17.78	17.28	18.28	17.79	0.08

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

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/h970303.b/h8270sQ.m
Misc Info: E061S1/H061B02/H06IC3

Client SDG: h970303
Fraction: SV

Operator: LH
SampleType: MS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
5 Phenol	2500	1500	60.71	12-110
9 2-Chlorophenol	2500	1600	63.58	27-123
12 1,4-Dichlorobenzen	1600	1100	68.37	36-97
21 N-Nitroso-di-n-pro	1600	1200	78.51	41-116
31 1,2,4-Trichloroben	1600	1400	86.01	39-98
36 4-Chloro-3-methylp	2500	1900	76.73	23-97
49 Acenaphthene	1600	1200	72.75	46-118
51 4-Nitrophenol	2500	1600	63.81	30-150
53 2,4-Dinitrotoluene	1600	1300	82.23	50-150
64 Pentachlorophenol	2500	1800	72.59	9-103
71 Pyrene	1600	760	47.75	26-127

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 23 Nitrobenzene-d5	1600	1400	89.41	23-120
$ 41 2-Fluorobiphenyl	1600	1200	77.92	30-115
$ 72 Terphenyl-d14	1600	1200	75.80	18-137
$ 3 2-Fluorophenol	2500	1700	67.49	25-121
$ 4 Phenol-d5	2500	1600	65.58	24-113
$ 61 2,4,6-Tribromophen	2500	2600	104.41	19-122

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPL Contract:

Lab Code: Case No.: 9703006 SAS No.: SDG No.:

Matrix Spike - EPA Sample No.: 9702216-03B 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	1600	64	12-110
2-Chlorophenol	2500	0	1700	68	27-123
1,4-Dichlorobenzene	1600	0	1100	69	36- 97
N-Nitroso-di-n-prop.(1)	1600	0	1400	88	41-116
1,2,4-Trichlorobenzene	1600	0	1500	94	39- 98
4-Chloro-3-methylphenol	2500	0	2300	92	23- 97
Acenaphthene	1600	0	1300	81	46-118
4-Nitrophenol	2500	0	1800	72	30-150
2,4-Dinitrotoluene	1600	0	1900	119	50-150
Pentachlorophenol	2500	0	1200	48	9-103
Pyrene	1600	150	1400	78	26-127

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	2500	1600	64	0	42	12-11
2-Chlorophenol	2500	1700	68	0	40	27-123
1,4-Dichlorobenzene	1600	1100	69	0	28	36- 97
N-Nitroso-di-n-prop.(1)	1600	1500	94	7	38	41-116
1,2,4-Trichlorobenzene	1600	1500	94	0	28	39- 98
4-Chloro-3-methylphenol	2500	2200	88	4	42	23- 97
Acenaphthene	1600	1100	69	16	31	46-118
4-Nitrophenol	2500	1900	76	5	50	30-150
2,4-Dinitrotoluene	1600	1700	106	12	50	50-150
Pentachlorophenol	2500	1400	56	15	50	9-103
Pyrene	1600	1600	91	15	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: 0 out of 22 outside limits

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 03/05/97
Analyzed on: 03/04/97
Analyst: LAR

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.
9703070-01A	86	85	1.2	20

-9703131

Samples in batch:

9702947-02A	9702950-01A	9702C31-05A	9703070-01A
9703070-02A	9703072-01A	9703073-01A	9703081-01A
9703081-02A	9703081-03A		

COMMENTS:

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

9702148

F A X

MONTGOMERY WATSON

250 N. Madison Avenue
Pasadena, California 91101

Tel: 818 796 9141
Fax: 818 568 6515

Date: 2/20/97

To: Mike Crisostomo

Fax No: (714) 447-6800

From: Steve Reiners

Reference: MDRC

Subject: Additional Analyses

No. of Pages: 2
(including cover)

Comments: Please run the following sample for VOCs (8260) and SVOCs (8270):

B37-GS-44-2'

COC follows. Please call me at (818) 568-6334 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: 9702148

C- 04449

page 1 of 1

Client Name: Montgomery Watson.

Address/Phone: 250 N Madison Ave Pasadena

Client Contact: Fred Strauss - (818) 568-6582

Project Name: MDRC C-6 facility, Torrance, CA

Project Number: 1206035.01090010

Project Location: C-6 facility, Building 37 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							
B37-GS-44-2½gs	2/20/97	10:45		X	S	12"x6" SS sleeve	approx 1½ oz	Ice	2	X	X							

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

Laboratory remarks:

Intact? ☑ Y ☐ N

Temp: 3.2

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):

	date	time		date	time
1. Relinquished by Sampler: Adam W. Vonia	2/20/97	1615	2. Received by: [signature]	2/20/97	18:44
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 [illegible]ghes 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 (7[illegible] 447-6868

BOE-C6-0109756

FEDEX 392-5303602

9703073

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

INTEROFFICE SAMPLE TRANSFER
CHAIN-OF-CUSTODY FORM

PAGE 1 OF 1

ORIGINATING LAB: Fullerton RECEIVING LAB: TX/MI/LA DATE:

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 #: 9702148 DATE NEEDED: 3/6/97

HEADING FOR ANALYSIS:	INVOICE TO:
COMPANY: Montgomery Watson	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
	2/20/97 10:45	9702148-01A	Soil	8270C/ARP6MS	$205.00

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
1. [signature]	3/3/97	1019	S. West	3/4/97	1000
2.					

