0061245

SAF-D03-001
100-B/C ECO Biological Sampling
45 DAY PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Ken Gano H0-23 1.13.04
INITIAL/DATE

COMMENTS: (PLEASE INCLUDE THE FOLLOWING ON THE FAX COVER SHEET)

SDG W04139 SAF-D03-001

Rad only X Chem only Rad & Chem

X Complete Partial

RECEIVED
FEB 05 2004
EDMC

SEVERN TRENT STL

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Tel: 314 298 8566 Fax: 314 298 8757
www.stl-inc.com

ANALYTICAL REPORT

PROJECT NO. 100-B/C ECO BIO

D03-001

Lot #: F3L160106
SDG #: W04139

Joan Kessner

Bechtel Hanford, Inc.
3350 George Washington Way
MSIN HO-25
Richland, WA 99352

SEVERN TRENT LABORATORIES, INC.

MWard

MARTI WARD
Project Manager

January 5, 2004

RECEIVED
JAN 2004

SEVERN TRENT STL

STL St. Louis
13715 Rider Trail North
Earth City, MO 63045

Tel: 314 298 8566 Fax: 314 298 8757
www.stl-inc.com

January 5, 2004

STL LOT NUMBER: **F3L160106**
SDG: **W04139**

Joan Kessner
Bechtel Hanford, Inc.
3350 George Washington Way
MSIN HO-25
Richland, WA 99352

Dear Joan Kessner,

This report contains the analytical results for the four samples received under chain of custody by Severn Trent Laboratories (STL) on December 13, 2003. These samples are associated with your D03-001 SAF.

All applicable quality control procedures met method-specified acceptance criteria.

This report shall not be reproduced except in full, without the written approval of the laboratory. This report is incomplete without the Case Narrative. Results are reported "as received" (i.e. wet weight) unless otherwise noted.

If you have any questions, please feel free to call me at (314) 298-8566.

Sincerely,

Marti Ward
Project Manager

cc: Project File

SAMPLE SUMMARY

F3L160106

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
F6QFH	001	J015P9	12/12/03	09:00
F6QFK	002	J015R0	12/12/03	09:01
F6QFL	003	J015R1	12/12/03	09:02
F6QFM	004	J015R2	12/12/03	09:03

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

METHODS SUMMARY

F3L160106

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
Semivolatile Organic Compounds by GC/MS	SW846 8270C	SW846 3550B

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

LOT # F3L160106

SDG # W04139

STL ST. LOUIS

Bechtel Hanford Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		D03-001-55	Page 1 of 1
Collector: GALE/ST JOHN	Company Contact: JOAN KESSNER	Telephone No.: 375-4688	Project Coordinator: WEISS, RL	Price Code: SESSP; Air Quality
Project Designation: 100-B/C ECO Biological Sampling	Sampling Location: 100 B/C AREA		SAF No.: D03-001	Data Turnaround: 45 Days
Ice Chest No.: ERC-99-069	Field Logbook No.: N/A	COA: MEA122C100	Method of Shipment: ~~GOV. VEH.~~ FED EX	
Shipped To: ST LOUIS Severn Trent Incorporated, ~~Richland~~	Offsite Property No.: ~~N/A~~ A040094		Bill of Lading/Air Bill No.: ~~N/A~~ SEE OSPC	

POSSIBLE SAMPLE HAZARDS/REMARKS

Special Handling and/or Storage: Samples did not originate in radiological controlled area. No total activity associated with sample/samples.

W04139

SAMPLE ANALYSIS

Preservation													
Type of Container													
No. of Container(s)													
Volume													
				Semi-VOA - 8270A (TCL)									
Sample No.	Matrix *	Sample Date	Sample Time										
J015P9	OTHER SOLID	12-12-03	0900	X				TIE TO	J015P9 → B184H7				
J015R0	OTHER SOLID	12-12-03	0901	X				TIE TO	J015R0 → B184H8				
J015R1	OTHER SOLID	12-12-03	0902	X				TIE TO	J015R1 → B184H9				
J015R2	OTHER SOLID	12-12-03	0903	X				TIE TO	J015R2 → B184J0				

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By/Removed From: S GALE	Date/Time: 1930 12-12-03	Received By/Stored In: FEDEX	Date/Time
Relinquished By/Removed From: FED EX	Date/Time	Received By/Stored In: S Wilson	Date/Time: 12-16-03 0800
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

Matrix *
S=Soil
SE=Sediment
SO=Solid
SI=Sludge
W = Water
O=Oil
A=Air
DS=Drum Solids
DL=Drum Liquids
T=Tissue
WI=Wipe
L=Liquid
V=Vegetation
X=Other

LABORATORY SECTION	Received By	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

BHI-EE-011 (03/01/2002)

SEVERN TRENT STL

F3L160106

Lot No.: ~~F3L160104~~

WO4139

Condition Upon Receipt Form
St. Louis Laboratory

Client: Richland

Date: 12/13/03 Time: 0855

Quote No: 56338

Initiated by: [illegible]

Shipper/No: FedX below

COC/RFA Numbers: below

Condition/Variance (Circle "Y" for yes and "N" for no. If "N" is circled, see notes for explanation):

1.	Y N	Sample received in undamaged condition.	5.	Y N	Sample volume sufficient for analysis. ? see below
2.	Y N	Sample received within 4°C ± 2°C*	6.	Y N	Sample received with Chain of Custody.
		Record temperature: 2, 2, 3, 3, 2, 3	7.	Y N	Chain of Custody matches sample IDs on containers.
3.	Y N N/A	Sample received with proper pH**.	8.	Y N	Custody seal received intact and tamper evident on cooler.
4.	Y N	Sample received in proper containers.	9.	Y N	Custody seal received intact and tamper evident on bottles.

* Temperature Variance Does Not Affect the Following Analyses: _____

** For DOE-AL (Pantex, LANL, Sandia, Timet) sites, remember to pH all containers received, except for VOA, TOX, and soils. [illegible] 12/13/03

Notes: 7904 9873 3899 Only about ~~about~~
7923 8931 9168 40-50 mls of
8937 7252 92599.
7263
7230
7219
138488, W04-012-23, 49, 69, 9, 41, S04-011-169, S04-010-228
S04-012-29, 33

Corrective Action:

☐ Client's Name: _____ Informed verbally on: _____ By: _____

☐ Client's Name: _____ Informed in writing on: _____ By: _____

☐ Sample(s) processed "as is". _____

☐ Sample(s) on hold until: _____ If released, notify: _____

Sample Control Supervisor (or designate) Review: [illegible] Date: 12.13.03

Project Management Review: M Ward Date: 12.16.03

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE
THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED
IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIALS AND THE DATE NEXT TO THAT ITEM

7830

SL-ADMIN-0004, Revised 6/5/03
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SEMI-VOLATILE ORGANICS

BECHTEL HANFORD, INC.