NOTES: 5°C

BOE-C6-0109757

SPL Houston Environmental Laboratory

Sample Login Checklist

Date:	Time:
3/4/97	1000

SPL Sample ID:
9703073

			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:		5° C	
10	Method of sample delivery to SPL:	SPL Delivery		
		Client Delivery		
		FedEx Delivery (airbill #)	3925303602	
		Other:		
11	Method of sample disposal:	SPL Disposal	✓	
		HOLD		
		Return to Client		

Name:	Date:
S. West	3/4/97

SPL Fullerton Environmental Laboratory
Sample Receiving Checklist

SPL Workorder Number: 9702148

Date: 2-26-97 Time: 18:44

	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 3.2 °C

Samples Were Delivered by:

SPL Courier	G. Molano
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

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

SPL, INC.

REPORT APPROVAL SHEET

WORK ORDER NUMBER: *97 - 02 - 172*

Approved for release by:

Joel Grice, Laboratory Manager — *Date:* 3/10/97

Michael J. Crisostomo, Project Manager — *Date:* 3-6-97

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

CASE NARRATIVE

SPL Workorder Number: 9702172

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 February 24, 1997, two (2) soil samples were received by the laboratory. 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.

On February 25, 1997, a faxed note was received requesting that sample B37-GS-45-3' be analyzed for Volatile Organics by EPA Method 8260, Semi-Volatile Organics by EPA Method 8270, and Carbon Chain (by Simulated Distillation). The results of these analyses are presented in this report.

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 several elements: antimony, arsenic, barium, silver, and thallium. 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.

If you have any questions regarding information presented in this report please call me at (714) 447-6868. Please refer to workorder 9702172 to expedite service.

Michael J. Crisostomo
Project Manager

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

Certificate of Analysis No. 9702172

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
Method: 418.1*

Report Date: 3/5/97
Date(s) Received: 2/24/97
Date(s) Sampled: 2/24/97
Date(s) Analyzed: 2/25/97
Project Number: 120603501090010
Matrix: SOIL

Units: mg/Kg

Sample ID	Petroleum Extractables
B37-GS-45-3 ft. bgs.	24000
B37-GS-46-3 ft. bgs.	150

Results reported at Practical Quantitation Limit 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. 9702172

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: 3/5/97
Date(s) Received: 2/24/97
Date(s) Sampled: 2/24/97
Date(s) Analyzed: 2/27/97,2/26/97,2/25/9
Project Number: 12060350109001
Matrix: SOIL

Analyte	Units	EPA Method	B37-GS-45-3 ft. bgs.	B37-GS-46-3 ft. bgs.
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***	103	130
Beryllium, Total	mg/Kg	6010A***	ND<0.06	ND<0.06
Cadmium, Total	mg/Kg	6010A***	0.171	0.086
Chromium, Total	mg/Kg	6010A***	17.7	14.3
Cobalt, Total	mg/Kg	6010A***	9.10	9.06
Copper, Total	mg/Kg	6010A***	20.6	18.7
Digestion-Solids 3050A	N/A	3050A***	02/25/97	02/25/97
Lead, Total	mg/Kg	6010A***	6.59	7.43
Mercury Digestion in Soil	N/A	7471A***	02/26/97	02/26/97
Mercury, Total	mg/Kg	7471A***	ND<0.200	ND<0.200
Molybdenum,Total	mg/Kg	6010A***	ND<2.50	ND<2.50
Nickel, Total	mg/Kg	6010A ***	12.7	11.7
Selenium, Total	mg/Kg	6010A***	ND<5.00	ND<5.00
Silver, Total	mg/Kg	6010A***	ND<5.00	ND<5.00
Soil extraction	N/A	CA LUFT, App. D	02/27/97	
Thallium, Total	mg/Kg	6010A***	ND<0.500	ND<0.500
Ultrasonic Extraction 3550A	N/A	3550A	02/27/97	
Vanadium, Total	mg/Kg	6010A***	37.5	34.1
Zinc, Total	mg/Kg	6010A***	64.2	57.8

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.