Client Sample ID: J015P9

GC/MS Semivolatiles

Lot-Sample #...: F3L160106-001 **Work Order #...:** F6QFH1AC **Matrix.....:** SOLID
Date Sampled...: 12/12/03 **Date Received..:** 12/13/03
Prep Date.....: 12/18/03 **Analysis Date..:** 12/19/03
Prep Batch #...: 3352219
Dilution Factor: 1
% Moisture.....: 19 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Phenol	ND	410	ug/kg	110
bis(2-Chloroethyl)-ether	ND	410	ug/kg	16
2-Chlorophenol	ND	410	ug/kg	17
1,3-Dichlorobenzene	ND	410	ug/kg	14
1,4-Dichlorobenzene	ND	410	ug/kg	17
1,2-Dichlorobenzene	ND	410	ug/kg	15
2-Methylphenol	ND	410	ug/kg	24
2,2'-oxybis(1-Chloropropane)	ND	410	ug/kg	19
4-Methylphenol	ND	810	ug/kg	62
N-Nitrosodi-n-propyl-amine	ND	410	ug/kg	24
Hexachloroethane	ND	410	ug/kg	20
Nitrobenzene	ND	410	ug/kg	22
Isophorone	ND	410	ug/kg	23
2-Nitrophenol	ND	410	ug/kg	24
2,4-Dimethylphenol	ND	410	ug/kg	35
bis(2-Chloroethoxy) methane	ND	410	ug/kg	25
2,4-Dichlorophenol	ND	410	ug/kg	31
1,2,4-Trichloro-benzene	ND	410	ug/kg	21
Naphthalene	ND	410	ug/kg	18
4-Chloroaniline	ND	410	ug/kg	38
Hexachlorobutadiene	ND	410	ug/kg	15
4-Chloro-3-methylphenol	ND	410	ug/kg	33
2-Methylnaphthalene	ND	410	ug/kg	18
Hexachlorocyclopenta-diene	ND	2000	ug/kg	88
2,4,6-Trichloro-phenol	ND	410	ug/kg	39
2,4,5-Trichloro-phenol	ND	410	ug/kg	37
2-Chloronaphthalene	ND	410	ug/kg	19
2-Nitroaniline	ND	2000	ug/kg	46
Dimethyl phthalate	ND	410	ug/kg	24
Acenaphthylene	ND	410	ug/kg	20
Acenaphthene	ND	410	ug/kg	20

(Continued on next page)

BECHTEL HANFORD, INC.

Client Sample ID: J015P9

GC/MS Semivolatiles

Lot-Sample #...: F3L160106-001 **Work Order #...:** F6QFH1AC **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,6-Dinitrotoluene	ND	410	ug/kg	25
3-Nitroaniline	ND	2000	ug/kg	32
2,4-Dinitrophenol	ND	2000	ug/kg	79
4-Nitrophenol	ND	2000	ug/kg	52
Dibenzofuran	ND	410	ug/kg	27
Dibenzo(a,h)anthracene	ND	410	ug/kg	100
2,4-Dinitrotoluene	ND	410	ug/kg	22
Diethyl phthalate	ND	410	ug/kg	50
Fluorene	ND	410	ug/kg	23
4-Chlorophenyl phenyl ether	ND	410	ug/kg	22
4-Nitroaniline	ND	2000	ug/kg	27
4,6-Dinitro-2-methylphenol	ND	2000	ug/kg	76
N-Nitrosodiphenylamine	ND	410	ug/kg	26
Pyrene	ND	410	ug/kg	27
4-Bromophenyl phenyl ether	ND	410	ug/kg	28
Hexachlorobenzene	ND	410	ug/kg	22
Pentachlorophenol	ND	2000	ug/kg	140
Phenanthrene	ND	410	ug/kg	20
Anthracene	ND	410	ug/kg	22
Carbazole	ND	410	ug/kg	25
Di-n-butyl phthalate	ND	410	ug/kg	34
Fluoranthene	ND	410	ug/kg	28
Butyl benzyl phthalate	ND	410	ug/kg	32
Benzo(a)anthracene	ND	410	ug/kg	28
3,3'-Dichlorobenzidine	ND	2000	ug/kg	28
Chrysene	ND	410	ug/kg	18
bis(2-Ethylhexyl) phthalate	ND	410	ug/kg	42
Di-n-octyl phthalate	ND	410	ug/kg	170
Benzo(b)fluoranthene	ND	410	ug/kg	47
Benzo(k)fluoranthene	ND	410	ug/kg	24
Benzo(a)pyrene	ND	410	ug/kg	24
Indeno(1,2,3-cd)pyrene	ND	410	ug/kg	21
Benzo(ghi)perylene	ND	410	ug/kg	120

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	72	(19 - 115)
Phenol-d5	75	(27 - 115)
Nitrobenzene-d5	76	(10 - 115)
2-Fluorobiphenyl	78	(10 - 115)
2,4,6-Tribromophenol	77	(19 - 115)
Terphenyl-d14	81	(10 - 115)

(Continued on next page)

BECHTEL HANFORD, INC.

Client Sample ID: J015P9

GC/MS Semivolatiles

Lot-Sample #...: F3L160106-001 **Work Order #...:** F6QFH1AC **Matrix.....:** SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

BECHTEL HANFORD, INC.

J015P9

GC/MS Semivolatiles

Lot-Sample #: F3L160106-001 **Work Order #:** F6QFH1AC **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown aldol condensate		12000	M	3.799	ug/kg
Unknown alkane		490	M	17.958	ug/kg
Unknown alkane		800	M	19.203	ug/kg
Squalene	7683-64-9	280	M	20.036	ug/kg
Unknown alkane		1400	M	20.367	ug/kg
Unknown		720	M	20.415	ug/kg
Unknown alkane		890	M	21.67	ug/kg
Unknown		470	M	21.766	ug/kg
Unknown		2900	M	24.314	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: F3L160106 **Work Order #...:** F6QFH1AD-MS **Matrix.....:** SOLID
MS Lot-Sample #: F3L160106-001 F6QFH1AE-MSD
Date Sampled...: 12/12/03 **Date Received..:** 12/13/03
Prep Date.....: 12/18/03 **Analysis Date..:** 12/23/03
Prep Batch #...: 3352219
Dilution Factor: 1 **% Moisture.....:** 19

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Phenol	ND	4110	2880	ug/kg	70		SW846 8270C
	ND	4100	2940	ug/kg	72	1.9	SW846 8270C
bis(2-Chloroethyl)-ether	ND	4110	2990	ug/kg	73		SW846 8270C
	ND	4100	3060	ug/kg	75	2.4	SW846 8270C
2-Chlorophenol	ND	4110	2880	ug/kg	70		SW846 8270C
	ND	4100	2930	ug/kg	71	1.6	SW846 8270C
2-Methylphenol	ND	4110	3000	ug/kg	73		SW846 8270C
	ND	4100	2930	ug/kg	72	2.2	SW846 8270C
2,2'-oxybis(1-Chloropropa	ND	4110	3380	ug/kg	82		SW846 8270C
	ND	4100	3230	ug/kg	79	4.5	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	4110	3490	ug/kg	85		SW846 8270C
	ND	4100	3500	ug/kg	85	0.35	SW846 8270C
Hexachloroethane	ND	4110	3060	ug/kg	75		SW846 8270C
	ND	4100	3090	ug/kg	76	1.1	SW846 8270C
Nitrobenzene	ND	4110	3360	ug/kg	82		SW846 8270C
	ND	4100	3250	ug/kg	79	3.3	SW846 8270C
Isophorone	ND	4110	3730	ug/kg	91		SW846 8270C
	ND	4100	3600	ug/kg	88	3.5	SW846 8270C
2-Nitrophenol	ND	4110	3130	ug/kg	76		SW846 8270C
	ND	4100	3060	ug/kg	75	2.0	SW846 8270C
2,4-Dimethylphenol	ND	4110	3260	ug/kg	79		SW846 8270C
	ND	4100	3010	ug/kg	73	8.0	SW846 8270C
bis(2-Chloroethoxy) methane	ND	4110	3390	ug/kg	82		SW846 8270C
	ND	4100	3370	ug/kg	82	0.62	SW846 8270C
2,4-Dichlorophenol	ND	4110	3190	ug/kg	78		SW846 8270C
	ND	4100	2950	ug/kg	72	8.0	SW846 8270C
1,2,4-Trichloro-benzene	ND	4110	3210	ug/kg	78		SW846 8270C
	ND	4100	2960	ug/kg	72	8.1	SW846 8270C
Naphthalene	ND	4110	3330	ug/kg	81		SW846 8270C
	ND	4100	3210	ug/kg	78	3.5	SW846 8270C
4-Chloroaniline	ND	4110	1800	ug/kg	44		SW846 8270C
	ND	4100	1910	ug/kg	47	5.8	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: F3L160106 **Work Order #...:** F6QFH1AD-MS **Matrix.....:** SOLID
MS Lot-Sample #: F3L160106-001 F6QFH1AE-MSD

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Hexachlorobutadiene	ND	4110	3260	ug/kg	79		SW846 8270C
	ND	4100	2860	ug/kg	70	13	SW846 8270C
4-Chloro-3-methylphenol	ND	4110	3420	ug/kg	83		SW846 8270C
	ND	4100	3080	ug/kg	75	10	SW846 8270C
2-Methylnaphthalene	ND	4110	4470	ug/kg	109		SW846 8270C
	ND	4100	3090	ug/kg	75 p	37	SW846 8270C
Hexachlorocyclopentadiene	ND	4110	2820	ug/kg	69		SW846 8270C
	ND	4100	2630	ug/kg	64	7.0	SW846 8270C
2,4,6-Trichlorophenol	ND	4110	3250	ug/kg	79		SW846 8270C
	ND	4100	2930	ug/kg	72	10	SW846 8270C
2,4,5-Trichlorophenol	ND	4110	3300	ug/kg	80		SW846 8270C
	ND	4100	2990	ug/kg	73	9.6	SW846 8270C
2-Nitroaniline	ND	4110	3770	ug/kg	92		SW846 8270C
	ND	4100	3460	ug/kg	85	8.5	SW846 8270C
Dimethyl phthalate	ND	4110	3490	ug/kg	85		SW846 8270C
	ND	4100	3160	ug/kg	77	9.7	SW846 8270C
Acenaphthylene	ND	4110	3640	ug/kg	89		SW846 8270C
	ND	4100	3350	ug/kg	82	8.2	SW846 8270C
Acenaphthene	ND	4110	3500	ug/kg	85		SW846 8270C
	ND	4100	3260	ug/kg	80	7.0	SW846 8270C
2,6-Dinitrotoluene	ND	4110	3490	ug/kg	85		SW846 8270C
	ND	4100	3190	ug/kg	78	8.9	SW846 8270C
3-Nitroaniline	ND	4110	2690	ug/kg	65		SW846 8270C
	ND	4100	2360	ug/kg	57	13	SW846 8270C
2,4-Dinitrophenol	ND	4110	2830	ug/kg	69		SW846 8270C
	ND	4100	2910	ug/kg	71	2.9	SW846 8270C
4-Nitrophenol	ND	4110	3560	ug/kg	87		SW846 8270C
	ND	4100	3220	ug/kg	78	10	SW846 8270C
Dibenzofuran	ND	4110	3500	ug/kg	85		SW846 8270C
	ND	4100	3170	ug/kg	77	9.7	SW846 8270C
Dibenzo(a,h)anthracene	ND	4110	3860	ug/kg	94		SW846 8270C
	ND	4100	3310	ug/kg	81	15	SW846 8270C
2,4-Dinitrotoluene	ND	4110	3730	ug/kg	91		SW846 8270C
	ND	4100	3400	ug/kg	83	9.3	SW846 8270C
Diethyl phthalate	ND	4110	3680	ug/kg	90		SW846 8270C
	ND	4100	3270	ug/kg	80	12	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: F3L160106 **Work Order #...:** F6QFH1AD-MS **Matrix.....:** SOLID
MS Lot-Sample #: F3L160106-001 F6QFH1AE-MSD

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Fluorene	ND	4110	3510	ug/kg	85		SW846 8270C
	ND	4100	3190	ug/kg	78	9.5	SW846 8270C
4-Chlorophenyl phenyl ether	ND	4110	3480	ug/kg	85		SW846 8270C
	ND	4100	3090	ug/kg	75	12	SW846 8270C
4-Nitroaniline	ND	4110	3110	ug/kg	76		SW846 8270C
	ND	4100	2890	ug/kg	70	7.4	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	4110	2960	ug/kg	72		SW846 8270C
	ND	4100	2860	ug/kg	70	3.3	SW846 8270C
N-Nitrosodiphenylamine	ND	4110	3750	ug/kg	91		SW846 8270C
	ND	4100	3500	ug/kg	85	7.0	SW846 8270C
Pyrene	ND	4110	3500	ug/kg	85		SW846 8270C
	ND	4100	3360	ug/kg	82	3.9	SW846 8270C
4-Bromophenyl phenyl ether	ND	4110	3390	ug/kg	83		SW846 8270C
	ND	4100	3010	ug/kg	73	12	SW846 8270C
Hexachlorobenzene	ND	4110	3590	ug/kg	87		SW846 8270C
	ND	4100	3100	ug/kg	76	14	SW846 8270C
Pentachlorophenol	ND	4110	2620	ug/kg	64		SW846 8270C
	ND	4100	2240	ug/kg	55	16	SW846 8270C
Phenanthrene	ND	4110	3560	ug/kg	87		SW846 8270C
	ND	4100	3200	ug/kg	78	11	SW846 8270C
Anthracene	ND	4110	3470	ug/kg	84		SW846 8270C
	ND	4100	3150	ug/kg	77	9.5	SW846 8270C
Carbazole	ND	4110	3550	ug/kg	86		SW846 8270C
	ND	4100	3220	ug/kg	78	9.8	SW846 8270C
Di-n-butyl phthalate	ND	4110	3670	ug/kg	89		SW846 8270C
	ND	4100	3300	ug/kg	81	10	SW846 8270C
Fluoranthene	ND	4110	3540	ug/kg	86		SW846 8270C
	ND	4100	3050	ug/kg	74	15	SW846 8270C
Butyl benzyl phthalate	ND	4110	3690	ug/kg	90		SW846 8270C
	ND	4100	3490	ug/kg	85	5.7	SW846 8270C
Benzo(a)anthracene	ND	4110	3650	ug/kg	89		SW846 8270C
	ND	4100	3250	ug/kg	79	12	SW846 8270C
3,3'-Dichlorobenzidine	ND	4110	2240	ug/kg	55		SW846 8270C
	ND	4100	1760	ug/kg	43	24	SW846 8270C
Chrysene	ND	4110	3670	ug/kg	89		SW846 8270C
	ND	4100	3400	ug/kg	83	7.6	SW846 8270C