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

SPL California License Number 2178

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

Certificate of Analysis No. 9702172

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: 3/5/97
Date(s) Received: 2/24/97
Date(s) Sampled: 2/24/97
Date(s) Analyzed: 3/3/97
Project Number: 120603501090010
Matrix: SOIL

Method: 8260 Soil, Volatile Organics

Units: UG/KG

Analyte	B37-GS-45-3 ft. bgs.
Dichlorodifluoromethane	ND<5
Chloromethane	ND<5
Vinyl chloride	ND<5
Bromomethane	ND<5
Chloroethane	ND<5
Trichlorofluoromethane	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-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
Isopropylbenzene	ND<5
1,1,2,2-Tetrachloroethane	ND<5

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Certificate of Analysis No. 9702172

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: 3/5/97
Date(s) Received: 2/24/97
Date(s) Sampled: 2/24/97
Date(s) Analyzed: 3/3/97
Project Number: 120603501090010
Matrix: SOIL

Method: 8260 Soil, Volatile Organics

Units: UG/KG

Analyte	B37-GS-45-3 ft. bgs.
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	18
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	85
1,2,3-Trichlorobenzene	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.

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FULLERTON, CA 92831
PHONE (714) 447-6868

Certificate of Analysis No. 9702172

Client:	Montgomery Watson	**Report Date:**	3/5/97
Client Address:	250 N. Madison Avenue Pasadena, CA 91101	**Date(s) Received:**	2/24/97
		Date(s) Sampled:	2/24/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	2/28/97
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-GS-45-.3ft. bgs
Acenaphthene	ND<3300
Acenaphthylene	ND<3300
Aniline	ND<3300
Anthracene	ND<3300
Benzo (a) Anthracene	ND<3300
Benzo (b) Fluoranthene	ND<3300
Benzo (k) Fluoranthene	ND<3300
Benzo (a) Pyrene	ND<3300
Benzoic Acid	ND<16000
Benzo (g,h,i) Perylene	ND<3300
Benzyl alcohol	ND<3300
4-Bromophenylphenyl ether	ND<3300
Butylbenzylphthalate	ND<3300
di-n-Butyl phthalate	ND<3300
Carbazole	ND<3300
4-Chloroaniline	ND<3300
bis (2-Chloroethoxy) Methane	ND<3300
bis (2-Chloroethyl) Ether	ND<3300
bis (2-Chloroisopropyl) Ether	ND<3300
4-Chloro-3-Methylphenol	ND<3300
2-Chloronaphthalene	ND<3300
2-Chlorophenol	ND<3300
4-Chlorophenylphenyl ether	ND<3300
Chrysene	ND<3300
Dibenz (a,h) Anthracene	ND<3300
Dibenzofuran	ND<3300
1,2-Dichlorobenzene	ND<3300
1,3-Dichlorobenzene	ND<3300
1,4-Dichlorobenzene	ND<3300
3,3'-Dichlorobenzidine	ND<3300
2,4-Dichlorophenol	ND<3300
Diethylphthalate	ND<3300
2,4-Dimethylphenol	ND<3300
Dimethyl Phthalate	ND<3300
4,6-Dinitro-2-Methylphenol	ND<8000
2,4-Dinitrophenol	ND<8000
2,4-Dinitrotoluene	ND<3300
2,6-Dinitrotoluene	ND<3300
1,2-Diphenylhydrazine	ND<3300
bis (2-Ethylhexyl)Phthalate	4200

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Certificate of Analysis No. 9702172

Client:	Montgomery Watson	**Report Date:**	3/5/97
Client Address:	250 N. Madison Avenue Pasadena, CA 91101	**Date(s) Received:**	2/24/97
		Date(s) Sampled:	2/24/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	2/28/97
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-GS-45-.3ft. bgs
Fluoranthene	ND<3300
Fluorene	ND<3300
Hexachlorobenzene	ND<3300
Hexachlorobutadiene	ND<3300
Hexachloroethane	ND<3300
Hexachlorocyclopentadiene	ND<3300
Indeno(1,2,3-cd)Pyrene	ND<3300
Isophorone	ND<3300
2-Methylnaphthalene	ND<3300
2-Methylphenol	ND<3300
4-Methylphenol	ND<3300
Napthalene	ND<3300
2-Nitroaniline	ND<8000
3-Nitroaniline	ND<8000
4-Nitroaniline	ND<8000
Nitrobenzene	ND<3300
2-Nitrophenol	ND<3300
4-Nitrophenol	ND<8000
N-Nitrosodiphenylamine	ND<3300
N-Nitroso-Di-n-Propylamine	ND<3300
Di-n-Octyl Phthalate	ND<3300
Pentachlorophenol	ND<8000
Phenanthrene	ND<3300
Phenol	ND<3300
Pyrene	ND<3300
Pyridine	ND<3300
1,2,4-Trichlorobenzene	ND<3300
2,4,5-Trichlorophenol	ND<8000
2,4,6-Trichlorophenol	ND<3300

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. 9702172

Client:	Montgomery Watson	**Report Date:**	3/5/97
Client Address:	250 N. Madison Avenue	**Date(s) Received:**	2/24/97
	Pasadena, CA 91101	**Date(s) Sampled:**	2/24/97
Attention:	Nancy Matsumoto	**Date(s) Analyzed:**	2/28/97
Project Name:	MDRC C6-Facility Building 37	**Project Number:**	120603501090010
Site:	Torrance, CA	**Matrix:**	SOIL
Method:	Mod. D-2887, Simulated Distillation	**Units:**	mg/Kg

Carbon Chain Range	B37-GS-45-3 ft. bgs.
C08-C09	ND < 10
C10-C11	180
C12-C13	590
C14-C15	110
C16-C17	85
C18-C19	350
C20-C23	970
C24-C27	570
C28-C31	420
C32-C35	240
C36-C39	76
C40-C43	49
Total	3640

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/25/97
Analyzed on: 02/25/97
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
BLANK	ND	ND	500	464	92.8	482	96.4	3.8	20	80 -120

PETHS022597 -9702049

Samples in batch:

9702172-01A 9702172-02A 9702173-01B

COMMENTS:
MS/MSD out of reporting limits due to soil inconsistency and interferences.