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: F3L160106 **Work Order #...:** F6QFH1AD-MS **Matrix.....:** SOLID
MS Lot-Sample #: F3L160106-001 F6QFH1AE-MSD

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
bis(2-Ethylhexyl) phthalate	**ND**	**4110**	**3700**	**ug/kg**	**90**		**SW846 8270C**
	ND	**4100**	**3430**	**ug/kg**	**84**	**7.6**	**SW846 8270C**
Di-n-octyl phthalate	**ND**	**4110**	**3520**	**ug/kg**	**86**		**SW846 8270C**
	ND	**4100**	**3230**	**ug/kg**	**79**	**8.6**	**SW846 8270C**
Benzo(b)fluoranthene	**ND**	**4110**	**3510**	**ug/kg**	**86**		**SW846 8270C**
	ND	**4100**	**3170**	**ug/kg**	**77**	**10**	**SW846 8270C**
Benzo(k)fluoranthene	**ND**	**4110**	**3820**	**ug/kg**	**93**		**SW846 8270C**
	ND	**4100**	**3380**	**ug/kg**	**83**	**12**	**SW846 8270C**
Benzo(a)pyrene	**ND**	**4110**	**3570**	**ug/kg**	**87**		**SW846 8270C**
	ND	**4100**	**3130**	**ug/kg**	**76**	**13**	**SW846 8270C**
Indeno(1,2,3-cd)pyrene	**ND**	**4110**	**3810**	**ug/kg**	**93**		**SW846 8270C**
	ND	**4100**	**3220**	**ug/kg**	**79**	**17**	**SW846 8270C**
Benzo(ghi)perylene	**ND**	**4110**	**3880**	**ug/kg**	**94**		**SW846 8270C**
	ND	**4100**	**3460**	**ug/kg**	**84**	**12**	**SW846 8270C**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	76	(19 - 115)
	78	(19 - 115)
Phenol-d5	70	(27 - 115)
	77	(27 - 115)
Nitrobenzene-d5	83	(10 - 115)
	83	(10 - 115)
2-Fluorobiphenyl	85	(10 - 115)
	82	(10 - 115)
2,4,6-Tribromophenol	84	(19 - 115)
	75	(19 - 115)
Terphenyl-d14	79	(10 - 115)
	76	(10 - 115)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Results and reporting limits have been adjusted for dry weight.

p Relative percent difference (RPD) is outside stated control limits.

BECHTEL HANFORD, INC.

Client Sample ID: J015R0

GC/MS Semivolatiles

Lot-Sample #...: F3L160106-002 **Work Order #...:** F6QFK1AC **Matrix.....:** SOLID
Date Sampled...: 12/12/03 **Date Received..:** 12/13/03
Prep Date.....: 12/18/03 **Analysis Date..:** 12/23/03
Prep Batch #...: 3352219
Dilution Factor: 1
% Moisture.....: 46 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Phenol	ND	610	ug/kg	160
bis(2-Chloroethyl)-ether	ND	610	ug/kg	25
2-Chlorophenol	ND	610	ug/kg	25
1,3-Dichlorobenzene	ND	610	ug/kg	21
1,4-Dichlorobenzene	ND	610	ug/kg	25
1,2-Dichlorobenzene	ND	610	ug/kg	22
2-Methylphenol	ND	610	ug/kg	36
2,2'-oxybis(1-Chloropropane)	ND	610	ug/kg	28
4-Methylphenol	ND	1200	ug/kg	93
N-Nitrosodi-n-propyl-amine	ND	610	ug/kg	36
Hexachloroethane	ND	610	ug/kg	30
Nitrobenzene	ND	610	ug/kg	33
Isophorone	ND	610	ug/kg	34
2-Nitrophenol	ND	610	ug/kg	36
2,4-Dimethylphenol	ND	610	ug/kg	52
bis(2-Chloroethoxy) methane	ND	610	ug/kg	38
2,4-Dichlorophenol	ND	610	ug/kg	47
1,2,4-Trichloro-benzene	ND	610	ug/kg	32
Naphthalene	ND	610	ug/kg	27
4-Chloroaniline	ND	610	ug/kg	56
Hexachlorobutadiene	ND	610	ug/kg	23
4-Chloro-3-methylphenol	ND	610	ug/kg	49
2-Methylnaphthalene	ND	610	ug/kg	27
Hexachlorocyclopenta-diene	ND	3000	ug/kg	130
2,4,6-Trichloro-phenol	ND	610	ug/kg	58
2,4,5-Trichloro-phenol	ND	610	ug/kg	56
2-Chloronaphthalene	ND	610	ug/kg	29
2-Nitroaniline	ND	3000	ug/kg	70
Dimethyl phthalate	ND	610	ug/kg	36
Acenaphthylene	ND	610	ug/kg	30
Acenaphthene	ND	610	ug/kg	30

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BECHTEL HANFORD, INC.

Client Sample ID: J015R0

GC/MS Semivolatiles

Lot-Sample #...: F3L160106-002 **Work Order #...:** F6QFK1AC **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,6-Dinitrotoluene	ND	610	ug/kg	37
3-Nitroaniline	ND	3000	ug/kg	48
2,4-Dinitrophenol	ND	3000	ug/kg	120
4-Nitrophenol	ND	3000	ug/kg	78
Dibenzofuran	ND	610	ug/kg	41
Dibenzo(a,h)anthracene	ND	610	ug/kg	150
2,4-Dinitrotoluene	ND	610	ug/kg	33
Diethyl phthalate	ND	610	ug/kg	75
Fluorene	ND	610	ug/kg	35
4-Chlorophenyl phenyl ether	ND	610	ug/kg	33
4-Nitroaniline	ND	3000	ug/kg	40
4,6-Dinitro-2-methylphenol	ND	3000	ug/kg	110
N-Nitrosodiphenylamine	ND	610	ug/kg	38
Pyrene	ND	610	ug/kg	41
4-Bromophenyl phenyl ether	ND	610	ug/kg	41
Hexachlorobenzene	ND	610	ug/kg	33
Pentachlorophenol	ND	3000	ug/kg	220
Phenanthrene	ND	610	ug/kg	30
Anthracene	ND	610	ug/kg	33
Carbazole	ND	610	ug/kg	37
Di-n-butyl phthalate	ND	610	ug/kg	51
Fluoranthene	ND	610	ug/kg	42
Butyl benzyl phthalate	ND	610	ug/kg	48
Benzo(a)anthracene	ND	610	ug/kg	42
3,3'-Dichlorobenzidine	ND	3000	ug/kg	42
Chrysene	ND	610	ug/kg	26
bis(2-Ethylhexyl) phthalate	**160 J**	**610**	**ug/kg**	**63**
Di-n-octyl phthalate	ND	610	ug/kg	260
Benzo(b)fluoranthene	ND	610	ug/kg	71
Benzo(k)fluoranthene	ND	610	ug/kg	36
Benzo(a)pyrene	ND	610	ug/kg	36
Indeno(1,2,3-cd)pyrene	ND	610	ug/kg	31
Benzo(ghi)perylene	ND	610	ug/kg	190

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	66	(19 - 115)
Phenol-d5	64	(27 - 115)
Nitrobenzene-d5	72	(10 - 115)
2-Fluorobiphenyl	77	(10 - 115)
2,4,6-Tribromophenol	77	(19 - 115)
Terphenyl-d14	79	(10 - 115)

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BECHTEL HANFORD, INC.

Client Sample ID: J015R0

GC/MS Semivolatiles

Lot-Sample #...: F3L160106-002 **Work Order #...:** F6QFK1AC **Matrix.....:** SOLID

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

BECHTEL HANFORD, INC.

J015R0

GC/MS Semivolatiles

Lot-Sample #: F3L160106-002 **Work Order #:** F6QFK1AC **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown aldol condensate		25000	M	2.91	ug/kg
Ethanone, 1-(2-hydroxyphenyl)-	118-93-4	350	M	6.041	ug/kg
Unknown		1200	M	7.552	ug/kg
Diphenyl sulfide	139-66-2	280	M	9.86	ug/kg
Bicyclo[3.1.1]heptane, 2,6,6-t	6876-13-7	1800	M	11.89	ug/kg
2-Hexadecene, 3,7,11,15-tetram	14237-73-1	410	M	11.944	ug/kg
Unknown		400	M	12.093	ug/kg
Unknown		590	M	12.243	ug/kg
Unknown		420	M	12.793	ug/kg
Unknown organic acid		1700	M	12.868	ug/kg
Unknown organic acid		1800	M	12.948	ug/kg
Unknown		550	M	14.305	ug/kg
Unknown organic acid		370	M	14.46	ug/kg
Unknown organic acid		290	M	14.893	ug/kg
Unknown		400	M	17.142	ug/kg
Unknown alkane		550	M	17.964	ug/kg
Unknown organic acid		400	M	18.424	ug/kg
Unknown		1300	M	19.118	ug/kg
1-Eicosanol	629-96-9	1200	M	19.166	ug/kg
Unknown alkane		1500	M	20.203	ug/kg
Unknown		2800	M	21.912	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

BECHTEL HANFORD, INC.

Client Sample ID: J015R1

GC/MS Semivolatiles

Lot-Sample #...: F3L160106-003 **Work Order #...:** F6QFL1AC **Matrix.....:** SOLID
Date Sampled...: 12/12/03 **Date Received..:** 12/13/03
Prep Date.....: 12/18/03 **Analysis Date..:** 12/23/03
Prep Batch #...: 3352219
Dilution Factor: 1
% Moisture.....: 46 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Phenol	ND	620	ug/kg	160
bis(2-Chloroethyl)-ether	ND	620	ug/kg	25
2-Chlorophenol	ND	620	ug/kg	26
1,3-Dichlorobenzene	ND	620	ug/kg	22
1,4-Dichlorobenzene	ND	620	ug/kg	26
1,2-Dichlorobenzene	ND	620	ug/kg	23
2-Methylphenol	ND	620	ug/kg	36
2,2'-oxybis(1-Chloropropane)	ND	620	ug/kg	28
4-Methylphenol	ND	1200	ug/kg	94
N-Nitrosodi-n-propyl-amine	ND	620	ug/kg	37
Hexachloroethane	ND	620	ug/kg	30
Nitrobenzene	ND	620	ug/kg	34
Isophorone	ND	620	ug/kg	34
2-Nitrophenol	ND	620	ug/kg	36
2,4-Dimethylphenol	ND	620	ug/kg	53
bis(2-Chloroethoxy) methane	ND	620	ug/kg	38
2,4-Dichlorophenol	ND	620	ug/kg	48
1,2,4-Trichloro-benzene	ND	620	ug/kg	32
Naphthalene	ND	620	ug/kg	28
4-Chloroaniline	ND	620	ug/kg	57
Hexachlorobutadiene	ND	620	ug/kg	23
4-Chloro-3-methylphenol	ND	620	ug/kg	50
2-Methylnaphthalene	ND	620	ug/kg	28
Hexachlorocyclopenta-diene	ND	3000	ug/kg	130
2,4,6-Trichloro-phenol	ND	620	ug/kg	58
2,4,5-Trichloro-phenol	ND	620	ug/kg	57
2-Chloronaphthalene	ND	620	ug/kg	29
2-Nitroaniline	ND	3000	ug/kg	70
Dimethyl phthalate	ND	620	ug/kg	37
Acenaphthylene	ND	620	ug/kg	31
Acenaphthene	ND	620	ug/kg	31

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BECHTEL HANFORD, INC.

Client Sample ID: J015R1

GC/MS Semivolatiles

Lot-Sample #...: F3L160106-003 **Work Order #...:** F6QFL1AC **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,6-Dinitrotoluene	ND	620	ug/kg	38
3-Nitroaniline	ND	3000	ug/kg	48
2,4-Dinitrophenol	ND	3000	ug/kg	120
4-Nitrophenol	ND	3000	ug/kg	79
Dibenzofuran	ND	620	ug/kg	42
Dibenzo(a,h)anthracene	ND	620	ug/kg	150
2,4-Dinitrotoluene	ND	620	ug/kg	33
Diethyl phthalate	ND	620	ug/kg	76
Fluorene	ND	620	ug/kg	35
4-Chlorophenyl phenyl ether	ND	620	ug/kg	34
4-Nitroaniline	ND	3000	ug/kg	41
4,6-Dinitro-2-methylphenol	ND	3000	ug/kg	120
N-Nitrosodiphenylamine	ND	620	ug/kg	39
Pyrene	ND	620	ug/kg	42
4-Bromophenyl phenyl ether	ND	620	ug/kg	42
Hexachlorobenzene	ND	620	ug/kg	33
Pentachlorophenol	ND	3000	ug/kg	220
Phenanthrene	ND	620	ug/kg	30
Anthracene	ND	620	ug/kg	33
Carbazole	ND	620	ug/kg	38
Di-n-butyl phthalate	ND	620	ug/kg	52
Fluoranthene	ND	620	ug/kg	43
Butyl benzyl phthalate	ND	620	ug/kg	49
Benzo(a)anthracene	ND	620	ug/kg	43
3,3'-Dichlorobenzidine	ND	3000	ug/kg	43
Chrysene	ND	620	ug/kg	27
bis(2-Ethylhexyl) phthalate	**130 J**	**620**	**ug/kg**	**64**
Di-n-octyl phthalate	ND	620	ug/kg	260
Benzo(b)fluoranthene	ND	620	ug/kg	72
Benzo(k)fluoranthene	ND	620	ug/kg	36
Benzo(a)pyrene	ND	620	ug/kg	36
Indeno(1,2,3-cd)pyrene	ND	620	ug/kg	32
Benzo(ghi)perylene	ND	620	ug/kg	190