QUALITY CONTROL INFORMATION
METALS

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

MS/MSD Results

Date: 2/25/97
Sample ID: 9702173-1

Matrix: Soil
Includes: 9702143-4-5; 9702172-1-2; 9702173-1

Parameter	LMB	LCS Rec. (%)	Acceptability Range (%)	MS Rec. (%)		MSD Rec. (%)		Acceptability Range (%)	RPD		RPD Range (%)
Antimony, Sb	ND	104	84-117	42.0	*	35.1	*	80-120	18.0		20
Arsenic, As	ND	106	85-117	79.3	*	78.2	*	80-120	1.3		20
Barium, Ba	ND	101	62-136	89.1		70.4	*	80-120	23.4	*	20
Beryllium, Be	ND	102	85-111	92.4		90.9		80-120	1.6		20
Cadmium, Cd	ND	103	86-112	91.7		90.2		80-120	1.7		20
Chromium, Cr	ND	102	83-110	86.9		85.9		80-120	1.2		20
Cobalt, Co	ND	102	85-112	84.8		83.8		80-120	1.3		20
Copper, Cu	ND	102	84-111	89.6		90.0		80-120	0.4		20
Lead, Pb	ND	101	85-110	83.6		82.1		80-120	1.8		20
Molybdenum, Mo	ND	102	83-110	80.8		79.1		80-120	2.1		20
Nickel, Ni	ND	104	86-110	85.5		84.3		80-120	1.4		20
Selenium, Se	ND	101	84-111	83.8		81.7		80-120	2.5		20
Silver, Ag	ND	108	80-125	79.5	*	78.0	*	80-120	2.0		20
Thallium, Tl	ND	99.9	83-109	77.0	*	76.7	*	80-120	0.4		20
Vanadium, V	ND	103	84-109	87.9		86.7		80-120	1.4		20
Zinc, Zn	ND	108	88-117	92.0		92.9		80-120	0.9		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

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/28/97
Analyzed on: 02/27/97
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
9702173-01B	ND	ND	.0010	.00097	97.0	.00097	97.0	0	20	80 -120

HGS022797 -9702058

Samples in batch:

9702143-04B 9702143-05B 9702172-01A 9702172-02A
9702173-01B 9702193-05A

COMMENTS:

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/28/97
Analyzed on: 02/27/97
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	.0010	100	80 - 120

HGS022797 -9702058

Samples in batch:

9702143-04B 9702143-05B 9702172-01A 9702172-02A
9702173-01B 9702193-05A

COMMENTS:

** SPL BATCH QUALITY CONTROL REPORT **

M8015 - Carbon Chain ID

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

Matrix: Soil

Units: mg/Kg

Batch Id: GC_6970228025400

LABORATORY CONTROL SAMPLE

SPIKE COMPOUNDS	Method Blank Result <2>	Spike Added <3>	Blank Spike Result <1>	Blank Spike Recovery %	QC Limits(**) (Mandatory) % Recovery Range
Petroleum Hydrocarbons-Die	ND	200	151	75.5	70 - 140

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
PETROLEUM HYDROCARBONS-DIE	ND	200	170	85.0	170	85.0	0	20	50 - 150

Analyst: RTC

Sequence Date: 02/28/97

SPL ID of sample spiked: 9702190-01A

Sample File ID: GC6B363.TX0

Method Blank File ID:

Blank Spike File ID: GC6B412.TX0

Matrix Spike File ID: GC6B378.TX0

Matrix Spike Duplicate File ID: GC6B379.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: SPL Internal Limits

(***) = Source:

SAMPLES IN BATCH(SPL ID): 9702190-01A 9702172-01A 9702195-01A

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

SPL Blank QC Report

Matrix: Soil
Sample ID: BLANK
Batch: E970227044703

Reported on: 03/03/97 10:41
Analyzed on: 02/28/97 10:04
Analyst: PC

METHOD 8270 P058B02

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) 660-0901

SPL Blank QC Report

Matrix: Soil
Sample ID: BLANK
Batch: E970227044703

Reported on: 03/03/97 10:41
Analyzed on: 02/28/97 10:04
Analyst: PC

METHOD 8270 P058B02

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: E970227044703

Reported on: 03/03/97 10:41
Analyzed on: 02/28/97 10:04
Analyst: PC

METHOD 8270 P058B02

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

Surrogate	Result	QC Criteria	Units
Nitrobenzene-d5	72	23-120	% Recovery
2-Fluorobiphenyl	78	30-115	% Recovery
Terphenyl-d14	62	18-137	% Recovery
Phenol-d5	73	24-113	% Recovery
2-Fluorophenol	65	25-121	% Recovery
2,4,6-Tribromophenol	82	19-122	% Recovery

Samples in Batch 9702B85-01

Notes

ND - Not detected.

SPL Houston Labs

Data file : /chem1/p.i/p970228.b/p058t12.d
Lab Smp Id: LCS
Inj Date : 28-FEB-1997 11:03
Operator : PC Inst ID: p.i
Smp Info : METHSPIKE-8270S/1X
Misc Info : E058S1/P058B02/P059CC1
Comment :
Method : /chem1/p.i/p970228.b/p8270sQ.m
Meth Date : 28-Feb-1997 10:22 patti Quant Type: ISTD
Cal Date : 25-FEB-1997 10:15 Cal File: p056ic2.d
Als bottle: 6 QC Sample: METHSPIKE
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: LCS.sub
Target Version: 3.10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng.	FINAL (ug/Kg)	
* 1,4-Dichlorobenzene-d4	152.00	4.512	4.643	(1.000)	89012	40		(M)
* Naphthalene-d8	136.00	6.257	6.406	(1.000)	340715	40		
* 48 Acenaphthene-d10	164.00	8.972	9.132	(1.000)	178024	40		
* 65 Phenanthrene-d10	188.00	11.281	11.447	(1.000)	269138	40		
* 76 Chrysene-d12	240.00	15.482	15.672	(1.000)	174345	40		
* 83 Perylene-d12	264.00	17.591	17.810	(1.000)	175008	40		
$ 23 Nitrobenzene-d5	82.00	5.282	5.419	(0.844)	219300	76	1300	
$ 41 2-Fluorobiphenyl	172.00	7.961	8.110	(0.887)	407183	81	1400	
$ 72 Terphenyl-d14	244.00	13.890	14.056	(0.897)	312621	59	990	
$ 3 2-Fluorophenol	112.00	3.161	3.269	(0.701)	331232	120	2000	
$ 4 Phenol-d5	99.00	4.160	4.273	(0.922)	353974	120	1900	
$ 61 2,4,6-Tribromophenol	329.70	10.235	10.396	(0.907)	67491	130	2200	
5 Phenol	94.00	4.178	4.291	(0.926)	351261	120	2000	
9 2-Chlorophenol	128.00	4.307	4.432	(0.954)	313388	120	2000	
12 1,4-Dichlorobenzene	146.00	4.530	4.661	(1.004)	245262	86	1400	
21 N-Nitroso-di-n-propylamine	70.00	5.129	5.278	(1.137)	150876	91	1500	
31 1,2,4-Trichlorobenzene	180.00	6.205	6.347	(0.992)	170847	88	1500	
36 4-Chloro-3-methylphenol	107.00	7.209	7.340	(1.152)	269380	120	2000	
49 Acenaphthene	153.00	9.025	9.179	(1.006)	358430	89	1500	
51 4-Nitrophenol	109.00	9.319	9.461	(1.039)	60800	120	1900	
53 2,4-Dinitrotoluene	165.00	9.389	9.549	(1.046)	150560	83	1400	
64 Pentachlorophenol	266.00	11.116	11.277	(0.985)	92488	130	2200	
71 Pyrene	202.00	13.543	13.721	(0.875)	447139	56	940	

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem1/p.i/p970228.b/p058t12.d
Report Date: 28-Feb-1997 12:11

SPL Houston Labs

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: p.i
Lab File ID: p058t12.d
Lab Smp Id: LCS
Analysis Type: SV
Quant Type: ISTD
Operator: PC
Method File: /chem1/p.i/p970228.b/p8270s.m
Misc Info: E058S1/P058B02/P059CC1

Calibration Date: 02/28/97
Calibration Time: 0833

Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	117560	58780	235120	89012	-24.28
32 Naphthalene-d8	461328	230664	922656	340715	-26.14
48 Acenaphthene-d10	240906	120453	481812	178024	-26.10
65 Phenanthrene-d10	359947	179974	719894	269138	-25.23
76 Chrysene-d12	188108	94054	376216	174345	-7.32
83 Perylene-d12	203273	101636	406546	175008	-13.90

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	% DIFF
11 1,4-Dichlorobenzene-	4.51	4.01	5.01	4.51	0.04
32 Naphthalene-d8	6.26	5.76	6.76	6.26	-0.06
48 Acenaphthene-d10	8.98	8.48	9.48	8.97	-0.04
65 Phenanthrene-d10	11.28	10.78	11.78	11.28	-0.03
76 Chrysene-d12	15.50	15.00	16.00	15.48	-0.10
83 Perylene-d12	17.61	17.11	18.11	17.59	-0.09

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

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/p.i/p970228.b/p8270sQ.m
Misc Info: E058S1/P058B02/P059CC1