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	72	(19 - 115)
Phenol-d5	70	(27 - 115)
Nitrobenzene-d5	79	(10 - 115)
2-Fluorobiphenyl	80	(10 - 115)
2,4,6-Tribromophenol	79	(19 - 115)
Terphenyl-d14	81	(10 - 115)

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BECHTEL HANFORD, INC.

Client Sample ID: J015R1

GC/MS Semivolatiles

Lot-Sample #...: F3L160106-003 **Work Order #...:** F6QFL1AC **Matrix.....: SOLID**

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

BECHTEL HANFORD, INC.

J015R1

GC/MS Semivolatiles

Lot-Sample #: F3L160106-003 **Work Order #:** F6QFL1AC **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown aldol condensate		27000	M	2.904	ug/kg
Unknown		630	M	7.536	ug/kg
Diphenyl sulfide	139-66-2	310	M	9.854	ug/kg
Unknown organic acid		280	M	11.81	ug/kg
Unknown		1500	M	11.884	ug/kg
Unknown alkene		510	M	11.943	ug/kg
Unknown		330	M	12.093	ug/kg
Unknown		490	M	12.242	ug/kg
Unknown organic acid		310	M	12.782	ug/kg
Unknown organic acid		970	M	12.857	ug/kg
Unknown organic acid		2200	M	12.937	ug/kg
Unknown		440	M	13.792	ug/kg
Unknown organic acid		620	M	14.299	ug/kg
Unknown organic acid		370	M	14.459	ug/kg
Unknown cycloalkane		420	M	15.72	ug/kg
Unknown		280	M	15.971	ug/kg
1,21-Docosadiene	53057-53-7	520	M	16.292	ug/kg
Hexadecanal	629-80-1	400	M	16.96	ug/kg
Unknown organic acid		340	M	17.195	ug/kg
Unknown alkane		920	M	17.958	ug/kg
.Gamma.-sitosterol	83-47-6	670	M	18.423	ug/kg
Unknown alkane		2800	M	19.123	ug/kg
Unknown cycloalkane		4100	M	19.166	ug/kg
Unknown alkane		3400	M	20.202	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

BECHTEL HANFORD, INC.

Client Sample ID: J015R2

GC/MS Semivolatiles

Lot-Sample #...: F3L160106-004 **Work Order #...:** F6QFM1AC **Matrix.....:** SOLID
Date Sampled...: 12/12/03 **Date Received..:** 12/13/03
Prep Date.....: 12/18/03 **Analysis Date..:** 12/20/03
Prep Batch #...: 3352219
Dilution Factor: 1
% Moisture.....: 51 **Method.....:** SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Phenol	ND	680	ug/kg	180
bis(2-Chloroethyl)-ether	ND	680	ug/kg	27
2-Chlorophenol	ND	680	ug/kg	28
1,3-Dichlorobenzene	ND	680	ug/kg	24
1,4-Dichlorobenzene	ND	680	ug/kg	28
1,2-Dichlorobenzene	ND	680	ug/kg	25
2-Methylphenol	ND	680	ug/kg	40
2,2'-oxybis(1-Chloropropane)	ND	680	ug/kg	31
4-Methylphenol	ND	1400	ug/kg	100
N-Nitrosodi-n-propyl-amine	ND	680	ug/kg	40
Hexachloroethane	ND	680	ug/kg	33
Nitrobenzene	ND	680	ug/kg	37
Isophorone	ND	680	ug/kg	38
2-Nitrophenol	ND	680	ug/kg	40
2,4-Dimethylphenol	ND	680	ug/kg	58
bis(2-Chloroethoxy) methane	ND	680	ug/kg	42
2,4-Dichlorophenol	ND	680	ug/kg	52
1,2,4-Trichloro-benzene	ND	680	ug/kg	36
Naphthalene	ND	680	ug/kg	30
4-Chloroaniline	ND	680	ug/kg	63
Hexachlorobutadiene	ND	680	ug/kg	25
4-Chloro-3-methylphenol	ND	680	ug/kg	55
2-Methylnaphthalene	ND	680	ug/kg	30
Hexachlorocyclopenta-diene	ND	3300	ug/kg	150
2,4,6-Trichloro-phenol	ND	680	ug/kg	64
2,4,5-Trichloro-phenol	ND	680	ug/kg	62
2-Chloronaphthalene	ND	680	ug/kg	32
2-Nitroaniline	ND	3300	ug/kg	77
Dimethyl phthalate	ND	680	ug/kg	40
Acenaphthylene	ND	680	ug/kg	34
Acenaphthene	ND	680	ug/kg	34

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BECHTEL HANFORD, INC.

Client Sample ID: J015R2

GC/MS Semivolatiles

Lot-Sample #...: F3L160106-004 **Work Order #...:** F6QFM1AC **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2,6-Dinitrotoluene	ND	680	ug/kg	41
3-Nitroaniline	ND	3300	ug/kg	53
2,4-Dinitrophenol	ND	3300	ug/kg	130
4-Nitrophenol	ND	3300	ug/kg	87
Dibenzofuran	ND	680	ug/kg	46
Dibenzo(a,h)anthracene	ND	680	ug/kg	170
2,4-Dinitrotoluene	ND	680	ug/kg	36
Diethyl phthalate	ND	680	ug/kg	84
Fluorene	ND	680	ug/kg	39
4-Chlorophenyl phenyl ether	ND	680	ug/kg	37
4-Nitroaniline	ND	3300	ug/kg	45
4,6-Dinitro-2-methylphenol	ND	3300	ug/kg	130
N-Nitrosodiphenylamine	ND	680	ug/kg	43
Pyrene	ND	680	ug/kg	46
4-Bromophenyl phenyl ether	ND	680	ug/kg	46
Hexachlorobenzene	ND	680	ug/kg	36
Pentachlorophenol	ND	3300	ug/kg	240
Phenanthrene	ND	680	ug/kg	33
Anthracene	ND	680	ug/kg	37
Carbazole	ND	680	ug/kg	41
Di-n-butyl phthalate	ND	680	ug/kg	57
Fluoranthene	ND	680	ug/kg	47
Butyl benzyl phthalate	ND	680	ug/kg	53
Benzo(a)anthracene	ND	680	ug/kg	47
3,3'-Dichlorobenzidine	ND	3300	ug/kg	47
Chrysene	ND	680	ug/kg	29
bis(2-Ethylhexyl) phthalate	ND	680	ug/kg	70
Di-n-octyl phthalate	ND	680	ug/kg	290
Benzo(b)fluoranthene	ND	680	ug/kg	79
Benzo(k)fluoranthene	ND	680	ug/kg	40
Benzo(a)pyrene	ND	680	ug/kg	40
Indeno(1,2,3-cd)pyrene	ND	680	ug/kg	35
Benzo(ghi)perylene	ND	680	ug/kg	210