Client SDG: p970228
Fraction: SV

Operator: PC
SampleType: METHSPIKE
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
5 Phenol	2500	2000	79.91	12-110
9 2-Chlorophenol	2500	2000	81.81	27-123
12 1,4-Dichlorobenzen	1600	1400	89.32	36-97
21 N-Nitroso-di-n-pro	1600	1500	94.38	41-116
31 1,2,4-Trichloroben	1600	1500	91.43	39-98
36 4-Chloro-3-methylp	2500	2000	78.64	23-97
49 Acenaphthene	1600	1500	92.86	46-118
51 4-Nitrophenol	2500	1900	77.36	30-150
53 2,4-Dinitrotoluene	1600	1400	86.73	50-150
64 Pentachlorophenol	2500	2200	88.71	9-103
71 Pyrene	1600	940	58.79	26-127

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
$ 23 Nitrobenzene-d5	1600	1300	79.28	23-120
$ 41 2-Fluorobiphenyl	1600	1400	84.60	30-115
$ 72 Terphenyl-d14	1600	990	61.94	18-137
$ 3 2-Fluorophenol	2500	2000	80.08	25-121
$ 4 Phenol-d5	2500	1900	77.99	24-113
$ 61 2,4,6-Tribromophen	2500	2200	88.41	19-122

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPL Contract:

Lab Code: Case No.:9702A86 SAS No.: SDG No.:

Matrix Spike - EPA Sample No.:B-2 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	1900	76	27-123
1,4-Dichlorobenzene	1600	0	1300	81	36- 97
N-Nitroso-di-n-prop.(1)	1600	0	1400	88	41-116
1,2,4-Trichlorobenzene	1600	0	1300	81	39- 98
4-Chloro-3-methylphenol	2500	0	1800	72	23- 97
Acenaphthene	1600	0	1300	81	46-118
4-Nitrophenol	2500	0	1900	76	30-150
2,4-Dinitrotoluene	1600	0	1300	81	50-150
Pentachlorophenol	2500	0	2100	84	9-103
Pyrene	1600	0	880	55	26-127

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	2500	1900	76	0	42	12-110
2-Chlorophenol	2500	1800	72	5	40	27-123
1,4-Dichlorobenzene	1600	1300	81	0	28	36- 97
N-Nitroso-di-n-prop.(1)	1600	1500	94	7	38	41-116
1,2,4-Trichlorobenzene	1600	1300	81	0	28	39- 98
4-Chloro-3-methylphenol	2500	1800	72	0	42	23- 97
Acenaphthene	1600	1300	81	0	31	46-118
4-Nitrophenol	2500	1800	72	5	50	30-150
2,4-Dinitrotoluene	1600	1300	81	0	50	50-150
Pentachlorophenol	2500	2100	84	0	50	9-103
Pyrene	1600	890	56	2	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: 0 out of 22 outside limits

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 03/01/97
Analyzed on: 02/28/97
Analyst: LAR

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.
9702B85-01A	85	85	0	20

-9703004

Samples in batch:

9702753-01A 9702753-02A 9702753-03A 9702753-04A
9702753-05A 9702753-06A 9702753-07A 9702B85-01A
9702C76-01A

COMMENTS:

CHAIN OF CUSTODY

AND

SAMPLE RECEIPT CHECKLIST

SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No: 9702172

C- 2417

page 1 of 1

Client Name: Montgomery Watson

Address/Phone: 250 N Madison Ave Pasadena

Client Contact: Fred Strauss - (818) 568-6582

Project Name: MDRC. C-6 facility, Torrance, CA

Project Number: 1206035. 01090010.

Project Location: C-6 facility, Building 37 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							
B37-GS-45-3'bgs	2/24/97	14:55		X	S	12"x6" SS sleeve	approx 12 oz	Ice	2	X	X							
B-37-GS-46-3'bgs	2/24/97	15:24		X	S	12"x6" SS sleeve	approx 12 oz	Ice	2	X	X							

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

Laboratory remarks:

Intact? ☐ Y ☐ N

Temp:

Requested TAT

TRPH only

24hr ☒ 72hr ☐

48hr ☐ Standard ☒ ALL others

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. Voris	date 2/24/97	time 1700	2. Received by: [signature] 2/24/97 @ 18:21
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-C6-0109784

SPL Fullerton Environmental Laboratory
Sample Receiving Checklist

SPL Workorder Number: 9702172

Date: 2-24-97 Time: 18:21

	Yes	No	N/A
1. Chain of Custody Record Present?	✓	*	
2. Chain of Custody Record Properly Completed?	✓	*	
3. Custody Seals on Shipping Container?	✓		X
4. Custody Seals on Sample Container?		✓	
5. All Custody Seals Intact?	✓	*	X
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 3.2 °C

Samples Were Delivered by:

SPL Courier	G. Molano
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

9702172

F A X

MONTGOMERY WATSON

250 N. Madison Avenue
Pasadena, California 91101

Tel: 818 568 6508
Fax: 818 796 5941

Date: 2/25/97

To: Mike Crisostomo

Fax No: (714) 447-6800

From: Nancy Matsumoto

Reference: MDRC

Subject: Additional Analyses

No. of Pages: 2
(including cover)

Comments:

Please run the following sample for VOCs (8260), SVOCs (8270) and carbon chain-length analysis:

B37-GS-45-3'

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: 9702172

C- 02417

page 1 of 1

Client Name: Montgomery Watson

Address/Phone: 250 N Madison Ave Pasadena

Client Contact: Fred Strauss - (818)568-6582

Project Name: MDRC- C-6 facility, Torrance, CA

Project Number: 1206035. 01090010.