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	68	(19 - 115)
Phenol-d5	70	(27 - 115)
Nitrobenzene-d5	72	(10 - 115)
2-Fluorobiphenyl	73	(10 - 115)
2,4,6-Tribromophenol	72	(19 - 115)
Terphenyl-d14	83	(10 - 115)

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BECHTEL HANFORD, INC.

Client Sample ID: J015R2

GC/MS Semivolatiles

Lot-Sample #...: F3L160106-004 **Work Order #...:** F6QFM1AC **Matrix.....: SOLID**

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

BECHTEL HANFORD, INC.

J015R2

GC/MS Semivolatiles

Lot-Sample #: F3L160106-004 **Work Order #:** F6QFM1AC **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown aldol condensate		24000	M	3.805	ug/kg
Unknown		280	M	10.022	ug/kg
Bicyclo[3.1.1]heptane, 2,6,6-t	6876-13-7	490	M	13.099	ug/kg
Unknown		330	M	13.462	ug/kg
Unknown		970	M	15.113	ug/kg
Unknown alkane		1100	M	17.959	ug/kg
Unknown alkane		1200	M	19.204	ug/kg
Unknown		500	M	20.042	ug/kg
Unknown alkane		1400	M	20.368	ug/kg
Unknown cycloalkane		2400	M	20.422	ug/kg
Unknown alkane		1400	M	21.671	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: F3L160106 **Work Order #...:** F60KX1AA **Matrix.....:** SOLID
MB Lot-Sample #: F3L180000-219

Prep Date.....: 12/18/03
Analysis Date..: 12/19/03 **Prep Batch #...:** 3352219
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Phenol	ND	330	ug/kg	SW846 8270C
bis(2-Chloroethyl)-ether	ND	330	ug/kg	SW846 8270C
2-Chlorophenol	ND	330	ug/kg	SW846 8270C
1,3-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
1,4-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
1,2-Dichlorobenzene	ND	330	ug/kg	SW846 8270C
2-Methylphenol	ND	330	ug/kg	SW846 8270C
2,2'-oxybis(1-Chloropropa	ND	330	ug/kg	SW846 8270C
4-Methylphenol	ND	660	ug/kg	SW846 8270C
N-Nitrosodi-n-propyl-amine	ND	330	ug/kg	SW846 8270C
Hexachloroethane	ND	330	ug/kg	SW846 8270C
Nitrobenzene	ND	330	ug/kg	SW846 8270C
Isophorone	ND	330	ug/kg	SW846 8270C
2-Nitrophenol	ND	330	ug/kg	SW846 8270C
2,4-Dimethylphenol	ND	330	ug/kg	SW846 8270C
bis(2-Chloroethoxy) methane	ND	330	ug/kg	SW846 8270C
2,4-Dichlorophenol	ND	330	ug/kg	SW846 8270C
1,2,4-Trichloro-benzene	ND	330	ug/kg	SW846 8270C
Naphthalene	ND	330	ug/kg	SW846 8270C
4-Chloroaniline	ND	330	ug/kg	SW846 8270C
Hexachlorobutadiene	ND	330	ug/kg	SW846 8270C
4-Chloro-3-methylphenol	ND	330	ug/kg	SW846 8270C
2-Methylnaphthalene	ND	330	ug/kg	SW846 8270C
Hexachlorocyclopenta-diene	ND	1600	ug/kg	SW846 8270C
2,4,6-Trichloro-phenol	ND	330	ug/kg	SW846 8270C
2,4,5-Trichloro-phenol	ND	330	ug/kg	SW846 8270C
2-Chloronaphthalene	ND	330	ug/kg	SW846 8270C
2-Nitroaniline	ND	1600	ug/kg	SW846 8270C
Dimethyl phthalate	ND	330	ug/kg	SW846 8270C
Acenaphthene	ND	330	ug/kg	SW846 8270C
Acenaphthylene	ND	330	ug/kg	SW846 8270C
2,6-Dinitrotoluene	ND	330	ug/kg	SW846 8270C
3-Nitroaniline	ND	1600	ug/kg	SW846 8270C
2,4-Dinitrophenol	ND	1600	ug/kg	SW846 8270C

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METHOD BLANK REPORT

GC/MS Semivolatiles

Client Lot #...: F3L160106 **Work Order #...:** F60KX1AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
4-Nitrophenol	ND	1600	ug/kg	SW846 8270C
Dibenzofuran	ND	330	ug/kg	SW846 8270C
Dibenzo(a,h)anthracene	ND	330	ug/kg	SW846 8270C
2,4-Dinitrotoluene	ND	330	ug/kg	SW846 8270C
Diethyl phthalate	ND	330	ug/kg	SW846 8270C
Fluorene	ND	330	ug/kg	SW846 8270C
4-Chlorophenyl phenyl ether	ND	330	ug/kg	SW846 8270C
4-Nitroaniline	ND	1600	ug/kg	SW846 8270C
4,6-Dinitro-2-methylphenol	ND	1600	ug/kg	SW846 8270C
N-Nitrosodiphenylamine	ND	330	ug/kg	SW846 8270C
Pyrene	ND	330	ug/kg	SW846 8270C
4-Bromophenyl phenyl ether	ND	330	ug/kg	SW846 8270C
Hexachlorobenzene	ND	330	ug/kg	SW846 8270C
Pentachlorophenol	ND	1600	ug/kg	SW846 8270C
Phenanthrene	ND	330	ug/kg	SW846 8270C
Anthracene	ND	330	ug/kg	SW846 8270C
Carbazole	ND	330	ug/kg	SW846 8270C
Di-n-butyl phthalate	ND	330	ug/kg	SW846 8270C
Fluoranthene	ND	330	ug/kg	SW846 8270C
Butyl benzyl phthalate	ND	330	ug/kg	SW846 8270C
Benzo(a)anthracene	ND	330	ug/kg	SW846 8270C
3,3'-Dichlorobenzidine	ND	1600	ug/kg	SW846 8270C
Chrysene	ND	330	ug/kg	SW846 8270C
bis(2-Ethylhexyl) phthalate	ND	330	ug/kg	SW846 8270C
Di-n-octyl phthalate	ND	330	ug/kg	SW846 8270C
Benzo(b)fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(k)fluoranthene	ND	330	ug/kg	SW846 8270C
Benzo(a)pyrene	ND	330	ug/kg	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	330	ug/kg	SW846 8270C
Benzo(ghi)perylene	ND	330	ug/kg	SW846 8270C

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	66	(19 - 115)
Phenol-d5	69	(27 - 115)
Nitrobenzene-d5	69	(10 - 115)
2-Fluorobiphenyl	69	(10 - 115)
2,4,6-Tribromophenol	56	(19 - 115)
Terphenyl-d14	78	(10 - 115)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

BECHTEL HANFORD, INC.