Project Location: C-6 facility, Building 37 Area

Invoice To: Fred Strauss

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	TPH 8015 Mod
B37-GS-45-3'bgs	2/24/97	14:55		X	S	12 oz SS Sleeve	approx 12 oz	Ice	2	X	X
B-37-GS-46-3'bgs	2/24/97	15:24		X	S	12 oz SS Sleeve	approx 12 oz	Ice	2	X	X

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

Laboratory remarks:

Intact? ☐ Y ☐ N

Temp:

Requested TAT: TRPH only

24hr ☒ 72hr ☐ 48hr ☐ Standard ☒ (all others) 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. Varia	date 2/24/97	time 1700	2. Received by: [signature] 2/24/97 @ 18:2
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

FEB 25 '97 05:55PM MONTGOMERY WATSON P.2

BOE-C6-0109787

97-02-B85 FEDEX 392

SPL

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

INTEROFFICE SAMPLE TRANSFER
CHAIN-OF-CUSTODY FORM

PAGE 1 OF 1

ORIGINATING LAB: Fullerton RECEIVING LAB: Houston DATE: 2-26-97

ATTENTION: Brent Barron REPORT RESULTS TO: Mike Crisostomo

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

CLIENT NAME: Montgomery Watson PROJECT #: 9702172 DATE NEEDED: 3-03-97

HEADING FOR ANALYSIS:	INVOICE TO:
COMPANY: Montgomery Watson	COMPANY: SPL-Fullerton
ADDRESS: 250 N. Madison Avenue	ADDRESS:
Pasadena, CA 91101	
ATTN: Nancy Matsumoto	ATTN: Mike Crisostomo

SAMPLE NO. IDENTIFICATION	DATE/TIME COLLECTED	LAB SAMPLE NUMBER	SAMPLE MATRIX	ANALYSES REQUESTED	QUOTED PRICE
	2/24/97 14:5T	9702172-01B	Soil	8270S/PARPGHS	$205.00

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
1.	2/26/97	11:10		2/27/97	0930
2.			40C ROI, intact		

NOTES:

BOE-C6-0109788

SPL Houston Environmental Laboratory

Sample Login Checklist

Date:	Time:
2-27-97	0930

SPL Sample ID:
97-02-B85

			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 #)	3925303505	
		Other:		
11	Method of sample disposal:	SPL Disposal	✓	
		HOLD		
		Return to Client		

Name:	Date:
[signature]	2-27-97

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

SPL, INC.

REPORT APPROVAL SHEET

WORK ORDER NUMBER: *97 - 02 - 204*

Approved for release by:

Joel Grice, Laboratory Manager — *Date:* 3/10/97

Michael J. Crisostomo, Project Manager — *Date:* 3-7-97

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

CASE NARRATIVE

SPL Workorder Number: 9702204

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 February 26, 1997, one (1) soil sample was received by the laboratory courier in a cooler for sample transport. This sample delivery group was further checked by the sample receiving custodian on February 27, 1997. The sample was received intact and within the 2°C - 6°C preservation temperature range. The sample was analyzed as 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 several elements: antimony, arsenic, barium, cobalt, lead, nickel, selenium, silver, and thallium. 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.

If you have any questions regarding information presented in this report please call me at (714) 447-6868. Please refer to workorder 9702204 to expedite service.

Michael J. Crisostomo
Project Manager

Certificate of Analysis No. 9702204

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
Method: 418.1*

Report Date: 3/7/97
Date(s) Received: 2/26/97
Date(s) Sampled: 2/26/97
Date(s) Analyzed: 2/27/97
Project Number: 120603501090010
Matrix: SOIL

Units: mg/Kg

Sample ID	Petroleum Extractables
B37-GS-47-3ft.	5600

Results reported at Practical Quantitation Limit 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

Certificate of Analysis No. 9702204

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: 3/7/97
Date(s) Received: 2/26/97
Date(s) Sampled: 2/26/97
Date(s) Analyzed: 3/5/97,3/4/97,2/27/97,2
Project Number: 12060350109001
Matrix: SOIL

Analyte	Units	EPA Method	B37-GS-47-3ft.
Antimony, Total	mg/Kg	6010A***	ND<0.500
Arsenic, Total	mg/Kg	6010A***	ND<0.11
Barium, Total	mg/Kg	6010A***	105
Beryllium, Total	mg/Kg	6010A***	ND<0.06
Cadmium, Total	mg/Kg	6010A***	0.502
Chromium, Total	mg/Kg	6010A***	23.1
Cobalt, Total	mg/Kg	6010A***	9.12
Copper, Total	mg/Kg	6010A***	22.5
Digestion-Solids 3050A	N/A	3050A***	03/04/97
Lead, Total	mg/Kg	6010A***	11.3
Mercury Digestion in Soil	N/A	7471A***	02/26/97
Mercury, Total	mg/Kg	7471A***	ND<0.200
Molybdenum,Total	mg/Kg	6010A***	ND<2.50
Nickel, Total	mg/Kg	6010A ***	12.2
Selenium, Total	mg/Kg	6010A***	ND<5.00
Silver, Total	mg/Kg	6010A***	ND<5.00
Thallium, Total	mg/Kg	6010A***	ND<0.500
Vanadium, Total	mg/Kg	6010A***	33.2
Zinc, Total	mg/Kg	6010A***	71.7

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.

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

SPL California License Number 2178

QUALITY CONTROL

DOCUMENTATION

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/27/97
Analyzed on: 02/27/97
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
BLANK	ND	ND	500	489	97.8	501	100	2.2	20	80 -120

PETHS022797 -9702057

Samples in batch:

9702204-01A

COMMENTS:

MS/MSD out of calibration range.

QUALITY CONTROL INFORMATION
METALS

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

MS/MSD Results

Date: 3/5/97
Sample ID: 9702226-14

Matrix: Soil
Includes: 9702204-1; 9702205-1-3
9702226-14

Parameter	LMB	LCS Rec. (%)	Acceptability Range (%)	MS Rec. (%)		MSD Rec. (%)		Acceptability Range (%)	RPD	RPD Range (%)
Antimony, Sb	ND	102	84-117	56.1	*	57.1	*	80-120	1.8	20
Arsenic, As	ND	105	85-117	73.3	*	74.2	*	80-120	1.2	20
Barium, Ba	ND	101	62-136	77.8	*	76.2	*	80-120	2.0	20
Beryllium, Be	ND	102	85-111	85.4		84.9		80-120	0.5	20
Cadmium, Cd	ND	100	86-112	86.1		85.9		80-120	0.2	20
Chromium, Cr	ND	100	83-110	82.8		81.8		80-120	1.1	20
Cobalt, Co	ND	101	85-112	79.0	*	78.6	*	80-120	0.5	20
Copper, Cu	ND	100	84-111	88.2		86.6		80-120	1.9	20
Lead, Pb	ND	100	85-110	77.6	*	77.5	*	80-120	0.2	20
Molybdenum, Mo	ND	99.9	83-110	81.4		81.2		80-120	0.2	20
Nickel, Ni	ND	101	86-110	80.1		79.2	*	80-120	1.1	20
Selenium, Se	ND	101	84-111	74.9	*	73.9	*	80-120	1.3	20
Silver, Ag	ND	104	80-125	69.5	*	69.4	*	80-120	0.2	20
Thallium, Tl	ND	98.7	83-109	72.8	*	73.4	*	80-120	0.9	20
Vanadium, V	ND	101	84-109	86.5		84.6		80-120	2.2	20
Zinc, Zn	ND	105	88-117	88.9		86.8		80-120	2.3	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

SPL Fullerton Environmental Laboratory
Sample Receiving Checklist

SPL Workorder Number: 9702204

Date: 2-27-97 Time: 9:10

	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 2.0 °C

Samples Were Delivered by:

SPL Courier	G. Molano
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

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

** SPL QUALITY CONTROL REPORT **

Matrix: Soil

Reported on: 02/28/97
Analyzed on: 02/27/97
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
9702173-01B	ND	ND	.0010	.00097	97.0	.00097	97.0	0	20	80 -120

HGS022797 -9702058

Samples in batch:

9702143-04B 9702143-05B 9702172-01A 9702172-02A
9702173-01B 9702193-05A 9702204-01A

COMMENTS:

SPL, I

Analysis Request & Chain of Custody Record

SPL Workorder No: 9702204 -04450

page 1 of 1

Client Name: Montgomery Watson.

Address/Phone: 250 N Madison Ave, Pasadena, CA 568-6582 (818)

Client Contact: Fred Strauss (818) 568-6582

Project Name: MDRC-C6 facility, Torrance. CA

Project Number: 1206035-01090010.

Project Location: C-6 facility, Building 37 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	TTHE 22 Metals							
B37-GS-47-3'	2/26/96	11:35		X	S	12"x8" 35 sleeve	approx 12 oz	Ice	2	X	X							

Client/Consultant Remarks: 24 hr - TATON TRPH only - Standard TAT otherwise

Laboratory remarks:

Intact? ☑ Y ☐ N

Temp: 2.0°C

Requested TAT

24hr ☒ TRPH only 72hr ☐

48hr ☐ Standard ☒ all others

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: IVAN VARGAS.	date 2/26/97	time 15:30	2. Received by: 2/27/97
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-C6-0109799