Method Blank Report

GC/MS Semivolatiles

Lot-Sample #: F3L180000-219 B **Work Order #:** F60KX1AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Unknown aldol condensate		9800	M	3.799	ug/kg
Unkown		220	M	15.116	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: F3L160106 Work Order #...: F60KX1AC Matrix.....: SOLID
LCS Lot-Sample#: F3L180000-219
Prep Date.....: 12/18/03 Analysis Date..: 12/19/03
Prep Batch #...: 3352219
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Phenol	3330	2090	ug/kg	63	SW846 8270C
bis(2-Chloroethyl)-ether	3330	2200	ug/kg	66	SW846 8270C
2-Chlorophenol	3330	2160	ug/kg	65	SW846 8270C
2-Methylphenol	3330	2120	ug/kg	64	SW846 8270C
2,2'-oxybis(1-Chloropropa	3330	2170	ug/kg	65	SW846 8270C
N-Nitrosodi-n-propyl-amine	3330	2500	ug/kg	75	SW846 8270C
Hexachloroethane	3330	2280	ug/kg	68	SW846 8270C
Nitrobenzene	3330	2330	ug/kg	70	SW846 8270C
Isophorone	3330	2580	ug/kg	77	SW846 8270C
2-Nitrophenol	3330	2240	ug/kg	67	SW846 8270C
2,4-Dimethylphenol	3330	2130	ug/kg	64	SW846 8270C
bis(2-Chloroethoxy) methane	3330	2420	ug/kg	73	SW846 8270C
2,4-Dichlorophenol	3330	2200	ug/kg	66	SW846 8270C
1,2,4-Trichloro-benzene	3330	2220	ug/kg	67	SW846 8270C
Naphthalene	3330	2360	ug/kg	71	SW846 8270C
4-Chloroaniline	3330	1590	ug/kg	48	SW846 8270C
Hexachlorobutadiene	3330	2190	ug/kg	66	SW846 8270C
4-Chloro-3-methylphenol	3330	2320	ug/kg	70	SW846 8270C
2-Methylnaphthalene	3330	2270	ug/kg	68	SW846 8270C
Hexachlorocyclopenta-diene	3330	2210	ug/kg	66	SW846 8270C
2,4,6-Trichloro-phenol	3330	2230	ug/kg	67	SW846 8270C
2,4,5-Trichloro-phenol	3330	2310	ug/kg	69	SW846 8270C
2-Nitroaniline	3330	2530	ug/kg	76	SW846 8270C
Dimethyl phthalate	3330	2430	ug/kg	73	SW846 8270C
Acenaphthylene	3330	2530	ug/kg	76	SW846 8270C
Acenaphthene	3330	2450	ug/kg	74	SW846 8270C
2,6-Dinitrotoluene	3330	2460	ug/kg	74	SW846 8270C

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LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: F3L160106 Work Order #...: F60KX1AC Matrix.....: SOLID
LCS Lot-Sample#: F3L180000-219

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
3-Nitroaniline	3330	1760	ug/kg	53	SW846 8270C
2,4-Dinitrophenol	3330	1410	ug/kg	42	SW846 8270C
4-Nitrophenol	3330	2330	ug/kg	70	SW846 8270C
Dibenzofuran	3330	2410	ug/kg	72	SW846 8270C
Dibenzo(a,h)anthracene	3330	2490	ug/kg	75	SW846 8270C
2,4-Dinitrotoluene	3330	2650	ug/kg	80	SW846 8270C
Diethyl phthalate	3330	2550	ug/kg	76	SW846 8270C
Fluorene	3330	2450	ug/kg	74	SW846 8270C
4-Chlorophenyl phenyl ether	3330	2400	ug/kg	72	SW846 8270C
4-Nitroaniline	3330	2360	ug/kg	71	SW846 8270C
4,6-Dinitro-2-methylphenol	3330	1840	ug/kg	55	SW846 8270C
N-Nitrosodiphenylamine	3330	2750	ug/kg	82	SW846 8270C
Pyrene	3330	2680	ug/kg	80	SW846 8270C
4-Bromophenyl phenyl ether	3330	2430	ug/kg	73	SW846 8270C
Hexachlorobenzene	3330	2510	ug/kg	75	SW846 8270C
Pentachlorophenol	3330	2020	ug/kg	61	SW846 8270C
Phenanthrene	3330	2510	ug/kg	75	SW846 8270C
Anthracene	3330	2520	ug/kg	75	SW846 8270C
Carbazole	3330	2560	ug/kg	77	SW846 8270C
Di-n-butyl phthalate	3330	2590	ug/kg	78	SW846 8270C
Fluoranthene	3330	2420	ug/kg	73	SW846 8270C
Butyl benzyl phthalate	3330	2740	ug/kg	82	SW846 8270C
Benzo(a)anthracene	3330	2630	ug/kg	79	SW846 8270C
3,3'-Dichlorobenzidine	3330	1700	ug/kg	51	SW846 8270C
Chrysene	3330	2720	ug/kg	82	SW846 8270C
bis(2-Ethylhexyl) phthalate	3330	2690	ug/kg	81	SW846 8270C
Di-n-octyl phthalate	3330	2620	ug/kg	79	SW846 8270C
Benzo(b)fluoranthene	3330	2630	ug/kg	79	SW846 8270C
Benzo(k)fluoranthene	3330	2740	ug/kg	82	SW846 8270C
Benzo(a)pyrene	3330	2540	ug/kg	76	SW846 8270C
Indeno(1,2,3-cd)pyrene	3330	2410	ug/kg	72	SW846 8270C
Benzo(ghi)perylene	3330	2600	ug/kg	78	SW846 8270C

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Semivolatiles

Client Lot #...: F3L160106 **Work Order #...:** F60KX1AC **Matrix.....:** SOLID
LCS Lot-Sample#: F3L180000-219

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2-Fluorophenol	70	(30 - 115)
Phenol-d5	68	(41 - 115)
Nitrobenzene-d5	73	(20 - 115)
2-Fluorobiphenyl	75	(23 - 123)
2,4,6-Tribromophenol	72	(41 - 119)
Terphenyl-d14	75	(17 - 120)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters