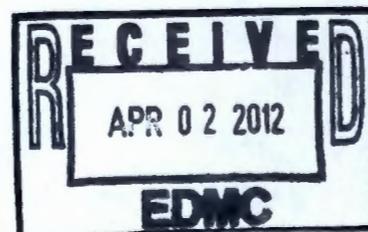


**Problems and Discrepancies**  
SDG SL677-CHEM-1

7/26/07

1. Matrix spike and duplicate data are missing for total organic halides in batch 7099104 in both the EDD and hardcopy. Please include these data and resubmit both the EDD and hardcopy.
2. A C qualifier is missing for nitrogen in nitrate in sample BIM9B4 (F7C240121-002) (batch 7085122) in both the EDD and hard copy. Please correct in both and resubmit.

1212862



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**Internal Corrective Actions**

SDG Number: SL677

Type:  Chemistry  Radiochemistry

Verified by: Debbie Sklarew

Date: 7/26/07

1. None

# Completeness Report for SDG SL677

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COC	Sample
✓/07-032-3	B1MDH6
✓/S07-003-129	B1MFB1
✓/S07-003-133	B1MFB3
✓/S07-003-27	B1MDY3
✓/S07-003-353	B1MFF7
✓/S07-003-354	B1MFF8
✓/W07-002-508	B1M9B3 B1M9B4
✓/W07-003-110	B1MKY2 B1MKY3
✓/W07-003-12	B1MJL0 B1MJL1
✓/W07-003-198	B1MKK5 B1MKK6
✓/W07-003-206	B1MKL0 B1MKL1
✓/W07-003-222	B1MKM0 B1MKM1
✓/W07-003-268	B1MKN0 B1MKN1
✓/W07-003-269	B1MKN4 B1MKN5
✓/W07-003-276	B1MKN9 B1MKP0
✓/W07-003-509	B1MKR6
✓/W07-003-510	B1MKR9
✓/W07-003-511	B1MKT2
✓/W07-003-512	B1MKT5

COC	Sample
✓/W07-003-514	B1MKV1
✓/W07-003-515	B1MKV4
✓/W07-003-58	B1MKV8 B1MKV9
✓/W07-003-64	B1MKW2 B1MKW3
✓/W07-003-70	B1MKW6 B1MKW7
✓/W07-003-76	B1MKX0 B1MKX1
✓/W07-003-82	B1MKX4 B1MKX5
✓/W07-003-90	B1MJT0 B1MJT1 B1MJT2 B1MJT3 B1MJT4 B1MJT5
✓/W07-003-96	B1MKX8 B1MKX9
✓/W07-004-210	B1MWY8 B1MWY9

Number of samples:50 ✓

Issue Resolution Forms \_\_\_\_\_

✓ 6010\_METALS\_ICP

Count	Sample	Data Group
1	✓ B1M9B3	SL677_c0
2	✓ B1MJL0	SL677_c0
3	✓ B1MJL0	SL677_c0
4	✓ B1MJT4	SL677_c0
5	✓ B1MJT4	SL677_c0
6	✓ B1MKK5	SL677_c0
7	✓ B1MKK5	SL677_c0
8	✓ B1MKL0	SL677_c0
9	✓ B1MKL0	SL677_c0
10	✓ B1MKM0	SL677_c0
11	✓ B1MKM0	SL677_c0
12	✓ B1MKN0	SL677_c0
13	✓ B1MKN0	SL677_c0
14	✓ B1MKN4	SL677_c0
15	✓ B1MKN4	SL677_c0
16	✓ B1MKN9	SL677_c0
17	✓ B1MKN9	SL677_c0
18	✓ B1MKV8	SL677_c0
19	✓ B1MKV8	SL677_c0
20	✓ B1MKV9	SL677_c0
21	✓ B1MKV9	SL677_c0
22	✓ B1MKW2	SL677_c0
23	✓ B1MKW2	SL677_c0
24	✓ B1MKW3	SL677_c0
25	✓ B1MKW3	SL677_c0
26	✓ B1MKW6	SL677_c0
27	✓ B1MKW6	SL677_c0
28	✓ B1MKW7	SL677_c0
29	✓ B1MKW7	SL677_c0
30	✓ B1MKX0	SL677_c0
31	✓ B1MKX0	SL677_c0
32	✓ B1MKX1	SL677_c0
33	✓ B1MKX1	SL677_c0
34	✓ B1MKX4	SL677_c0
35	✓ B1MKX4	SL677_c0
36	✓ B1MKX5	SL677_c0
37	✓ B1MKX5	SL677_c0
38	✓ B1MKX8	SL677_c0
39	✓ B1MKX8	SL677_c0
40	✓ B1MKX9	SL677_c0
41	✓ B1MKX9	SL677_c0
42	✓ B1MKY2	SL677_c0
43	✓ B1MKY2	SL677_c0
44	✓ B1MKY3	SL677_c0
45	✓ B1MKY3	SL677_c0
46	✓ B1MWY8	SL677_c0
47	✓ B1MWY8	SL677_c0

8260\_VOA\_GCMS

Count	Sample	Data Group
2	✓ B1MFF8	SL677_c0
3	✓ B1MKR6	SL677_c0
4	✓ B1MKR6	SL677_c0
5	✓ B1MKR9	SL677_c0
6	✓ B1MKR9	SL677_c0
7	✓ B1MKT2	SL677_c0
8	✓ B1MKT2	SL677_c0
9	✓ B1MKT5	SL677_c0
10	✓ B1MKT5	SL677_c0
11	✓ B1MKV1	SL677_c0
12	✓ B1MKV1	SL677_c0
13	✓ B1MKV4	SL677_c0
14	✓ B1MKV4	SL677_c0

✓ 6020\_METALS\_ICPMS

Count	Sample	Data Group
1	✓ B1MDH6	SL677_c0
2	✓ B1MJT4	SL677_c0
3	✓ B1MJT4	SL677_c0

✓ 8260\_VOA\_GCMS

Count	Sample	Data Group
1	✓ B1MFF7	SL677_c0

<b>B1M9B4</b>	✓300.0_ANIONS_IC	SL677_c0	✓310.1_ALKALINITY	4
	✓9020_TOX	SL677_c0	✓9012_CYANIDE	6
	✓9020_TOX	SL677_c0	✓9020_TOX	14
<b>B1MDY3</b>	✓9060_TOC	SL677_c0	✓9060_TOC	22
	✓9060_TOC	SL677_c0	✓WTPH_DIESEL	1
<b>WTPH_DIESEL</b>	SL677_c0			
<b>B1MFB1</b>	✓300.0_ANIONS_IC	SL677_c0	<b>B1MKW3</b>	
	✓310.1_ALKALINITY	SL677_c0	✓300.0_ANIONS_IC	SL677_c0
			✓300.0_ANIONS_IC	SL677_c0
<b>B1MFB3</b>	✓300.0_ANIONS_IC	SL677_c0	✓9020_TOX	SL677_c0
	✓310.1_ALKALINITY	SL677_c0	✓9020_TOX	SL677_c0
			✓9060_TOC	SL677_c0
			✓9060_TOC	SL677_c0
<b>B1MJL1</b>	✓300.0_ANIONS_IC	SL677_c0	<b>B1MKW7</b>	
	✓300.0_ANIONS_IC	SL677_c0	✓300.0_ANIONS_IC	SL677_c0
			✓300.0_ANIONS_IC	SL677_c0
<b>B1MJT0</b>	✓9060_TOC	SL677_c0	✓9020_TOX	SL677_c0
	✓9060_TOC	SL677_c0	✓9020_TOX	SL677_c0
			✓9060_TOC	SL677_c0
			✓9060_TOC	SL677_c0
<b>B1MJT1</b>	✓9060_TOC	SL677_c0	<b>B1MKX1</b>	
	✓9060_TOC	SL677_c0	✓300.0_ANIONS_IC	SL677_c0
			✓300.0_ANIONS_IC	SL677_c0
<b>B1MJT2</b>	✓9060_TOC	SL677_c0	✓9020_TOX	SL677_c0
	✓9060_TOC	SL677_c0	✓9020_TOX	SL677_c0
			✓9060_TOC	SL677_c0
			✓9060_TOC	SL677_c0
<b>B1MJT3</b>	✓9060_TOC	SL677_c0	<b>B1MKX5</b>	
	✓9060_TOC	SL677_c0	✓300.0_ANIONS_IC	SL677_c0
			✓300.0_ANIONS_IC	SL677_c0
<b>B1MJT5</b>	✓300.0_ANIONS_IC	SL677_c0	✓9020_TOX	SL677_c0
	✓300.0_ANIONS_IC	SL677_c0	✓9020_TOX	SL677_c0
			✓9060_TOC	SL677_c0
			✓9060_TOC	SL677_c0
<b>B1MKK6</b>	✓300.0_ANIONS_IC	SL677_c0	<b>B1MKX9</b>	
	✓300.0_ANIONS_IC	SL677_c0	✓300.0_ANIONS_IC	SL677_c0
	✓9012_CYANIDE	SL677_c0	✓300.0_ANIONS_IC	SL677_c0
	✓9012_CYANIDE	SL677_c0	✓9020_TOX	SL677_c0
<b>B1MKL1</b>	✓300.0_ANIONS_IC	SL677_c0	✓9020_TOX	SL677_c0
	✓300.0_ANIONS_IC	SL677_c0	✓9060_TOC	SL677_c0
	✓9012_CYANIDE	SL677_c0	✓9060_TOC	SL677_c0
	✓9012_CYANIDE	SL677_c0		
<b>B1MKM1</b>	✓300.0_ANIONS_IC	SL677_c0	<b>B1MKY3</b>	
	✓300.0_ANIONS_IC	SL677_c0	✓300.0_ANIONS_IC	SL677_c0
	✓9012_CYANIDE	SL677_c0	✓300.0_ANIONS_IC	SL677_c0
	✓9012_CYANIDE	SL677_c0	✓9020_TOX	SL677_c0
<b>B1MKN1</b>	✓300.0_ANIONS_IC	SL677_c0	✓9020_TOX	SL677_c0
	✓300.0_ANIONS_IC	SL677_c0	✓9060_TOC	SL677_c0
			✓9060_TOC	SL677_c0
<b>B1MKN5</b>	✓300.0_ANIONS_IC	SL677_c0	<b>B1MWY9</b>	
	✓300.0_ANIONS_IC	SL677_c0	✓120.1_CONDUCT	SL677_c0
			✓120.1_CONDUCT	SL677_c0
<b>B1MKP0</b>	✓300.0_ANIONS_IC	SL677_c0	✓300.0_ANIONS_IC	SL677_c0
	✓300.0_ANIONS_IC	SL677_c0	✓300.0_ANIONS_IC	SL677_c0
			✓310.1_ALKALINITY	SL677_c0
			✓310.1_ALKALINITY	SL677_c0
<b>B1MKV9</b>	✓300.0_ANIONS_IC	SL677_c0	<b>Summary</b>	
			<b>Method</b>	<b>Samples</b>
			✓120.1_CONDUCT	2
			✓300.0_ANIONS_IC	35

# Data Verification Report

## SDG SL677

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### Section A. Data/Qualifier Errors

A.1 B/C qualifier is missing (associated method blank result is > Reporting Limit). *Result > 5 \* blk result - C qual not needed 8/7/26/6*

Count	Header/Detail Lines	Sample ID	Lab_Sample_ID	Method	CAS #	Constituent	Result	Units	Qual	QC	Additional Information
1	1639 / 1643	B1M9B4	F7C240121002	300.0_ANIONS_IC	NO3-N	Nitrogen in Nitrate	16.5	mg/L	D		Blank result = .013, R.L. = .2

## Section B. Completeness Errors

B.1 Method blank data is missing. *Internal issue. Off 7/26/07*

Count	Header/Detail Lines	Sample ID	Lab_Sample_ID	Method	CAS #	Constituent	Batch	Additional Information
1	/			8260_VOA_GCMS	136777-61-2	(m+p)-Xylene	7087139	
2	/			8260_VOA_GCMS	630-20-6	1,1,1,2-Tetrachloroethane	7087139	
3	/			8260_VOA_GCMS	79-34-5	1,1,2,2-Tetrachloroethane	7087139	
4	/			8260_VOA_GCMS	76-13-1	1,1,2-Trichloro-1,2,2-trifluor	7087139	
5	/			8260_VOA_GCMS	563-58-6	1,1-Dichloropropene	7087139	
6	/			8260_VOA_GCMS	87-61-6	1,2,3-Trichlorobenzene	7087139	
7	/			8260_VOA_GCMS	120-82-1	1,2,4-Trichlorobenzene	7087139	
8	/			8260_VOA_GCMS	96-12-8	1,2-Dibromo-3-chloropropan	7087139	
9	/			8260_VOA_GCMS	106-93-4	1,2-Dibromoethane	7087139	
10	/			8260_VOA_GCMS	95-50-1	1,2-Dichlorobenzene	7087139	
11	/			8260_VOA_GCMS	540-59-0	1,2-Dichloroethene (Total)	7087139	
12	/			8260_VOA_GCMS	78-87-5	1,2-Dichloropropane	7087139	
13	/			8260_VOA_GCMS	108-67-8	1,3,5-Trimethylbenzene	7087139	
14	/			8260_VOA_GCMS	541-73-1	1,3-Dichlorobenzene	7087139	
15	/			8260_VOA_GCMS	142-28-9	1,3-Dichloropropane	7087139	
16	/			8260_VOA_GCMS	594-20-7	2,2-Dichloropropane	7087139	
17	/			8260_VOA_GCMS	110-75-8	2-Chloroethyl vinyl ether	7087139	
18	/			8260_VOA_GCMS	95-49-8	2-Chlorotoluene	7087139	
19	/			8260_VOA_GCMS	591-78-6	2-Hexanone	7087139	
20	/			8260_VOA_GCMS	79-46-9	2-Nitropropane	7087139	
21	/			8260_VOA_GCMS	106-43-4	4-Chlorotoluene	7087139	
22	/			8260_VOA_GCMS	79-20-9	Acetic acid, methyl ester	7087139	
23	/			8260_VOA_GCMS	75-05-8	Acetonitrile	7087139	
24	/			8260_VOA_GCMS	107-02-8	Acrolein	7087139	
25	/			8260_VOA_GCMS	107-13-1	Acrylonitrile	7087139	
26	/			8260_VOA_GCMS	107-05-1	Allyl chloride	7087139	
27	/			8260_VOA_GCMS	108-86-1	Bromobenzene	7087139	
28	/			8260_VOA_GCMS	74-97-5	Bromochloromethane	7087139	
29	/			8260_VOA_GCMS	75-27-4	Bromodichloromethane	7087139	
30	/			8260_VOA_GCMS	75-25-2	Bromoform	7087139	
31	/			8260_VOA_GCMS	74-83-9	Bromomethane	7087139	
32	/			8260_VOA_GCMS	108-90-7	Chlorobenzene	7087139	
33	/			8260_VOA_GCMS	75-00-3	Chloroethane	7087139	
34	/			8260_VOA_GCMS	74-87-3	Chloromethane	7087139	
35	/			8260_VOA_GCMS	126-99-8	Chloroprene	7087139	
36	/			8260_VOA_GCMS	10061-01-5	cis-1,3-Dichloropropene	7087139	
37	/			8260_VOA_GCMS	110-82-7	Cyclohexane	7087139	
38	/			8260_VOA_GCMS	108-94-1	Cyclohexanone	7087139	
39	/			8260_VOA_GCMS	124-48-1	Dibromochloromethane	7087139	
40	/			8260_VOA_GCMS	75-71-8	Dichlorodifluoromethane	7087139	
41	/			8260_VOA_GCMS	60-29-7	Diethyl ether	7087139	

## B.1 Method blank data is missing.

Count	Header/Detail Lines	Sample ID	Lab_Sample_ID	Method	CAS #	Constituent	Batch	Additional Information
42	/			8260_VOA_GCMS	141-78-6	Ethyl acetate	7087139	
43	/			8260_VOA_GCMS	97-63-2	Ethyl methacrylate	7087139	
44	/			8260_VOA_GCMS	87-68-3	Hexachlorobutadiene	7087139	
45	/			8260_VOA_GCMS	110-54-3	Hexane	7087139	
46	/			8260_VOA_GCMS	74-88-4	Iodomethane	7087139	
47	/			8260_VOA_GCMS	78-83-1	Isobutyl alcohol	7087139	
48	/			8260_VOA_GCMS	98-82-8	Isopropylbenzene	7087139	
49	/			8260_VOA_GCMS	126-98-7	Methacrylonitrile	7087139	
50	/			8260_VOA_GCMS	108-87-2	Methyl cyclohexane	7087139	
51	/			8260_VOA_GCMS	80-62-6	Methyl methacrylate	7087139	
52	/			8260_VOA_GCMS	1634-04-4	Methyl tert-butyl ether	7087139	
53	/			8260_VOA_GCMS	91-20-3	Naphthalene	7087139	
54	/			8260_VOA_GCMS	104-51-8	n-Butylbenzene	7087139	
55	/			8260_VOA_GCMS	103-65-1	n-Propylbenzene	7087139	
56	/			8260_VOA_GCMS	95-47-6	o-Xylene	7087139	
57	/			8260_VOA_GCMS	99-87-6	p-Cymene	7087139	
58	/			8260_VOA_GCMS	76-01-7	Pentachloroethane	7087139	
59	/			8260_VOA_GCMS	135-98-8	sec-Butylbenzene	7087139	
60	/			8260_VOA_GCMS	100-42-5	Styrene	7087139	
61	/			8260_VOA_GCMS	98-06-6	tert-Butylbenzene	7087139	
62	/			8260_VOA_GCMS	10061-02-6	trans-1,3-Dichloropropene	7087139	
63	/			8260_VOA_GCMS	110-57-6	trans-1,4-Dichloro-2-butene	7087139	
64	/			8260_VOA_GCMS	75-69-4	Trichloromonofluoromethan	7087139	
65	/			8260_VOA_GCMS	108-05-4	Vinyl acetate	7087139	

## B.2 Matrix duplicate data is missing.

Count	Header/Detail Lines	Sample ID	Lab_Sample_ID	Method	CAS #	Constituent	Batch	Additional Information
1	/			300.0_ANIONS_IC	24959-67-9	Bromide		Num_Samples = 1, Dups_Required = 1, Dups_Reported = 0
2	/			300.0_ANIONS_IC	14265-44-2	Phosphate		Num_Samples = 1, Dups_Required = 1, Dups_Reported = 0
3	/			9020_TOX	59473-04-0	Total organic halides		Num_Samples = 7, Dups_Required = 1, Dups_Reported = 0

*in case narrative Oct 7/26/07*

*P+D*

## B.3 Matrix spike data is missing.

Count	Header/Detail Lines	Sample ID	Lab_Sample_ID	Method	CAS #	Constituent	Batch	Additional Information
1	/			300.0_ANIONS_IC				Num_Samples = 1, MS_Required = 1, MS_Reported = 0
2	/			300.0_ANIONS_IC				Num_Samples = 1, MS_Required = 1, MS_Reported = 0
3	/			9020_TOX				Num_Samples = 7, MS_Required = 1, MS_Reported = 0

*in case narr Oct 7/26/07*

*P+D*

B.4 No results were reported for the requested constituent.

*Not ordered - glitch in program*

Count	Header/Detail Lines	Sample ID	Lab_Sample_ID	Method	CAS #	Constituent	Batch	Additional Information
1	/	B1MDY3		WTPH_DIESEL		TPHKEROSE Total petroleum hydrocarbo		SERVICE_LIST_NAME = TPH-Diesel Range - WTPH-D

### Section C. Summary of Detection Limit Discrepancies

C.1 Reference IDL/MDL not available or could not be calculated for this constituent. *Internal issue D4 7/26/07*

Count	Method	CAS #	Constituent	Reporting_Limit	Adjusted_MDL	IDL_1	IDL_2	IDL_3	Units	Records
1	6010_METALS_ICP	7440-36-0	Antimony	44.8					ug/L	38
2	6010_METALS_ICP	7440-39-3	Barium	5					ug/L	38
3	6010_METALS_ICP	7440-41-7	Beryllium	0.51					ug/L	38
4	6010_METALS_ICP	7440-43-9	Cadmium	2.3					ug/L	38
5	6010_METALS_ICP	7440-70-2	Calcium	36					ug/L	38
6	6010_METALS_ICP	7440-47-3	Chromium	3.1					ug/L	38
7	6010_METALS_ICP	7440-48-4	Cobalt	5					ug/L	38
8	6010_METALS_ICP	7440-50-8	Copper	2.8					ug/L	38
9	6010_METALS_ICP	7439-89-6	Iron	25					ug/L	38
10	6010_METALS_ICP	7439-95-4	Magnesium	108					ug/L	38
11	6010_METALS_ICP	7439-96-5	Manganese	2.5					ug/L	38
12	6010_METALS_ICP	7440-02-0	Nickel	7.5					ug/L	38
13	6010_METALS_ICP	7440-09-7	Potassium	1500					ug/L	38
14	6010_METALS_ICP	7440-22-4	Silver	5.2					ug/L	38
15	6010_METALS_ICP	7440-23-5	Sodium	110					ug/L	38
16	6010_METALS_ICP	7440-24-6	Strontium	0.56					ug/L	38
17	6010_METALS_ICP	7440-62-2	Vanadium	5.9					ug/L	38
18	6010_METALS_ICP	7440-66-6	Zinc	9.6					ug/L	38
19	6020_METALS_ICPMS	7440-38-2	Arsenic	2					ug/L	5
20	6020_METALS_ICPMS	7439-92-1	Lead	0.49					ug/L	5

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**

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W07-003

Lot #: F7C220104  
SDG #: SL677

Dot Stewart

Pacific Northwest National Lab  
3110 Port of Benton Blvd.  
Sigma 5 MS K694  
Richland, WA 99352

SEVERN TRENT LABORATORIES, INC.

*Janus M. K. O'Donnell*  
for  
**Brian O'Donnell**  
Project Manager

*212 pp.*  
*Rec 5/1/07*

April 30, 2007

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

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

## CASE NARRATIVE

Pacific Northwest National Laboratories  
P.O. Box 1970  
Richland, Washington 99352  
April 30, 2007  
Attention: Dot Stewart

---

SDG	:	SL677
Number of Samples	:	50
Sample Matrix	:	Water
Data Deliverable	:	Summary
Date SDG Closed	:	March 23, 2007

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### II. Introduction

Between March 21, 2007 and March 24, 2007, fifty (50) water samples were received by STL St. Louis for chemical analysis. The samples were received within temperature criteria. See the COC and CUR forms for documentation of any variations on receipt conditions and temperature. Upon receipt, the samples were given laboratory Ids to correspond with specific client Ids. Please refer to the Sample Summary sheets attached to this case narrative. This report is incomplete without the narrative.

### III. Analytical Results/ Methodology

The analytical results for this report are presented by analytical test. Each set of data includes sample identification information, analytical results and the appropriate detection limits. All results are based upon samples as they were received, i.e. wet weight, unless otherwise noted on the data sheets. See the attached Methods Summary Form for the methods used in this SDG.

Deviation from Request:           None

### IV. Definitions

QCBLK-	Quality Control Blank, Method Blank
QCLCS-	Quality Control Laboratory Control Sample, Blank Spike
DUP-	Laboratory Duplicate
MS-	Matrix Spike
MSD-	Matrix Spike Duplicate

Pacific Northwest National Laboratories  
April 30, 2007  
SDG: SL677

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

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

## V. Comments

### General

The following SAFs are associated with this SDG: W07-003, S07-003, W07-004, W07-002, S07-002, I07-032.

The term "Detection Limit" used in the analytical data report refers to either the lab's standard reporting limits or contractually required reporting limits, whichever is applicable.

### Volatiles

The MS/MSD recoveries are outside QC limits for less than 10% of the compounds spiked. Laboratory QC practices, based on federal guidance documents, allow for up to 10% of the spike compounds to be outside QC criteria without necessitating re-preparation/re-analysis. Sample purge efficiency and compliance is demonstrated by the remaining acceptable MS/MSD recoveries. The MS and MSD were analyzed out of the BFB clock due to tape on one of the samples sticking on the gripper which stopped the Instrument.

**Batch:**

7093119

**Affected Samples:**

F7C220175 (11): B1MKR9

F7C230155 (6): B1MKT5

F7C220175 (12): B1MKR6

F7C230155 (7): B1MKV1

The associated sample was analyzed at a dilution due to high concentrations of target analyte (cis-1,2-Dichloroethene). The reporting limit has been adjusted only for those targets reported from the dilution run.

**Batch:**

7093119

**Affected Samples:**

F7C230155 (6): B1MKT5

### Extractable Petroleum Hydrocarbons

The Method Blank surrogate recovery is outside acceptance limits. Samples, associated with this method blank, demonstrated acceptable surrogate recoveries indicating the surrogate excursion is isolated to the method blank and not indicative of the batch.

**Affected Samples:**

F7C240130 (1): B1MDY3

### Ion Chromatography

Chloride was observed in the CCB above the reporting limit. Associated samples exhibited concentrations greater than ten (10) times the concentrations observed in the method blank, and did not require re-analysis. Results are reported in batch 7081238.

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The anion matrix spike solution contains all routine anions. Spiking technique, sample preparation and method compliance is demonstrated by the remaining acceptable MS recoveries. Poor matrix spike recovery for Chloride in batch 7081238, Fluoride in batch 7081239, and Nitrite in batch 7081241 is attributed to matrix interference.

The sample duplicate %RPD for Chloride in batch 7081238 and Fluoride in batch 7081239 are outside the established QC limits. A matrix interference is physically evident in the sample. Method performance is demonstrated by acceptable LCS recovery.

**Affected Samples:**

F7C220104 (2): B1MKV9  
F7C220104 (4): B1MKW3  
F7C220104 (6): B1MKW7

F7C220104 (8): B1MKX1  
F7C220104 (10): B1MKX5  
F7C220104 (12): B1MKX9

The sample was analyzed at a dilution due to the presence of matrix interferences. The reporting limit has been adjusted for the dilution for Nitrite in batch 7082190.

Chloride was observed in the CCB above the reporting limit. Associated samples exhibited concentrations greater than ten (10) times the concentrations observed in the method blank, and did not require re-analysis. Results are reported in batch 7082187.

The anion matrix spike solution contains all routine anions. Spiking technique, sample preparation and method compliance is demonstrated by the remaining acceptable MS recoveries. Poor matrix spike recovery for Sulfate in batch 7082189 and Nitrite in batch 7082190 is attributed to matrix interference.

The sample duplicate %RPD for Nitrite in batch 7082190 is outside the established QC limits. A matrix interference is physically evident in the sample. Method performance is demonstrated by acceptable LCS recovery.

**Affected Samples:**

F7C220175 (6): B1MJT5  
F7C220175 (8): B1MKY3

F7C220175 (10): B1MKK6  
F7C220227 (1): B1MFB1

The associated samples were analyzed at a dilution due to the presence of matrix interferences. The reporting limit has been adjusted for the dilution for Nitrite in batches 7085097.

**Affected Samples:**

F7C230155 (2): B1MKL1

F7C230157 (1): B1MFB3

The anion matrix spike solution contains all routine anions. Spiking technique, sample preparation and method compliance is demonstrated by the remaining acceptable MS recoveries. Poor matrix spike recovery for Chloride in batch 7085118 and Nitrite in batch 7085121 is attributed to matrix interference.

Chloride was observed in the method blank above the reporting limit. Associated samples were either non-detect for the contaminant or exhibited concentrations greater than ten (10) times the concentrations observed in the method blank, and did not require re-analysis. Results are reported in batch 7085118.

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**Affected Samples:**

F7C240118 (2): B1MJL1  
F7C240118 (4): B1MKN1  
F7C240118 (6): B1MKN5

F7C240118 (8): B1MKP0  
F7C240121 (2): B1M9B4

No matrix spikes/duplicates were performed in Bromide batch 7089198, Nitrate batch 7085098 or Orthophosphate batch 7085281. LCS/LCSDs were performed to demonstrate accuracy and precision.

**Affected Samples:**

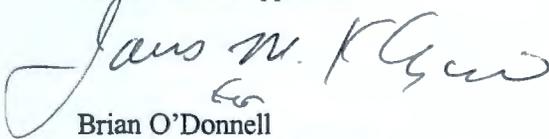
F7C230263 (2): B1MWY9

There were no observations or nonconformances to report for the following analyses:

**Alkalinity**  
**Conductivity**  
**Cyanide**  
**ICP Metals**  
**ICP-MS Metals**  
**Total Organic Carbon**  
**Total Organic Halogens**

I certify that this Summary Package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. The Laboratory Manager or a designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Reviewed and approved:



Brian O'Donnell  
St. Louis Project Manager

**METHODS SUMMARY**

SL677

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Alkalinity	MCAWW 310.1	MCAWW 310.1
Bromide	MCAWW 300.0A	MCAWW 300.0A
Chloride	MCAWW 300.0A	MCAWW 300.0A
Extractable Petroleum Hydrocarbons	SW846 8015 MOD	SW846 3510
Fluoride	MCAWW 300.0A	MCAWW 300.0A
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3010A
ICP-MS (6020)	SW846 6020	
Nitrate as N	MCAWW 300.0A	MCAWW 300.0A
Nitrate as NO3	MCAWW 300.0A	
Nitrite as N	MCAWW 300.0A	MCAWW 300.0A
Phosphate as P, Ortho	MCAWW 300.0A	MCAWW 300.0A
Specific Conductance	MCAWW 120.1	
Sulfate	MCAWW 300.0A	MCAWW 300.0A
Total Cyanide	SW846 9012	SW846 9012
Total Organic Carbon	SW846 9060	SW846 9060
Total Organic Halogens	SW846 9020B	SW846 9020B
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826

**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.

**SAMPLE SUMMARY**

SL677 : F7C220104

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
JRHE0	001	B1MKV8	03/20/07	11:13
JRHE2	002	B1MKV9	03/20/07	11:13
JRHE5	003	B1MKW2	03/20/07	10:31
JRHE6	004	B1MKW3	03/20/07	10:31
JRHE8	005	B1MKW6	03/20/07	09:51
JRHFA	006	B1MKW7	03/20/07	09:51
JRHFD	007	B1MKX0	03/20/07	12:27
JRHFE	008	B1MKX1	03/20/07	12:27
JRHFF	009	B1MKX4	03/20/07	09:15
JRHFH	010	B1MKX5	03/20/07	09:15
JRHFJ	011	B1MKX8	03/20/07	11:49
JRHFK	012	B1MKX9	03/20/07	11:49

**NOTE(S) :**

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- 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.

(Continued on next page)

**SAMPLE SUMMARY**

SL677 : F7C220175

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
JRH8F	001	B1MJT0	03/21/07	10:37
JRH8X	002	B1MJT1	03/21/07	10:37
JRH80	003	B1MJT2	03/21/07	10:37
JRH81	004	B1MJT3	03/21/07	10:37
JRH89	005	B1MJT4	03/21/07	10:37
JRJQN	006	B1MJT5	03/21/07	10:37
JRJQ0	007	B1MKY2	03/21/07	09:20
JRJQ4	008	B1MKY3	03/21/07	09:20
JRJQ8	009	B1MKK5	03/21/07	11:36
JRJRE	010	B1MKK6	03/21/07	11:36
JRJR5	011	B1MKR9	03/21/07	10:16
JRJTC	012	B1MKR6	03/21/07	11:39

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(Continued on next page)

**SAMPLE SUMMARY**

SL677 : F7C220227

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
JRJT2	001	B1MFB1	03/21/07	11:39
JRJVA	002	B1MFF7	03/21/07	10:16

**NOTE (S) :**

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(Continued on next page)

**SAMPLE SUMMARY**

SL677 : F7C230155

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
JRLWW	001	B1MKL0	03/22/07	13:33
JRLW0	002	B1MKL1	03/22/07	13:33
JRLW2	003	B1MKM0	03/22/07	12:25
JRLW3	004	B1MKM1	03/22/07	12:25
JRLW4	005	B1MKT2	03/22/07	14:17
JRLW5	006	B1MKT5	03/22/07	13:46
JRLW6	007	B1MKV1	03/22/07	12:36
JRLW7	008	B1MKV4	03/22/07	10:57

**NOTE(S) :**

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(Continued on next page)

**SAMPLE SUMMARY**

SL677 : F7C230157

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
JRLXD	001	B1MFB3	03/22/07	14:17
JRLXE	002	B1MFF8	03/22/07	10:57

**NOTE(S) :**

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(Continued on next page)

**SAMPLE SUMMARY**

SL677 : F7C230263

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
JRMWR	001	B1MWY8	03/22/07	11:15
JRMWO	002	B1MWY9	03/22/07	11:15

**NOTE(S) :**

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(Continued on next page)

**SAMPLE SUMMARY**

SL677 : F7C240118

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
JRN6G	001	B1MJL0	03/23/07	11:20
JRN6H	002	B1MJL1	03/23/07	11:20
JRN6J	003	B1MKN0	03/23/07	10:12
JRN6K	004	B1MKN1	03/23/07	10:12
JRN6L	005	B1MKN4	03/23/07	07:45
JRN6N	006	B1MKN5	03/23/07	07:45
JRN6Q	007	B1MKN9	03/23/07	12:18
JRN6R	008	B1MKP0	03/23/07	12:18

**NOTE (S) :**

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(Continued on next page)

**SAMPLE SUMMARY**

SL677 : F7C240121

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
JRN7T	001	B1M9B3	03/23/07	08:48
JRN7X	002	B1M9B4	03/23/07	08:48

**NOTE(S) :**

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(Continued on next page)

**SAMPLE SUMMARY**

SL677 : F7C240130

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
JRN9E	001	B1MDY3	03/23/07	11:00

**NOTE(S) :**

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(Continued on next page)

**SAMPLE SUMMARY**

SL677 : F7C260145

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT</u>	<u>SAMPLE ID</u>	<u>SAMPLED</u>	<u>SAMP</u>
				<u>DATE</u>	<u>TIME</u>
JRQQA	001	B1MDH6		03/23/07	11:09

**NOTE(S) :**

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Collectors: **FRUOF Hanford R. T. SICKLE** Contact/Requester: **Dot Stewart** Telephone No.: **509-376-5056** MSIN: **FAX**  
 SAF No.: **W07-003** Sampling Origin: **Hanford Site** Purchase Order/Charge Code:  
 Project Title: **RCRA, MARCH 2007** Ice Chest No.: **SM L 4050** Temp.:  
 Shipped To (Lab): **Severn Trent St. Louis** Method of Shipment: **Govt. Vehicle** Bill of Lading/Air Bill No.: **7912 5761 1631**  
 Protocol: **RCRA** Priority: **45 Days** Offsite Property No.:

**POSSIBLE SAMPLE HAZARDS/REMARKS**  
 \*\* \*\* Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

**SPECIAL INSTRUCTIONS** Hold Time: Total Activity Exemption: Yes  No   
 All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.  
 WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MKX8 (F)		W	3-20-07	1149	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	HNO3 to pH <2
B1MKX9		W			1x500-mL G/P	6010_METALS_ICP: List-3 (18)	HNO3 to pH <2
B1MKX9		W			1x20-mL P	Activity Scan	None
B1MKX9		W			1x1000-mL aGs*	9020_TOX: TOX (1)	H2SO4 to pH <2 Cool 4C
B1MKX9		W			1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool 4C
B1MKX9		W			1x250-mL aGs*	9060_TOC: TOC (1)	HCl or H2SO4 to pH <2 Cool 4C

Relinquished By: <b>FRUOF Hanford R. T. SICKLE</b> (Print) Sign: <i>[Signature]</i> Date/Time: <b>MAR 20 2007</b> (100)	Received By: <b>Fed Ex</b> (Print) Sign: <i>[Signature]</i> Date/Time:	<b>Matrix *</b> S = Soil DS = Drum Solid SF = Sediment DL = Drum Liquid SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other	
Relinquished By: <b>Fed Ex</b> Date/Time:	Received By: <b>B-H-L</b> Date/Time: <b>3/21/07 0845</b>		
Relinquished By: Date/Time:	Received By: Date/Time:		
Relinquished By: <b>2</b> Date/Time:	Received By: Date/Time:		
<b>FINAL SAMPLE DISPOSITION</b>	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

STL ST. LOUIS

SD# PNNL SL 677 112

Track Shipments  
Detailed Results

Quick Help

<b>Tracking number</b>	791257611631	<b>Reference</b>	sml-4055
<b>Signed for by</b>	B.DANIELS	<b>Destination</b>	Earth City, MO
<b>Ship date</b>	Mar 20, 2007	<b>Delivered to</b>	Shipping/Receiving
<b>Delivery date</b>	Mar 21, 2007 8:45 AM	<b>Service type</b>	Priority Overnight
		<b>Weight</b>	81.0 lbs.
<b>Status</b>	Delivered		
<b>Signature image available</b>	Yes		

Date/Time	Activity	Location	Details
Mar 21, 2007	8:45 AM	Delivered	Earth City, MO
	6:55 AM	On FedEx vehicle for delivery	EARTH CITY, MO
	6:49 AM	At local FedEx facility	EARTH CITY, MO
	5:14 AM	At dest sort facility	BERKELEY, MO
	3:41 AM	Departed FedEx location	MEMPHIS, TN
Mar 20, 2007	12:47 AM	Arrived at FedEx location	MEMPHIS, TN
	5:23 PM	Left origin	PASCO, WA
	4:13 PM	Picked up	PASCO, WA
	3:06 PM	Package data transmitted to FedEx	



Subscribe to tracking updates (optional)

Your Name:

Your E-mail Address:

E-mail address	Language	Exception updates	Delivery updates
<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>

Select format:  HTML  Text  Wireless

Add personal message:

Not available for Wireless or non-English characters.

By selecting this check box and the Submit button, I agree to these [Terms and Conditions](#)

Client: Hanford COC/RFA No: W07-003-58, 64, 70, 76, 82, 96 Date: 3/21/07  
 Quote No: 741597 Initiated By: BQ Time: 0845

Shipping Information

Shipper Name: KC Multiple Packages Y  N/A  
 Shipping # (s):\* 791257611631 <sup>04-8-07</sup> Sample Temperature (s):\*\*  
 1. 4 6. \_\_\_\_\_  
 2. \_\_\_\_\_ 7. \_\_\_\_\_  
 3. \_\_\_\_\_ 8. \_\_\_\_\_  
 4. \_\_\_\_\_ 9. \_\_\_\_\_  
 5. \_\_\_\_\_ 10. \_\_\_\_\_

\*Numbered shipping lines correspond to Numbered Sample Temp lines \*\*Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT effect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	Was sample received broken?	8.	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample received with Chain of Custody?
2.	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Was sample received with proper pH <sup>1</sup> ? (If not, make note below)	9.	<input checked="" type="radio"/> Y <input type="radio"/> N	Chain of Custody matches sample ID's on container(s)?
3.	<input type="radio"/> Y <input type="radio"/> N	If N/A-Was pH taken by original STL Lab?	10.	<input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on cooler?
4.	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample received in proper containers?	11.	<input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Do custody seals on cooler appear to be tampered with?
5.	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample volume sufficient for analysis?	12.	<input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on bottles?
6.	<input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)	13.	<input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Do custody seals on bottles appear to be tampered with?
7.	<input checked="" type="radio"/> Y <input type="radio"/> N	Were contents of the cooler frisked after opening	14.	<input type="radio"/> Y <input type="radio"/> N	Was Internal COC/Workshare received?

<sup>1</sup> For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes:

Corrective Action:

Client Contact Name: \_\_\_\_\_ Informed by: \_\_\_\_\_  
 Sample(s) processed "as is"  
 Sample(s) on hold until: \_\_\_\_\_ If released, notify: \_\_\_\_\_  
 Project Management Review: 4. Flory Date: 3/22/07

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

SDG # PNNL # **SL 677** FMC 220175 C.O.C. # **W07-003-90**

**CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST**

Page 1 of 1

Collector <b>Fluor Hanford L.D. WALL</b>	Contact/Requester Dot Stewart	Telephone No. 509-376-5056
SAF No. W07-003	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA MARCH 2007	Method of Shipment Govt. Vehicle	Ice Chest No. <b>6 W07-06-7</b> Temp.
Shipped To (Lab) Severn Trent St. Louis	Priority: 45 Days	Bill of Lading/Air Bill No. <b>799107950619</b>
Protocol RCRA		Offsite Property No.

**POSSIBLE SAMPLE HAZARDS/REMARKS**  
 \*\* \*\* Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

**SPECIAL INSTRUCTIONS** Hold Time Total Activity Exemption: Yes  No   
 All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.  
 WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MJT0		W	3-21-07	1037	1x250-mL aGs*	9060_TOC: TOC (1)	HCl or H2SO4 to pH <2 Cool 4C
B1MJT1		W			1x250-mL aGs*	9060_TOC: TOC (1)	HCl or H2SO4 to pH <2 Cool 4C
B1MJT2		W			1x250-mL aGs*	9060_TOC: TOC (1)	HCl or H2SO4 to pH <2 Cool 4C
B1MJT3		W			1x250-mL aGs*	9060_TOC: TOC (1)	HCl or H2SO4 to pH <2 Cool 4C
B1MJT4 (F)		W			1x500-mL G/P	6010_METALS_ICP: List-3 (18)	HNO3 to pH <2
B1MJT4 (F)		W			1x500-mL G/P	6020_METALS_ICPMS: Lead (1)	HNO3 to pH <2
B1MJT5 <sub>2</sub>		W			1x20-mL P	Activity Scan	None
B1MJT5		W			1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool 4C

Relinquished By <b>Fluor Hanford L.D. WALL</b>	Print <i>L.D. Wall</i>	Sign <i>L.D. Wall</i>	Date/Time MAR 21 2007 1400	Received By <i>FedEx</i>	Print <i>FedEx</i>	Sign <i>B-J</i>	Date/Time 3/22/07 0930	<b>Matrix *</b>
Relinquished By	Date/Time	Received By	Date/Time	Received By	Date/Time	Received By	Date/Time	S = Soil            DS = Drum Solid SF = Sediment    DI = Drum Liquid SO = Solid        T = Tissue SL = Sludge        WI = Wine W = Water        I = Liquid O = Oil            V = Vegetation A = Air            X = Other
Relinquished By	Date/Time	Received By	Date/Time	Received By	Date/Time	Received By	Date/Time	
Relinquished By	Date/Time	Received By	Date/Time	Received By	Date/Time	Received By	Date/Time	
<b>FINAL SAMPLE DISPOSITION</b>	Disposal Method (e.g., Return to customer, per lab procedure, used in process)						Disposed By	Date/Time

SDG # PNNL # SL 677









# Track Shipments Summary Results

 [Quick Help](#)

## Single piece shipments

Tracking number	Status	Date/Time	Destination	Service	Signature Proof	
					Image	View
<a href="#">799107950619</a>	Delivered	Mar 22, 2007 9:34 AM	Earth City, MO	■ FedEx Express	Yes	<input checked="" type="checkbox"/>
<a href="#">799607823292</a>	Delivered	Mar 22, 2007 9:34 AM	Earth City, MO	■ FedEx Express	Yes	<input checked="" type="checkbox"/>

Account number

(Required for detailed Signature POD only)

Click [here](#) if you have more than one account number for these shipments.



Lot #(s): F7C220166  
113  
221

- 5627 -

Client: Hanford COC/RFA No: see below Date: 3/22/07  
 Quote No: 74198, 74597, 74337 Initiated By: BO Time: 0930

Shipping Information

Shipper Name: FE Multiple Packages  Y  N  N/A  
 Shipping # (s):\* Sample Temperature (s):\*\*  
 1. 7491 0771 8140 6. \_\_\_\_\_ 1. 6 6. \_\_\_\_\_  
 2. 7491 0782 3292 7. \_\_\_\_\_ 2. 3 7. \_\_\_\_\_  
 3. 7491 0795 0619 8. \_\_\_\_\_ 3. 3 8. \_\_\_\_\_  
 4. \_\_\_\_\_ 9. \_\_\_\_\_ 4. \_\_\_\_\_ 9. \_\_\_\_\_  
 5. \_\_\_\_\_ 10. \_\_\_\_\_ 5. \_\_\_\_\_ 10. \_\_\_\_\_

\*Numbered shipping lines correspond to Numbered Sample Temp lines \*\*Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	<input checked="" type="radio"/> Y <input type="radio"/> N	Was sample received broken?	8.	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample received with Chain of Custody?
2.	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Was sample received with proper pH? (If not, make note below)	9.	<input checked="" type="radio"/> Y <input type="radio"/> N	Chain of Custody matches sample ID's on container(s)?
3.	<input type="radio"/> Y <input type="radio"/> N	If N/A- Was pH taken by original STL Lab?	10.	<input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on cooler?
4.	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample received in proper containers?	11.	<input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Do custody seals on cooler appear to be tampered with?
5.	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample volume sufficient for analysis?	12.	<input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on bottles?
6.	<input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)	13.	<input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Do custody seals on bottles appear to be tampered with?
7.	<input checked="" type="radio"/> Y <input type="radio"/> N	Were contents of the cooler frisked after opening?	14.	<input type="radio"/> Y <input type="radio"/> N	Was Internal COC/Workshare received?

<sup>1</sup> For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes: 1. X07-017-3, 6  
2. W07-003-570, 509, 507-003-129, 353  
3. W07-003-90, 110, 198

Samples on COC's X07-017 were sampled on 3/20/07

Corrective Action:  
 Client Contact Name: \_\_\_\_\_ Informed by: \_\_\_\_\_  
 Sample(s) processed "as is"  
 Sample(s) on hold until: \_\_\_\_\_ If released, notify: \_\_\_\_\_  
 Project Management Review: O. Salazar Date: 3/23/07

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





Track Shipments  
Detailed Results

Quick Help

<b>Tracking number</b>	799607823292	<b>Reference</b>	ERC-01-040
<b>Signed for by</b>	J.CLARKE	<b>Destination</b>	Earth City, MO
<b>Ship date</b>	Mar 21, 2007	<b>Delivered to</b>	Shipping/Receiving
<b>Delivery date</b>	Mar 22, 2007 9:34 AM	<b>Service type</b>	Priority Overnight
		<b>Weight</b>	39.0 lbs.

**Status** Delivered

**Signature image available** Yes

Date/Time	Activity	Location	Details
Mar 22, 2007	9:34 AM	Delivered	Earth City, MO
	9:19 AM	On FedEx vehicle for delivery	EARTH CITY, MO
	8:28 AM	At dest sort facility	BERKELEY, MO
	6:54 AM	At local FedEx facility	EARTH CITY, MO
	5:59 AM	At dest sort facility	BERKELEY, MO
	4:02 AM	Departed FedEx location	MEMPHIS, TN
Mar 21, 2007	1:00 AM	Arrived at FedEx location	MEMPHIS, TN
	5:18 PM	Left origin	PASCO, WA
	4:07 PM	Picked up	PASCO, WA
	2:08 PM	Package data transmitted to FedEx	

[Signature proof](#) | [E-mail results](#) | [Track more shipments](#)

Subscribe to tracking updates (optional)

Your Name:

Your E-mail Address:

E-mail address	Language	Exception updates	Delivery updates
<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>

Select format:  HTML  Text  Wireless

Add personal message:

Not available for Wireless or non-English characters.

By selecting this check box and the Submit button, I agree to these [Terms and Conditions](#)

Lot #(s): F7C220166

- 5627 -

125  
227

Condition Upon Receipt Form

Client: Hanford COC/RFA No: see below Date: 3/22/07  
Quote No: 74198, 74597, 74337 Initiated By: BO Time: 0930

Shipping Information

Shipper Name: FE  
Shipping # (s):\*  
1. 7991 0771 8140 6. \_\_\_\_\_  
2. 7991 0782 3292 7. \_\_\_\_\_  
3. 7991 0795 0619 8. \_\_\_\_\_  
4. \_\_\_\_\_ 9. \_\_\_\_\_  
5. \_\_\_\_\_ 10. \_\_\_\_\_

Multiple Packages  Y N N/A  
Sample Temperature (s):\*\*  
1. 6 6. \_\_\_\_\_  
2. 3 7. \_\_\_\_\_  
3. 3 8. \_\_\_\_\_  
4. \_\_\_\_\_ 9. \_\_\_\_\_  
5. \_\_\_\_\_ 10. \_\_\_\_\_

\*Numbered shipping lines correspond to Numbered Sample Temp lines \*\*Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	Was sample received broken?	8.	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample received with Chain of Custody?
2.	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Was sample received with proper pH? (If not, make note below)	9.	<input checked="" type="radio"/> Y <input type="radio"/> N	Chain of Custody matches sample ID's on container(s)?
3.	<input type="radio"/> Y <input type="radio"/> N	If N/A- Was pH taken by original STL Lab?	10.	<input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on cooler?
4.	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample received in proper containers?	11.	<input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Do custody seals on cooler appear to be tampered with?
5.	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample volume sufficient for analysis?	12.	<input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on bottles?
6.	<input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)	13.	<input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Do custody seals on bottles appear to be tampered with?
7.	<input checked="" type="radio"/> Y <input type="radio"/> N	Were contents of the cooler frisked after opening	14.	<input type="radio"/> Y <input type="radio"/> N	Was Internal COC/Workshare received?

<sup>1</sup> For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes: 1. X07-017-3, 6  
2. W07-003-570, 509, 507-003-129, 553  
3. W07-003-90, 110, 198

Samples on COC's X07-017 were sampled on 3/20/07

Corrective Action:  
 Client Contact Name: \_\_\_\_\_ Informed by: \_\_\_\_\_  
 Sample(s) processed "as is"  
 Sample(s) on hold until: \_\_\_\_\_  
Project Management Review: Ben D. Smith If released, notify: \_\_\_\_\_ Date: 3/26/07

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

SDG#

SIC#

SIC#

SIC#

SIC#

SIC#

SIC#

SIC#

SIC#

SIC#

PNNL

54677

FHC230155

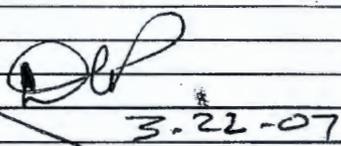
## CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

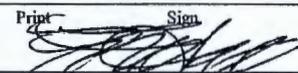
C.O.C.#

W07-003-206

Page 1 of 1

Collector <b>Fluor Hanford F. M. HALL</b>		Contact/Requester Dot Stewart		Telephone No. 509-376-5056		MSIN FAX	
SAF No. W07-003		Sampling Origin Hanford Site		Purchase Order/Charge Code			
Project Title RCRA MARCH 2007		Ice Chest No. SAWS100		Temp.			
Shipped To (Lab) Severn Trent St. Louis		Method of Shipment Govt. Vehicle		Bill of Lading/Air Bill No. 7916 5644 9303			
Protocol RCRA		Priority: 45 Days		Offsite Property No.			
<b>POSSIBLE SAMPLE HAZARDS/REMARKS</b> ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)				<b>SPECIAL INSTRUCTIONS</b> Hold Time      Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.			

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MKL0 (F)		W	3-22-07	1333	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	HNO3 to pH <2
B1MKL1		W			1x20-mL P	Activity Scan	None
B1MKL1		W			1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool 4C
B1MKL1		W			1x250-mL G/P	9012_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool 4C
							

Relinquished By <b>Fluor Hanford F. M. HALL</b>	Print 	Sign	Date/Time MAR 22 2007	Received By Fed Ex	Print	Sign	Date/Time	<b>Matrix *</b> S = Soil      DS = Drum Solid SE = Sediment      DI = Drum Liquid SO = Solid      T = Tissue SL = Sludge      WI = Wine W = Water      L = Liquid O = Oil      V = Vegetation A = Air      X = Other
Relinquished By Federal Express			Date/Time 3/23/07 0845	Received By B-A-L			Date/Time 3/23/07 0845	
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
<b>FINAL SAMPLE DISPOSITION</b>		Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By		Date/Time	

STL ST. LOUIS

SDG# 5167

PNNL 54677	<h2 style="margin: 0;">CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST</h2>	C.O.C.# <b>W07-003-222</b>
		Page 1 of 1

Collector <b>Fluor Hanford</b> <b>F.M. HALL</b>	Contact/Requester Dot Stewart Sampling Origin Hanford Site	Telephone No. MSIN FAX 509-376-5056
SAF No. W07-003	Project Title RCRA MARCH 2007	Purchase Order/Charge Code
Shipped To (Lab) Severn Trent St. Louis	Method of Shipment Govt. Vehicle	Ice Chest No. Temp. SAWS 100
Protocol RCRA	Priority: 45 Days	Bill of Lading/Air Bill No. <b>7916 5644 9303</b>

<b>POSSIBLE SAMPLE HAZARDS/REMARKS</b> ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)	<b>SPECIAL INSTRUCTIONS</b> Hold Time    Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.
--	--

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MKMO (F)		W	3-22-07	1225	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	HNO3 to pH <2
B1MKM1		W			1x20-mL P	Activity Scan	None
B1MKM1		W			1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool 4C
B1MKM1		W			1x250-mL G/P	9012_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool 4C

Relinquished By <b>Fluor Hanford</b> <b>F.M. HALL</b>	Print Sign 	Date/Time <b>MAR 22 2007</b> 1400	Received By <b>Fed EX</b>	Print Sign 	Date/Time <b>3/23/07 0845</b>	<b>Matrix *</b> S = Soil                      DS = Drum Solid SE = Sediment              DI = Drum Liquid SO = Solid                    T = Tissue SL = Sludge                  WI = Wine W = Water                    L = Liquid O = Oil                        V = Vegetation A = Air                         X = Other
Relinquished By <b>Federal Express</b>		Date/Time <b>3/22/07 0845</b>	Received By <b>B-D-L</b>		Date/Time <b>3/23/07 0845</b>	
Relinquished By		Date/Time	Received By		Date/Time	
Relinquished By		Date/Time	Received By		Date/Time	

<b>FINAL SAMPLE DISPOSITION</b>	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time
---------------------------------	--	-------------	-----------

37 OF 212









Track Shipments  
Detailed Results

Quick Help

<b>Tracking number</b>	791656449303	<b>Reference</b>	saws-100
<b>Signed for by</b>	J.CLARKE	<b>Destination</b>	Earth City, MO
<b>Ship date</b>	Mar 22, 2007	<b>Delivered to</b>	Shipping/Receiving
<b>Delivery date</b>	Mar 23, 2007 8:49 AM	<b>Service type</b>	Priority Overnight
		<b>Weight</b>	38.0 lbs.

**Status** Delivered

**Signature image available** Yes

Date/Time	Activity	Location	Details
Mar 23, 2007	8:49 AM	Delivered	Earth City, MO
	8:30 AM	On FedEx vehicle for delivery	EARTH CITY, MO
	8:54 AM	At local FedEx facility	EARTH CITY, MO
	5:00 AM	At dest sort facility	BERKELEY, MO
	4:18 AM	Departed FedEx location	MEMPHIS, TN
	1:07 AM	Arrived at FedEx location	MEMPHIS, TN
Mar 22, 2007	5:19 PM	Left origin	PASCO, WA
	4:38 PM	Package data transmitted to FedEx	
	4:06 PM	Picked up	PASCO, WA

[Signature proof](#) | [E-mail results](#) | [Track more shipments](#)

Subscribe to tracking updates (optional)

Your Name:

Your E-mail Address:

E-mail address	Language	Exception updates	Delivery updates
<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>

Select format:  HTML  Text  Wireless

Add personal message:

Not available for Wireless or non-English characters.

By selecting this check box and the Submit button, I agree to these [Terms and Conditions](#)

Lot #(s): FL230155  
157  
263

- 6360 -

Client: Hanford COC/RFA No: see below Date: 3/23/07  
 Quote No: 745907, 74337 Initiated By: BO Time: 0845

Condition Upon Receipt Form

Shipping Information

Shipper Name: FE Multiple Packages Y (N) N/A  
 Shipping # (s):\* Sample Temperature (s):\*\*  
 1. 7916 5644 9303 6. \_\_\_\_\_ 1. 3 6. \_\_\_\_\_  
 2. \_\_\_\_\_ 7. \_\_\_\_\_ 2. \_\_\_\_\_ 7. \_\_\_\_\_  
 3. \_\_\_\_\_ 8. \_\_\_\_\_ 3. \_\_\_\_\_ 8. \_\_\_\_\_  
 4. \_\_\_\_\_ 9. \_\_\_\_\_ 4. \_\_\_\_\_ 9. \_\_\_\_\_  
 5. \_\_\_\_\_ 10. \_\_\_\_\_ 5. \_\_\_\_\_ 10. \_\_\_\_\_

\*Numbered shipping lines correspond to Numbered Sample Temp lines \*\*Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	Was sample received broken?	8.	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample received with Chain of Custody?
2.	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Was sample received with proper pH? (If not, make note below)	9.	<input checked="" type="radio"/> Y <input type="radio"/> N	Chain of Custody matches sample ID's on container(s)?
3.	<input type="radio"/> Y <input type="radio"/> N	If N/A- Was pH taken by original STL Lab?	10.	<input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on cooler?
4.	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample received in proper containers?	11.	<input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Do custody seals on cooler appear to be tampered with?
5.	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample volume sufficient for analysis?	12.	<input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on bottles?
6.	<input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)	13.	<input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Do custody seals on bottles appear to be tampered with?
7.	<input checked="" type="radio"/> Y <input type="radio"/> N	Were contents of the cooler frisked after opening	14.	<input type="radio"/> Y <input type="radio"/> N	Was Internal COC/Workshare received?

<sup>1</sup> For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes: W07-004-210, S07-003-133, 354, W07-003-201, 222, 511, 512, 514, 515

Corrective Action:

Client Contact Name: \_\_\_\_\_ Informed by: \_\_\_\_\_  
 Sample(s) processed "as is"  
 Sample(s) on hold until: \_\_\_\_\_ If released, notify: \_\_\_\_\_  
 Project Management Review: [Signature] Date: 3/26/07

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





Track Shipments  
Detailed Results

Quick Help

<b>Tracking number</b>	791656449303	<b>Reference</b>	saws-100
<b>Signed for by</b>	J.CLARKE	<b>Destination</b>	Earth City, MO
<b>Ship date</b>	Mar 22, 2007	<b>Delivered to</b>	Shipping/Receiving
<b>Delivery date</b>	Mar 23, 2007 8:49 AM	<b>Service type</b>	Priority Overnight
		<b>Weight</b>	38.0 lbs.

**Status** Delivered

**Signature image available** Yes

Date/Time	Activity	Location	Details
Mar 23, 2007	8:49 AM	<b>Delivered</b>	Earth City, MO
	8:30 AM	On FedEx vehicle for delivery	EARTH CITY, MO
	6:54 AM	At local FedEx facility	EARTH CITY, MO
	5:00 AM	At dest sort facility	BERKELEY, MO
	4:18 AM	Departed FedEx location	MEMPHIS, TN
	1:07 AM	Arrived at FedEx location	MEMPHIS, TN
Mar 22, 2007	5:19 PM	Left origin	PASCO, WA
	4:38 PM	Package data transmitted to FedEx	
	4:06 PM	Picked up	PASCO, WA

[Signature proof](#) | [E-mail results](#) | [Track more shipments](#)

Subscribe to tracking updates (optional)

Your Name:

Your E-mail Address:

E-mail address	Language	Exception updates	Delivery updates
<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>

Select format:  HTML  Text  Wireless

Add personal message:

Not available for Wireless or non-English characters.

By selecting this check box and the Submit button, I agree to these [Terms and Conditions](#)

Lot #(s): F7C230155  
157  
263

- 6360 -

Client: Hanford COC/RFA No: see below Date: 3/23/07  
 Quote No: 74597, 74337 Initiated By: BN Time: 0845

Condition Upon Receipt Form

Shipping Information

Shipper Name: FE Multiple Packages Y  N/A  
 Shipping # (s):\*  
 1. 7916 5644 9303 6. \_\_\_\_\_ Sample Temperature (s):\*\*  
 2. \_\_\_\_\_ 7. \_\_\_\_\_ 1. 3 6. \_\_\_\_\_  
 3. \_\_\_\_\_ 8. \_\_\_\_\_ 2. \_\_\_\_\_ 7. \_\_\_\_\_  
 4. \_\_\_\_\_ 9. \_\_\_\_\_ 3. \_\_\_\_\_ 8. \_\_\_\_\_  
 5. \_\_\_\_\_ 10. \_\_\_\_\_ 4. \_\_\_\_\_ 9. \_\_\_\_\_  
 5. \_\_\_\_\_ 10. \_\_\_\_\_ 5. \_\_\_\_\_ 10. \_\_\_\_\_

\*Numbered shipping lines correspond to Numbered Sample Temp lines \*\*Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	Was sample received broken?	8.	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample received with Chain of Custody?
2.	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Was sample received with proper pH? (If not, make note below)	9.	<input checked="" type="radio"/> Y <input type="radio"/> N	Chain of Custody matches sample ID's on container(s)?
3.	<input type="radio"/> Y <input type="radio"/> N	If N/A-Was pH taken by original STL Lab?	10.	<input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on cooler?
4.	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample received in proper containers?	11.	<input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Do custody seals on cooler appear to be tampered with?
5.	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample volume sufficient for analysis?	12.	<input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on bottles?
6.	<input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)	13.	<input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Do custody seals on bottles appear to be tampered with?
7.	<input checked="" type="radio"/> Y <input type="radio"/> N	Were contents of the cooler frisked after opening?	14.	<input type="radio"/> Y <input type="radio"/> N	Was Internal COC/Workshare received?

<sup>1</sup> For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes: W07-004-210, S07-003-133, 354, W07-003-201, 222, 511, 512, 514, 515

Corrective Action:

Client Contact Name: \_\_\_\_\_ Informed by: \_\_\_\_\_  
 Sample(s) processed "as is"  
 Sample(s) on hold until: \_\_\_\_\_ If released, notify: \_\_\_\_\_  
 Project Management Review: [Signature] Date: 3/24/07

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

SDG# 5677

STL ST. LOUIS

PNNL

5677

FMC 230 263

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C.#

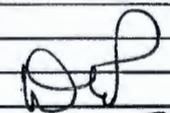
W07-004-210

Page 1 of 1

Collector <b>Fluor Hanford F.M. HALL</b>	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN FAX
SAF No. W07-004	Sampling Origin Hanford Site	Purchase Order/Charge Code	
Project Title RCRA, APRIL 2007	HNF-N-504 6	Ice Chest No. SAWS 100	Temp.
Shipped To (Lab) Severn Trent St. Louis	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No. 7916 5644 9303	
Protocol RCRA	Priority: 15 Days	Priority: <b>PRIORITY</b>	
Offsite Property No.			

**POSSIBLE SAMPLE HAZARDS/REMARKS**  
 \*\* \*\* Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

**SPECIAL INSTRUCTIONS** Hold Time Total Activity Exemption: Yes  No   
 All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.  
 WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MWY8 (F)		W	3-22-07	1115	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	HNO3 to pH <2
B1MWY9		W			1x20-mL P	Activity Scan	None
B1MWY9		W			1x500-mL G/P	120.1_CONDUCT: Conductivity (1)	Cool 4C
B1MWY9		W			1x500-mL P	300.0_ANIONS_IC: List-1 + Brom_Phosp (7)	Cool 4C
310.1 - ALKALINITY: Alkalinity (1) per DOT Stewart 3/27/07							
 3-22-07							

Relinquished By <b>Fluor Hanford F.M. HALL</b>	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time 1400	Received By <b>Fed Ex</b>	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time MAR 22 2007	<b>Matrix *</b> S = Soil DS = Drum Solid SE = Sediment DI = Drum Liner SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By <b>FEDERAL EXPRESS</b>	Date/Time 3/23/07 0845	Received By <b>B-D-P</b>	Date/Time 3/23/07 0845					
Relinquished By	Date/Time	Received By	Date/Time					
Relinquished By	Date/Time	Received By	Date/Time					
<b>FINAL SAMPLE DISPOSITION</b>	Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By			Date/Time	

48 OF 212

Track Shipments  
Detailed Results

Quick Help

<b>Tracking number</b>	791656449303	<b>Reference</b>	saws-100
<b>Signed for by</b>	J.CLARKE	<b>Destination</b>	Earth City, MO
<b>Ship date</b>	Mar 22, 2007	<b>Delivered to</b>	Shipping/Receiving
<b>Delivery date</b>	Mar 23, 2007 8:49 AM	<b>Service type</b>	Priority Overnight
		<b>Weight</b>	38.0 lbs.

**Status** Delivered

**Signature image available** Yes

Date/Time	Activity	Location	Details
Mar 23, 2007	8:49 AM	Delivered	Earth City, MO
	8:30 AM	On FedEx vehicle for delivery	EARTH CITY, MO
	8:54 AM	At local FedEx facility	EARTH CITY, MO
	5:00 AM	At dest sort facility	BERKELEY, MO
	4:18 AM	Departed FedEx location	MEMPHIS, TN
	1:07 AM	Arrived at FedEx location	MEMPHIS, TN
Mar 22, 2007	5:19 PM	Left origin	PASCO, WA
	4:38 PM	Package data transmitted to FedEx	
	4:06 PM	Picked up	PASCO, WA

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Subscribe to tracking updates (optional)

Your Name:

Your E-mail Address:

E-mail address	Language	Exception updates	Delivery updates
<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	English	<input type="checkbox"/>	<input type="checkbox"/>

Select format:  HTML  Text  Wireless

Add personal message:

Not available for Wireless or non-English characters.

By selecting this check box and the Submit button, I agree to these [Terms and Conditions](#)

Lot #(s): F7C230155  
157  
263

- 6360 -

Condition Upon Receipt Form

Client: Hanford COC/RFA No: see below Date: 3/23/07  
 Quote No: 74507, 74337 Initiated By: BO Time: 0845

Shipping Information

Shipper Name: FE Multiple Packages Y  N/A  
 Shipping # (s):\*  
 1. 7916 5644 9303 6. \_\_\_\_\_ Sample Temperature (s):\*\*  
 2. \_\_\_\_\_ 7. \_\_\_\_\_ 1. 3 6. \_\_\_\_\_  
 3. \_\_\_\_\_ 8. \_\_\_\_\_ 2. \_\_\_\_\_ 7. \_\_\_\_\_  
 4. \_\_\_\_\_ 9. \_\_\_\_\_ 3. \_\_\_\_\_ 8. \_\_\_\_\_  
 5. \_\_\_\_\_ 10. \_\_\_\_\_ 4. \_\_\_\_\_ 9. \_\_\_\_\_  
 5. \_\_\_\_\_ 10. \_\_\_\_\_ 5. \_\_\_\_\_ 10. \_\_\_\_\_

\*Numbered shipping lines correspond to Numbered Sample Temp lines  
 \*\*Sample must be received at 4°C ± 2°C - If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	Was sample received broken?	8.	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample received with Chain of Custody?
2.	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Was sample received with proper pH <sup>1</sup> ? (If not, make note below)	9.	<input checked="" type="radio"/> Y <input type="radio"/> N	Chain of Custody matches sample ID's on container(s)?
3.	<input type="radio"/> Y <input type="radio"/> N	If N/A-Was pH taken by original STL Lab?	10.	<input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on cooler?
4.	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample received in proper containers?	11.	<input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Do custody seals on cooler appear to be tampered with?
5.	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample volume sufficient for analysis?	12.	<input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on bottles?
6.	<input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)	13.	<input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Do custody seals on bottles appear to be tampered with?
7.	<input checked="" type="radio"/> Y <input type="radio"/> N	Were contents of the cooler frisked after opening?	14.	<input type="radio"/> Y <input type="radio"/> N	Was Internal COC/Workshare received?

<sup>1</sup> For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes: W07-00U-210, S07-003-133, 354, W07-003-201, 222, 511, 512, 514, 515

Corrective Action:

Client Contact Name: \_\_\_\_\_ Informed by: \_\_\_\_\_  
 Sample(s) processed "as is"  
 Sample(s) on hold until: \_\_\_\_\_ If released, notify: \_\_\_\_\_  
 Project Management Review: [Signature] Date: 3/23/07

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

ADMIN-0004, REVISED 03/01/06\SI\svr01\QA\FORMS\ST-LOUIS\ADMIN\ADMIN004030106.doc









# Track Shipments Summary Results

[? Quick Help](#)

## Single piece shipments

Tracking number <input type="checkbox"/>	Status <input type="checkbox"/>	Date/Time <input type="checkbox"/>	Destination <input type="checkbox"/>	Service <input type="checkbox"/>	Signature Proof Image	View
<a href="#">792955856440</a>	Delivered	Mar 24, 2007 8:20 AM	Earth City, MO	■ FedEx Express	Yes	<input checked="" type="checkbox"/>
<a href="#">798635938144</a>	Delivered	Mar 24, 2007 8:20 AM	Earth City, MO	■ FedEx Express	Yes	<input checked="" type="checkbox"/>

Account number

(Required for [detailed](#) Signature POD only)

Click [here](#) if you have more than one account number for these shipments.

[Signature Proof - view all selected](#)

[Track more shipments](#)

Lot #(s): F7C240118  
121  
130  
F7C240145

- 6277 -

Client: PNNL COC/RFA No: See Below Condition Upon Receipt Form  
 Quote No: 74597 74036 74021 Initiated By: [Signature] Date: 3.24.07  
 Time: 0825

Shipper Name: FedEx Shipping Information  
 Shipping # (s):\*  
 1. 7986 3593 8144 6. \_\_\_\_\_  
 2. 7929 5585 6440 7. \_\_\_\_\_  
 3. \_\_\_\_\_ 8. \_\_\_\_\_  
 4. \_\_\_\_\_ 9. \_\_\_\_\_  
 5. \_\_\_\_\_ 10. \_\_\_\_\_

Multiple Packages  Y N N/A  
 Sample Temperature (s):\*\*  
 1. 2 6. \_\_\_\_\_  
 2. 2 7. \_\_\_\_\_  
 3. \_\_\_\_\_ 8. \_\_\_\_\_  
 4. \_\_\_\_\_ 9. \_\_\_\_\_  
 5. \_\_\_\_\_ 10. \_\_\_\_\_

\*Numbered shipping lines correspond to Numbered Sample Temp lines \*\*Sample must be received at 4°C ± 2°C - If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	<input checked="" type="radio"/> Y <input type="radio"/> N	Was sample received broken?	8.	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample received with Chain of Custody?
2.	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Was sample received with proper pH? (If not, make note below)	9.	<input checked="" type="radio"/> Y <input type="radio"/> N	Chain of Custody matches sample ID's on container(s)?
3.	<input type="radio"/> Y <input type="radio"/> N	If N/A-Was pH taken by original STL Lab?	10.	<input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on cooler?
4.	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample received in proper containers?	11.	<input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Do custody seals on cooler appear to be tampered with?
5.	<input checked="" type="radio"/> Y <input type="radio"/> N	Sample volume sufficient for analysis?	12.	<input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on bottles?
6.	<input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)	13.	<input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Do custody seals on bottles appear to be tampered with?
7.	<input checked="" type="radio"/> Y <input type="radio"/> N	Were contents of the cooler frisked after opening	14.	<input type="radio"/> Y <input type="radio"/> N	Was Internal COC/Workshare received?

<sup>1</sup> For DOE-AL (Pentex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes: COC #5  
W07-003-18  
    -268  
    -269  
    -276  
W07-002-508  
I07-032-3  
S07-003-27

Corrective Action:  
 Client Contact Name: \_\_\_\_\_ Informed by: \_\_\_\_\_  
 Sample(s) processed "as is"  
 Sample(s) on hold until: \_\_\_\_\_  
 Project Management Review: [Signature] If released, notify: \_\_\_\_\_  
 Date: 3/27/07

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



Track Shipments  
Summary Results

[? Quick Help](#)

Single piece shipments

Tracking number	Status	Date/Time	Destination	Service	Signature Proof Image	View
<a href="#">792955856440</a>	Delivered	Mar 24, 2007 8:20 AM	Earth City, MO	FedEx Express	Yes	<input checked="" type="checkbox"/>
<a href="#">798635938144</a>	Delivered	Mar 24, 2007 8:20 AM	Earth City, MO	FedEx Express	Yes	<input checked="" type="checkbox"/>

Account number

(Required for [detailed](#) Signature POD only)

Click [here](#) if you have more than one account number for these shipments.

[Signature Proof: view all selected](#) [Track more shipments](#)

Lot #(s): F70240118  
121  
130  
F70240145

- 6277 -

Client: PNNL COC/RFA No: See Below Condition Upon Receipt Form  
 Quote No: 74597, 74036, 74021 Initiated By: [Signature] Date: 3.24.07  
 Time: 0825

Shipper Name: FedEx Shipping Information  
 Shipping # (s):\*  
 1. 7986 3593 8144 6. \_\_\_\_\_  
 2. 7929 5585 6440 7. \_\_\_\_\_  
 3. \_\_\_\_\_ 8. \_\_\_\_\_  
 4. \_\_\_\_\_ 9. \_\_\_\_\_  
 5. \_\_\_\_\_ 10. \_\_\_\_\_

Multiple Packages  Y N N/A  
 Sample Temperature (s):\*\*  
 1. 2 6. \_\_\_\_\_  
 2. 2 7. \_\_\_\_\_  
 3. \_\_\_\_\_ 8. \_\_\_\_\_  
 4. \_\_\_\_\_ 9. \_\_\_\_\_  
 5. \_\_\_\_\_ 10. \_\_\_\_\_

\*Numbered shipping lines correspond to Numbered Sample Temp lines \*\*Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1. <input checked="" type="radio"/> Y <input type="radio"/> N	Was sample received broken?	8. <input checked="" type="radio"/> Y <input type="radio"/> N	Sample received with Chain of Custody?
2. <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Was sample received with proper pH? (If not, make note below)	9. <input checked="" type="radio"/> Y <input type="radio"/> N	Chain of Custody matches sample ID's on container(s)?
3. <input type="radio"/> Y <input type="radio"/> N	If N/A-Was pH taken by original STL Lab?	10. <input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on cooler?
4. <input checked="" type="radio"/> Y <input type="radio"/> N	Sample received in proper containers?	11. <input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Do custody seals on cooler appear to be tampered with?
5. <input checked="" type="radio"/> Y <input type="radio"/> N	Sample volume sufficient for analysis?	12. <input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on bottles?
6. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)	13. <input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Do custody seals on bottles appear to be tampered with?
7. <input checked="" type="radio"/> Y <input type="radio"/> N	Were contents of the cooler frisked after opening?	14. <input type="radio"/> Y <input type="radio"/> N	Was Internal COC/Workshare received?

<sup>1</sup> For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes: COC #s  
W07-003-18  
-268  
-269  
-276  
W07-002-508  
I07-032-3  
S07-003-27

Corrective Action:  
 Client Contact Name: \_\_\_\_\_ Informed by: \_\_\_\_\_  
 Sample(s) processed "as is"  
 Sample(s) on hold until: \_\_\_\_\_  
 Project Management Review: [Signature] If released, notify: \_\_\_\_\_  
 Date: 3/27/07

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



Track Shipments  
Summary Results

[? Quick Help](#)

Single piece shipments

Tracking number <input type="checkbox"/>	Status <input type="checkbox"/>	Date/Time <input type="checkbox"/>	Destination <input type="checkbox"/>	Service <input type="checkbox"/>	Signature Proof	
					Image	View
<a href="#">792955856440</a>	Delivered	Mar 24, 2007 8:20 AM	Earth City, MO	■ FedEx Express	Yes	<input checked="" type="checkbox"/>
<a href="#">798635938144</a>	Delivered	Mar 24, 2007 8:20 AM	Earth City, MO	■ FedEx Express	Yes	<input checked="" type="checkbox"/>

Account number

(Required for [detailed](#) Signature POD only)

Click [here](#) if you have more than one account number for these shipments.

[Signature Proof - view all selected](#)

[Track more shipments](#)

Lot #(s): F7C240118  
121  
130  
F7C240145

- 6277 -

Client: PNNL COC/RFA No: See Below Condition Upon Receipt Form  
 Quote No: 74597, 74036, 74021 Initiated By: [Signature] Date: 3.24.07  
 Time: 0825

Shipper Name: FedEx Shipping Information  
 Shipping # (s):\*  
 1. 7986 3593 8144 6. \_\_\_\_\_  
 2. 7929 5585 10440 7. \_\_\_\_\_  
 3. \_\_\_\_\_ 8. \_\_\_\_\_  
 4. \_\_\_\_\_ 9. \_\_\_\_\_  
 5. \_\_\_\_\_ 10. \_\_\_\_\_

\*Numbered shipping lines correspond to Numbered Sample Temp lines \*\*Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1. <input checked="" type="radio"/> <input type="radio"/> N	Was sample received broken?	8. <input checked="" type="radio"/> <input type="radio"/> N	Sample received with Chain of Custody?
2. <input checked="" type="radio"/> <input type="radio"/> N <input type="radio"/> N/A	Was sample received with proper pH? (If not, make note below)	9. <input checked="" type="radio"/> <input type="radio"/> N	Chain of Custody matches sample ID's on container(s)?
3. <input type="radio"/> Y <input type="radio"/> N	If N/A-Was pH taken by original STL Lab?	10. <input checked="" type="radio"/> <input type="radio"/> N	Are there custody seals present on cooler?
4. <input checked="" type="radio"/> <input type="radio"/> N	Sample received in proper containers?	11. <input type="radio"/> Y <input checked="" type="radio"/> <input type="radio"/> N/A	Do custody seals on cooler appear to be tampered with?
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6. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)	13. <input type="radio"/> Y <input checked="" type="radio"/> <input type="radio"/> N/A	Do custody seals on bottles appear to be tampered with?
7. <input checked="" type="radio"/> <input type="radio"/> N	Were contents of the cooler frisked after opening?	14. <input type="radio"/> Y <input type="radio"/> N	Was Internal COC/Workshare received?

<sup>1</sup> For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes: COC #5

W07-003-18  
-268  
-269  
-276  
W07-002-508  
I07-032-3  
S07-003-27

Corrective Action:  
 Client Contact Name: \_\_\_\_\_ Informed by: \_\_\_\_\_  
 Sample(s) processed "as is"  
 Sample(s) on hold until: \_\_\_\_\_  
 Project Management Review: [Signature] If released, notify: \_\_\_\_\_ Date: 3/27/07

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



Track Shipments  
Summary Results

[? Quick Help](#)

Single piece shipments

Tracking number <input type="checkbox"/>	Status <input type="checkbox"/>	Date/Time <input type="checkbox"/>	Destination <input type="checkbox"/>	Service <input type="checkbox"/>	Signature Proof	
					Image	View
<a href="#">792955856440</a>	Delivered	Mar 24, 2007 8:20 AM	Earth City, MO	<input checked="" type="checkbox"/> FedEx Express	Yes	<input checked="" type="checkbox"/>
<a href="#">798635938144</a>	Delivered	Mar 24, 2007 8:20 AM	Earth City, MO	<input checked="" type="checkbox"/> FedEx Express	Yes	<input checked="" type="checkbox"/>

Account number

(Required for [detailed](#) Signature POD only)

Click [here](#) if you have more than one account number for these shipments.

[Signature Proof - view all selected](#)

[Track more shipments](#)

Lot #(s): F7C240118  
121  
130  
F7C240145

- 6277 -

Client: PNNL COC/RFA No: See Below Date: 3.24.07  
 Quote No: 74597, 74036, 74021 Initiated By: [Signature] Time: 0825

Shipping Information

Shipper Name: Fed Ex Multiple Packages  N N/A  
 Shipping # (s):\* Sample Temperature (s):\*\*  
 1. 7986 3593 8144 6. 2 6. \_\_\_\_\_  
 2. 7929 5585 6440 7. \_\_\_\_\_ 7. \_\_\_\_\_  
 3. \_\_\_\_\_ 8. \_\_\_\_\_ 8. \_\_\_\_\_  
 4. \_\_\_\_\_ 9. \_\_\_\_\_ 9. \_\_\_\_\_  
 5. \_\_\_\_\_ 10. \_\_\_\_\_ 10. \_\_\_\_\_

\*Numbered shipping lines correspond to Numbered Sample Temp lines \*\*Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Was sample received broken?	8.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample received with Chain of Custody?
2.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A	Was sample received with proper pH <sup>1</sup> ? (If not, make note below)	9.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Chain of Custody matches sample ID's on container(s)?
3.	<input type="checkbox"/> Y <input type="checkbox"/> N	If N/A-Was pH taken by original STL Lab?	10.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Are there custody seals present on cooler?
4.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample received in proper containers?	11.	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> N/A	Do custody seals on cooler appear to be tampered with?
5.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample volume sufficient for analysis?	12.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Are there custody seals present on bottles?
6.	<input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)	13.	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> N/A	Do custody seals on bottles appear to be tampered with?
7.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Were contents of the cooler frisked after opening?	14.	<input type="checkbox"/> Y <input type="checkbox"/> N	Was Internal COC/Workshare received?

<sup>1</sup> For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes: COC#5

W07-003-18  
-268  
-269  
-276  
W07-002-508  
I07-032-3  
S07-003-27

Corrective Action:

Client Contact Name: \_\_\_\_\_ Informed by: \_\_\_\_\_  
 Sample(s) processed "as is"  
 Sample(s) on hold until: \_\_\_\_\_  
 Project Management Review: [Signature] If released, notify: \_\_\_\_\_  
 Date: 3/27/07

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

# **VOLATILES**

## Pacific Northwest National Laboratory

Client Sample ID: B1MKR9

## GC/MS Volatiles

Lot-Sample #....: F7C220175-011    Work Order #....: JRJR51AC    Matrix.....: WATER  
 Date Sampled....: 03/21/07    Date Received...: 03/22/07  
 Prep Date.....: 04/02/07    Analysis Date...: 04/02/07  
 Prep Batch #....: 7093119  
 Dilution Factor: 1    Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1,1-Dichloroethene	ND	1.0	ug/L	0.045
1,4-Dioxane	ND	80	ug/L	12
Ethylbenzene	ND	1.0	ug/L	0.064
Vinyl chloride	ND	2.0	ug/L	0.044
Acetone	ND	2.0	ug/L	0.80
Methylene chloride	ND	1.0	ug/L	0.60
<b>Carbon disulfide</b>	<b>0.24 J</b>	<b>1.0</b>	<b>ug/L</b>	<b>0.031</b>
1,1-Dichloroethane	ND	1.0	ug/L	0.046
2-Butanone	ND	5.0	ug/L	1.8
Chloroform	ND	1.0	ug/L	0.048
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.048
Propionitrile	ND	5.0	ug/L	1.7
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.016
1,1,1-Trichloroethane	ND	1.0	ug/L	0.035
<b>Carbon tetrachloride</b>	<b>0.11 J,N</b>	<b>1.0</b>	<b>ug/L</b>	<b>0.039</b>
1,2-Dichloroethane	ND	1.0	ug/L	0.11
Benzene	ND	1.0	ug/L	0.064
Trichloroethene	ND	1.0	ug/L	0.037
4-Methyl-2-pentanone	ND	5.0	ug/L	0.21
1,1,2-Trichloroethane	ND	1.0	ug/L	0.092
Tetrachloroethene	ND	1.0	ug/L	0.17
Tetrahydrofuran	ND	10	ug/L	1.2
Xylenes (total)	ND	3.0	ug/L	0.13
1,4-Dichlorobenzene	ND	1.0	ug/L	0.047
1-Butanol	ND	40	ug/L	14
Toluene	ND	1.0	ug/L	0.025

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Toluene-d8	99	(76 - 117)
Dibromofluoromethane	109	(82 - 130)
1,2-Dichloroethane-d4	113	(73 - 137)
4-Bromofluorobenzene	88	(75 - 114)

**NOTE(S):**

J Estimated result. Result is less than RL.

N Spike sample recovery is outside control limits.

Pacific Northwest National Laboratory

B1MKR9

GC/MS Volatiles

Lot-Sample #: F7C220175-011

Work Order #: JRJR51AC

Matrix: WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

<u>PARAMETER</u>	<u>CAS #</u>	<u>ESTIMATED RESULT</u>	<u>RETENTION TIME</u>	<u>UNITS</u>
None				ug/L

## Pacific Northwest National Laboratory

Client Sample ID: B1MKR6

## GC/MS Volatiles

Lot-Sample #....: F7C220175-012    Work Order #....: JRJTC1AC    Matrix.....: WATER  
 Date Sampled....: 03/21/07    Date Received...: 03/22/07  
 Prep Date.....: 04/02/07    Analysis Date...: 04/02/07  
 Prep Batch #....: 7093119  
 Dilution Factor: 1    Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1,1-Dichloroethene	ND	1.0	ug/L	0.045
1,4-Dioxane	ND	80	ug/L	12
Ethylbenzene	ND	1.0	ug/L	0.064
Vinyl chloride	ND	2.0	ug/L	0.044
Acetone	ND	2.0	ug/L	0.80
Methylene chloride	ND	1.0	ug/L	0.60
Carbon disulfide	0.14 J	1.0	ug/L	0.031
1,1-Dichloroethane	ND	1.0	ug/L	0.046
2-Butanone	ND	5.0	ug/L	1.8
Chloroform	ND	1.0	ug/L	0.048
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.048
Propionitrile	ND	5.0	ug/L	1.7
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.016
1,1,1-Trichloroethane	ND	1.0	ug/L	0.035
Carbon tetrachloride	ND N	1.0	ug/L	0.039
1,2-Dichloroethane	ND	1.0	ug/L	0.11
Benzene	ND	1.0	ug/L	0.064
Trichloroethene	ND	1.0	ug/L	0.037
4-Methyl-2-pentanone	ND	5.0	ug/L	0.21
1,1,2-Trichloroethane	ND	1.0	ug/L	0.092
Tetrachloroethene	ND	1.0	ug/L	0.17
Tetrahydrofuran	ND	10	ug/L	1.2
Xylenes (total)	ND	3.0	ug/L	0.13
1,4-Dichlorobenzene	ND	1.0	ug/L	0.047
1-Butanol	ND	40	ug/L	14
Toluene	ND	1.0	ug/L	0.025

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Toluene-d8	98	(76 - 117)
Dibromofluoromethane	111	(82 - 130)
1,2-Dichloroethane-d4	112	(73 - 137)
4-Bromofluorobenzene	90	(75 - 114)

**NOTE(S):**

J Estimated result. Result is less than RL.

N Spike sample recovery is outside control limits.

Pacific Northwest National Laboratory

B1MKR6

GC/MS Volatiles

Lot-Sample #: F7C220175-012

Work Order #: JRJTC1AC

Matrix: WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

<u>PARAMETER</u>	<u>CAS #</u>	<u>ESTIMATED RESULT</u>	<u>RETENTION TIME</u>	<u>UNITS</u>
None				ug/L

## Pacific Northwest National Laboratory

Client Sample ID: B1MFF7

## GC/MS Volatiles

Lot-Sample #....: F7C220227-002    Work Order #....: JRJVALAC    Matrix.....: WATER  
 Date Sampled....: 03/21/07    Date Received...: 03/22/07  
 Prep Date.....: 03/27/07    Analysis Date...: 03/28/07  
 Prep Batch #....: 7087139  
 Dilution Factor: 1    Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1,1-Dichloroethene	ND	1.0	ug/L	0.045
1,4-Dioxane	ND	80	ug/L	12
Ethylbenzene	ND	1.0	ug/L	0.064
Vinyl chloride	ND	2.0	ug/L	0.044
Acetone	ND	2.0	ug/L	0.80
Methylene chloride	0.63 J	1.0	ug/L	0.60
Carbon disulfide	ND	1.0	ug/L	0.031
1,1-Dichloroethane	ND	1.0	ug/L	0.046
2-Butanone	ND	5.0	ug/L	1.8
Chloroform	ND	1.0	ug/L	0.048
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.048
Propionitrile	ND	5.0	ug/L	1.7
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.016
1,1,1-Trichloroethane	ND	1.0	ug/L	0.035
Carbon tetrachloride	ND	1.0	ug/L	0.039
1,2-Dichloroethane	ND	1.0	ug/L	0.11
Benzene	ND	1.0	ug/L	0.064
Trichloroethene	ND	1.0	ug/L	0.037
4-Methyl-2-pentanone	ND	5.0	ug/L	0.21
1,1,2-Trichloroethane	ND	1.0	ug/L	0.092
Tetrachloroethene	ND	1.0	ug/L	0.17
Tetrahydrofuran	ND	10	ug/L	1.2
Xylenes (total)	ND	3.0	ug/L	0.13
1,4-Dichlorobenzene	ND	1.0	ug/L	0.047
1-Butanol	ND	40	ug/L	14
Toluene	ND	1.0	ug/L	0.025

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Toluene-d8	80	(76 - 117)
Dibromofluoromethane	109	(82 - 130)
1,2-Dichloroethane-d4	107	(73 - 137)
4-Bromofluorobenzene	95	(75 - 114)

**NOTE(S):**

J Estimated result. Result is less than RL.

Pacific Northwest National Laboratory

B1MFF7

GC/MS Volatiles

Lot-Sample #: F7C220227-002

Work Order #: JRJVA1AC

Matrix: WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

<u>PARAMETER</u>	<u>CAS #</u>	<u>ESTIMATED RESULT</u>	<u>RETENTION TIME</u>	<u>UNITS</u>
None				ug/L

## Pacific Northwest National Laboratory

Client Sample ID: B1MKT2

## GC/MS Volatiles

Lot-Sample #....: F7C230155-005    Work Order #....: JRLW41AC    Matrix.....: WATER  
 Date Sampled....: 03/22/07    Date Received...: 03/23/07  
 Prep Date.....: 03/27/07    Analysis Date...: 03/28/07  
 Prep Batch #....: 7087139  
 Dilution Factor: 1    Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1,1-Dichloroethene	ND	1.0	ug/L	0.045
1,4-Dioxane	ND	80	ug/L	12
Ethylbenzene	ND	1.0	ug/L	0.064
Vinyl chloride	ND	2.0	ug/L	0.044
Acetone	ND	2.0	ug/L	0.80
Methylene chloride	ND	1.0	ug/L	0.60
Carbon disulfide	ND	1.0	ug/L	0.031
1,1-Dichloroethane	ND	1.0	ug/L	0.046
2-Butanone	ND	5.0	ug/L	1.8
Chloroform	ND	1.0	ug/L	0.048
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.048
Propionitrile	ND	5.0	ug/L	1.7
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.016
1,1,1-Trichloroethane	ND	1.0	ug/L	0.035
Carbon tetrachloride	ND	1.0	ug/L	0.039
1,2-Dichloroethane	ND	1.0	ug/L	0.11
Benzene	ND	1.0	ug/L	0.064
Trichloroethene	0.61 J	1.0	ug/L	0.037
4-Methyl-2-pentanone	ND	5.0	ug/L	0.21
1,1,2-Trichloroethane	ND	1.0	ug/L	0.092
Tetrachloroethene	ND	1.0	ug/L	0.17
Tetrahydrofuran	ND	10	ug/L	1.2
Xylenes (total)	ND	3.0	ug/L	0.13
1,4-Dichlorobenzene	ND	1.0	ug/L	0.047
1-Butanol	ND	40	ug/L	14
Toluene	ND	1.0	ug/L	0.025

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Toluene-d8	81	(76 - 117)
Dibromofluoromethane	107	(82 - 130)
1,2-Dichloroethane-d4	108	(73 - 137)
4-Bromofluorobenzene	96	(75 - 114)

**NOTE(S):**

J Estimated result. Result is less than RL.

Pacific Northwest National Laboratory

B1MKT2

GC/MS Volatiles

Lot-Sample #: F7C230155-005

Work Order #: JRLW41AC

Matrix: WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

<u>PARAMETER</u>	<u>CAS #</u>	<u>ESTIMATED RESULT</u>	<u>RETENTION TIME</u>	<u>UNITS</u>
None				ug/L

## Pacific Northwest National Laboratory

Client Sample ID: BIMKT5

## GC/MS Volatiles

Lot-Sample #....: F7C230155-006    Work Order #....: JRLW51AC    Matrix.....: WATER  
 Date Sampled....: 03/22/07    Date Received...: 03/23/07  
 Prep Date.....: 03/27/07    Analysis Date...: 03/28/07  
 Prep Batch #....: 7087139  
 Dilution Factor: 1    Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1,1-Dichloroethene	ND	1.0	ug/L	0.045
1,4-Dioxane	ND	80	ug/L	12
Ethylbenzene	ND	1.0	ug/L	0.064
Vinyl chloride	ND	2.0	ug/L	0.044
Acetone	ND	2.0	ug/L	0.80
Methylene chloride	ND	1.0	ug/L	0.60
Carbon disulfide	ND	1.0	ug/L	0.031
1,1-Dichloroethane	ND	1.0	ug/L	0.046
2-Butanone	ND	5.0	ug/L	1.8
Chloroform	ND	1.0	ug/L	0.048
Propionitrile	ND	5.0	ug/L	1.7
<b>trans-1,2-Dichloroethene</b>	<b>1.9</b>	<b>1.0</b>	<b>ug/L</b>	<b>0.016</b>
1,1,1-Trichloroethane	ND	1.0	ug/L	0.035
Carbon tetrachloride	ND	1.0	ug/L	0.039
1,2-Dichloroethane	ND	1.0	ug/L	0.11
Benzene	ND	1.0	ug/L	0.064
<b>Trichloroethene</b>	<b>2.2</b>	<b>1.0</b>	<b>ug/L</b>	<b>0.037</b>
4-Methyl-2-pentanone	ND	5.0	ug/L	0.21
1,1,2-Trichloroethane	ND	1.0	ug/L	0.092
Tetrachloroethene	ND	1.0	ug/L	0.17
Tetrahydrofuran	ND	10	ug/L	1.2
Xylenes (total)	ND	3.0	ug/L	0.13
1,4-Dichlorobenzene	ND	1.0	ug/L	0.047
1-Butanol	ND	40	ug/L	14
Toluene	ND	1.0	ug/L	0.025

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Toluene-d8	81	(76 - 117)
Dibromofluoromethane	106	(82 - 130)
1,2-Dichloroethane-d4	108	(73 - 137)
4-Bromofluorobenzene	98	(75 - 114)

Pacific Northwest National Laboratory

B1MKTS

GC/MS Volatiles

Lot-Sample #: F7C230155-006

Work Order #: JRLW51AC

Matrix: WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

<u>PARAMETER</u>	<u>CAS #</u>	<u>ESTIMATED RESULT</u>	<u>RETENTION TIME</u>	<u>UNITS</u>
None				ug/L

## Pacific Northwest National Laboratory

Client Sample ID: B1MKTS

## GC/MS Volatiles

Lot-Sample #....: F7C230155-006    Work Order #....: JRLW52AC    Matrix.....: WATER  
 Date Sampled....: 03/22/07    Date Received...: 03/23/07  
 Prep Date.....: 04/02/07    Analysis Date...: 04/02/07  
 Prep Batch #....: 7093119  
 Dilution Factor: 20    Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
cis-1,2-Dichloroethene	120 D	20	ug/L	0.96
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
Toluene-d8	98	(76 - 117)		
Dibromofluoromethane	109	(82 - 130)		
1,2-Dichloroethane-d4	116	(73 - 137)		
4-Bromofluorobenzene	89	(75 - 114)		

**NOTE(S):**

D Result was obtained from the analysis of a dilution.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKV1

## GC/MS Volatiles

Lot-Sample #....: F7C230155-007    Work Order #....: JRLW62AC    Matrix.....: WATER  
 Date Sampled....: 03/22/07    Date Received...: 03/23/07  
 Prep Date.....: 04/02/07    Analysis Date...: 04/02/07  
 Prep Batch #....: 7093119  
 Dilution Factor: 1    Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1,1-Dichloroethene	ND	1.0	ug/L	0.045
1,4-Dioxane	ND	80	ug/L	12
Ethylbenzene	ND	1.0	ug/L	0.064
Vinyl chloride	ND	2.0	ug/L	0.044
Acetone	ND	2.0	ug/L	0.80
Methylene chloride	ND	1.0	ug/L	0.60
Carbon disulfide	0.24 J	1.0	ug/L	0.031
1,1-Dichloroethane	ND	1.0	ug/L	0.046
2-Butanone	ND	5.0	ug/L	1.8
Chloroform	ND	1.0	ug/L	0.048
cis-1,2-Dichloroethene	2.3	1.0	ug/L	0.048
Propionitrile	ND	5.0	ug/L	1.7
trans-1,2-Dichloroethene	0.27 J	1.0	ug/L	0.016
1,1,1-Trichloroethane	ND	1.0	ug/L	0.035
Carbon tetrachloride	ND N	1.0	ug/L	0.039
1,2-Dichloroethane	ND	1.0	ug/L	0.11
Benzene	ND	1.0	ug/L	0.064
Trichloroethene	ND	1.0	ug/L	0.037
4-Methyl-2-pentanone	ND	5.0	ug/L	0.21
1,1,2-Trichloroethane	ND	1.0	ug/L	0.092
Tetrachloroethene	ND	1.0	ug/L	0.17
Tetrahydrofuran	ND	10	ug/L	1.2
Xylenes (total)	ND	3.0	ug/L	0.13
1,4-Dichlorobenzene	ND	1.0	ug/L	0.047
1-Butanol	ND	40	ug/L	14
Toluene	ND	1.0	ug/L	0.025

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Toluene-d8	99	(76 - 117)
Dibromofluoromethane	112	(82 - 130)
1,2-Dichloroethane-d4	115	(73 - 137)
4-Bromofluorobenzene	90	(75 - 114)

**NOTE(S):**

J Estimated result. Result is less than RL.

N Spike sample recovery is outside control limits.

Pacific Northwest National Laboratory

BIMKVI

GC/MS Volatiles

Lot-Sample #: F7C230155-007

Work Order #: JRLW62AC

Matrix: WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

<u>PARAMETER</u>	<u>CAS #</u>	<u>ESTIMATED RESULT</u>	<u>RETENTION TIME</u>	<u>UNITS</u>
None				ug/L

## Pacific Northwest National Laboratory

Client Sample ID: B1MKV4

## GC/MS Volatiles

Lot-Sample #...: F7C230155-008    Work Order #...: JRLW71AC    Matrix.....: WATER  
 Date Sampled...: 03/22/07    Date Received...: 03/23/07  
 Prep Date.....: 03/27/07    Analysis Date...: 03/28/07  
 Prep Batch #...: 7087139  
 Dilution Factor: 1    Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1,1-Dichloroethene	ND	1.0	ug/L	0.045
1,4-Dioxane	ND	80	ug/L	12
Ethylbenzene	ND	1.0	ug/L	0.064
Vinyl chloride	ND	2.0	ug/L	0.044
Acetone	ND	2.0	ug/L	0.80
Methylene chloride	ND	1.0	ug/L	0.60
Carbon disulfide	ND	1.0	ug/L	0.031
1,1-Dichloroethane	ND	1.0	ug/L	0.046
2-Butanone	ND	5.0	ug/L	1.8
Chloroform	ND	1.0	ug/L	0.048
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.048
Propionitrile	ND	5.0	ug/L	1.7
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.016
1,1,1-Trichloroethane	ND	1.0	ug/L	0.035
Carbon tetrachloride	ND	1.0	ug/L	0.039
1,2-Dichloroethane	ND	1.0	ug/L	0.11
Benzene	ND	1.0	ug/L	0.064
Trichloroethene	ND	1.0	ug/L	0.037
4-Methyl-2-pentanone	ND	5.0	ug/L	0.21
1,1,2-Trichloroethane	ND	1.0	ug/L	0.092
Tetrachloroethene	ND	1.0	ug/L	0.17
Tetrahydrofuran	ND	10	ug/L	1.2
Xylenes (total)	ND	3.0	ug/L	0.13
1,4-Dichlorobenzene	ND	1.0	ug/L	0.047
1-Butanol	ND	40	ug/L	14
Toluene	ND	1.0	ug/L	0.025

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Toluene-d8	81	(76 - 117)
Dibromofluoromethane	114	(82 - 130)
1,2-Dichloroethane-d4	107	(73 - 137)
4-Bromofluorobenzene	98	(75 - 114)

Pacific Northwest National Laboratory

B1MKV4

GC/MS Volatiles

Lot-Sample #: F7C230155-008

Work Order #: JRLW71AC

Matrix: WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

<u>PARAMETER</u>	<u>CAS #</u>	<u>ESTIMATED RESULT</u>	<u>RETENTION TIME</u>	<u>UNITS</u>
None				ug/L

## Pacific Northwest National Laboratory

Client Sample ID: B1MFF8

## GC/MS Volatiles

Lot-Sample #....: F7C230157-002    Work Order #....: JRLXE1AC    Matrix.....: WATER  
 Date Sampled....: 03/22/07    Date Received...: 03/23/07  
 Prep Date.....: 03/27/07    Analysis Date...: 03/28/07  
 Prep Batch #....: 7087139  
 Dilution Factor: 1    Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
1,1-Dichloroethene	ND	1.0	ug/L	0.045
1,4-Dioxane	ND	80	ug/L	12
Ethylbenzene	ND	1.0	ug/L	0.064
Vinyl chloride	ND	2.0	ug/L	0.044
Acetone	ND	2.0	ug/L	0.80
<b>Methylene chloride</b>	<b>8.6</b>	<b>1.0</b>	<b>ug/L</b>	<b>0.60</b>
Carbon disulfide	ND	1.0	ug/L	0.031
1,1-Dichloroethane	ND	1.0	ug/L	0.046
2-Butanone	ND	5.0	ug/L	1.8
Chloroform	ND	1.0	ug/L	0.048
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.048
Propionitrile	ND	5.0	ug/L	1.7
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.016
1,1,1-Trichloroethane	ND	1.0	ug/L	0.035
Carbon tetrachloride	ND	1.0	ug/L	0.039
1,2-Dichloroethane	ND	1.0	ug/L	0.11
Benzene	ND	1.0	ug/L	0.064
Trichloroethene	ND	1.0	ug/L	0.037
4-Methyl-2-pentanone	ND	5.0	ug/L	0.21
1,1,2-Trichloroethane	ND	1.0	ug/L	0.092
Tetrachloroethene	ND	1.0	ug/L	0.17
Tetrahydrofuran	ND	10	ug/L	1.2
Xylenes (total)	ND	3.0	ug/L	0.13
1,4-Dichlorobenzene	ND	1.0	ug/L	0.047
1-Butanol	ND	40	ug/L	14
Toluene	ND	1.0	ug/L	0.025

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Toluene-d8	80	(76 - 117)
Dibromofluoromethane	109	(82 - 130)
1,2-Dichloroethane-d4	111	(73 - 137)
4-Bromofluorobenzene	98	(75 - 114)

Pacific Northwest National Laboratory

B1MFF8

GC/MS Volatiles

Lot-Sample #: F7C230157-002

Work Order #: JRLXE1AC

Matrix: WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

<u>PARAMETER</u>	<u>CAS #</u>	<u>ESTIMATED RESULT</u>	<u>RETENTION TIME</u>	<u>UNITS</u>
None				ug/L

## METHOD BLANK REPORT

## GC/MS Volatiles

Client Lot #....: SL677

Work Order #....: JRVRV1AA

Matrix.....: WATER

MB Lot-Sample #: F7C280000-139

Prep Date.....: 03/27/07

Analysis Date...: 03/27/07

Prep Batch #....: 7087139

Dilution Factor: 1

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,4-Dioxane	ND	80	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	2.0	ug/L	SW846 8260B
Acetone	ND	2.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	5.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
Propionitrile	ND	5.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Tetrahydrofuran	ND	10	ug/L	SW846 8260B
Xylenes (total)	ND	3.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1-Butanol	ND	40	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Toluene-d8	80	(76 - 117)
Dibromofluoromethane	110	(82 - 130)
1,2-Dichloroethane-d4	115	(73 - 137)
4-Bromofluorobenzene	101	(75 - 114)

**NOTE (S) :**

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

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Method Blank Report

GC/MS Volatiles

Lot-Sample #: F7C280000-139 B Work Order #: JRVRVIAA Matrix: WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

<u>PARAMETER</u>	<u>CAS #</u>	<u>ESTIMATED RESULT</u>	<u>RETENTION TIME</u>	<u>UNITS</u>
None				ug/L

## METHOD BLANK REPORT

## GC/MS Volatiles

Client Lot #...: SL677

Work Order #...: JR8D81AA

Matrix.....: WATER

MB Lot-Sample #: F7D030000-119

Prep Date.....: 04/02/07

Analysis Date...: 04/02/07

Prep Batch #...: 7093119

Dilution Factor: 1

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,4-Dioxane	ND	80	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	2.0	ug/L	SW846 8260B
Acetone	ND	2.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	5.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
Propionitrile	ND	5.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Tetrahydrofuran	ND	10	ug/L	SW846 8260B
Xylenes (total)	ND	3.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1-Butanol	ND	40	ug/L	SW846 8260B
<b>Toluene</b>	<b>0.12 J</b>	<b>1.0</b>	<b>ug/L</b>	<b>SW846 8260B</b>

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Toluene-d8	102	(76 - 117)
Dibromofluoromethane	100	(82 - 130)
1,2-Dichloroethane-d4	95	(73 - 137)
4-Bromofluorobenzene	99	(75 - 114)

**NOTE(S) :**

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

J Estimated result. Result is less than RL.

Pacific Northwest National Laboratory

Method Blank Report

GC/MS Volatiles

Lot-Sample #: F7D030000-119 B Work Order #: JR8D81AA Matrix: WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

<u>PARAMETER</u>	<u>CAS #</u>	<u>ESTIMATED RESULT</u>	<u>RETENTION TIME</u>	<u>UNITS</u>
None				ug/L

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #...: SL677      Work Order #...: JRVRV1AC-LCS      Matrix.....: WATER  
 LCS Lot-Sample#: F7C280000-139      JRVRV1AD-LCSD  
 Prep Date.....: 03/27/07      Analysis Date...: 03/27/07  
 Prep Batch #...: 7087139  
 Dilution Factor: 1

PARAMETER	SPIKE	MEASURED		PERCENT		METHOD
	AMOUNT	AMOUNT	UNITS	RECOVERY	RPD	
1,1-Dichloroethene	10.0	9.01	ug/L	90		SW846 8260B
	10.0	8.75	ug/L	88	2.9	SW846 8260B
Ethylbenzene	10.0	11.3	ug/L	113		SW846 8260B
	10.0	11.2	ug/L	112	0.17	SW846 8260B
1,4-Dioxane	200	159	ug/L	79		SW846 8260B
	200	168	ug/L	84	5.4	SW846 8260B
Vinyl chloride	10.0	11.5	ug/L	115		SW846 8260B
	10.0	11.3	ug/L	113	1.5	SW846 8260B
Acetone	10.0	8.28	ug/L	83		SW846 8260B
	10.0	8.50	ug/L	85	2.6	SW846 8260B
Methylene chloride	10.0	11.0	ug/L	110		SW846 8260B
	10.0	11.1	ug/L	111	1.4	SW846 8260B
Carbon disulfide	10.0	8.38	ug/L	84		SW846 8260B
	10.0	8.22	ug/L	82	2.0	SW846 8260B
1,1-Dichloroethane	10.0	9.99	ug/L	100		SW846 8260B
	10.0	9.97	ug/L	100	0.28	SW846 8260B
2-Butanone	10.0	9.25	ug/L	92		SW846 8260B
	10.0	11.1	ug/L	111	18	SW846 8260B
Chloroform	10.0	9.87	ug/L	99		SW846 8260B
	10.0	10.3	ug/L	103	4.5	SW846 8260B
cis-1,2-Dichloroethene	10.0	10.4	ug/L	104		SW846 8260B
	10.0	10.4	ug/L	104	0.19	SW846 8260B
Propionitrile	50.0	51.6	ug/L	103		SW846 8260B
	50.0	55.5	ug/L	111	7.3	SW846 8260B
trans-1,2-Dichloroethene	10.0	10.1	ug/L	101		SW846 8260B
	10.0	10.3	ug/L	103	1.5	SW846 8260B
1,1,1-Trichloroethane	10.0	10.5	ug/L	105		SW846 8260B
	10.0	10.3	ug/L	103	1.5	SW846 8260B
Carbon tetrachloride	10.0	11.4	ug/L	114		SW846 8260B
	10.0	11.9	ug/L	119	4.0	SW846 8260B
1,2-Dichloroethane	10.0	9.97	ug/L	100		SW846 8260B
	10.0	10.1	ug/L	101	1.4	SW846 8260B
Benzene	10.0	10.2	ug/L	102		SW846 8260B
	10.0	10.4	ug/L	104	1.4	SW846 8260B
Trichloroethene	10.0	9.76	ug/L	98		SW846 8260B
	10.0	10.0	ug/L	100	2.8	SW846 8260B
4-Methyl-2-pentanone	10.0	9.48	ug/L	95		SW846 8260B
	10.0	9.34	ug/L	93	1.5	SW846 8260B
1,1,2-Trichloroethane	10.0	9.38	ug/L	94		SW846 8260B
	10.0	9.69	ug/L	97	3.3	SW846 8260B

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## LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #...: SL677      Work Order #...: JRVRVIAC-LCS      Matrix.....: WATER  
 LCS Lot-Sample#: F7C280000-139      JRVRVIAD-LCSD

PARAMETER	SPIKE	MEASURED		PERCENT		METHOD
	AMOUNT	AMOUNT	UNITS	RECOVERY	RPD	
<b>Tetrachloroethene</b>	10.0	10.2	ug/L	102		SW846 8260B
	10.0	10.5	ug/L	105	2.7	SW846 8260B
<b>Tetrahydrofuran</b>	50.0	50.1	ug/L	100		SW846 8260B
	50.0	54.0	ug/L	108	7.6	SW846 8260B
<b>1,4-Dichlorobenzene</b>	10.0	9.88	ug/L	99		SW846 8260B
	10.0	9.85	ug/L	98	0.36	SW846 8260B
<b>1-Butanol</b>	100	70.6	ug/L	71		SW846 8260B
	100	84.9	ug/L	85	18	SW846 8260B
<b>Toluene</b>	10.0	10.7	ug/L	107		SW846 8260B
	10.0	10.9	ug/L	109	1.5	SW846 8260B

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
<b>Toluene-d8</b>	107	(90 - 118)
	110	(90 - 118)
<b>Dibromofluoromethane</b>	106	(83 - 125)
	106	(83 - 125)
<b>1,2-Dichloroethane-d4</b>	103	(75 - 135)
	107	(75 - 135)
<b>4-Bromofluorobenzene</b>	110	(78 - 119)
	110	(78 - 119)

**NOTE(S):**

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

Bold print denotes control parameters

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #...: SL677      Work Order #...: JR8D81AC-LCS      Matrix.....: WATER  
 LCS Lot-Sample#: F7D030000-119      JR8D81AD-LCSD  
 Prep Date.....: 04/02/07      Analysis Date...: 04/02/07  
 Prep Batch #...: 7093119  
 Dilution Factor: 1

PARAMETER	SPIKE	MEASURED		PERCENT		METHOD
	AMOUNT	AMOUNT	UNITS	RECOVERY	RPD	
1,1-Dichloroethene	10.0	9.37	ug/L	94		SW846 8260B
	10.0	10.1	ug/L	101	7.7	SW846 8260B
Ethylbenzene	10.0	11.8	ug/L	118		SW846 8260B
	10.0	11.6	ug/L	116	1.9	SW846 8260B
1,4-Dioxane	200	97.8	ug/L	49		SW846 8260B
	200	112	ug/L	56	14	SW846 8260B
Vinyl chloride	10.0	11.2	ug/L	112		SW846 8260B
	10.0	10.4	ug/L	104	7.2	SW846 8260B
Acetone	10.0	5.31	ug/L	53		SW846 8260B
	10.0	6.25	ug/L	62	16	SW846 8260B
Methylene chloride	10.0	9.01	ug/L	90		SW846 8260B
	10.0	9.69	ug/L	97	7.2	SW846 8260B
Carbon disulfide	10.0	8.37	ug/L	84		SW846 8260B
	10.0	8.42	ug/L	84	0.53	SW846 8260B
1,1-Dichloroethane	10.0	9.80	ug/L	98		SW846 8260B
	10.0	9.62	ug/L	96	1.8	SW846 8260B
2-Butanone	10.0	8.59	ug/L	86		SW846 8260B
	10.0	10.1	ug/L	101	16	SW846 8260B
Chloroform	10.0	9.87	ug/L	99		SW846 8260B
	10.0	9.91	ug/L	99	0.40	SW846 8260B
cis-1,2-Dichloroethene	10.0	9.94	ug/L	99		SW846 8260B
	10.0	10.2	ug/L	102	2.1	SW846 8260B
Propionitrile	50.0	43.1	ug/L	86		SW846 8260B
	50.0	41.0	ug/L	82	4.9	SW846 8260B
trans-1,2-Dichloroethene	10.0	9.64	ug/L	96		SW846 8260B
	10.0	9.90	ug/L	99	2.6	SW846 8260B
1,1,1-Trichloroethane	10.0	10.6	ug/L	106		SW846 8260B
	10.0	10.6	ug/L	106	0.28	SW846 8260B
Carbon tetrachloride	10.0	11.5	ug/L	115		SW846 8260B
	10.0	11.1	ug/L	111	2.9	SW846 8260B
1,2-Dichloroethane	10.0	9.27	ug/L	93		SW846 8260B
	10.0	9.41	ug/L	94	1.6	SW846 8260B
Benzene	10.0	9.82	ug/L	98		SW846 8260B
	10.0	9.76	ug/L	98	0.61	SW846 8260B
Trichloroethene	10.0	9.45	ug/L	95		SW846 8260B
	10.0	9.32	ug/L	93	1.4	SW846 8260B
4-Methyl-2-pentanone	10.0	8.14	ug/L	81		SW846 8260B
	10.0	8.81	ug/L	88	8.0	SW846 8260B
1,1,2-Trichloroethane	10.0	9.08	ug/L	91		SW846 8260B
	10.0	9.24	ug/L	92	1.8	SW846 8260B

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## LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #...: SL677      Work Order #...: JR8D81AC-LCS      Matrix.....: WATER  
 LCS Lot-Sample#: F7D030000-119      JR8D81AD-LCSD

<u>PARAMETER</u>	<u>SPIKE</u> <u>AMOUNT</u>	<u>MEASURED</u> <u>AMOUNT</u>	<u>UNITS</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RPD</u>	<u>METHOD</u>
<b>Tetrachloroethene</b>	10.0	10.9	ug/L	109		SW846 8260B
	10.0	11.4	ug/L	114	4.1	SW846 8260B
<b>Tetrahydrofuran</b>	50.0	37.0	ug/L	74		SW846 8260B
	50.0	39.4	ug/L	79	6.3	SW846 8260B
<b>1,4-Dichlorobenzene</b>	10.0	9.63	ug/L	96		SW846 8260B
	10.0	9.38	ug/L	94	2.7	SW846 8260B
<b>1-Butanol</b>	100	53.0	ug/L	53		SW846 8260B
	100	63.8	ug/L	64	18	SW846 8260B
<b>Toluene</b>	10.0	11.1	ug/L	111		SW846 8260B
	10.0	10.8	ug/L	108	2.6	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
<b>Toluene-d8</b>	115	(90 - 118)
	110	(90 - 118)
<b>Dibromofluoromethane</b>	108	(83 - 125)
	107	(83 - 125)
<b>1,2-Dichloroethane-d4</b>	97	(75 - 135)
	96	(75 - 135)
<b>4-Bromofluorobenzene</b>	103	(78 - 119)
	101	(78 - 119)

**NOTE(S):**

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

Bold print denotes control parameters

## MATRIX SPIKE SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #....: SL677                      Work Order #....: JRH501AK-MS                      Matrix.....: WATER  
 MS Lot-Sample #: F7C220166-002                      JRH501AL-MSD  
 Date Sampled...: 03/20/07                      Date Received...: 03/22/07  
 Prep Date.....: 03/27/07                      Analysis Date...: 03/27/07  
 Prep Batch #....: 7087139  
 Dilution Factor: 1

PARAMETER	SAMPLE	SPIKE	MEASRD		PERCNT		METHOD
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD	
1,1-Dichloroethene	ND	10.0	8.56	ug/L	86		SW846 8260B
	ND	10.0	8.56	ug/L	86	0.04	SW846 8260B
Ethylbenzene	ND	10.0	11.6	ug/L	116		SW846 8260B
	ND	10.0	11.4	ug/L	114	1.6	SW846 8260B
1,4-Dioxane	ND	200	116	ug/L	58		SW846 8260B
	ND	200	112	ug/L	56	3.5	SW846 8260B
Vinyl chloride	ND	10.0	10.6	ug/L	106		SW846 8260B
	ND	10.0	10.4	ug/L	104	1.6	SW846 8260B
Acetone	ND	10.0	6.62	ug/L	66		SW846 8260B
	ND	10.0	7.06	ug/L	71	6.4	SW846 8260B
Methylene chloride	ND	10.0	8.69	ug/L	87		SW846 8260B
	ND	10.0	8.54	ug/L	85	1.8	SW846 8260B
Carbon disulfide	ND	10.0	8.23	ug/L	82		SW846 8260B
	ND	10.0	8.06	ug/L	81	2.1	SW846 8260B
1,1-Dichloroethane	ND	10.0	9.78	ug/L	98		SW846 8260B
	ND	10.0	9.70	ug/L	97	0.84	SW846 8260B
2-Butanone	ND	10.0	9.57	ug/L	96		SW846 8260B
	ND	10.0	9.41	ug/L	94	1.7	SW846 8260B
Chloroform	0.10	10.0	9.91	ug/L	98		SW846 8260B
	0.10	10.0	9.62	ug/L	95	3.0	SW846 8260B
cis-1,2-Dichloroethene	ND	10.0	10.3	ug/L	103		SW846 8260B
	ND	10.0	10.4	ug/L	104	0.58	SW846 8260B
Propionitrile	ND	50.0	49.7	ug/L	99		SW846 8260B
	ND	50.0	47.7	ug/L	95	4.1	SW846 8260B
trans-1,2-Dichloroethene	ND	10.0	9.95	ug/L	99		SW846 8260B
	ND	10.0	10.1	ug/L	101	1.8	SW846 8260B
1,1,1-Trichloroethane	ND	10.0	10.3	ug/L	103		SW846 8260B
	ND	10.0	9.94	ug/L	99	3.9	SW846 8260B
Carbon tetrachloride	ND	10.0	12.6	ug/L	126		SW846 8260B
	ND	10.0	12.2	ug/L	122	2.7	SW846 8260B
1,2-Dichloroethane	ND	10.0	9.85	ug/L	98		SW846 8260B
	ND	10.0	9.44	ug/L	94	4.3	SW846 8260B
Benzene	ND	10.0	10.2	ug/L	102		SW846 8260B
	ND	10.0	10.0	ug/L	100	2.2	SW846 8260B
Trichloroethene	ND	10.0	9.66	ug/L	97		SW846 8260B
	ND	10.0	9.27	ug/L	93	4.1	SW846 8260B
4-Methyl-2-pentanone	ND	10.0	9.01	ug/L	90		SW846 8260B
	ND	10.0	8.67	ug/L	87	3.9	SW846 8260B
1,1,2-Trichloroethane	ND	10.0	9.60	ug/L	96		SW846 8260B
	ND	10.0	9.05	ug/L	91	5.8	SW846 8260B

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## MATRIX SPIKE SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #...: SL677      Work Order #...: JRH501AK-MS      Matrix.....: WATER  
 MS Lot-Sample #: F7C220166-002      JRH501AL-MSD

PARAMETER	SAMPLE	SPIKE	MEASRD	UNITS	PERCNT		METHOD
	AMOUNT	AMT	AMOUNT		RECVRY	RPD	
Tetrachloroethene	ND	10.0	10.9	ug/L	109		SW846 8260B
	ND	10.0	10.5	ug/L	105	3.6	SW846 8260B
Tetrahydrofuran	ND	50.0	51.3	ug/L	103		SW846 8260B
	ND	50.0	50.0	ug/L	100	2.5	SW846 8260B
1,4-Dichlorobenzene	ND	10.0	9.75	ug/L	97		SW846 8260B
	ND	10.0	9.56	ug/L	96	2.0	SW846 8260B
1-Butanol	ND	100	79.2	ug/L	79		SW846 8260B
	ND	100	69.2	ug/L	69	13	SW846 8260B
Toluene	ND	10.0	10.8	ug/L	108		SW846 8260B
	ND	10.0	10.4	ug/L	104	3.7	SW846 8260B

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Toluene-d8	112	(76 - 117)
	110	(76 - 117)
Dibromofluoromethane	103	(82 - 130)
	102	(82 - 130)
1,2-Dichloroethane-d4	102	(73 - 137)
	97	(73 - 137)
4-Bromofluorobenzene	113	(75 - 114)
	114	(75 - 114)

**NOTE(S) :**

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

Bold print denotes control parameters

## MATRIX SPIKE SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #....: SL677                      Work Order #....: JRJR51AD-MS                      Matrix.....: WATER  
 MS Lot-Sample #: F7C220175-011                      JRJR51AB-MSD  
 Date Sampled...: 03/21/07                      Date Received...: 03/22/07  
 Prep Date.....: 04/02/07                      Analysis Date...: 04/02/07  
 Prep Batch #....: 7093119  
 Dilution Factor: 1

PARAMETER	SAMPLE	SPIKE	MEASRD	UNITS	PERCNT		METHOD
	AMOUNT	AMT	AMOUNT		RECVRY	RPD	
1,1-Dichloroethene	ND	10.0	8.02	ug/L	80		SW846 8260B
	ND	10.0	8.73	ug/L	87	8.4	SW846 8260B
Ethylbenzene	ND	10.0	9.22	ug/L	92		SW846 8260B
	ND	10.0	9.67	ug/L	97	4.8	SW846 8260B
1,4-Dioxane	ND	200	93.8	ug/L	47		SW846 8260B
	ND	200	102	ug/L	51	8.3	SW846 8260B
Vinyl chloride	ND	10.0	9.51	ug/L	95		SW846 8260B
	ND	10.0	10.3	ug/L	103	8.1	SW846 8260B
Acetone	ND	10.0	8.48	ug/L	85		SW846 8260B
	ND	10.0	8.36	ug/L	84	1.4	SW846 8260B
Methylene chloride	ND	10.0	9.16	ug/L	92		SW846 8260B
	ND	10.0	9.04	ug/L	90	1.2	SW846 8260B
Carbon disulfide	0.24	10.0	8.77	ug/L	85		SW846 8260B
	0.24	10.0	8.97	ug/L	87	2.2	SW846 8260B
1,1-Dichloroethane	ND	10.0	10.4	ug/L	104		SW846 8260B
	ND	10.0	10.4	ug/L	104	0.28	SW846 8260B
2-Butanone	ND	10.0	9.08	ug/L	91		SW846 8260B
	ND	10.0	8.69	ug/L	87	4.3	SW846 8260B
Chloroform	ND	10.0	11.3	ug/L	113		SW846 8260B
	ND	10.0	11.4	ug/L	114	0.70	SW846 8260B
cis-1,2-Dichloroethene	ND	10.0	10.5	ug/L	105		SW846 8260B
	ND	10.0	10.9	ug/L	109	4.3	SW846 8260B
Propionitrile	ND	50.0	53.8	ug/L	108		SW846 8260B
	ND	50.0	51.4	ug/L	103	4.7	SW846 8260B
trans-1,2-Dichloroethene	ND	10.0	9.32	ug/L	93		SW846 8260B
	ND	10.0	9.99	ug/L	100	7.0	SW846 8260B
1,1,1-Trichloroethane	ND	10.0	11.0	ug/L	110		SW846 8260B
	ND	10.0	11.1	ug/L	111	0.90	SW846 8260B
Carbon tetrachloride	0.11	10.0	16.7	ug/L	166		SW846 8260B
	Qualifiers: a,N						
	0.11	10.0	16.9	ug/L	168	1.4	SW846 8260B
	Qualifiers: a,N						
1,2-Dichloroethane	ND	10.0	11.0	ug/L	110		SW846 8260B
	ND	10.0	10.9	ug/L	109	1.6	SW846 8260B
Benzene	ND	10.0	10.3	ug/L	103		SW846 8260B
	ND	10.0	10.4	ug/L	104	0.77	SW846 8260B
Trichloroethene	ND	10.0	10.0	ug/L	100		SW846 8260B
	ND	10.0	9.82	ug/L	98	2.2	SW846 8260B
4-Methyl-2-pentanone	ND	10.0	7.14	ug/L	71		SW846 8260B
	ND	10.0	7.47	ug/L	75	4.6	SW846 8260B

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## MATRIX SPIKE SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #...: SL677

Work Order #...: JRJR51AD-MS

Matrix.....: WATER

MS Lot-Sample #: F7C220175-011

JRJR51AE-MSD

PARAMETER	SAMPLE	SPIKE	MEASRD	UNITS	PERCNT		METHOD
	AMOUNT	AMT	AMOUNT		RECVRY	RPD	
1,1,2-Trichloroethane	ND	10.0	7.49	ug/L	75		SW846 8260B
	ND	10.0	8.00	ug/L	80	6.6	SW846 8260B
Tetrachloroethene	ND	10.0	8.29	ug/L	83		SW846 8260B
	ND	10.0	8.61	ug/L	86	3.8	SW846 8260B
Tetrahydrofuran	ND	50.0	50.4	ug/L	101		SW846 8260B
	ND	50.0	51.3	ug/L	103	1.7	SW846 8260B
1,4-Dichlorobenzene	ND	10.0	7.45	ug/L	75		SW846 8260B
	ND	10.0	7.56	ug/L	76	1.4	SW846 8260B
1-Butanol	ND	100	83.7	ug/L	84		SW846 8260B
	ND	100	68.8	ug/L	69	20	SW846 8260B
Toluene	ND	10.0	8.71	ug/L	87		SW846 8260B
	ND	10.0	8.68	ug/L	87	0.34	SW846 8260B

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Toluene-d8	84	(76 - 117)
	85	(76 - 117)
Dibromofluoromethane	102	(82 - 130)
	99	(82 - 130)
1,2-Dichloroethane-d4	107	(73 - 137)
	114	(73 - 137)
4-Bromofluorobenzene	86	(75 - 114)
	87	(75 - 114)

**NOTE(S) :**

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

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

N Spike sample recovery is outside control limits.

**EXTRACTABLE  
PETROLEUM  
HYDROCARBONS**

## Pacific Northwest National Laboratory

Client Sample ID: B1MDY3

## GC Semivolatiles

Lot-Sample #....: F7C240130-001    Work Order #....: JRN9E1AC    Matrix.....: WATER  
 Date Sampled...: 03/23/07    Date Received...: 03/24/07  
 Prep Date.....: 03/27/07    Analysis Date...: 04/04/07  
 Prep Batch #....: 7086131  
 Dilution Factor: 1    Method.....: SW846 8015 MOD

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		
		<u>LIMIT</u>	<u>UNITS</u>	<u>MDL</u>
TPH - Diesel Range - WTPH-D	ND	0.50	mg/L	0.050
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>		
o-Terphenyl	67	(16 - 150)		

## METHOD BLANK REPORT

## GC Semivolatiles

Client Lot #...: SL677

Work Order #...: JRRP1AA

Matrix.....: WATER

MB Lot-Sample #: F7C270000-131

Prep Date.....: 03/27/07

Analysis Date...: 04/04/07

Prep Batch #...: 7086131

Dilution Factor: 1

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
TPH - Diesel Range - WTPH	ND	0.50	mg/L	SW846 8015 MOD

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
o-Terphenyl	67 *	(73 - 150)

**NOTE(S):**

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

\* Surrogate recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #....: SL677                      Work Order #....: JRRPPLAC                      Matrix.....: WATER  
 LCS Lot-Sample#: F7C270000-131  
 Prep Date.....: 03/27/07                      Analysis Date...: 04/04/07  
 Prep Batch #....: 7086131  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE</u> <u>AMOUNT</u>	<u>MEASURED</u> <u>AMOUNT</u>	<u>UNITS</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>METHOD</u>
TPH - Diesel Range - WTPH	2.50	1.50	ug/L	60	SW846 8015 MO
<u>SURROGATE</u>		<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>		
o-Terphenyl		98	(73 - 150)		

**NOTE(S):**

Calculations are performed before rounding to avoid round-off errors in calculated results.  
 Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #....: SL677                      Work Order #....: JRN9E1AD-MS                      Matrix.....: WATER  
 MS Lot-Sample #: F7C240130-001                      JRN9E1AE-MSD  
 Date Sampled....: 03/23/07                      Date Received...: 03/24/07  
 Prep Date.....: 03/27/07                      Analysis Date...: 04/04/07  
 Prep Batch #....: 7086131  
 Dilution Factor: 1

PARAMETER	SAMPLE	SPIKE	MEASRD	UNITS	PERCNT		METHOD
	AMOUNT	AMT	AMOUNT		RECVRY	RPD	
TPH - Diesel Range - WTPH	ND	2.71	1.72	mg/L	64		SW846 8015 MOD
	ND	2.55	1.47	mg/L	57	16	SW846 8015 MOD

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
o-Terphenyl	99	(16 - 150)
	91	(16 - 150)

**NOTE(S):**

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

Bold print denotes control parameters

# METALS

## Pacific Northwest National Laboratory

Client Sample ID: B1MKVB

## DISSOLVED Metals

Lot-Sample #...: F7C220104-001

Matrix.....: WATER

Date Sampled...: 03/20/07

Date Received...: 03/21/07

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS			
Prep Batch #...: 7081217						
Antimony	ND	60.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE01AA
		Dilution Factor: 1		MDL.....: 44.8		
Barium	65.8 B	200	ug/L	SW846 6010B	03/22-04/04/07	JRHE01AC
		Dilution Factor: 1		MDL.....: 5.0		
Beryllium	ND	5.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE01AD
		Dilution Factor: 1		MDL.....: 0.51		
Cadmium	ND	5.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE01AE
		Dilution Factor: 1		MDL.....: 2.3		
Calcium	50900 C	5000	ug/L	SW846 6010B	03/22-04/04/07	JRHE01AF
		Dilution Factor: 1		MDL.....: 36.0		
Chromium	8.0 B	10.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE01AG
		Dilution Factor: 1		MDL.....: 3.1		
Cobalt	ND	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE01AH
		Dilution Factor: 1		MDL.....: 5.0		
Copper	ND	25.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE01AJ
		Dilution Factor: 1		MDL.....: 2.8		
Iron	ND	100	ug/L	SW846 6010B	03/22-04/03/07	JRHE01AK
		Dilution Factor: 1		MDL.....: 25.0		
Magnesium	16200	5000	ug/L	SW846 6010B	03/22-04/04/07	JRHE01AL
		Dilution Factor: 1		MDL.....: 108		
Manganese	2.9 B	15.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE01AM
		Dilution Factor: 1		MDL.....: 2.5		
Nickel	ND	40.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE01AN
		Dilution Factor: 1		MDL.....: 7.5		
Potassium	8240	5000	ug/L	SW846 6010B	03/22-04/03/07	JRHE01AP
		Dilution Factor: 1		MDL.....: 1500		
Silver	ND	10.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE01AQ
		Dilution Factor: 1		MDL.....: 5.2		

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## Pacific Northwest National Laboratory

Client Sample ID: B1MKV8

## DISSOLVED Metals

Lot-Sample #...: F7C220104-001

Matrix.....: WATER

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION-	WORK
		LIMIT	UNITS		ANALYSIS DATE	ORDER #
Sodium	24600	5000	ug/L	SW846 6010B	03/22-04/03/07	JRHE01AR
		Dilution Factor: 1		MDL.....: 110		
Strontium	259	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE01AT
		Dilution Factor: 1		MDL.....: 0.56		
Vanadium	18.0 B	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE01AU
		Dilution Factor: 1		MDL.....: 5.9		
Zinc	ND	20.0	ug/L	SW846 6010B	03/22-04/03/07	JRHE01AV
		Dilution Factor: 1		MDL.....: 9.6		

**NOTE(S):**

B Estimated result. Result is less than RL.

C Method blank contamination. The associated method blank contains the target analyte at a reportable level.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKV9

## TOTAL Metals

Lot-Sample #...: F7C220104-002

Matrix.....: WATER

Date Sampled...: 03/20/07

Date Received...: 03/21/07

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 7081217						
Antimony	ND	60.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE21AC
		Dilution Factor: 1		MDL.....: 44.8		
Barium	68.8 B	200	ug/L	SW846 6010B	03/22-04/04/07	JRHE21AD
		Dilution Factor: 1		MDL.....: 5.0		
Beryllium	ND	5.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE21AE
		Dilution Factor: 1		MDL.....: 0.51		
Cadmium	ND	5.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE21AF
		Dilution Factor: 1		MDL.....: 2.3		
Calcium	52500 C	5000	ug/L	SW846 6010B	03/22-04/04/07	JRHE21AG
		Dilution Factor: 1		MDL.....: 36.0		
Chromium	8.3 B	10.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE21AH
		Dilution Factor: 1		MDL.....: 3.1		
Cobalt	ND	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE21AJ
		Dilution Factor: 1		MDL.....: 5.0		
Copper	ND	25.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE21AK
		Dilution Factor: 1		MDL.....: 2.8		
Iron	35.9 B,C	100	ug/L	SW846 6010B	03/22-04/03/07	JRHE21AL
		Dilution Factor: 1		MDL.....: 25.0		
Magnesium	16700	5000	ug/L	SW846 6010B	03/22-04/04/07	JRHE21AM
		Dilution Factor: 1		MDL.....: 108		
Manganese	ND	15.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE21AN
		Dilution Factor: 1		MDL.....: 2.5		
Nickel	ND	40.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE21AP
		Dilution Factor: 1		MDL.....: 7.5		
Potassium	7360	5000	ug/L	SW846 6010B	03/22-04/03/07	JRHE21AQ
		Dilution Factor: 1		MDL.....: 1500		
Silver	ND	10.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE21AR
		Dilution Factor: 1		MDL.....: 5.2		

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## Pacific Northwest National Laboratory

Client Sample ID: B1MKV9

## TOTAL Metals

Lot-Sample #...: F7C220104-002

Matrix.....: WATER

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION-	WORK
		LIMIT	UNITS		ANALYSIS DATE	ORDER #
Sodium	24800	5000	ug/L	SW846 6010B	03/22-04/03/07	JRHE21AT
		Dilution Factor: 1		MDL.....: 110		
Strontium	267	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE21AU
		Dilution Factor: 1		MDL.....: 0.56		
Vanadium	18.9 B	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE21AV
		Dilution Factor: 1		MDL.....: 5.9		
Zinc	14.9 B	20.0	ug/L	SW846 6010B	03/22-04/03/07	JRHE21AW
		Dilution Factor: 1		MDL.....: 9.6		

NOTE(S) :

B Estimated result. Result is less than RL.

C Method blank contamination. The associated method blank contains the target analyte at a reportable level.

## Pacific Northwest National Laboratory

Client Sample ID: BIMKW2

## DISSOLVED Metals

Lot-Sample #...: F7C220104-003

Matrix.....: WATER

Date Sampled...: 03/20/07

Date Received...: 03/21/07

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 7081217						
Antimony	ND	60.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE51AA
		Dilution Factor: 1		MDL.....: 44.8		
Barium	54.9 B	200	ug/L	SW846 6010B	03/22-04/04/07	JRHE51AC
		Dilution Factor: 1		MDL.....: 5.0		
Beryllium	ND	5.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE51AD
		Dilution Factor: 1		MDL.....: 0.51		
Cadmium	ND	5.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE51AE
		Dilution Factor: 1		MDL.....: 2.3		
Calcium	48200 C	5000	ug/L	SW846 6010B	03/22-04/04/07	JRHE51AF
		Dilution Factor: 1		MDL.....: 36.0		
Chromium	29.7	10.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE51AG
		Dilution Factor: 1		MDL.....: 3.1		
Cobalt	ND	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE51AH
		Dilution Factor: 1		MDL.....: 5.0		
Copper	ND	25.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE51AJ
		Dilution Factor: 1		MDL.....: 2.8		
Iron	25.7 B,C	100	ug/L	SW846 6010B	03/22-04/03/07	JRHE51AK
		Dilution Factor: 1		MDL.....: 25.0		
Magnesium	15900	5000	ug/L	SW846 6010B	03/22-04/04/07	JRHE51AL
		Dilution Factor: 1		MDL.....: 108		
Manganese	ND	15.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE51AM
		Dilution Factor: 1		MDL.....: 2.5		
Nickel	ND	40.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE51AN
		Dilution Factor: 1		MDL.....: 7.5		
Potassium	5560	5000	ug/L	SW846 6010B	03/22-04/03/07	JRHE51AP
		Dilution Factor: 1		MDL.....: 1500		
Silver	ND	10.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE51AQ
		Dilution Factor: 1		MDL.....: 5.2		

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Pacific Northwest National Laboratory

Client Sample ID: B1MKW2

DISSOLVED Metals

Lot-Sample #...: F7C220104-003

Matrix.....: WATER

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION-	WORK
		LIMIT	UNITS		ANALYSIS DATE	ORDER #
Sodium	21900	5000	ug/L	SW846 6010B	03/22-04/03/07	JRHE51AR
		Dilution Factor: 1		MDL.....: 110		
Strontium	229	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE51AT
		Dilution Factor: 1		MDL.....: 0.56		
Vanadium	21.2 B	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE51AU
		Dilution Factor: 1		MDL.....: 5.9		
Zinc	ND	20.0	ug/L	SW846 6010B	03/22-04/03/07	JRHE51AV
		Dilution Factor: 1		MDL.....: 9.6		

**NOTE(S) :**

- B Estimated result. Result is less than RL.
- C Method blank contamination. The associated method blank contains the target analyte at a reportable level.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKW3

## TOTAL Metals

Lot-Sample #....: F7C220104-004

Matrix.....: WATER

Date Sampled....: 03/20/07

Date Received...: 03/21/07

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 7081217						
Antimony	ND	60.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE61AJ
		Dilution Factor: 1		MDL.....: 44.8		
Barium	55.4 B	200	ug/L	SW846 6010B	03/22-04/04/07	JRHE61AK
		Dilution Factor: 1		MDL.....: 5.0		
Beryllium	ND	5.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE61AL
		Dilution Factor: 1		MDL.....: 0.51		
Cadmium	ND	5.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE61AM
		Dilution Factor: 1		MDL.....: 2.3		
Calcium	48500 C	5000	ug/L	SW846 6010B	03/22-04/04/07	JRHE61AN
		Dilution Factor: 1		MDL.....: 36.0		
Chromium	30.2	10.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE61AP
		Dilution Factor: 1		MDL.....: 3.1		
Cobalt	ND	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE61AQ
		Dilution Factor: 1		MDL.....: 5.0		
Copper	ND	25.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE61AR
		Dilution Factor: 1		MDL.....: 2.8		
Iron	46.0 B,C	100	ug/L	SW846 6010B	03/22-04/03/07	JRHE61AT
		Dilution Factor: 1		MDL.....: 25.0		
Magnesium	16000	5000	ug/L	SW846 6010B	03/22-04/04/07	JRHE61AU
		Dilution Factor: 1		MDL.....: 108		
Manganese	ND	15.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE61AV
		Dilution Factor: 1		MDL.....: 2.5		
Nickel	ND	40.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE61AW
		Dilution Factor: 1		MDL.....: 7.5		
Potassium	6240	5000	ug/L	SW846 6010B	03/22-04/03/07	JRHE61AX
		Dilution Factor: 1		MDL.....: 1500		
Silver	ND	10.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE61AO
		Dilution Factor: 1		MDL.....: 5.2		

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## Pacific Northwest National Laboratory

Client Sample ID: B1MKW3

## TOTAL Metals

Lot-Sample #...: F7C220104-004

Matrix.....: WATER

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION-	WORK
		LIMIT	UNITS		ANALYSIS DATE	ORDER #
Sodium	22400	5000	ug/L	SW846 6010B	03/22-04/03/07	JRHE61A1
		Dilution Factor: 1		MDL.....: 110		
Strontium	229	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE61A2
		Dilution Factor: 1		MDL.....: 0.56		
Vanadium	21.7 B	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE61A3
		Dilution Factor: 1		MDL.....: 5.9		
Zinc	19.0 B	20.0	ug/L	SW846 6010B	03/22-04/03/07	JRHE61A4
		Dilution Factor: 1		MDL.....: 9.6		

**NOTE(S):**

B Estimated result. Result is less than RL.

C Method blank contamination. The associated method blank contains the target analyte at a reportable level.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKW6

## DISSOLVED Metals

Lot-Sample #...: F7C220104-005

Matrix.....: WATER

Date Sampled...: 03/20/07

Date Received...: 03/21/07

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 7081217						
Antimony	ND	60.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE81AA
		Dilution Factor: 1		MDL.....: 44.8		
Barium	56.3 B	200	ug/L	SW846 6010B	03/22-04/04/07	JRHE81AC
		Dilution Factor: 1		MDL.....: 5.0		
Beryllium	ND	5.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE81AD
		Dilution Factor: 1		MDL.....: 0.51		
Cadmium	ND	5.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE81AE
		Dilution Factor: 1		MDL.....: 2.3		
Calcium	47800 C	5000	ug/L	SW846 6010B	03/22-04/04/07	JRHE81AF
		Dilution Factor: 1		MDL.....: 36.0		
Chromium	23.4	10.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE81AG
		Dilution Factor: 1		MDL.....: 3.1		
Cobalt	ND	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE81AH
		Dilution Factor: 1		MDL.....: 5.0		
Copper	ND	25.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE81AJ
		Dilution Factor: 1		MDL.....: 2.8		
Iron	ND	100	ug/L	SW846 6010B	03/22-04/03/07	JRHE81AK
		Dilution Factor: 1		MDL.....: 25.0		
Magnesium	16700	5000	ug/L	SW846 6010B	03/22-04/04/07	JRHE81AL
		Dilution Factor: 1		MDL.....: 108		
Manganese	5.4 B	15.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE81AM
		Dilution Factor: 1		MDL.....: 2.5		
Nickel	ND	40.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE81AN
		Dilution Factor: 1		MDL.....: 7.5		
Potassium	6530	5000	ug/L	SW846 6010B	03/22-04/03/07	JRHE81AP
		Dilution Factor: 1		MDL.....: 1500		
Silver	ND	10.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE81AQ
		Dilution Factor: 1		MDL.....: 5.2		

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## Pacific Northwest National Laboratory

Client Sample ID: B1MKW6

## DISSOLVED Metals

Lot-Sample #....: F7C220104-005

Matrix.....: WATER

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION-	WORK
		LIMIT	UNITS		ANALYSIS DATE	ORDER #
Sodium	21400	5000	ug/L	SW846 6010B	03/22-04/03/07	JRHE81AR
		Dilution Factor: 1		MDL.....: 110		
Strontium	235	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE81AT
		Dilution Factor: 1		MDL.....: 0.56		
Vanadium	22.0 B	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHE81AU
		Dilution Factor: 1		MDL.....: 5.9		
Zinc	ND	20.0	ug/L	SW846 6010B	03/22-04/03/07	JRHE81AV
		Dilution Factor: 1		MDL.....: 9.6		

**NOTE(S):**

B Estimated result. Result is less than RL.

C Method blank contamination. The associated method blank contains the target analyte at a reportable level.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKW7

## TOTAL Metals

Lot-Sample #....: F7C220104-006

Matrix.....: WATER

Date Sampled....: 03/20/07

Date Received...: 03/21/07

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 7081217						
Antimony	ND	60.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFAIAJ
		Dilution Factor: 1		MDL.....: 44.8		
Barium	56.2 B	200	ug/L	SW846 6010B	03/22-04/04/07	JRHFAIAK
		Dilution Factor: 1		MDL.....: 5.0		
Beryllium	ND	5.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFAIAL
		Dilution Factor: 1		MDL.....: 0.51		
Cadmium	ND	5.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFAIAM
		Dilution Factor: 1		MDL.....: 2.3		
Calcium	47600 C	5000	ug/L	SW846 6010B	03/22-04/04/07	JRHFAIAN
		Dilution Factor: 1		MDL.....: 36.0		
Chromium	23.0	10.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFAIAP
		Dilution Factor: 1		MDL.....: 3.1		
Cobalt	ND	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFAIAQ
		Dilution Factor: 1		MDL.....: 5.0		
Copper	ND	25.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFAIAR
		Dilution Factor: 1		MDL.....: 2.8		
Iron	ND	100	ug/L	SW846 6010B	03/22-04/03/07	JRHFAIAT
		Dilution Factor: 1		MDL.....: 25.0		
Magnesium	16600	5000	ug/L	SW846 6010B	03/22-04/04/07	JRHFAIAU
		Dilution Factor: 1		MDL.....: 108		
Manganese	ND	15.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFAIAV
		Dilution Factor: 1		MDL.....: 2.5		
Nickel	ND	40.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFAIAW
		Dilution Factor: 1		MDL.....: 7.5		
Potassium	6560	5000	ug/L	SW846 6010B	03/22-04/03/07	JRHFAIAX
		Dilution Factor: 1		MDL.....: 1500		
Silver	ND	10.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFAIAO
		Dilution Factor: 1		MDL.....: 5.2		

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## Pacific Northwest National Laboratory

Client Sample ID: B1MKW7

## TOTAL Metals

Lot-Sample #...: F7C220104-006

Matrix.....: WATER

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION-	WORK
		LIMIT	UNITS		ANALYSIS DATE	ORDER #
Sodium	21400	5000	ug/L	SW846 6010B	03/22-04/03/07	JRHFA1A1
		Dilution Factor: 1		MDL.....: 110		
Strontium	234	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFA1A2
		Dilution Factor: 1		MDL.....: 0.56		
Vanadium	21.3 B	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFA1A3
		Dilution Factor: 1		MDL.....: 5.9		
Zinc	ND	20.0	ug/L	SW846 6010B	03/22-04/03/07	JRHFA1A4
		Dilution Factor: 1		MDL.....: 9.6		

**NOTE(S):**

B Estimated result. Result is less than RL.

C Method blank contamination. The associated method blank contains the target analyte at a reportable level.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKX0

## DISSOLVED Metals

Lot-Sample #...: F7C220104-007

Matrix.....: WATER

Date Sampled...: 03/20/07

Date Received...: 03/21/07

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION-	WORK
		LIMIT	UNITS		ANALYSIS DATE	ORDER #
Prep Batch #...: 7081217						
Antimony	ND	60.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFD1AA
		Dilution Factor: 1		MDL.....: 44.8		
Barium	69.1 B	200	ug/L	SW846 6010B	03/22-04/04/07	JRHFD1AC
		Dilution Factor: 1		MDL.....: 5.0		
Beryllium	ND	5.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFD1AD
		Dilution Factor: 1		MDL.....: 0.51		
Cadmium	ND	5.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFD1AE
		Dilution Factor: 1		MDL.....: 2.3		
Calcium	54900 C	5000	ug/L	SW846 6010B	03/22-04/04/07	JRHFD1AF
		Dilution Factor: 1		MDL.....: 36.0		
Chromium	13.6	10.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFD1AG
		Dilution Factor: 1		MDL.....: 3.1		
Cobalt	ND	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFD1AH
		Dilution Factor: 1		MDL.....: 5.0		
Copper	ND	25.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFD1AJ
		Dilution Factor: 1		MDL.....: 2.8		
Iron	ND	100	ug/L	SW846 6010B	03/22-04/03/07	JRHFD1AK
		Dilution Factor: 1		MDL.....: 25.0		
Magnesium	17800	5000	ug/L	SW846 6010B	03/22-04/04/07	JRHFD1AL
		Dilution Factor: 1		MDL.....: 108		
Manganese	ND	15.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFD1AM
		Dilution Factor: 1		MDL.....: 2.5		
Nickel	ND	40.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFD1AN
		Dilution Factor: 1		MDL.....: 7.5		
Potassium	6810	5000	ug/L	SW846 6010B	03/22-04/03/07	JRHFD1AP
		Dilution Factor: 1		MDL.....: 1500		
Silver	ND	10.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFD1AQ
		Dilution Factor: 1		MDL.....: 5.2		

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## Pacific Northwest National Laboratory

Client Sample ID: B1MK10

## DISSOLVED Metals

Lot-Sample #...: F7C220104-007

Matrix.....: WATER

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION-	WORK
		LIMIT	UNITS		ANALYSIS DATE	ORDER #
Sodium	24100	5000	ug/L	SW846 6010B	03/22-04/03/07	JRHFD1AR
		Dilution Factor: 1		MDL.....: 110		
Strontium	267	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFD1AT
		Dilution Factor: 1		MDL.....: 0.56		
Vanadium	18.7 B	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFD1AU
		Dilution Factor: 1		MDL.....: 5.9		
Zinc	ND	20.0	ug/L	SW846 6010B	03/22-04/03/07	JRHFD1AV
		Dilution Factor: 1		MDL.....: 9.6		

**NOTE(S) :**

B Estimated result. Result is less than RL.

C Method blank contamination. The associated method blank contains the target analyte at a reportable level.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKX1

## TOTAL Metals

Lot-Sample #....: F7C220104-008

Matrix.....: WATER

Date Sampled....: 03/20/07

Date Received...: 03/21/07

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 7081217						
Antimony	ND	60.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFE1AJ
		Dilution Factor: 1		MDL.....: 44.8		
Barium	67.4 B	200	ug/L	SW846 6010B	03/22-04/04/07	JRHFE1AK
		Dilution Factor: 1		MDL.....: 5.0		
Beryllium	ND	5.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFE1AL
		Dilution Factor: 1		MDL.....: 0.51		
Cadmium	ND	5.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFE1AM
		Dilution Factor: 1		MDL.....: 2.3		
Calcium	54600 C	5000	ug/L	SW846 6010B	03/22-04/04/07	JRHFE1AN
		Dilution Factor: 1		MDL.....: 36.0		
Chromium	13.5	10.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFE1AP
		Dilution Factor: 1		MDL.....: 3.1		
Cobalt	ND	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFE1AQ
		Dilution Factor: 1		MDL.....: 5.0		
Copper	ND	25.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFE1AR
		Dilution Factor: 1		MDL.....: 2.8		
Iron	25.8 B,C	100	ug/L	SW846 6010B	03/22-04/03/07	JRHFE1AT
		Dilution Factor: 1		MDL.....: 25.0		
Magnesium	17700	5000	ug/L	SW846 6010B	03/22-04/04/07	JRHFE1AU
		Dilution Factor: 1		MDL.....: 108		
Manganese	ND	15.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFE1AV
		Dilution Factor: 1		MDL.....: 2.5		
Nickel	ND	40.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFE1AW
		Dilution Factor: 1		MDL.....: 7.5		
Potassium	8380	5000	ug/L	SW846 6010B	03/22-04/03/07	JRHFE1AX
		Dilution Factor: 1		MDL.....: 1500		
Silver	ND	10.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFE1AO
		Dilution Factor: 1		MDL.....: 5.2		

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## Pacific Northwest National Laboratory

Client Sample ID: B1MKX1

## TOTAL Metals

Lot-Sample #....: F7C220104-008

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>	<u>PREPARATION-</u>	<u>WORK</u>
		<u>LIMIT</u>	<u>UNITS</u>		<u>ANALYSIS DATE</u>	<u>ORDER #</u>
Sodium	23700	5000	ug/L	SW846 6010B	03/22-04/03/07	JRHFE1A1
		Dilution Factor: 1		MDL.....: 110		
Strontium	265	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFE1A2
		Dilution Factor: 1		MDL.....: 0.56		
Vanadium	19.6 B	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFE1A3
		Dilution Factor: 1		MDL.....: 5.9		
Zinc	ND	20.0	ug/L	SW846 6010B	03/22-04/03/07	JRHFE1A4
		Dilution Factor: 1		MDL.....: 9.6		

**NOTE(S):**

B Estimated result. Result is less than RL.

C Method blank contamination. The associated method blank contains the target analyte at a reportable level.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKX4

## DISSOLVED Metals

Lot-Sample #...: F7C220104-009

Matrix.....: WATER

Date Sampled...: 03/20/07

Date Received...: 03/21/07

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
Prep Batch #...: 7081217							
Antimony	ND	60.0	ug/L		SW846 6010B	03/22-04/04/07	JRHFF1AA
		Dilution Factor: 1			MDL.....: 44.8		
Barium	41.1 B	200	ug/L		SW846 6010B	03/22-04/04/07	JRHFF1AC
		Dilution Factor: 1			MDL.....: 5.0		
Beryllium	ND	5.0	ug/L		SW846 6010B	03/22-04/04/07	JRHFF1AD
		Dilution Factor: 1			MDL.....: 0.51		
Cadmium	ND	5.0	ug/L		SW846 6010B	03/22-04/04/07	JRHFF1AE
		Dilution Factor: 1			MDL.....: 2.3		
Calcium	42000 C	5000	ug/L		SW846 6010B	03/22-04/04/07	JRHFF1AF
		Dilution Factor: 1			MDL.....: 36.0		
Chromium	23.6	10.0	ug/L		SW846 6010B	03/22-04/04/07	JRHFF1AG
		Dilution Factor: 1			MDL.....: 3.1		
Cobalt	ND	50.0	ug/L		SW846 6010B	03/22-04/04/07	JRHFF1AH
		Dilution Factor: 1			MDL.....: 5.0		
Copper	ND	25.0	ug/L		SW846 6010B	03/22-04/04/07	JRHFF1AJ
		Dilution Factor: 1			MDL.....: 2.8		
Iron	33.4 B,C	100	ug/L		SW846 6010B	03/22-04/03/07	JRHFF1AK
		Dilution Factor: 1			MDL.....: 25.0		
Magnesium	14900	5000	ug/L		SW846 6010B	03/22-04/04/07	JRHFF1AL
		Dilution Factor: 1			MDL.....: 108		
Manganese	ND	15.0	ug/L		SW846 6010B	03/22-04/04/07	JRHFF1AM
		Dilution Factor: 1			MDL.....: 2.5		
Nickel	ND	40.0	ug/L		SW846 6010B	03/22-04/04/07	JRHFF1AN
		Dilution Factor: 1			MDL.....: 7.5		
Potassium	7100	5000	ug/L		SW846 6010B	03/22-04/03/07	JRHFF1AP
		Dilution Factor: 1			MDL.....: 1500		
Silver	ND	10.0	ug/L		SW846 6010B	03/22-04/04/07	JRHFF1AQ
		Dilution Factor: 1			MDL.....: 5.2		

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Pacific Northwest National Laboratory

Client Sample ID: B1MKX4

DISSOLVED Metals

Lot-Sample #....: F7C220104-009

Matrix.....: WATER

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION-	WORK
		LIMIT	UNITS		ANALYSIS DATE	ORDER #
Sodium	29800	5000	ug/L	SW846 6010B	03/22-04/03/07	JRHFF1AR
		Dilution Factor: 1		MDL.....: 110		
Strontium	258	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFF1AT
		Dilution Factor: 1		MDL.....: 0.56		
Vanadium	9.3 B	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFF1AU
		Dilution Factor: 1		MDL.....: 5.9		
Zinc	ND	20.0	ug/L	SW846 6010B	03/22-04/03/07	JRHFF1AV
		Dilution Factor: 1		MDL.....: 9.6		

NOTE(S):

- B Estimated result. Result is less than RL.
- C Method blank contamination. The associated method blank contains the target analyte at a reportable level.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKX5

## TOTAL Metals

Lot-Sample #...: F7C220104-010

Matrix.....: WATER

Date Sampled...: 03/20/07

Date Received...: 03/21/07

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
<b>Prep Batch #...: 7081217</b>						
Antimony	ND	60.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFH1AJ
		Dilution Factor: 1		MDL.....: 44.8		
Barium	42.1 B	200	ug/L	SW846 6010B	03/22-04/04/07	JRHFH1AK
		Dilution Factor: 1		MDL.....: 5.0		
Beryllium	ND	5.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFH1AL
		Dilution Factor: 1		MDL.....: 0.51		
Cadmium	ND	5.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFH1AM
		Dilution Factor: 1		MDL.....: 2.3		
Calcium	42700 C	5000	ug/L	SW846 6010B	03/22-04/04/07	JRHFH1AN
		Dilution Factor: 1		MDL.....: 36.0		
Chromium	30.4	10.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFH1AP
		Dilution Factor: 1		MDL.....: 3.1		
Cobalt	ND	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFH1AQ
		Dilution Factor: 1		MDL.....: 5.0		
Copper	ND	25.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFH1AR
		Dilution Factor: 1		MDL.....: 2.8		
Iron	119 C	100	ug/L	SW846 6010B	03/22-04/03/07	JRHFH1AT
		Dilution Factor: 1		MDL.....: 25.0		
Magnesium	15000	5000	ug/L	SW846 6010B	03/22-04/04/07	JRHFH1AU
		Dilution Factor: 1		MDL.....: 108		
Manganese	ND	15.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFH1AV
		Dilution Factor: 1		MDL.....: 2.5		
Nickel	ND	40.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFH1AW
		Dilution Factor: 1		MDL.....: 7.5		
Potassium	6920	5000	ug/L	SW846 6010B	03/22-04/03/07	JRHFH1AX
		Dilution Factor: 1		MDL.....: 1500		
Silver	ND	10.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFH1AO
		Dilution Factor: 1		MDL.....: 5.2		

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Pacific Northwest National Laboratory

Client Sample ID: B1MKI5

TOTAL Metals

Lot-Sample #...: F7C220104-010

Matrix.....: WATER

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION-	WORK
		LIMIT	UNITS		ANALYSIS DATE	ORDER #
Sodium	29800	5000	ug/L	SW846 6010B	03/22-04/03/07	JRHFH1A1
		Dilution Factor: 1		MDL.....: 110		
Strontium	262	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFH1A2
		Dilution Factor: 1		MDL.....: 0.56		
Vanadium	9.7 B	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFH1A3
		Dilution Factor: 1		MDL.....: 5.9		
Zinc	ND	20.0	ug/L	SW846 6010B	03/22-04/03/07	JRHFH1A4
		Dilution Factor: 1		MDL.....: 9.6		

NOTE(S):

- B Estimated result. Result is less than RL.
- C Method blank contamination. The associated method blank contains the target analyte at a reportable level.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKX8

## DISSOLVED Metals

Lot-Sample #...: F7C220104-011

Matrix.....: WATER

Date Sampled...: 03/20/07

Date Received...: 03/21/07

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 7081217						
Antimony	ND	60.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFJ1AA
		Dilution Factor: 1		MDL.....: 44.8		
Barium	77.8 B	200	ug/L	SW846 6010B	03/22-04/04/07	JRHFJ1AC
		Dilution Factor: 1		MDL.....: 5.0		
Beryllium	ND	5.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFJ1AD
		Dilution Factor: 1		MDL.....: 0.51		
Cadmium	ND	5.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFJ1AE
		Dilution Factor: 1		MDL.....: 2.3		
Calcium	60900 C	5000	ug/L	SW846 6010B	03/22-04/04/07	JRHFJ1AF
		Dilution Factor: 1		MDL.....: 36.0		
Chromium	5.9 B	10.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFJ1AG
		Dilution Factor: 1		MDL.....: 3.1		
Cobalt	ND	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFJ1AH
		Dilution Factor: 1		MDL.....: 5.0		
Copper	ND	25.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFJ1AJ
		Dilution Factor: 1		MDL.....: 2.8		
Iron	26.8 B,C	100	ug/L	SW846 6010B	03/22-04/03/07	JRHFJ1AK
		Dilution Factor: 1		MDL.....: 25.0		
Magnesium	18800	5000	ug/L	SW846 6010B	03/22-04/04/07	JRHFJ1AL
		Dilution Factor: 1		MDL.....: 108		
Manganese	2.5 B	15.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFJ1AM
		Dilution Factor: 1		MDL.....: 2.5		
Nickel	ND	40.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFJ1AN
		Dilution Factor: 1		MDL.....: 7.5		
Potassium	7200	5000	ug/L	SW846 6010B	03/22-04/03/07	JRHFJ1AP
		Dilution Factor: 1		MDL.....: 1500		
Silver	ND	10.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFJ1AQ
		Dilution Factor: 1		MDL.....: 5.2		

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## Pacific Northwest National Laboratory

Client Sample ID: B1MKX8

## DISSOLVED Metals

Lot-Sample #....: F7C220104-011

Matrix.....: WATER

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION-	WORK
		LIMIT	UNITS		ANALYSIS DATE	ORDER #
Sodium	27700	5000	ug/L	SW846 6010B	03/22-04/03/07	JRHFJ1AR
		Dilution Factor: 1		MDL.....: 110		
Strontium	307	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFJ1AT
		Dilution Factor: 1		MDL.....: 0.56		
Vanadium	17.8 B	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFJ1AU
		Dilution Factor: 1		MDL.....: 5.9		
Zinc	ND	20.0	ug/L	SW846 6010B	03/22-04/03/07	JRHFJ1AV
		Dilution Factor: 1		MDL.....: 9.6		

**NOTE(S):**

B Estimated result. Result is less than RL.

C Method blank contamination. The associated method blank contains the target analyte at a reportable level.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKX9

## TOTAL Metals

Lot-Sample #...: F7C220104-012

Matrix.....: WATER

Date Sampled...: 03/20/07

Date Received...: 03/21/07

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 7081217						
Antimony	ND	60.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFKLAJ
		Dilution Factor: 1		MDL.....: 44.8		
Barium	78.8 B	200	ug/L	SW846 6010B	03/22-04/04/07	JRHFKLAK
		Dilution Factor: 1		MDL.....: 5.0		
Beryllium	ND	5.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFKLAL
		Dilution Factor: 1		MDL.....: 0.51		
Cadmium	ND	5.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFKLAM
		Dilution Factor: 1		MDL.....: 2.3		
Calcium	62000 C	5000	ug/L	SW846 6010B	03/22-04/04/07	JRHFKLAN
		Dilution Factor: 1		MDL.....: 36.0		
Chromium	13.9	10.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFKLAP
		Dilution Factor: 1		MDL.....: 3.1		
Cobalt	ND	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFKLAQ
		Dilution Factor: 1		MDL.....: 5.0		
Copper	ND	25.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFKLAR
		Dilution Factor: 1		MDL.....: 2.8		
Iron	45.4 B,C	100	ug/L	SW846 6010B	03/22-04/03/07	JRHFKLAT
		Dilution Factor: 1		MDL.....: 25.0		
Magnesium	19200	5000	ug/L	SW846 6010B	03/22-04/04/07	JRHFKLAU
		Dilution Factor: 1		MDL.....: 108		
Manganese	ND	15.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFKLAV
		Dilution Factor: 1		MDL.....: 2.5		
Nickel	8.8 B	40.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFKLAW
		Dilution Factor: 1		MDL.....: 7.5		
Potassium	7450	5000	ug/L	SW846 6010B	03/22-04/03/07	JRHFKLAX
		Dilution Factor: 1		MDL.....: 1500		
Silver	ND	10.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFKLAO
		Dilution Factor: 1		MDL.....: 5.2		

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Pacific Northwest National Laboratory

Client Sample ID: B1MK19

TOTAL Metals

Lot-Sample #...: F7C220104-012

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Sodium	27900	5000	ug/L	SW846 6010B	03/22-04/03/07	JRHFK1A1
		Dilution Factor: 1		MDL.....: 110		
Strontium	312	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFK1A2
		Dilution Factor: 1		MDL.....: 0.56		
Vanadium	18.2 B	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRHFK1A3
		Dilution Factor: 1		MDL.....: 5.9		
Zinc	ND	20.0	ug/L	SW846 6010B	03/22-04/03/07	JRHFK1A4
		Dilution Factor: 1		MDL.....: 9.6		

NOTE(S):

- B Estimated result. Result is less than RL.
- C Method blank contamination. The associated method blank contains the target analyte at a reportable level.

## Pacific Northwest National Laboratory

Client Sample ID: B1MJT4

## DISSOLVED Metals

Lot-Sample #...: F7C220175-005

Matrix.....: WATER

Date Sampled...: 03/21/07

Date Received...: 03/22/07

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS			ANALYSIS DATE	ORDER #
<b>Prep Batch #...: 7085260</b>							
Antimony	ND	60.0	ug/L	SW846 6010B	03/26-04/04/07	JRH891AA	
		Dilution Factor: 1		MDL.....: 44.8			
Barium	46.7 B	200	ug/L	SW846 6010B	03/26-04/04/07	JRH891AC	
		Dilution Factor: 1		MDL.....: 5.0			
Beryllium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRH891AD	
		Dilution Factor: 1		MDL.....: 0.51			
Cadmium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRH891AE	
		Dilution Factor: 1		MDL.....: 2.3			
Calcium	48400	5000	ug/L	SW846 6010B	03/26-04/04/07	JRH891AF	
		Dilution Factor: 1		MDL.....: 36.0			
Chromium	3.6 B	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRH891AG	
		Dilution Factor: 1		MDL.....: 3.1			
Cobalt	ND	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRH891AH	
		Dilution Factor: 1		MDL.....: 5.0			
Copper	ND	25.0	ug/L	SW846 6010B	03/26-04/04/07	JRH891AJ	
		Dilution Factor: 1		MDL.....: 2.8			
Iron	ND	100	ug/L	SW846 6010B	03/26-04/04/07	JRH891AK	
		Dilution Factor: 1		MDL.....: 25.0			
Magnesium	14600	5000	ug/L	SW846 6010B	03/26-04/04/07	JRH891AL	
		Dilution Factor: 1		MDL.....: 108			
Manganese	ND	15.0	ug/L	SW846 6010B	03/26-04/04/07	JRH891AM	
		Dilution Factor: 1		MDL.....: 2.5			
Nickel	ND	40.0	ug/L	SW846 6010B	03/26-04/04/07	JRH891AN	
		Dilution Factor: 1		MDL.....: 7.5			
Potassium	6580	5000	ug/L	SW846 6010B	03/26-04/04/07	JRH891AP	
		Dilution Factor: 1		MDL.....: 1500			
Silver	ND	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRH891AQ	
		Dilution Factor: 1		MDL.....: 5.2			

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Pacific Northwest National Laboratory

Client Sample ID: B1MJT4

DISSOLVED Metals

Lot-Sample #....: F7C220175-005

Matrix.....: WATER

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION-	WORK
		LIMIT	UNITS		ANALYSIS DATE	ORDER #
Sodium	18600	5000	ug/L	SW846 6010B	03/26-04/04/07	JRH891AR
		Dilution Factor: 1		MDL.....: 110		
Strontium	253	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRH891AT
		Dilution Factor: 1		MDL.....: 0.56		
Vanadium	26.9 B	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRH891AU
		Dilution Factor: 1		MDL.....: 5.9		
Zinc	ND	20.0	ug/L	SW846 6010B	03/26-04/04/07	JRH891AV
		Dilution Factor: 1		MDL.....: 9.6		
Prep Batch #....: 7085267						
Lead	ND	3.0	ug/L	SW846 6020	03/26-04/03/07	JRH891AW
		Dilution Factor: 1		MDL.....: 0.49		

**NOTE(S):**

B Estimated result. Result is less than RL.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKY2

## DISSOLVED Metals

Lot-Sample #...: F7C220175-007

Matrix.....: WATER

Date Sampled...: 03/21/07

Date Received...: 03/22/07

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS			ANALYSIS DATE	ORDER #
Prep Batch #...: 7085260							
Antimony	ND	60.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ01AA	
		Dilution Factor: 1		MDL.....: 44.8			
Barium	73.6 B	200	ug/L	SW846 6010B	03/26-04/04/07	JRJQ01AC	
		Dilution Factor: 1		MDL.....: 5.0			
Beryllium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ01AD	
		Dilution Factor: 1		MDL.....: 0.51			
Cadmium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ01AE	
		Dilution Factor: 1		MDL.....: 2.3			
Calcium	56900	5000	ug/L	SW846 6010B	03/26-04/04/07	JRJQ01AF	
		Dilution Factor: 1		MDL.....: 36.0			
Chromium	ND	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ01AG	
		Dilution Factor: 1		MDL.....: 3.1			
Cobalt	ND	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ01AH	
		Dilution Factor: 1		MDL.....: 5.0			
Copper	ND	25.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ01AJ	
		Dilution Factor: 1		MDL.....: 2.8			
Iron	ND	100	ug/L	SW846 6010B	03/26-04/04/07	JRJQ01AK	
		Dilution Factor: 1		MDL.....: 25.0			
Magnesium	19200	5000	ug/L	SW846 6010B	03/26-04/04/07	JRJQ01AL	
		Dilution Factor: 1		MDL.....: 108			
Manganese	ND	15.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ01AM	
		Dilution Factor: 1		MDL.....: 2.5			
Nickel	ND	40.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ01AN	
		Dilution Factor: 1		MDL.....: 7.5			
Potassium	7810	5000	ug/L	SW846 6010B	03/26-04/04/07	JRJQ01AP	
		Dilution Factor: 1		MDL.....: 1500			
Silver	ND	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ01AQ	
		Dilution Factor: 1		MDL.....: 5.2			

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Pacific Northwest National Laboratory

Client Sample ID: B1MKY2

DISSOLVED Metals

Lot-Sample #...: F7C220175-007

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Sodium	22500	5000	ug/L	SW846 6010B	03/26-04/04/07	JRQ01AR
		Dilution Factor: 1		MDL.....: 110		
Strontium	284	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRQ01AT
		Dilution Factor: 1		MDL.....: 0.56		
Vanadium	19.4 B	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRQ01AU
		Dilution Factor: 1		MDL.....: 5.9		
Zinc	ND	20.0	ug/L	SW846 6010B	03/26-04/04/07	JRQ01AV
		Dilution Factor: 1		MDL.....: 9.6		

NOTE(S):

B Estimated result. Result is less than RL.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKY3

## TOTAL Metals

Lot-Sample #...: F7C220175-008

Matrix.....: WATER

Date Sampled...: 03/21/07

Date Received...: 03/22/07

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
Prep Batch #...: 7085260							
Antimony	ND	60.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ41AC	
		Dilution Factor: 1		MDL.....: 44.8			
Barium	74.1 B	200	ug/L	SW846 6010B	03/26-04/04/07	JRJQ41AD	
		Dilution Factor: 1		MDL.....: 5.0			
Beryllium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ41AE	
		Dilution Factor: 1		MDL.....: 0.51			
Cadmium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ41AF	
		Dilution Factor: 1		MDL.....: 2.3			
Calcium	57400	5000	ug/L	SW846 6010B	03/26-04/04/07	JRJQ41AG	
		Dilution Factor: 1		MDL.....: 36.0			
Chromium	ND	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ41AH	
		Dilution Factor: 1		MDL.....: 3.1			
Cobalt	ND	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ41AJ	
		Dilution Factor: 1		MDL.....: 5.0			
Copper	ND	25.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ41AK	
		Dilution Factor: 1		MDL.....: 2.8			
Iron	ND	100	ug/L	SW846 6010B	03/26-04/04/07	JRJQ41AL	
		Dilution Factor: 1		MDL.....: 25.0			
Magnesium	19300	5000	ug/L	SW846 6010B	03/26-04/04/07	JRJQ41AM	
		Dilution Factor: 1		MDL.....: 108			
Manganese	ND	15.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ41AN	
		Dilution Factor: 1		MDL.....: 2.5			
Nickel	ND	40.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ41AP	
		Dilution Factor: 1		MDL.....: 7.5			
Potassium	8730	5000	ug/L	SW846 6010B	03/26-04/04/07	JRJQ41AQ	
		Dilution Factor: 1		MDL.....: 1500			
Silver	ND	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ41AR	
		Dilution Factor: 1		MDL.....: 5.2			

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Pacific Northwest National Laboratory

Client Sample ID: B1MKY3

TOTAL Metals

Lot-Sample #....: F7C220175-008

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Sodium	22700	5000	ug/L	SW846 6010B	03/26-04/04/07	JRQ41AT
		Dilution Factor: 1		MDL.....: 110		
Strontium	285	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRQ41AU
		Dilution Factor: 1		MDL.....: 0.56		
Vanadium	18.9 B	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRQ41AV
		Dilution Factor: 1		MDL.....: 5.9		
Zinc	ND	20.0	ug/L	SW846 6010B	03/26-04/04/07	JRQ41AW
		Dilution Factor: 1		MDL.....: 9.6		

NOTE(S):

B Estimated result. Result is less than RL.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKK5

## DISSOLVED Metals

Lot-Sample #....: F7C220175-009

Matrix.....: WATER

Date Sampled....: 03/21/07

Date Received...: 03/22/07

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 7085260						
Antimony	ND	60.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ81AA
		Dilution Factor: 1		MDL.....: 44.8		
Barium	26.8 B	200	ug/L	SW846 6010B	03/26-04/04/07	JRJQ81AC
		Dilution Factor: 1		MDL.....: 5.0		
Beryllium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ81AD
		Dilution Factor: 1		MDL.....: 0.51		
Cadmium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ81AE
		Dilution Factor: 1		MDL.....: 2.3		
Calcium	43200	5000	ug/L	SW846 6010B	03/26-04/04/07	JRJQ81AF
		Dilution Factor: 1		MDL.....: 36.0		
Chromium	ND	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ81AG
		Dilution Factor: 1		MDL.....: 3.1		
Cobalt	ND	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ81AH
		Dilution Factor: 1		MDL.....: 5.0		
Copper	ND	25.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ81AJ
		Dilution Factor: 1		MDL.....: 2.8		
Iron	ND	100	ug/L	SW846 6010B	03/26-04/04/07	JRJQ81AK
		Dilution Factor: 1		MDL.....: 25.0		
Magnesium	12700	5000	ug/L	SW846 6010B	03/26-04/04/07	JRJQ81AL
		Dilution Factor: 1		MDL.....: 108		
Manganese	ND	15.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ81AM
		Dilution Factor: 1		MDL.....: 2.5		
Nickel	ND	40.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ81AN
		Dilution Factor: 1		MDL.....: 7.5		
Potassium	6230	5000	ug/L	SW846 6010B	03/26-04/04/07	JRJQ81AP
		Dilution Factor: 1		MDL.....: 1500		
Silver	ND	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ81AQ
		Dilution Factor: 1		MDL.....: 5.2		

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Pacific Northwest National Laboratory

Client Sample ID: B1MKK5

DISSOLVED Metals

Lot-Sample #....: F7C220175-009

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Sodium	14200	5000	ug/L	SW846 6010B	03/26-04/04/07	JRJQ81AR
		Dilution Factor: 1		MDL.....: 110		
Strontium	212	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ81AT
		Dilution Factor: 1		MDL.....: 0.56		
Vanadium	24.0 B	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ81AU
		Dilution Factor: 1		MDL.....: 5.9		
Zinc	ND	20.0	ug/L	SW846 6010B	03/26-04/04/07	JRJQ81AV
		Dilution Factor: 1		MDL.....: 9.6		

NOTE(S):

B Estimated result. Result is less than RL.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKL0

## DISSOLVED Metals

Lot-Sample #...: F7C230155-001

Matrix.....: WATER

Date Sampled...: 03/22/07

Date Received...: 03/23/07

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS			ANALYSIS DATE	ORDER #
Prep Batch #...: 7085260							
Antimony	ND	60.0	ug/L	SW846 6010B	03/26-04/04/07	JRLWW1AA	
		Dilution Factor: 1		MDL.....: 44.8			
Barium	51.0 B	200	ug/L	SW846 6010B	03/26-04/04/07	JRLWW1AC	
		Dilution Factor: 1		MDL.....: 5.0			
Beryllium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRLWW1AD	
		Dilution Factor: 1		MDL.....: 0.51			
Cadmium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRLWW1AE	
		Dilution Factor: 1		MDL.....: 2.3			
Calcium	81400	5000	ug/L	SW846 6010B	03/26-04/04/07	JRLWW1AF	
		Dilution Factor: 1		MDL.....: 36.0			
Chromium	ND	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRLWW1AG	
		Dilution Factor: 1		MDL.....: 3.1			
Cobalt	ND	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRLWW1AH	
		Dilution Factor: 1		MDL.....: 5.0			
Copper	ND	25.0	ug/L	SW846 6010B	03/26-04/04/07	JRLWW1AJ	
		Dilution Factor: 1		MDL.....: 2.8			
Iron	29.5 B	100	ug/L	SW846 6010B	03/26-04/04/07	JRLWW1AK	
		Dilution Factor: 1		MDL.....: 25.0			
Magnesium	23200	5000	ug/L	SW846 6010B	03/26-04/04/07	JRLWW1AL	
		Dilution Factor: 1		MDL.....: 108			
Manganese	ND	15.0	ug/L	SW846 6010B	03/26-04/04/07	JRLWW1AM	
		Dilution Factor: 1		MDL.....: 2.5			
Nickel	ND	40.0	ug/L	SW846 6010B	03/26-04/04/07	JRLWW1AN	
		Dilution Factor: 1		MDL.....: 7.5			
Potassium	8940	5000	ug/L	SW846 6010B	03/26-04/04/07	JRLWW1AP	
		Dilution Factor: 1		MDL.....: 1500			
Silver	ND	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRLWW1AQ	
		Dilution Factor: 1		MDL.....: 5.2			

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Pacific Northwest National Laboratory

Client Sample ID: B1MKL0

DISSOLVED Metals

Lot-Sample #....: F7C230155-001

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Sodium	16500	5000	ug/L	SW846 6010B	03/26-04/04/07	JRLWW1AR
		Dilution Factor: 1		MDL.....: 110		
Strontium	426	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRLWW1AT
		Dilution Factor: 1		MDL.....: 0.56		
Vanadium	16.2 B	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRLWW1AU
		Dilution Factor: 1		MDL.....: 5.9		
Zinc	ND	20.0	ug/L	SW846 6010B	03/26-04/04/07	JRLWW1AV
		Dilution Factor: 1		MDL.....: 9.6		

**NOTE(S):**

B Estimated result. Result is less than RL.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKM0

## DISSOLVED Metals

Lot-Sample #....: F7C230155-003

Matrix.....: WATER

Date Sampled....: 03/22/07

Date Received...: 03/23/07

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS			ANALYSIS DATE	ORDER #
Prep Batch #....: 7085260							
Antimony	ND	60.0	ug/L	SW846 6010B	03/26-04/04/07	JRLW21AA	
		Dilution Factor: 1		MDL.....: 44.8			
Barium	43.1 B	200	ug/L	SW846 6010B	03/26-04/04/07	JRLW21AC	
		Dilution Factor: 1		MDL.....: 5.0			
Beryllium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRLW21AD	
		Dilution Factor: 1		MDL.....: 0.51			
Cadmium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRLW21AE	
		Dilution Factor: 1		MDL.....: 2.3			
Calcium	58600	5000	ug/L	SW846 6010B	03/26-04/04/07	JRLW21AF	
		Dilution Factor: 1		MDL.....: 36.0			
Chromium	3.8 B	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRLW21AG	
		Dilution Factor: 1		MDL.....: 3.1			
Cobalt	ND	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRLW21AH	
		Dilution Factor: 1		MDL.....: 5.0			
Copper	ND	25.0	ug/L	SW846 6010B	03/26-04/04/07	JRLW21AJ	
		Dilution Factor: 1		MDL.....: 2.8			
Iron	ND	100	ug/L	SW846 6010B	03/26-04/04/07	JRLW21AK	
		Dilution Factor: 1		MDL.....: 25.0			
Magnesium	16800	5000	ug/L	SW846 6010B	03/26-04/04/07	JRLW21AL	
		Dilution Factor: 1		MDL.....: 108			
Manganese	ND	15.0	ug/L	SW846 6010B	03/26-04/04/07	JRLW21AM	
		Dilution Factor: 1		MDL.....: 2.5			
Nickel	ND	40.0	ug/L	SW846 6010B	03/26-04/04/07	JRLW21AN	
		Dilution Factor: 1		MDL.....: 7.5			
Potassium	8420	5000	ug/L	SW846 6010B	03/26-04/04/07	JRLW21AP	
		Dilution Factor: 1		MDL.....: 1500			
Silver	ND	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRLW21AQ	
		Dilution Factor: 1		MDL.....: 5.2			

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Pacific Northwest National Laboratory

Client Sample ID: B1MKM0

DISSOLVED Metals

Lot-Sample #...: F7C230155-003

Matrix.....: WATER

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION-	WORK
		LIMIT	UNITS		ANALYSIS DATE	ORDER #
Sodium	13400	5000	ug/L	SW846 6010B	03/26-04/04/07	JRLW21AR
		Dilution Factor: 1		MDL.....: 110		
Strontium	290	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRLW21AT
		Dilution Factor: 1		MDL.....: 0.56		
Vanadium	18.2 B	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRLW21AU
		Dilution Factor: 1		MDL.....: 5.9		
Zinc	ND	20.0	ug/L	SW846 6010B	03/26-04/04/07	JRLW21AV
		Dilution Factor: 1		MDL.....: 9.6		

NOTE(S):

B Estimated result. Result is less than RL.

## Pacific Northwest National Laboratory

Client Sample ID: BIMWY8

## DISSOLVED Metals

Lot-Sample #...: F7C230263-001

Matrix.....: WATER

Date Sampled...: 03/22/07

Date Received...: 03/23/07

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 7085260						
Antimony	ND	60.0	ug/L	SW846 6010B	03/26-04/04/07	JRMWR1AA
				Dilution Factor: 1		
				MDL.....: 44.8		
Barium	64.4 B	200	ug/L	SW846 6010B	03/26-04/04/07	JRMWR1AC
				Dilution Factor: 1		
				MDL.....: 5.0		
Beryllium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRMWR1AD
				Dilution Factor: 1		
				MDL.....: 0.51		
Cadmium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRMWR1AE
				Dilution Factor: 1		
				MDL.....: 2.3		
Calcium	63200	5000	ug/L	SW846 6010B	03/26-04/04/07	JRMWR1AF
				Dilution Factor: 1		
				MDL.....: 36.0		
Chromium	9.2 B	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRMWR1AG
				Dilution Factor: 1		
				MDL.....: 3.1		
Cobalt	ND	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRMWR1AH
				Dilution Factor: 1		
				MDL.....: 5.0		
Copper	ND	25.0	ug/L	SW846 6010B	03/26-04/04/07	JRMWR1AJ
				Dilution Factor: 1		
				MDL.....: 2.8		
Iron	ND	100	ug/L	SW846 6010B	03/26-04/04/07	JRMWR1AK
				Dilution Factor: 1		
				MDL.....: 25.0		
Magnesium	18800	5000	ug/L	SW846 6010B	03/26-04/04/07	JRMWR1AL
				Dilution Factor: 1		
				MDL.....: 108		
Manganese	ND	15.0	ug/L	SW846 6010B	03/26-04/04/07	JRMWR1AM
				Dilution Factor: 1		
				MDL.....: 2.5		
Nickel	ND	40.0	ug/L	SW846 6010B	03/26-04/04/07	JRMWR1AN
				Dilution Factor: 1		
				MDL.....: 7.5		
Potassium	9450	5000	ug/L	SW846 6010B	03/26-04/04/07	JRMWR1AP
				Dilution Factor: 1		
				MDL.....: 1500		
Silver	ND	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRMWR1AQ
				Dilution Factor: 1		
				MDL.....: 5.2		

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Pacific Northwest National Laboratory

Client Sample ID: B1MWY8

DISSOLVED Metals

Lot-Sample #...: F7C230263-001

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Sodium	46700	5000	ug/L	SW846 6010B	03/26-04/04/07	JRMWR1AR
		Dilution Factor: 1		MDL.....: 110		
Strontium	291	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRMWR1AT
		Dilution Factor: 1		MDL.....: 0.56		
Vanadium	17.0 B	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRMWR1AU
		Dilution Factor: 1		MDL.....: 5.9		
Zinc	ND	20.0	ug/L	SW846 6010B	03/26-04/04/07	JRMWR1AV
		Dilution Factor: 1		MDL.....: 9.6		

**NOTE(S):**

B Estimated result. Result is less than RL.

## Pacific Northwest National Laboratory

Client Sample ID: B1MJL0

## DISSOLVED Metals

Lot-Sample #....: F7C240118-001

Matrix.....: WATER

Date Sampled....: 03/23/07

Date Received...: 03/24/07

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS			
Prep Batch #....: 7085260						
Antimony	ND	60.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6G1AA
		Dilution Factor: 1		MDL.....: 44.8		
Barium	25.4 B	200	ug/L	SW846 6010B	03/26-04/04/07	JRN6G1AC
		Dilution Factor: 1		MDL.....: 5.0		
Beryllium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6G1AD
		Dilution Factor: 1		MDL.....: 0.51		
Cadmium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6G1AE
		Dilution Factor: 1		MDL.....: 2.3		
Calcium	45900	5000	ug/L	SW846 6010B	03/26-04/04/07	JRN6G1AF
		Dilution Factor: 1		MDL.....: 36.0		
Chromium	4.1 B	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6G1AG
		Dilution Factor: 1		MDL.....: 3.1		
Cobalt	ND	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6G1AH
		Dilution Factor: 1		MDL.....: 5.0		
Copper	ND	25.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6G1AJ
		Dilution Factor: 1		MDL.....: 2.8		
Iron	ND	100	ug/L	SW846 6010B	03/26-04/04/07	JRN6G1AK
		Dilution Factor: 1		MDL.....: 25.0		
Magnesium	10900	5000	ug/L	SW846 6010B	03/26-04/04/07	JRN6G1AL
		Dilution Factor: 1		MDL.....: 108		
Manganese	8.1 B	15.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6G1AM
		Dilution Factor: 1		MDL.....: 2.5		
Nickel	ND	40.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6G1AN
		Dilution Factor: 1		MDL.....: 7.5		
Potassium	4980 B	5000	ug/L	SW846 6010B	03/26-04/04/07	JRN6G1AP
		Dilution Factor: 1		MDL.....: 1500		
Silver	ND	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6G1AQ
		Dilution Factor: 1		MDL.....: 5.2		

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## Pacific Northwest National Laboratory

Client Sample ID: B1MJL0

## DISSOLVED Metals

Lot-Sample #....: F7C240118-001

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Sodium	16500	5000	ug/L	SW846 6010B	03/26-04/04/07	JRN6G1AR
		Dilution Factor: 1		MDL.....: 110		
Strontium	289	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6G1AT
		Dilution Factor: 1		MDL.....: 0.56		
Vanadium	10.4 B	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6G1AU
		Dilution Factor: 1		MDL.....: 5.9		
Zinc	ND	20.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6G1AV
		Dilution Factor: 1		MDL.....: 9.6		

**NOTE(S):**

B Estimated result. Result is less than RL.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKNO

## DISSOLVED Metals

Lot-Sample #...: F7C240118-003

Matrix.....: WATER

Date Sampled...: 03/23/07

Date Received...: 03/24/07

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 7085260						
Antimony	ND	60.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6J1AA
		Dilution Factor: 1		MDL.....: 44.8		
Barium	52.2 B	200	ug/L	SW846 6010B	03/26-04/04/07	JRN6J1AC
		Dilution Factor: 1		MDL.....: 5.0		
Beryllium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6J1AD
		Dilution Factor: 1		MDL.....: 0.51		
Cadmium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6J1AE
		Dilution Factor: 1		MDL.....: 2.3		
Calcium	37900	5000	ug/L	SW846 6010B	03/26-04/04/07	JRN6J1AF
		Dilution Factor: 1		MDL.....: 36.0		
Chromium	236	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6J1AG
		Dilution Factor: 1		MDL.....: 3.1		
Cobalt	ND	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6J1AH
		Dilution Factor: 1		MDL.....: 5.0		
Copper	ND	25.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6J1AJ
		Dilution Factor: 1		MDL.....: 2.8		
Iron	ND	100	ug/L	SW846 6010B	03/26-04/04/07	JRN6J1AK
		Dilution Factor: 1		MDL.....: 25.0		
Magnesium	12000	5000	ug/L	SW846 6010B	03/26-04/04/07	JRN6J1AL
		Dilution Factor: 1		MDL.....: 108		
Manganese	ND	15.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6J1AM
		Dilution Factor: 1		MDL.....: 2.5		
Nickel	ND	40.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6J1AN
		Dilution Factor: 1		MDL.....: 7.5		
Potassium	4480 B	5000	ug/L	SW846 6010B	03/26-04/04/07	JRN6J1AP
		Dilution Factor: 1		MDL.....: 1500		
Silver	ND	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6J1AQ
		Dilution Factor: 1		MDL.....: 5.2		

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## Pacific Northwest National Laboratory

Client Sample ID: B1MKNO

## DISSOLVED Metals

Lot-Sample #...: F7C240118-003

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Sodium	33400	5000	ug/L	SW846 6010B	03/26-04/04/07	JRN6J1AR
		Dilution Factor: 1		MDL.....: 110		
Strontium	158	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6J1AT
		Dilution Factor: 1		MDL.....: 0.56		
Vanadium	22.9 B	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6J1AU
		Dilution Factor: 1		MDL.....: 5.9		
Zinc	ND	20.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6J1AV
		Dilution Factor: 1		MDL.....: 9.6		

**NOTE(S):**

B Estimated result. Result is less than RL.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKM4

## DISSOLVED Metals

Lot-Sample #....: F7C240118-005

Matrix.....: WATER

Date Sampled....: 03/23/07

Date Received...: 03/24/07

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 7085260						
Antimony	ND	60.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6L1AA
		Dilution Factor: 1		MDL.....: 44.8		
Barium	ND	200	ug/L	SW846 6010B	03/26-04/04/07	JRN6L1AC
		Dilution Factor: 1		MDL.....: 5.0		
Beryllium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6L1AD
		Dilution Factor: 1		MDL.....: 0.51		
Cadmium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6L1AE
		Dilution Factor: 1		MDL.....: 2.3		
Calcium	ND	5000	ug/L	SW846 6010B	03/26-04/04/07	JRN6L1AF
		Dilution Factor: 1		MDL.....: 36.0		
Chromium	ND	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6L1AG
		Dilution Factor: 1		MDL.....: 3.1		
Cobalt	ND	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6L1AH
		Dilution Factor: 1		MDL.....: 5.0		
Copper	ND	25.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6L1AJ
		Dilution Factor: 1		MDL.....: 2.8		
Iron	ND	100	ug/L	SW846 6010B	03/26-04/04/07	JRN6L1AK
		Dilution Factor: 1		MDL.....: 25.0		
Magnesium	ND	5000	ug/L	SW846 6010B	03/26-04/04/07	JRN6L1AL
		Dilution Factor: 1		MDL.....: 108		
Manganese	ND	15.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6L1AM
		Dilution Factor: 1		MDL.....: 2.5		
Nickel	ND	40.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6L1AN
		Dilution Factor: 1		MDL.....: 7.5		
Potassium	ND	5000	ug/L	SW846 6010B	03/26-04/04/07	JRN6L1AP
		Dilution Factor: 1		MDL.....: 1500		
Silver	ND	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6L1AQ
		Dilution Factor: 1		MDL.....: 5.2		

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## Pacific Northwest National Laboratory

Client Sample ID: B1MKN4

## DISSOLVED Metals

Lot-Sample #....: F7C240118-005

Matrix.....: WATER

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION-	WORK
		LIMIT	UNITS		ANALYSIS DATE	ORDER #
Sodium	ND	5000	ug/L	SW846 6010B	03/26-04/04/07	JRN6L1AR
		Dilution Factor: 1		MDL.....: 110		
Strontium	ND	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6L1AT
		Dilution Factor: 1		MDL.....: 0.56		
Vanadium	ND	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6L1AU
		Dilution Factor: 1		MDL.....: 5.9		
Zinc	ND	20.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6L1AV
		Dilution Factor: 1		MDL.....: 9.6		

## Pacific Northwest National Laboratory

Client Sample ID: B1MKN9

## DISSOLVED Metals

Lot-Sample #...: F7C240118-007

Matrix.....: WATER

Date Sampled...: 03/23/07

Date Received...: 03/24/07

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS			
Prep Batch #...: 7085260						
Antimony	ND	60.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6Q1AA
		Dilution Factor: 1		MDL.....: 44.8		
Barium	45.1 B	200	ug/L	SW846 6010B	03/26-04/04/07	JRN6Q1AC
		Dilution Factor: 1		MDL.....: 5.0		
Beryllium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6Q1AD
		Dilution Factor: 1		MDL.....: 0.51		
Cadmium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6Q1AE
		Dilution Factor: 1		MDL.....: 2.3		
Calcium	33300	5000	ug/L	SW846 6010B	03/26-04/04/07	JRN6Q1AF
		Dilution Factor: 1		MDL.....: 36.0		
Chromium	4.8 B	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6Q1AG
		Dilution Factor: 1		MDL.....: 3.1		
Cobalt	ND	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6Q1AH
		Dilution Factor: 1		MDL.....: 5.0		
Copper	ND	25.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6Q1AJ
		Dilution Factor: 1		MDL.....: 2.8		
Iron	ND	100	ug/L	SW846 6010B	03/26-04/04/07	JRN6Q1AK
		Dilution Factor: 1		MDL.....: 25.0		
Magnesium	10400	5000	ug/L	SW846 6010B	03/26-04/04/07	JRN6Q1AL
		Dilution Factor: 1		MDL.....: 108		
Manganese	ND	15.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6Q1AM
		Dilution Factor: 1		MDL.....: 2.5		
Nickel	ND	40.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6Q1AN
		Dilution Factor: 1		MDL.....: 7.5		
Potassium	4690 B	5000	ug/L	SW846 6010B	03/26-04/04/07	JRN6Q1AP
		Dilution Factor: 1		MDL.....: 1500		
Silver	ND	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6Q1AQ
		Dilution Factor: 1		MDL.....: 5.2		

(Continued on next page)

## Pacific Northwest National Laboratory

Client Sample ID: B1MKN9

## DISSOLVED Metals

Lot-Sample #....: F7C240118-007

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Sodium	29100	5000	ug/L	SW846 6010B	03/26-04/04/07	JRN6Q1AR
		Dilution Factor: 1		MDL.....: 110		
Strontium	144	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6Q1AT
		Dilution Factor: 1		MDL.....: 0.56		
Vanadium	25.3 B	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6Q1AU
		Dilution Factor: 1		MDL.....: 5.9		
Zinc	ND	20.0	ug/L	SW846 6010B	03/26-04/04/07	JRN6Q1AV
		Dilution Factor: 1		MDL.....: 9.6		

**NOTE(S):**

B Estimated result. Result is less than RL.

## Pacific Northwest National Laboratory

Client Sample ID: B1M9B3

## DISSOLVED Metals

Lot-Sample #...: F7C240121-001

Matrix.....: WATER

Date Sampled...: 03/23/07

Date Received...: 03/24/07

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 7085260						
Antimony	ND	60.0	ug/L	SW846 6010B	03/26-04/04/07	JRN7T1AA
		Dilution Factor: 1		MDL.....: 44.8		
Barium	57.5 B	200	ug/L	SW846 6010B	03/26-04/04/07	JRN7T1AC
		Dilution Factor: 1		MDL.....: 5.0		
Beryllium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRN7T1AD
		Dilution Factor: 1		MDL.....: 0.51		
Cadmium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRN7T1AE
		Dilution Factor: 1		MDL.....: 2.3		
Calcium	51000	5000	ug/L	SW846 6010B	03/26-04/04/07	JRN7T1AF
		Dilution Factor: 1		MDL.....: 36.0		
Chromium	8.1 B	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRN7T1AG
		Dilution Factor: 1		MDL.....: 3.1		
Cobalt	ND	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRN7T1AH
		Dilution Factor: 1		MDL.....: 5.0		
Copper	ND	25.0	ug/L	SW846 6010B	03/26-04/04/07	JRN7T1AJ
		Dilution Factor: 1		MDL.....: 2.8		
Iron	ND	100	ug/L	SW846 6010B	03/26-04/04/07	JRN7T1AK
		Dilution Factor: 1		MDL.....: 25.0		
Magnesium	16900	5000	ug/L	SW846 6010B	03/26-04/04/07	JRN7T1AL
		Dilution Factor: 1		MDL.....: 108		
Manganese	ND	15.0	ug/L	SW846 6010B	03/26-04/04/07	JRN7T1AM
		Dilution Factor: 1		MDL.....: 2.5		
Nickel	ND	40.0	ug/L	SW846 6010B	03/26-04/04/07	JRN7T1AN
		Dilution Factor: 1		MDL.....: 7.5		
Potassium	4810 B	5000	ug/L	SW846 6010B	03/26-04/04/07	JRN7T1AP
		Dilution Factor: 1		MDL.....: 1500		
Silver	ND	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRN7T1AQ
		Dilution Factor: 1		MDL.....: 5.2		

(Continued on next page)

## Pacific Northwest National Laboratory

Client Sample ID: B1M9B3

## DISSOLVED Metals

Lot-Sample #...: F7C240121-001

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Sodium	25700	5000	ug/L	SW846 6010B	03/26-04/04/07	JRN7T1AR
		Dilution Factor: 1		MDL.....: 110		
Strontium	205	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRN7T1AT
		Dilution Factor: 1		MDL.....: 0.56		
Vanadium	19.8 B	20.0	ug/L	SW846 6010B	03/26-04/04/07	JRN7T1AU
		Dilution Factor: 1		MDL.....: 5.9		
Zinc	ND	20.0	ug/L	SW846 6010B	03/26-04/04/07	JRN7T1AV
		Dilution Factor: 1		MDL.....: 9.6		

NOTE(S) :

B Estimated result. Result is less than RL.

Pacific Northwest National Laboratory

Client Sample ID: B1MDH6

DISSOLVED Metals

Lot-Sample #...: F7C260145-001

Matrix.....: WATER

Date Sampled...: 03/23/07

Date Received...: 03/24/07

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>	<u>PREPARATION-</u>	<u>WORK</u>
		<u>LIMIT</u>	<u>UNITS</u>		<u>ANALYSIS DATE</u>	<u>ORDER #</u>
Prep Batch #...: 7086262						
Arsenic	3.8 B	10.0	ug/L	SW846 6020	03/27-04/03/07	JRQOALAC
		Dilution Factor: 1		MDL.....: 2.0		

**NOTE(S):**

B Estimated result. Result is less than RL.

## METHOD BLANK REPORT

## TOTAL Metals

Client Lot #...: SL677

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
<b>MB Lot-Sample #: F7C220000-217 Prep Batch #...: 7081217</b>						
Antimony	ND	60.0	ug/L	SW846 6010B	03/22-04/04/07	JRH221AW
		Dilution Factor: 1				
Barium	ND	200	ug/L	SW846 6010B	03/22-04/04/07	JRH221AX
		Dilution Factor: 1				
Beryllium	ND	5.0	ug/L	SW846 6010B	03/22-04/04/07	JRH221A0
		Dilution Factor: 1				
Cadmium	ND	5.0	ug/L	SW846 6010B	03/22-04/04/07	JRH221A1
		Dilution Factor: 1				
Calcium	68.4 B	5000	ug/L	SW846 6010B	03/22-04/04/07	JRH221A2
		Dilution Factor: 1				
Chromium	ND	10.0	ug/L	SW846 6010B	03/22-04/04/07	JRH221A3
		Dilution Factor: 1				
Cobalt	ND	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRH221A4
		Dilution Factor: 1				
Copper	ND	25.0	ug/L	SW846 6010B	03/22-04/04/07	JRH221A5
		Dilution Factor: 1				
Iron	26.6 B	100	ug/L	SW846 6010B	03/22-04/03/07	JRH221A6
		Dilution Factor: 1				
Magnesium	ND	5000	ug/L	SW846 6010B	03/22-04/04/07	JRH221A7
		Dilution Factor: 1				
Manganese	ND	15.0	ug/L	SW846 6010B	03/22-04/04/07	JRH221A8
		Dilution Factor: 1				
Nickel	ND	40.0	ug/L	SW846 6010B	03/22-04/04/07	JRH221A9
		Dilution Factor: 1				
Potassium	ND	5000	ug/L	SW846 6010B	03/22-04/03/07	JRH221CA
		Dilution Factor: 1				
Silver	ND	10.0	ug/L	SW846 6010B	03/22-04/04/07	JRH221CC
		Dilution Factor: 1				
Sodium	ND	5000	ug/L	SW846 6010B	03/22-04/03/07	JRH221CD
		Dilution Factor: 1				

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## METHOD BLANK REPORT

## TOTAL Metals

Client Lot #...: SL677

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Strontium	ND	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRH221CE
		Dilution Factor: 1				
Vanadium	ND	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRH221CF
		Dilution Factor: 1				
Zinc	ND	20.0	ug/L	SW846 6010B	03/22-04/03/07	JRH221CG
		Dilution Factor: 1				
MB Lot-Sample #: F7C260000-260 Prep Batch #...: 7085260						
Antimony	ND	60.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1AX
		Dilution Factor: 1				
Barium	ND	200	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1A0
		Dilution Factor: 1				
Beryllium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1A1
		Dilution Factor: 1				
Cadmium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1A2
		Dilution Factor: 1				
Calcium	ND	5000	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1A3
		Dilution Factor: 1				
Chromium	ND	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1A4
		Dilution Factor: 1				
Cobalt	ND	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1A5
		Dilution Factor: 1				
Copper	ND	25.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1A6
		Dilution Factor: 1				
Iron	ND	100	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1A7
		Dilution Factor: 1				
Magnesium	ND	5000	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1A8
		Dilution Factor: 1				
Manganese	ND	15.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1A9
		Dilution Factor: 1				
Nickel	ND	40.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1CA
		Dilution Factor: 1				

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## METHOD BLANK REPORT

## TOTAL Metals

Client Lot #...: SL677

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Potassium	ND	5000	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1CC
		Dilution Factor: 1				
Silver	ND	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1CD
		Dilution Factor: 1				
Sodium	ND	5000	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1CE
		Dilution Factor: 1				
Strontium	ND	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1CF
		Dilution Factor: 1				
Vanadium	ND	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1CG
		Dilution Factor: 1				
Zinc	ND	20.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1CH
		Dilution Factor: 1				

**NOTE(S) :**

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

B Estimated result. Result is less than RL.

## METHOD BLANK REPORT

## DISSOLVED Metals

Client Lot #...: SL677

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
<b>MB Lot-Sample #: F7C220000-217 Prep Batch #...: 7081217</b>						
Antimony	ND	60.0	ug/L	SW846 6010B	03/22-04/04/07	JRH221AA
		Dilution Factor: 1				
Barium	ND	200	ug/L	SW846 6010B	03/22-04/04/07	JRH221AC
		Dilution Factor: 1				
Beryllium	ND	5.0	ug/L	SW846 6010B	03/22-04/04/07	JRH221AD
		Dilution Factor: 1				
Cadmium	ND	5.0	ug/L	SW846 6010B	03/22-04/04/07	JRH221AE
		Dilution Factor: 1				
Calcium	68.4 B	5000	ug/L	SW846 6010B	03/22-04/04/07	JRH221AF
		Dilution Factor: 1				
Chromium	ND	10.0	ug/L	SW846 6010B	03/22-04/04/07	JRH221AG
		Dilution Factor: 1				
Cobalt	ND	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRH221AH
		Dilution Factor: 1				
Copper	ND	25.0	ug/L	SW846 6010B	03/22-04/04/07	JRH221AJ
		Dilution Factor: 1				
Iron	26.6 B	100	ug/L	SW846 6010B	03/22-04/03/07	JRH221AK
		Dilution Factor: 1				
Magnesium	ND	5000	ug/L	SW846 6010B	03/22-04/04/07	JRH221AL
		Dilution Factor: 1				
Manganese	ND	15.0	ug/L	SW846 6010B	03/22-04/04/07	JRH221AM
		Dilution Factor: 1				
Nickel	ND	40.0	ug/L	SW846 6010B	03/22-04/04/07	JRH221AN
		Dilution Factor: 1				
Potassium	ND	5000	ug/L	SW846 6010B	03/22-04/03/07	JRH221AP
		Dilution Factor: 1				
Silver	ND	10.0	ug/L	SW846 6010B	03/22-04/04/07	JRH221AQ
		Dilution Factor: 1				
Sodium	ND	5000	ug/L	SW846 6010B	03/22-04/04/07	JRH221AR
		Dilution Factor: 1				

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## METHOD BLANK REPORT

## DISSOLVED Metals

Client Lot #....: SL677

Matrix.....: WATER

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION-	WORK
		LIMIT	UNITS		ANALYSIS DATE	ORDER #
Strontium	ND	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRH221AT
		Dilution Factor: 1				
Vanadium	ND	50.0	ug/L	SW846 6010B	03/22-04/04/07	JRH221AU
		Dilution Factor: 1				
Zinc	ND	20.0	ug/L	SW846 6010B	03/22-04/03/07	JRH221AV
		Dilution Factor: 1				
MB Lot-Sample #: F7C260000-260 Prep Batch #....: 7085260						
Antimony	ND	60.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1AA
		Dilution Factor: 1				
Antimony	ND	60.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1CJ
		Dilution Factor: 1				
Barium	ND	200	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1AC
		Dilution Factor: 1				
Barium	ND	200	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1CK
		Dilution Factor: 1				
Beryllium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1AD
		Dilution Factor: 1				
Beryllium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1CL
		Dilution Factor: 1				
Cadmium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1AE
		Dilution Factor: 1				
Cadmium	ND	5.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1CM
		Dilution Factor: 1				
Calcium	ND	5000	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1AF
		Dilution Factor: 1				
Calcium	ND	5000	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1CN
		Dilution Factor: 1				
Chromium	ND	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1AG
		Dilution Factor: 1				
Chromium	ND	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1CP
		Dilution Factor: 1				

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## METHOD BLANK REPORT

## DISSOLVED Metals

Client Lot #...: SL677

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Cobalt	ND	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1AH
		Dilution Factor: 1				
Cobalt	ND	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1CQ
		Dilution Factor: 1				
Copper	ND	25.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1AJ
		Dilution Factor: 1				
Copper	ND	25.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1CR
		Dilution Factor: 1				
Iron	ND	100	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1AK
		Dilution Factor: 1				
Iron	ND	100	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1CT
		Dilution Factor: 1				
Magnesium	ND	5000	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1AL
		Dilution Factor: 1				
Magnesium	ND	5000	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1CU
		Dilution Factor: 1				
Manganese	ND	15.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1AM
		Dilution Factor: 1				
Manganese	ND	15.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1CV
		Dilution Factor: 1				
Nickel	ND	40.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1AN
		Dilution Factor: 1				
Nickel	ND	40.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1CW
		Dilution Factor: 1				
Potassium	ND	5000	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1AP
		Dilution Factor: 1				
Potassium	ND	5000	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1CX
		Dilution Factor: 1				
Silver	ND	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1AQ
		Dilution Factor: 1				
Silver	ND	10.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1C0
		Dilution Factor: 1				

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## METHOD BLANK REPORT

## DISSOLVED Metals

Client Lot #...: SL677

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Sodium	ND	5000	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1AR
		Dilution Factor: 1				
Sodium	ND	5000	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1C1
		Dilution Factor: 1				
Strontium	ND	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1AT
		Dilution Factor: 1				
Strontium	ND	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1C2
		Dilution Factor: 1				
Vanadium	ND	50.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1AU
		Dilution Factor: 1				
Vanadium	ND	20.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1C3
		Dilution Factor: 1				
Zinc	ND	20.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1AV
		Dilution Factor: 1				
Zinc	ND	20.0	ug/L	SW846 6010B	03/26-04/04/07	JRQJD1C4
		Dilution Factor: 1				

MB Lot-Sample #: F7C260000-260 Prep Batch #...: 7085267

Lead	ND	3.0	ug/L	SW846 6020	03/26-04/03/07	JRQJD1AW
		Dilution Factor: 1				

MB Lot-Sample #: F7C270000-262 Prep Batch #...: 7086262

Arsenic	ND	10.0	ug/L	SW846 6020	03/27-04/03/07	JRR5Q1AA
		Dilution Factor: 1				

**NOTE(S):**

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

B Estimated result. Result is less than RL.

## LABORATORY CONTROL SAMPLE DATA REPORT

## TOTAL Metals

Client Lot #...: SL677

Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #	
LCS Lot-Sample#: F7C220000-217 Prep Batch #...: 7081217								
Antimony	500	538	ug/L	108	SW846 6010B	03/22-04/04/07	JRH221C4	
			Dilution Factor: 1					
Barium	500	526	ug/L	105	SW846 6010B	03/22-04/04/07	JRH221C5	
			Dilution Factor: 1					
Beryllium	500	564	ug/L	113	SW846 6010B	03/22-04/04/07	JRH221C6	
			Dilution Factor: 1					
Cadmium	500	545	ug/L	109	SW846 6010B	03/22-04/04/07	JRH221C7	
			Dilution Factor: 1					
Calcium	10000	10800	ug/L	108	SW846 6010B	03/22-04/04/07	JRH221C8	
			Dilution Factor: 1					
Chromium	500	536	ug/L	107	SW846 6010B	03/22-04/04/07	JRH221C9	
			Dilution Factor: 1					
Cobalt	500	533	ug/L	107	SW846 6010B	03/22-04/04/07	JRH221DA	
			Dilution Factor: 1					
Copper	500	518	ug/L	104	SW846 6010B	03/22-04/04/07	JRH221DC	
			Dilution Factor: 1					
Iron	500	569	ug/L	114	SW846 6010B	03/22-04/03/07	JRH221DD	
			Dilution Factor: 1					
Magnesium	10000	10800	ug/L	108	SW846 6010B	03/22-04/04/07	JRH221DE	
			Dilution Factor: 1					
Manganese	500	538	ug/L	108	SW846 6010B	03/22-04/04/07	JRH221DF	
			Dilution Factor: 1					
Nickel	500	527	ug/L	105	SW846 6010B	03/22-04/04/07	JRH221DG	
			Dilution Factor: 1					
Potassium	10000	9980	ug/L	100	SW846 6010B	03/22-04/03/07	JRH221DH	
			Dilution Factor: 1					
Silver	125	132	ug/L	105	SW846 6010B	03/22-04/04/07	JRH221DJ	
			Dilution Factor: 1					

(Continued on next page)

## LABORATORY CONTROL SAMPLE DATA REPORT

## TOTAL Metals

Client Lot #...: SL677

Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #	
Sodium	10000	10900	ug/L	109	SW846 6010B	03/22-04/03/07	JRH221DK	
			Dilution Factor: 1					
Strontium	500	537	ug/L	107	SW846 6010B	03/22-04/04/07	JRH221DL	
			Dilution Factor: 1					
Vanadium	500	528	ug/L	106	SW846 6010B	03/22-04/04/07	JRH221DM	
			Dilution Factor: 1					
Zinc	500	553	ug/L	111	SW846 6010B	03/22-04/03/07	JRH221DN	
			Dilution Factor: 1					
LCS Lot-Sample#: F7C260000-260 Prep Batch #...: 7085260								
Antimony	500	529	ug/L	106	SW846 6010B	03/26-04/04/07	JRQJD1DR	
			Dilution Factor: 1					
Barium	500	506	ug/L	101	SW846 6010B	03/26-04/04/07	JRQJD1DT	
			Dilution Factor: 1					
Beryllium	500	545	ug/L	109	SW846 6010B	03/26-04/04/07	JRQJD1DU	
			Dilution Factor: 1					
Cadmium	500	528	ug/L	106	SW846 6010B	03/26-04/04/07	JRQJD1DV	
			Dilution Factor: 1					
Calcium	10000	10600	ug/L	106	SW846 6010B	03/26-04/04/07	JRQJD1DW	
			Dilution Factor: 1					
Chromium	500	517	ug/L	103	SW846 6010B	03/26-04/04/07	JRQJD1DX	
			Dilution Factor: 1					
Cobalt	500	515	ug/L	103	SW846 6010B	03/26-04/04/07	JRQJD1DO	
			Dilution Factor: 1					
Copper	500	493	ug/L	99	SW846 6010B	03/26-04/04/07	JRQJD1D1	
			Dilution Factor: 1					
Iron	500	523	ug/L	105	SW846 6010B	03/26-04/04/07	JRQJD1D2	
			Dilution Factor: 1					
Magnesium	10000	10700	ug/L	107	SW846 6010B	03/26-04/04/07	JRQJD1D3	
			Dilution Factor: 1					

(Continued on next page)

## LABORATORY CONTROL SAMPLE DATA REPORT

## TOTAL Metals

Client Lot #....: SL677

Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Manganese	500	520	ug/L	104	SW846 6010B	03/26-04/04/07	JRQJD1D4
			Dilution Factor: 1				
Nickel	500	511	ug/L	102	SW846 6010B	03/26-04/04/07	JRQJD1D5
			Dilution Factor: 1				
Potassium	10000	9610	ug/L	96	SW846 6010B	03/26-04/04/07	JRQJD1D6
			Dilution Factor: 1				
Silver	125	127	ug/L	102	SW846 6010B	03/26-04/04/07	JRQJD1D7
			Dilution Factor: 1				
Sodium	10000	10600	ug/L	106	SW846 6010B	03/26-04/04/07	JRQJD1D8
			Dilution Factor: 1				
Strontium	500	520	ug/L	104	SW846 6010B	03/26-04/04/07	JRQJD1D9
			Dilution Factor: 1				
Vanadium	500	512	ug/L	102	SW846 6010B	03/26-04/04/07	JRQJD1EA
			Dilution Factor: 1				
Zinc	500	495	ug/L	99	SW846 6010B	03/26-04/04/07	JRQJD1EC
			Dilution Factor: 1				

**NOTE(S) :**

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

## LABORATORY CONTROL SAMPLE DATA REPORT

## DISSOLVED Metals

Client Lot #...: SL677

Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #	
LCS Lot-Sample#: F7C220000-217 Prep Batch #....: 7081217								
Antimony	500	538	ug/L	108	SW846 6010B	03/22-04/04/07	JRH221CH	
			Dilution Factor: 1					
Barium	500	526	ug/L	105	SW846 6010B	03/22-04/04/07	JRH221CJ	
			Dilution Factor: 1					
Beryllium	500	564	ug/L	113	SW846 6010B	03/22-04/04/07	JRH221CK	
			Dilution Factor: 1					
Cadmium	500	545	ug/L	109	SW846 6010B	03/22-04/04/07	JRH221CL	
			Dilution Factor: 1					
Calcium	10000	10800	ug/L	108	SW846 6010B	03/22-04/04/07	JRH221CM	
			Dilution Factor: 1					
Chromium	500	536	ug/L	107	SW846 6010B	03/22-04/04/07	JRH221CN	
			Dilution Factor: 1					
Cobalt	500	533	ug/L	107	SW846 6010B	03/22-04/04/07	JRH221CP	
			Dilution Factor: 1					
Copper	500	518	ug/L	104	SW846 6010B	03/22-04/04/07	JRH221CQ	
			Dilution Factor: 1					
Iron	500	569	ug/L	114	SW846 6010B	03/22-04/03/07	JRH221CR	
			Dilution Factor: 1					
Magnesium	10000	10800	ug/L	108	SW846 6010B	03/22-04/04/07	JRH221CT	
			Dilution Factor: 1					
Manganese	500	538	ug/L	108	SW846 6010B	03/22-04/04/07	JRH221CU	
			Dilution Factor: 1					
Nickel	500	527	ug/L	105	SW846 6010B	03/22-04/04/07	JRH221CV	
			Dilution Factor: 1					
Potassium	10000	9980	ug/L	100	SW846 6010B	03/22-04/03/07	JRH221CW	
			Dilution Factor: 1					
Silver	125	132	ug/L	105	SW846 6010B	03/22-04/04/07	JRH221CX	
			Dilution Factor: 1					

(Continued on next page)

## LABORATORY CONTROL SAMPLE DATA REPORT

## DISSOLVED Metals

Client Lot #....: SL677

Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Sodium	10000	8300	ug/L	83	SW846 6010B	03/22-04/04/07	JRH221C0
			Dilution Factor: 1				
Strontium	500	537	ug/L	107	SW846 6010B	03/22-04/04/07	JRH221C1
			Dilution Factor: 1				
Vanadium	500	528	ug/L	106	SW846 6010B	03/22-04/04/07	JRH221C2
			Dilution Factor: 1				
Zinc	500	553	ug/L	111	SW846 6010B	03/22-04/03/07	JRH221C3
			Dilution Factor: 1				
<b>LCS Lot-Sample#:</b> F7C260000-260 <b>Prep Batch #....:</b> 7085260							
Antimony	500	529	ug/L	106	SW846 6010B	03/26-04/04/07	JRQJD1C5
			Dilution Factor: 1				
Antimony	500	529	ug/L	106	SW846 6010B	03/26-04/04/07	JRQJD1E8
			Dilution Factor: 1				
Barium	500	506	ug/L	101	SW846 6010B	03/26-04/04/07	JRQJD1C6
			Dilution Factor: 1				
Barium	500	506	ug/L	101	SW846 6010B	03/26-04/04/07	JRQJD1EE
			Dilution Factor: 1				
Beryllium	500	545	ug/L	109	SW846 6010B	03/26-04/04/07	JRQJD1C7
			Dilution Factor: 1				
Beryllium	500	545	ug/L	109	SW846 6010B	03/26-04/04/07	JRQJD1EF
			Dilution Factor: 1				
Cadmium	500	528	ug/L	106	SW846 6010B	03/26-04/04/07	JRQJD1C8
			Dilution Factor: 1				
Cadmium	500	528	ug/L	106	SW846 6010B	03/26-04/04/07	JRQJD1EG
			Dilution Factor: 1				
Calcium	10000	10600	ug/L	106	SW846 6010B	03/26-04/04/07	JRQJD1C9
			Dilution Factor: 1				
Calcium	10000	10600	ug/L	106	SW846 6010B	03/26-04/04/07	JRQJD1EH
			Dilution Factor: 1				

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## LABORATORY CONTROL SAMPLE DATA REPORT

## DISSOLVED Metals

Client Lot #...: SL677

Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #	
Chromium	500	517	ug/L	103	SW846 6010B	03/26-04/04/07	JRQJD1DA	
			Dilution Factor: 1					
Chromium	500	517	ug/L	103	SW846 6010B	03/26-04/04/07	JRQJD1EJ	
			Dilution Factor: 1					
Cobalt	500	515	ug/L	103	SW846 6010B	03/26-04/04/07	JRQJD1DC	
			Dilution Factor: 1					
Cobalt	500	515	ug/L	103	SW846 6010B	03/26-04/04/07	JRQJD1EK	
			Dilution Factor: 1					
Copper	500	493	ug/L	99	SW846 6010B	03/26-04/04/07	JRQJD1DD	
			Dilution Factor: 1					
Copper	500	493	ug/L	99	SW846 6010B	03/26-04/04/07	JRQJD1EL	
			Dilution Factor: 1					
Iron	500	523	ug/L	105	SW846 6010B	03/26-04/04/07	JRQJD1DE	
			Dilution Factor: 1					
Iron	500	523	ug/L	105	SW846 6010B	03/26-04/04/07	JRQJD1EM	
			Dilution Factor: 1					
Magnesium	10000	10700	ug/L	107	SW846 6010B	03/26-04/04/07	JRQJD1DF	
			Dilution Factor: 1					
Magnesium	10000	10700	ug/L	107	SW846 6010B	03/26-04/04/07	JRQJD1EN	
			Dilution Factor: 1					
Manganese	500	520	ug/L	104	SW846 6010B	03/26-04/04/07	JRQJD1DG	
			Dilution Factor: 1					
Manganese	500	520	ug/L	104	SW846 6010B	03/26-04/04/07	JRQJD1EP	
			Dilution Factor: 1					
Nickel	500	511	ug/L	102	SW846 6010B	03/26-04/04/07	JRQJD1DH	
			Dilution Factor: 1					
Nickel	500	511	ug/L	102	SW846 6010B	03/26-04/04/07	JRQJD1EQ	
			Dilution Factor: 1					
Potassium	10000	9610	ug/L	96	SW846 6010B	03/26-04/04/07	JRQJD1DJ	
			Dilution Factor: 1					

(Continued on next page)

## LABORATORY CONTROL SAMPLE DATA REPORT

## DISSOLVED Metals

Client Lot #...: SL677

Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Potassium	10000	9610	ug/L	96	SW846 6010B	03/26-04/04/07	JRQJD1ER
			Dilution Factor: 1				
Silver	125	127	ug/L	102	SW846 6010B	03/26-04/04/07	JRQJD1DK
			Dilution Factor: 1				
Silver	125	127	ug/L	102	SW846 6010B	03/26-04/04/07	JRQJD1ET
			Dilution Factor: 1				
Sodium	10000	10600	ug/L	106	SW846 6010B	03/26-04/04/07	JRQJD1DL
			Dilution Factor: 1				
Sodium	10000	10600	ug/L	106	SW846 6010B	03/26-04/04/07	JRQJD1EU
			Dilution Factor: 1				
Strontium	500	520	ug/L	104	SW846 6010B	03/26-04/04/07	JRQJD1DM
			Dilution Factor: 1				
Strontium	500	520	ug/L	104	SW846 6010B	03/26-04/04/07	JRQJD1EV
			Dilution Factor: 1				
Vanadium	500	512	ug/L	102	SW846 6010B	03/26-04/04/07	JRQJD1DN
			Dilution Factor: 1				
Vanadium	500	512	ug/L	102	SW846 6010B	03/26-04/04/07	JRQJD1EW
			Dilution Factor: 1				
Zinc	500	495	ug/L	99	SW846 6010B	03/26-04/04/07	JRQJD1DP
			Dilution Factor: 1				
Zinc	500	495	ug/L	99	SW846 6010B	03/26-04/04/07	JRQJD1EX
			Dilution Factor: 1				
<b>LCS Lot-Sample#:</b> F7C260000-260 <b>Prep Batch #...</b> : 7085267							
Lead	500	529	ug/L	106	SW846 6020	03/26-04/03/07	JRQJD1DQ
			Dilution Factor: 1				
<b>LCS Lot-Sample#:</b> F7C270000-262 <b>Prep Batch #...</b> : 7086262							
Arsenic	500	550	ug/L	110	SW846 6020	03/27-04/03/07	JRR5Q1AC
			Dilution Factor: 1				

**NOTE (S):**

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

## MATRIX SPIKE SAMPLE DATA REPORT

## DISSOLVED Metals

Client Lot #...: SL677

Matrix.....: WATER

Date Sampled...: 03/20/07

Date Received...: 03/21/07

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F7C220104-001 Prep Batch #...: 7081217									
Antimony									
ND	250	250	264	ug/L	106		SW846 6010B	03/22-04/04/07	JRHE01AW
ND	250	250	261	ug/L	104	1.3	SW846 6010B	03/22-04/04/07	JRHE01AX
Dilution Factor: 1									
Barium									
65.8	1000	1000	1100	ug/L	103		SW846 6010B	03/22-04/04/07	JRHE01A0
65.8	1000	1000	1110	ug/L	105	1.5	SW846 6010B	03/22-04/04/07	JRHE01A1
Dilution Factor: 1									
Beryllium									
ND	25.0	25.0	27.6	ug/L	111		SW846 6010B	03/22-04/04/07	JRHE01A2
ND	25.0	25.0	28.2	ug/L	113	1.9	SW846 6010B	03/22-04/04/07	JRHE01A3
Dilution Factor: 1									
Cadmium									
ND	25.0	25.0	25.9	ug/L	103		SW846 6010B	03/22-04/04/07	JRHE01A4
ND	25.0	25.0	26.3	ug/L	105	1.8	SW846 6010B	03/22-04/04/07	JRHE01A5
Dilution Factor: 1									
Calcium									
50900	25000	25000	76800	ug/L	104		SW846 6010B	03/22-04/04/07	JRHE01A6
50900	25000	25000	78400	ug/L	110	2.0	SW846 6010B	03/22-04/04/07	JRHE01A7
Dilution Factor: 1									
Chromium									
8.0	100	100	112	ug/L	104		SW846 6010B	03/22-04/04/07	JRHE01A8
8.0	100	100	114	ug/L	106	1.4	SW846 6010B	03/22-04/04/07	JRHE01A9
Dilution Factor: 1									
Cobalt									
ND	250	250	256	ug/L	102		SW846 6010B	03/22-04/04/07	JRHE01CA
ND	250	250	260	ug/L	104	1.5	SW846 6010B	03/22-04/04/07	JRHE01CC
Dilution Factor: 1									
Copper									
ND	125	125	129	ug/L	103		SW846 6010B	03/22-04/04/07	JRHE01CD
ND	125	125	132	ug/L	105	1.9	SW846 6010B	03/22-04/04/07	JRHE01CE
Dilution Factor: 1									

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## MATRIX SPIKE SAMPLE DATA REPORT

## DISSOLVED Metals

Client Lot #...: SL677

Matrix.....: WATER

Date Sampled...: 03/20/07

Date Received...: 03/21/07

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Iron									
	ND	500	577	ug/L	115		SW846 6010B	03/22-04/03/07	JRHE01CF
	ND	500	577	ug/L	115	0.0	SW846 6010B	03/22-04/03/07	JRHE01CG
Dilution Factor: 1									
Magnesium									
	16200	25000	42000	ug/L	103		SW846 6010B	03/22-04/04/07	JRHE01CH
	16200	25000	42800	ug/L	106	1.9	SW846 6010B	03/22-04/04/07	JRHE01CJ
Dilution Factor: 1									
Manganese									
	2.9	250	262	ug/L	104		SW846 6010B	03/22-04/04/07	JRHE01CK
	2.9	250	266	ug/L	105	1.6	SW846 6010B	03/22-04/04/07	JRHE01CL
Dilution Factor: 1									
Nickel									
	ND	250	250	ug/L	100		SW846 6010B	03/22-04/04/07	JRHE01CM
	ND	250	254	ug/L	102	1.4	SW846 6010B	03/22-04/04/07	JRHE01CN
Dilution Factor: 1									
Potassium									
	8240	25000	33200	ug/L	100		SW846 6010B	03/22-04/03/07	JRHE01CP
	8240	25000	34500	ug/L	105	3.8	SW846 6010B	03/22-04/03/07	JRHE01CQ
Dilution Factor: 1									
Silver									
	ND	25.0	25.8	ug/L	103		SW846 6010B	03/22-04/04/07	JRHE01CR
	ND	25.0	25.4	ug/L	102	1.7	SW846 6010B	03/22-04/04/07	JRHE01CT
Dilution Factor: 1									
Sodium									
	24600	25000	51200	ug/L	106		SW846 6010B	03/22-04/03/07	JRHE01CU
	24600	25000	51800	ug/L	109	1.2	SW846 6010B	03/22-04/03/07	JRHE01CV
Dilution Factor: 1									
Strontium									
	259	500	786	ug/L	105		SW846 6010B	03/22-04/04/07	JRHE01CW
	259	500	800	ug/L	108	1.8	SW846 6010B	03/22-04/04/07	JRHE01CX
Dilution Factor: 1									
Vanadium									
	18.0	250	273	ug/L	102		SW846 6010B	03/22-04/04/07	JRHE01CO
	18.0	250	280	ug/L	105	2.6	SW846 6010B	03/22-04/04/07	JRHE01CI
Dilution Factor: 1									

(Continued on next page)

## MATRIX SPIKE SAMPLE DATA REPORT

## DISSOLVED Metals

Client Lot #....: SL677

Matrix.....: WATER

Date Sampled....: 03/20/07

Date Received...: 03/21/07

<u>PARAMETER</u>	<u>SAMPLE AMOUNT</u>	<u>SPIKE AMT</u>	<u>MEASRD AMOUNT</u>	<u>UNITS</u>	<u>PERCNT RECVRY</u>	<u>RPD</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Zinc									
	ND	250	274	ug/L	110		SW846 6010B	03/22-04/03/07	JRHE01C2
	ND	250	274	ug/L	110	0.02	SW846 6010B	03/22-04/03/07	JRHE01C3

Dilution Factor: 1

**NOTE(S):**

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

## MATRIX SPIKE SAMPLE DATA REPORT

## DISSOLVED Metals

Client Lot #....: SL677  
 Date Sampled....: 03/21/07

Date Received...: 03/22/07

Matrix.....: WATER

PARAMETER	AMOUNT	SAMPLE SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: F7C220175-005 Prep Batch #....: 7085260									
Antimony									
ND		250	259	ug/L	104		SW846 6010B	03/26-04/04/07	JRH891A1
ND		250	260	ug/L	104	0.18	SW846 6010B	03/26-04/04/07	JRH891A2
Dilution Factor: 1									
Barium									
46.7		1000	1070	ug/L	102		SW846 6010B	03/26-04/04/07	JRH891A3
46.7		1000	1060	ug/L	102	0.37	SW846 6010B	03/26-04/04/07	JRH891A4
Dilution Factor: 1									
Beryllium									
ND		25.0	27.6	ug/L	110		SW846 6010B	03/26-04/04/07	JRH891A5
ND		25.0	27.4	ug/L	109	0.94	SW846 6010B	03/26-04/04/07	JRH891A6
Dilution Factor: 1									
Cadmium									
ND		25.0	26.0	ug/L	104		SW846 6010B	03/26-04/04/07	JRH891A7
ND		25.0	25.8	ug/L	103	0.88	SW846 6010B	03/26-04/04/07	JRH891A8
Dilution Factor: 1									
Calcium									
48400		25000	73800	ug/L	101		SW846 6010B	03/26-04/04/07	JRH891A9
48400		25000	73800	ug/L	102	0.06	SW846 6010B	03/26-04/04/07	JRH891CA
Dilution Factor: 1									
Chromium									
3.6		100	109	ug/L	105		SW846 6010B	03/26-04/04/07	JRH891CC
3.6		100	107	ug/L	104	1.3	SW846 6010B	03/26-04/04/07	JRH891CD
Dilution Factor: 1									
Cobalt									
ND		250	255	ug/L	102		SW846 6010B	03/26-04/04/07	JRH891CE
ND		250	252	ug/L	101	1.1	SW846 6010B	03/26-04/04/07	JRH891CF
Dilution Factor: 1									
Copper									
ND		125	128	ug/L	102		SW846 6010B	03/26-04/04/07	JRH891CG
ND		125	127	ug/L	101	0.83	SW846 6010B	03/26-04/04/07	JRH891CH.
Dilution Factor: 1									

(Continued on next page)

## MATRIX SPIKE SAMPLE DATA REPORT

## DISSOLVED Metals

Client Lot #...: SL677

Matrix.....: WATER

Date Sampled...: 03/21/07

Date Received...: 03/22/07

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Iron									
	ND	500	553	ug/L	111		SW846 6010B	03/26-04/04/07	JRH891CJ
	ND	500	543	ug/L	109	1.8	SW846 6010B	03/26-04/04/07	JRH891CK
Dilution Factor: 1									
Magnesium									
	14600	25000	40800	ug/L	105		SW846 6010B	03/26-04/04/07	JRH891CL
	14600	25000	40700	ug/L	104	0.42	SW846 6010B	03/26-04/04/07	JRH891CM
Dilution Factor: 1									
Manganese									
	ND	250	259	ug/L	104		SW846 6010B	03/26-04/04/07	JRH891CN
	ND	250	258	ug/L	103	0.62	SW846 6010B	03/26-04/04/07	JRH891CP
Dilution Factor: 1									
Nickel									
	ND	250	256	ug/L	102		SW846 6010B	03/26-04/04/07	JRH891CQ
	ND	250	254	ug/L	102	0.77	SW846 6010B	03/26-04/04/07	JRH891CR
Dilution Factor: 1									
Potassium									
	6580	25000	32800	ug/L	105		SW846 6010B	03/26-04/04/07	JRH891CT
	6580	25000	33000	ug/L	106	0.70	SW846 6010B	03/26-04/04/07	JRH891CU
Dilution Factor: 1									
Silver									
	ND	25.0	25.8	ug/L	103		SW846 6010B	03/26-04/04/07	JRH891CV
	ND	25.0	26.0	ug/L	104	1.2	SW846 6010B	03/26-04/04/07	JRH891CW
Dilution Factor: 1									
Sodium									
	18600	25000	45100	ug/L	106		SW846 6010B	03/26-04/04/07	JRH891CX
	18600	25000	44700	ug/L	104	0.85	SW846 6010B	03/26-04/04/07	JRH891CO
Dilution Factor: 1									
Strontium									
	253	500	772	ug/L	104		SW846 6010B	03/26-04/04/07	JRH891C1
	253	500	773	ug/L	104	0.04	SW846 6010B	03/26-04/04/07	JRH891C2
Dilution Factor: 1									
Vanadium									
	26.9	250	284	ug/L	103		SW846 6010B	03/26-04/04/07	JRH891C3
	26.9	250	283	ug/L	103	0.27	SW846 6010B	03/26-04/04/07	JRH891C4
Dilution Factor: 1									

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

DISSOLVED Metals

Client Lot #....: SL677

Matrix.....: WATER

Date Sampled....: 03/21/07

Date Received...: 03/22/07

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Zinc	ND	250	248	ug/L	99		SW846 6010B	03/26-04/04/07	JRH891C5
	ND	250	247	ug/L	99	0.33	SW846 6010B	03/26-04/04/07	JRH891C6

Dilution Factor: 1

MS Lot-Sample #: F7C220175-005 Prep Batch #....: 7085267

Lead	ND	250	263	ug/L	105		SW846 6020	03/26-04/03/07	JRH891AX
	ND	250	247	ug/L	99	6.4	SW846 6020	03/26-04/03/07	JRH891A0

Dilution Factor: 1

**NOTE(S):**

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

MATRIX SPIKE SAMPLE DATA REPORT

DISSOLVED Metals

Client Lot #...: SL677

Matrix.....: WATER

Date Sampled...: 03/23/07

Date Received...: 03/24/07

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
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MS Lot-Sample #: F7C260145-001 Prep Batch #...: 7086262

Arsenic

3.8	1000	1020	ug/L	102			SW846 6020	03/27-04/03/07	JRQQA1AD
3.8	1000	1050	ug/L	105	3.0		SW846 6020	03/27-04/03/07	JRQQA1AE

Dilution Factor: 1

**NOTE(S):**

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

# WET CHEMISTRY

## Pacific Northwest National Laboratory

Client Sample ID: B1MKV9

## General Chemistry

Lot-Sample #....: F7C220104-002

Work Order #....: JRHE2

Matrix.....: WATER

Date Sampled....: 03/20/07

Date Received...: 03/21/07

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride	11.4 DN	4.0	mg/L	MCAWW 300.0A	03/21/07	7081238
				MDL.....: 0.46		
	Dilution Factor: 20					
Fluoride	0.42 N	0.10	mg/L	MCAWW 300.0A	03/21/07	7081239
				MDL.....: 0.020		
	Dilution Factor: 1					
Nitrate	9.6 D	0.40	mg/L	MCAWW 300.0A	03/21/07	7081242
				MDL.....: 0.080		
	Dilution Factor: 20					
Nitrite	0.17 N	0.020	mg/L	MCAWW 300.0A	03/21/07	7081241
				MDL.....: 0.0040		
	Dilution Factor: 1					
Sulfate	51.0 D	10.0	mg/L	MCAWW 300.0A	03/21/07	7081240
				MDL.....: 1.0		
	Dilution Factor: 20					
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	03/29/07	7087368
				MDL.....: 0.76		
	Dilution Factor: 1					
TOX	2.5 B	5.0	ug/L	SW846 9020B	04/10/07	7099104
				MDL.....: 2.2		
	Dilution Factor: 1					

**NOTE(S):**

RL Reporting Limit

DN Result obtained from dilution; spike sample recovery outside control limits.

N Spiked analyte recovery is outside stated control limits.

D Result was obtained from the analysis of a dilution.

B Estimated result. Result is less than RL.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKW3

## General Chemistry

Lot-Sample #...: F7C220104-004

Work Order #...: JRHE6

Matrix.....: WATER

Date Sampled...: 03/20/07

Date Received...: 03/21/07

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride	14.3 DN	2.0	mg/L	MCAWW 300.0A MDL.....: 0.23	03/21/07	7081238
		Dilution Factor: 10				
Fluoride	0.41 N	0.10	mg/L	MCAWW 300.0A MDL.....: 0.020	03/21/07	7081239
		Dilution Factor: 1				
Nitrate	4.8 D	0.20	mg/L	MCAWW 300.0A MDL.....: 0.040	03/21/07	7081242
		Dilution Factor: 10				
Nitrite	0.19 N	0.020	mg/L	MCAWW 300.0A MDL.....: 0.0040	03/21/07	7081241
		Dilution Factor: 1				
Sulfate	39.6 D	5.0	mg/L	MCAWW 300.0A MDL.....: 0.50	03/21/07	7081240
		Dilution Factor: 10				
Total Organic Carbon	ND	1.0	mg/L	SW846 9060 MDL.....: 0.76	03/29/07	7087368
		Dilution Factor: 1				
TOX	3.0 B	5.0	ug/L	SW846 9020B MDL.....: 2.2	04/10/07	7099104
		Dilution Factor: 1				

**NOTE(S) :**

RL Reporting Limit

DN Result obtained from dilution; spike sample recovery outside control limits.

N Spiked analyte recovery is outside stated control limits.

D Result was obtained from the analysis of a dilution.

B Estimated result. Result is less than RL.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKW7

## General Chemistry

Lot-Sample #...: F7C220104-006

Work Order #...: JRHFA

Matrix.....: WATER

Date Sampled...: 03/20/07

Date Received...: 03/21/07

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride	13.4 DN	2.0	mg/L	MCAWW 300.0A MDL.....: 0.23 Dilution Factor: 10	03/21/07	7081238
Fluoride	0.34 N	0.10	mg/L	MCAWW 300.0A MDL.....: 0.020 Dilution Factor: 1	03/21/07	7081239
Nitrate	5.3 D	0.20	mg/L	MCAWW 300.0A MDL.....: 0.040 Dilution Factor: 10	03/21/07	7081242
Nitrite	0.18 N	0.020	mg/L	MCAWW 300.0A MDL.....: 0.0040 Dilution Factor: 1	03/21/07	7081241
Sulfate	37.4 D	5.0	mg/L	MCAWW 300.0A MDL.....: 0.50 Dilution Factor: 10	03/21/07	7081240
Total Organic Carbon	ND	1.0	mg/L	SW846 9060 MDL.....: 0.76 Dilution Factor: 1	03/29/07	7087368
TOX	4.0 B	5.0	ug/L	SW846 9020B MDL.....: 2.2 Dilution Factor: 1	04/10/07	7099104

**NOTE(S):**

RL Reporting Limit

DN Result obtained from dilution; spike sample recovery outside control limits.

N Spiked analyte recovery is outside stated control limits.

D Result was obtained from the analysis of a dilution.

B Estimated result. Result is less than RL.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKX1

## General Chemistry

Lot-Sample #....: F7C220104-008

Work Order #....: JRHFE

Matrix.....: WATER

Date Sampled....: 03/20/07

Date Received...: 03/21/07

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride	15.7 DN	2.0	mg/L	MCAWW 300.0A MDL.....: 0.23	03/21/07	7081238
	Dilution Factor: 10					
Fluoride	0.39 N	0.10	mg/L	MCAWW 300.0A MDL.....: 0.020	03/21/07	7081239
	Dilution Factor: 1					
Nitrate	6.4 D	0.20	mg/L	MCAWW 300.0A MDL.....: 0.040	03/21/07	7081242
	Dilution Factor: 10					
Nitrite	0.23 N	0.020	mg/L	MCAWW 300.0A MDL.....: 0.0040	03/21/07	7081241
	Dilution Factor: 1					
Sulfate	62.1 D	5.0	mg/L	MCAWW 300.0A MDL.....: 0.50	03/21/07	7081240
	Dilution Factor: 10					
Total Organic Carbon	ND	1.0	mg/L	SW846 9060 MDL.....: 0.76	03/29/07	7087368
	Dilution Factor: 1					
TOX	14.8	5.0	ug/L	SW846 9020B MDL.....: 2.2	04/10/07	7099104
	Dilution Factor: 1					

**NOTE(S) :**

RL Reporting Limit

DN Result obtained from dilution; spike sample recovery outside control limits.

N Spiked analyte recovery is outside stated control limits.

D Result was obtained from the analysis of a dilution.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKX5

## General Chemistry

Lot-Sample #....: F7C220104-010

Work Order #....: JRHPH

Matrix.....: WATER

Date Sampled....: 03/20/07

Date Received...: 03/21/07

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride	7.2 DN	2.0	mg/L	MCAWW 300.0A	03/21/07	7081238
				Dilution Factor: 10		
				MDL.....: 0.23		
Fluoride	0.30 N	0.10	mg/L	MCAWW 300.0A	03/21/07	7081239
				Dilution Factor: 1		
				MDL.....: 0.020		
Nitrate	3.1 D	0.20	mg/L	MCAWW 300.0A	03/21/07	7081242
				Dilution Factor: 10		
				MDL.....: 0.040		
Nitrite	0.12 N	0.020	mg/L	MCAWW 300.0A	03/21/07	7081241
				Dilution Factor: 1		
				MDL.....: 0.0040		
Sulfate	109 D	5.0	mg/L	MCAWW 300.0A	03/21/07	7081240
				Dilution Factor: 10		
				MDL.....: 0.50		
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	03/29/07	7087368
				Dilution Factor: 1		
				MDL.....: 0.76		
TOX	ND	5.0	ug/L	SW846 9020B	04/10/07	7099104
				Dilution Factor: 1		
				MDL.....: 2.2		

**NOTE(S):**

RL Reporting Limit

DN Result obtained from dilution; spike sample recovery outside control limits.

N Spiked analyte recovery is outside stated control limits.

D Result was obtained from the analysis of a dilution.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKK9

## General Chemistry

Lot-Sample #...: F7C220104-012

Work Order #...: JRHFK

Matrix.....: WATER

Date Sampled...: 03/20/07

Date Received...: 03/21/07

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride	19.7 DN	4.0	mg/L	MCAWW 300.0A	03/21/07	7081238
				Dilution Factor: 20		
				MDL.....: 0.46		
Fluoride	0.39 N	0.10	mg/L	MCAWW 300.0A	03/21/07	7081239
				Dilution Factor: 1		
				MDL.....: 0.020		
Nitrate	10.5 D	0.40	mg/L	MCAWW 300.0A	03/21/07	7081242
				Dilution Factor: 20		
				MDL.....: 0.080		
Nitrite	0.21 N	0.020	mg/L	MCAWW 300.0A	03/21/07	7081241
				Dilution Factor: 1		
				MDL.....: 0.0040		
Sulfate	75.9 D	10.0	mg/L	MCAWW 300.0A	03/21/07	7081240
				Dilution Factor: 20		
				MDL.....: 1.0		
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	03/29/07	7087368
				Dilution Factor: 1		
				MDL.....: 0.76		
TOX	ND	5.0	ug/L	SW846 9020B	04/10/07	7099104
				Dilution Factor: 1		
				MDL.....: 2.2		

**NOTE(S):**

RL Reporting Limit

DN Result obtained from dilution; spike sample recovery outside control limits.

N Spiked analyte recovery is outside stated control limits.

D Result was obtained from the analysis of a dilution.

Pacific Northwest National Laboratory

Client Sample ID: B1MJT0

General Chemistry

Lot-Sample #...: F7C220175-001

Work Order #...: JRH8F

Matrix.....: WATER

Date Sampled...: 03/21/07

Date Received...: 03/22/07

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	03/29/07	7087368
		Dilution Factor: 1		MDL.....: 0.76		

Pacific Northwest National Laboratory

Client Sample ID: B1MJT1

General Chemistry

Lot-Sample #...: F7C220175-002

Work Order #...: JRH8X

Matrix.....: WATER

Date Sampled...: 03/21/07

Date Received...: 03/22/07

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	03/29/07	7087368
		Dilution Factor: 1		MDL.....: 0.76		

Pacific Northwest National Laboratory

Client Sample ID: B1MJT2

General Chemistry

Lot-Sample #...: F7C220175-003

Work Order #...: JRH80

Matrix.....: WATER

Date Sampled...: 03/21/07

Date Received...: 03/22/07

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Total Organic Carbon ND		1.0	mg/L	SW846 9060	03/29/07	7087368
		Dilution Factor: 1		MDL.....: 0.76		

Pacific Northwest National Laboratory

Client Sample ID: B1MJT3

General Chemistry

Lot-Sample #...: F7C220175-004

Work Order #...: JRH81

Matrix.....: WATER

Date Sampled...: 03/21/07

Date Received...: 03/22/07

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	03/29/07	7087368

Dilution Factor: 1      MDL.....: 0.76

## Pacific Northwest National Laboratory

Client Sample ID: B1MJT5

## General Chemistry

Lot-Sample #....: F7C220175-006

Work Order #....: JRJQN

Matrix.....: WATER

Date Sampled....: 03/21/07

Date Received...: 03/22/07

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride	20.5 D	4.0	mg/L	MCAWW 300.0A	03/22/07	7082187
				Dilution Factor: 20		
				MDL.....: 0.46		
Fluoride	0.25	0.10	mg/L	MCAWW 300.0A	03/22/07	7082188
				Dilution Factor: 1		
				MDL.....: 0.020		
Nitrate	8.3 D	0.40	mg/L	MCAWW 300.0A	03/22/07	7082191
				Dilution Factor: 20		
				MDL.....: 0.080		
Nitrite	0.43 N	0.020	mg/L	MCAWW 300.0A	03/22/07	7082190
				Dilution Factor: 1		
				MDL.....: 0.0040		
Sulfate	55.4 DN	10.0	mg/L	MCAWW 300.0A	03/22/07	7082189
				Dilution Factor: 20		
				MDL.....: 1.0		

**NOTE(S):**

RL Reporting Limit

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

DN Result obtained from dilution; spike sample recovery outside control limits.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKY3

## General Chemistry

Lot-Sample #....: F7C220175-008

Work Order #....: JRJQ4

Matrix.....: WATER

Date Sampled....: 03/21/07

Date Received...: 03/22/07

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride	12.7 D	2.0	mg/L	MCAWW 300.0A MDL.....: 0.23	03/22/07	7082187
				Dilution Factor: 10		
Fluoride	0.33	0.10	mg/L	MCAWW 300.0A MDL.....: 0.020	03/22/07	7082188
				Dilution Factor: 1		
Nitrate	14.2 D	1.0	mg/L	MCAWW 300.0A MDL.....: 0.20	03/22/07	7082191
				Dilution Factor: 50		
Nitrite	0.27 N	0.020	mg/L	MCAWW 300.0A MDL.....: 0.0040	03/22/07	7082190
				Dilution Factor: 1		
Sulfate	56.0 DN	5.0	mg/L	MCAWW 300.0A MDL.....: 0.50	03/22/07	7082189
				Dilution Factor: 10		
Total Organic Carbon	ND	1.0	mg/L	SW846 9060 MDL.....: 0.76	03/29/07	7087368
				Dilution Factor: 1		
TOX	15.6	5.0	ug/L	SW846 9020B MDL.....: 2.2	04/10/07	7099104
				Dilution Factor: 1		

**NOTE(S):**

RL Reporting Limit

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

DN Result obtained from dilution; spike sample recovery outside control limits.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKK6

## General Chemistry

Lot-Sample #...: F7C220175-010

Work Order #...: JRJRE

Matrix.....: WATER

Date Sampled...: 03/21/07

Date Received...: 03/22/07

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride	10.4 D	2.0	mg/L	MCAWW 300.0A	03/22/07	7082187
				Dilution Factor: 10		
				MDL.....: 0.23		
Fluoride	0.27	0.10	mg/L	MCAWW 300.0A	03/22/07	7082188
				Dilution Factor: 1		
				MDL.....: 0.020		
Nitrate	4.8 D	0.20	mg/L	MCAWW 300.0A	03/22/07	7082191
				Dilution Factor: 10		
				MDL.....: 0.040		
Nitrite	0.19 N	0.020	mg/L	MCAWW 300.0A	03/22/07	7082190
				Dilution Factor: 1		
				MDL.....: 0.0040		
Sulfate	58.1 DN	5.0	mg/L	MCAWW 300.0A	03/22/07	7082189
				Dilution Factor: 10		
				MDL.....: 0.50		
Total Cyanide	6.2	5.0	ug/L	SW846 9012	03/26-03/28/07	7085181
				Dilution Factor: 1		
				MDL.....: 2.4		

**NOTE(S):**

RL Reporting Limit

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

DN Result obtained from dilution; spike sample recovery outside control limits.

## Pacific Northwest National Laboratory

Client Sample ID: B1MFB1

## General Chemistry

Lot-Sample #...: F7C220227-001

Work Order #...: JRJT2

Matrix.....: WATER

Date Sampled...: 03/21/07

Date Received...: 03/22/07

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride	15.2 D	2.0	mg/L	MCAWW 300.0A	03/22/07	7082187
			Dilution Factor: 10	MDL.....: 0.23		
Fluoride	0.35	0.10	mg/L	MCAWW 300.0A	03/22/07	7082188
			Dilution Factor: 1	MDL.....: 0.020		
Nitrate	4.6 D	0.20	mg/L	MCAWW 300.0A	03/22/07	7082191
			Dilution Factor: 10	MDL.....: 0.040		
Nitrite	0.30 N	0.020	mg/L	MCAWW 300.0A	03/22/07	7082190
			Dilution Factor: 1	MDL.....: 0.0040		
Sulfate	40.5 DN	5.0	mg/L	MCAWW 300.0A	03/22/07	7082189
			Dilution Factor: 10	MDL.....: 0.50		
Total Alkalinity	110 C	5.0	mg/L	MCAWW 310.1	03/29/07	7088089
			Dilution Factor: 1	MDL.....: 0.85		

**NOTE(S):**

RL Reporting Limit

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

DN Result obtained from dilution; spike sample recovery outside control limits.

C Analyte detected in method blank above the MDL/IDL.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKL1

## General Chemistry

Lot-Sample #....: F7C230155-002

Work Order #....: JRLW0

Matrix.....: WATER

Date Sampled....: 03/22/07

Date Received...: 03/23/07

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride	36.5 D	4.0	mg/L	MCAWW 300.0A	03/23/07	7085094
				Dilution Factor: 20		
				MDL.....: 0.46		
Fluoride	0.20	0.10	mg/L	MCAWW 300.0A	03/23/07	7085095
				Dilution Factor: 1		
				MDL.....: 0.020		
Nitrate	7.3 D	0.40	mg/L	MCAWW 300.0A	03/23/07	7085098
				Dilution Factor: 20		
				MDL.....: 0.080		
Nitrite	ND D	0.40	mg/L	MCAWW 300.0A	03/23/07	7085097
				Dilution Factor: 20		
				MDL.....: 0.080		
Sulfate	154 D	10.0	mg/L	MCAWW 300.0A	03/23/07	7085096
				Dilution Factor: 20		
				MDL.....: 1.0		
Total Cyanide	2.8 B	5.0	ug/L	SW846 9012	03/26-03/28/07	7085181
				Dilution Factor: 1		
				MDL.....: 2.4		

**NOTE(S):**

RL Reporting Limit

D Result was obtained from the analysis of a dilution.

B Estimated result. Result is less than RL.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKM1

## General Chemistry

Lot-Sample #....: F7C230155-004

Work Order #....: JRLW3

Matrix.....: WATER

Date Sampled...: 03/22/07

Date Received...: 03/23/07

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride	16.6 D	2.0	mg/L	MCAWW 300.0A MDL.....: 0.23	03/23/07	7085094
				Dilution Factor: 10		
Fluoride	0.21	0.10	mg/L	MCAWW 300.0A MDL.....: 0.020	03/23/07	7085095
				Dilution Factor: 1		
Nitrate	5.6 D	0.20	mg/L	MCAWW 300.0A MDL.....: 0.040	03/23/07	7085098
				Dilution Factor: 10		
Nitrite	0.35	0.020	mg/L	MCAWW 300.0A MDL.....: 0.0040	03/23/07	7085097
				Dilution Factor: 1		
Sulfate	95.9 D	5.0	mg/L	MCAWW 300.0A MDL.....: 0.50	03/23/07	7085096
				Dilution Factor: 10		
Total Cyanide	8.9	5.0	ug/L	SW846 9012 MDL.....: 2.4	03/26-03/28/07	7085181
				Dilution Factor: 1		

**NOTE(S):**

RL Reporting Limit

D Result was obtained from the analysis of a dilution.

## Pacific Northwest National Laboratory

Client Sample ID: B1MFB3

## General Chemistry

Lot-Sample #....: F7C230157-001

Work Order #....: JRLXD

Matrix.....: WATER

Date Sampled....: 03/22/07

Date Received...: 03/23/07

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride	18.3 D	2.0	mg/L	MCAWW 300.0A	03/23/07	7085094
				Dilution Factor: 10		
				MDL.....: 0.23		
Fluoride	0.27	0.10	mg/L	MCAWW 300.0A	03/23/07	7085095
				Dilution Factor: 1		
				MDL.....: 0.020		
Nitrate	5.6 D	0.20	mg/L	MCAWW 300.0A	03/23/07	7085098
				Dilution Factor: 10		
				MDL.....: 0.040		
Nitrite	ND D	0.20	mg/L	MCAWW 300.0A	03/23/07	7085097
				Dilution Factor: 10		
				MDL.....: 0.040		
Sulfate	50.0 D	5.0	mg/L	MCAWW 300.0A	03/23/07	7085096
				Dilution Factor: 10		
				MDL.....: 0.50		
Total Alkalinity	121 C	5.0	mg/L	MCAWW 310.1	03/29/07	7088089
				Dilution Factor: 1		
				MDL.....: 0.85		

**NOTE(S):**

RL Reporting Limit

D Result was obtained from the analysis of a dilution.

C Analyte detected in method blank above the MDL/IDL.

## Pacific Northwest National Laboratory

Client Sample ID: B1MWY9

## General Chemistry

Lot-Sample #...: F7C230263-002

Work Order #...: JRMW0

Matrix.....: WATER

Date Sampled...: 03/22/07

Date Received...: 03/23/07

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bromide	1.0	0.25	mg/L	MCAWW 300.0A	03/23/07	7089198
				Dilution Factor: 1	MDL.....: 0.050	
Chloride	16.1 D	2.0	mg/L	MCAWW 300.0A	03/23/07	7085094
				Dilution Factor: 10	MDL.....: 0.23	
Conductivity	636	1.0	uS/cm	MCAWW 120.1	03/30/07	7089243
				Dilution Factor: 1	MDL.....: 0.23	
Fluoride	0.48	0.10	mg/L	MCAWW 300.0A	03/23/07	7085095
				Dilution Factor: 1	MDL.....: 0.020	
Nitrate	19.0 D	1.0	mg/L	MCAWW 300.0A	03/23/07	7085098
				Dilution Factor: 50	MDL.....: 0.20	
Nitrite	0.34	0.020	mg/L	MCAWW 300.0A	03/23/07	7085097
				Dilution Factor: 1	MDL.....: 0.0040	
Phosphate as P, Ortho	0.41 B,C	0.50	mg/L	MCAWW 300.0A	03/23/07	7085281
				Dilution Factor: 1	MDL.....: 0.10	
Sulfate	108 D	5.0	mg/L	MCAWW 300.0A	03/23/07	7085096
				Dilution Factor: 10	MDL.....: 0.50	
Total Alkalinity	111 C	5.0	mg/L	MCAWW 310.1	03/29/07	7088089
				Dilution Factor: 1	MDL.....: 0.85	

**NOTE(S):**

RL Reporting Limit

D Result was obtained from the analysis of a dilution.

B Estimated result. Result is less than RL.

C Analyte detected in method blank above the MDL/IDL.

## Pacific Northwest National Laboratory

Client Sample ID: B1MJL1

## General Chemistry

Lot-Sample #...: F7C240118-002

Work Order #...: JRN6H

Matrix.....: WATER

Date Sampled...: 03/23/07

Date Received...: 03/24/07

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride	11.5 C,DN	2.0	mg/L	MCAWW 300.0A	03/24/07	7085118
			Dilution Factor: 10	MDL.....: 0.23		
Fluoride	0.099 B	0.10	mg/L	MCAWW 300.0A	03/24/07	7085119
			Dilution Factor: 1	MDL.....: 0.020		
Nitrate	9.6 C,D	0.40	mg/L	MCAWW 300.0A	03/24/07	7085122
			Dilution Factor: 20	MDL.....: 0.080		
Nitrite	0.27 N	0.020	mg/L	MCAWW 300.0A	03/24/07	7085121
			Dilution Factor: 1	MDL.....: 0.0040		
Sulfate	64.3 C,D	5.0	mg/L	MCAWW 300.0A	03/24/07	7085120
			Dilution Factor: 10	MDL.....: 0.50		

**NOTE(S):**

RL Reporting Limit

C Analyte detected in method blank above the MDL/IDL.

DN Result obtained from dilution; spike sample recovery outside control limits.

B Estimated result. Result is less than RL.

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

## Pacific Northwest National Laboratory

Client Sample ID: BIMKN1

## General Chemistry

Lot-Sample #...: F7C240118-004

Work Order #...: JRN6K

Matrix.....: WATER

Date Sampled...: 03/23/07

Date Received...: 03/24/07

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride	15.0 C,DN	2.0	mg/L	MCAWW 300.0A MDL.....: 0.23 Dilution Factor: 10	03/24/07	7085118
Fluoride	0.32	0.10	mg/L	MCAWW 300.0A MDL.....: 0.020 Dilution Factor: 1	03/24/07	7085119
Nitrate	26.1 C,D	1.0	mg/L	MCAWW 300.0A MDL.....: 0.20 Dilution Factor: 50	03/24/07	7085122
Nitrite	0.26 N	0.020	mg/L	MCAWW 300.0A MDL.....: 0.0040 Dilution Factor: 1	03/24/07	7085121
Sulfate	22.0 C,D	5.0	mg/L	MCAWW 300.0A MDL.....: 0.50 Dilution Factor: 10	03/24/07	7085120

**NOTE(S) :**

RL Reporting Limit

C Analyte detected in method blank above the MDL/IDL.

DN Result obtained from dilution; spike sample recovery outside control limits.

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKNS

## General Chemistry

Lot-Sample #...: F7C240118-006

Work Order #...: JRN6N

Matrix.....: WATER

Date Sampled...: 03/23/07

Date Received...: 03/24/07

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride	ND N	0.20	mg/L	MCAWW 300.0A	03/24/07	7085118
		Dilution Factor: 1		MDL.....: 0.023		
Fluoride	ND	0.10	mg/L	MCAWW 300.0A	03/24/07	7085119
		Dilution Factor: 1		MDL.....: 0.020		
Nitrate	0.020 C	0.020	mg/L	MCAWW 300.0A	03/24/07	7085122
		Dilution Factor: 1		MDL.....: 0.0040		
Nitrite	ND N	0.020	mg/L	MCAWW 300.0A	03/24/07	7085121
		Dilution Factor: 1		MDL.....: 0.0040		
Sulfate	ND	0.50	mg/L	MCAWW 300.0A	03/24/07	7085120
		Dilution Factor: 1		MDL.....: 0.050		

**NOTE(S):**

RL Reporting Limit

N Spiked analyte recovery is outside stated control limits.

C Analyte detected in method blank above the MDL/IDL.

## Pacific Northwest National Laboratory

Client Sample ID: B1MKP0

## General Chemistry

Lot-Sample #....: F7C240118-008

Work Order #....: JRN6R

Matrix.....: WATER

Date Sampled....: 03/23/07

Date Received...: 03/24/07

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Chloride	15.6 C,DN	2.0	mg/L	MCAW 300.0A	03/24/07	7085118
				Dilution Factor: 10		
				MDL.....: 0.23		
Fluoride	0.40	0.10	mg/L	MCAW 300.0A	03/24/07	7085119
				Dilution Factor: 1		
				MDL.....: 0.020		
Nitrate	15.8 C,D	1.0	mg/L	MCAW 300.0A	03/24/07	7085122
				Dilution Factor: 50		
				MDL.....: 0.20		
Nitrite	0.30 N	0.020	mg/L	MCAW 300.0A	03/24/07	7085121
				Dilution Factor: 1		
				MDL.....: 0.0040		
Sulfate	23.8 C,D	5.0	mg/L	MCAW 300.0A	03/24/07	7085120
				Dilution Factor: 10		
				MDL.....: 0.50		

**NOTE(S):**

RL Reporting Limit

C Analyte detected in method blank above the MDL/IDL.

DN Result obtained from dilution; spike sample recovery outside control limits.

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

Pacific Northwest National Laboratory

Client Sample ID: B1M9B4

General Chemistry

Lot-Sample #...: F7C240121-002

Work Order #...: JRN7X

Matrix.....: WATER

Date Sampled...: 03/23/07

Date Received...: 03/24/07

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride	38.2 C, DN	4.0	mg/L	MCAWW 300.0A	03/24/07	7085118
	Dilution Factor: 20			MDL.....: 0.46		
Fluoride	0.40	0.10	mg/L	MCAWW 300.0A	03/24/07	7085119
	Dilution Factor: 1			MDL.....: 0.020		
Nitrite	0.75 DN	0.20	mg/L	MCAWW 300.0A	03/24/07	7085121
	Dilution Factor: 10			MDL.....: 0.040		
Nitrogen, Nitrate	16.5 D	1.0	mg/L	MCAWW 300.0A	03/24/07	7085122
	Dilution Factor: 50			MDL.....: 0.20		
Sulfate	49.1 C, D	5.0	mg/L	MCAWW 300.0A	03/24/07	7085120
	Dilution Factor: 10			MDL.....: 0.50		

**NOTE(S):**

RL Reporting Limit

C Analyte detected in method blank above the MDL/IDL.

DN Result obtained from dilution; spike sample recovery outside control limits.

D Result was obtained from the analysis of a dilution.

## METHOD BLANK REPORT

## General Chemistry

Client Lot #...: SL677

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bromide	ND	Work Order #: JR3GM1AA 0.25	mg/L	MB Lot-Sample #: F7C300000-198 MCAWW 300.0A	03/23/07	7089198
		Dilution Factor: 1				
Chloride	ND	Work Order #: JRH9E1AA 0.20	mg/L	MB Lot-Sample #: F7C220000-238 MCAWW 300.0A	03/21/07	7081238
		Dilution Factor: 1				
Chloride	ND	Work Order #: JRLV31AA 0.20	mg/L	MB Lot-Sample #: F7C230000-187 MCAWW 300.0A	03/22/07	7082187
		Dilution Factor: 1				
Chloride	ND	Work Order #: JRQED1AA 0.20	mg/L	MB Lot-Sample #: F7C260000-094 MCAWW 300.0A	03/23/07	7085094
		Dilution Factor: 1				
Chloride	0.47	Work Order #: JRQH61AA 0.20	mg/L	MB Lot-Sample #: F7C260000-118 MCAWW 300.0A	03/24/07	7085118
		Dilution Factor: 1				
Conductivity	ND	Work Order #: JR3WA1AA 1.0	uS/cm	MB Lot-Sample #: F7C300000-243 MCAWW 120.1	03/30/07	7089243
		Dilution Factor: 1				
Fluoride	ND	Work Order #: JRH9K1AA 0.10	mg/L	MB Lot-Sample #: F7C220000-239 MCAWW 300.0A	03/21/07	7081239
		Dilution Factor: 1				
Fluoride	ND	Work Order #: JRLV41AA 0.10	mg/L	MB Lot-Sample #: F7C230000-188 MCAWW 300.0A	03/22/07	7082188
		Dilution Factor: 1				
Fluoride	ND	Work Order #: JRQEE1AA 0.10	mg/L	MB Lot-Sample #: F7C260000-095 MCAWW 300.0A	03/23/07	7085095
		Dilution Factor: 1				
Fluoride	ND	Work Order #: JRQH71AA 0.10	mg/L	MB Lot-Sample #: F7C260000-119 MCAWW 300.0A	03/24/07	7085119
		Dilution Factor: 1				
Nitrate	ND	Work Order #: JRH9X1AA 0.020	mg/L	MB Lot-Sample #: F7C220000-242 MCAWW 300.0A	03/21/07	7081242
		Dilution Factor: 1				

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## METHOD BLANK REPORT

## General Chemistry

Client Lot #...: SL677

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Nitrate	ND	Work Order #: JRLV71AA 0.020	mg/L	MB Lot-Sample #: F7C230000-191 MCAWW 300.0A	03/22/07	7082191
		Dilution Factor: 1				
Nitrate	ND	Work Order #: JRQEK1AA 0.020	mg/L	MB Lot-Sample #: F7C260000-098 MCAWW 300.0A	03/23/07	7085098
		Dilution Factor: 1				
Nitrate	0.013 B	Work Order #: JRQJALAA 0.020	mg/L	MB Lot-Sample #: F7C260000-122 MCAWW 300.0A	03/24/07	7085122
		Dilution Factor: 1				
Nitrite	ND	Work Order #: JRH9T1AA 0.020	mg/L	MB Lot-Sample #: F7C220000-241 MCAWW 300.0A	03/21/07	7081241
		Dilution Factor: 1				
Nitrite	ND	Work Order #: JRLV61AA 0.020	mg/L	MB Lot-Sample #: F7C230000-190 MCAWW 300.0A	03/22/07	7082190
		Dilution Factor: 1				
Nitrite	ND	Work Order #: JRQEH1AA 0.020	mg/L	MB Lot-Sample #: F7C260000-097 MCAWW 300.0A	03/23/07	7085097
		Dilution Factor: 1				
Nitrite	ND	Work Order #: JRQH91AA 0.020	mg/L	MB Lot-Sample #: F7C260000-121 MCAWW 300.0A	03/24/07	7085121
		Dilution Factor: 1				
Phosphate as P, Ortho	0.28 B	Work Order #: JRQK21AA 0.50	mg/L	MB Lot-Sample #: F7C260000-281 MCAWW 300.0A	03/23/07	7085281
		Dilution Factor: 1				
Sulfate	ND	Work Order #: JRH9N1AA 0.50	mg/L	MB Lot-Sample #: F7C220000-240 MCAWW 300.0A	03/21/07	7081240
		Dilution Factor: 1				
Sulfate	ND	Work Order #: JRLV51AA 0.50	mg/L	MB Lot-Sample #: F7C230000-189 MCAWW 300.0A	03/22/07	7082189
		Dilution Factor: 1				
Sulfate	ND	Work Order #: JRQEG1AA 0.50	mg/L	MB Lot-Sample #: F7C260000-096 MCAWW 300.0A	03/23/07	7085096
		Dilution Factor: 1				

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## METHOD BLANK REPORT

## General Chemistry

Client Lot #...: SL677

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Sulfate	0.28 B	0.50	mg/L	Work Order #: JRQH81AA MB Lot-Sample #: F7C260000-120 MCAWW 300.0A	03/24/07	7085120
				Dilution Factor: 1		
Total Alkalinity	2.0 B	5.0	mg/L	Work Order #: JR0C41AA MB Lot-Sample #: F7C290000-089 MCAWW 310.1	03/29/07	7088089
				Dilution Factor: 1		
Total Cyanide	ND	5.0	ug/L	Work Order #: JRQAX1AA MB Lot-Sample #: F7C260000-181 SW846 9012	03/26-03/28/07	7085181
				Dilution Factor: 1		
Total Organic Carbon	ND	1.0	mg/L	Work Order #: JRXHK1AA MB Lot-Sample #: F7C280000-368 SW846 9060	03/29/07	7087368
				Dilution Factor: 1		
TOX	ND	5.0	ug/L	Work Order #: JTKDK1AA MB Lot-Sample #: F7D090000-104 SW846 9020B	04/10/07	7099104
				Dilution Factor: 1		

**NOTE(S):**

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

B Estimated result. Result is less than RL.





## LABORATORY CONTROL SAMPLE DATA REPORT

## General Chemistry

Lot-Sample #...: SL677

Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Nitrite								
							WO#:JRQH91AC-LCS/JRQH91AD-LCSD LCS Lot-Sample#: F7C260000-121	
	0.160	0.159	mg/L	99		MCAWW 300.0A	03/24/07	7085121
	0.160	0.169	mg/L	105	6.2	MCAWW 300.0A	03/24/07	7085121
	Dilution Factor: 1							
Phosphate as P, Ortho								
							WO#:JRQK21AC-LCS/JRQK21AD-LCSD LCS Lot-Sample#: F7C260000-281	
	8.00	7.22	mg/L	90		MCAWW 300.0A	03/23/07	7085281
	8.00	7.42	mg/L	93	2.6	MCAWW 300.0A	03/23/07	7085281
	Dilution Factor: 1							
Sulfate								
							WO#:JRH9N1AC-LCS/JRH9N1AD-LCSD LCS Lot-Sample#: F7C220000-240	
	8.00	7.51	mg/L	94		MCAWW 300.0A	03/21/07	7081240
	8.00	7.60	mg/L	95	1.1	MCAWW 300.0A	03/21/07	7081240
	Dilution Factor: 1							
Sulfate								
							WO#:JRLV51AC-LCS/JRLV51AD-LCSD LCS Lot-Sample#: F7C230000-189	
	8.00	7.40	mg/L	92		MCAWW 300.0A	03/22/07	7082189
	8.00	7.40	mg/L	92	0.02	MCAWW 300.0A	03/22/07	7082189
	Dilution Factor: 1							
Sulfate								
							WO#:JRQEG1AC-LCS/JRQEG1AD-LCSD LCS Lot-Sample#: F7C260000-096	
	8.00	7.32	mg/L	91		MCAWW 300.0A	03/23/07	7085096
	8.00	7.56	mg/L	95	3.3	MCAWW 300.0A	03/23/07	7085096
	Dilution Factor: 1							
Sulfate								
							WO#:JRQH81AC-LCS/JRQH81AD-LCSD LCS Lot-Sample#: F7C260000-120	
	8.00	8.04	mg/L	100		MCAWW 300.0A	03/24/07	7085120
	8.00	7.89	mg/L	99	1.8	MCAWW 300.0A	03/24/07	7085120
	Dilution Factor: 1							
Total Alkalinity								
							WO#:JR0C41AC-LCS/JR0C41AD-LCSD LCS Lot-Sample#: F7C290000-089	
	200	198	mg/L	99		MCAWW 310.1	03/29/07	7088089
	200	197	mg/L	98	0.50	MCAWW 310.1	03/29/07	7088089
	Dilution Factor: 1							
Total Organic Carbon								
							WO#:JRXHK1AC-LCS/JRXHK1AD-LCSD LCS Lot-Sample#: F7C280000-368	
	6.00	6.40	mg/L	107		SWB46 9060	03/29/07	7087368
	6.00	6.29	mg/L	105	1.8	SWB46 9060	03/29/07	7087368
	Dilution Factor: 1							

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LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Lot-Sample #...: SL677

Matrix.....: WATER

<u>PARAMETER</u>	<u>SPIKE</u> <u>AMOUNT</u>	<u>MEASURED</u> <u>AMOUNT</u>	<u>UNITS</u>	<u>PERCNT</u> <u>RECVRY</u>	<u>RPD</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>PREP</u> <u>BATCH #</u>
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**NOTE(S) :**

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

## LABORATORY CONTROL SAMPLE DATA REPORT

## General Chemistry

Client Lot #...: SL677

Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Conductivity	1000	939	uS/cm	94	MCAWW 120.1	03/30/07	7089243
Work Order #: JR3WALAC LCS Lot-Sample#: F7C300000-243 Dilution Factor: 1							
Total Cyanide	200	195	ug/L	97	SW846 9012	03/26-03/28/07	7085181
Work Order #: JRQAX1AC LCS Lot-Sample#: F7C260000-181 Dilution Factor: 1							
Total Cyanide	400	399	ug/L	100	SW846 9012	03/26-03/28/07	7085181
Work Order #: JRQAX1AD LCS Lot-Sample#: F7C260000-181 Dilution Factor: 1							
TOX	100	102	ug/L	102	SW846 9020B	04/10/07	7099104
Work Order #: JTKDK1AC LCS Lot-Sample#: F7D090000-104 Dilution Factor: 1							

**NOTE(S):**


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



**SAMPLE DUPLICATE EVALUATION REPORT**

**General Chemistry**

Client Lot #...: F7C220104

Work Order #...: JRJRE-SMP  
JRJRE-DUP

Matrix.....: WATER

Date Sampled...: 03/21/07

Date Received...: 03/22/07

<u>PARAM</u>	<u>RESULT</u>	<u>DUPLICATE</u> <u>RESULT</u>	<u>UNITS</u>	<u>RPD</u> <u>RPD</u>	<u>LIMIT</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>PREP</u> <u>BATCH #</u>
Total Cyanide	6.2	8.0	ug/L	26	(0-20)	SD Lot-Sample #: F7C220175-010 SW846 9012	03/26-03/28/07	7085181

Dilution Factor: 1

## SAMPLE DUPLICATE EVALUATION REPORT

## General Chemistry

Client Lot #....: F7C220104

Work Order #....: JRJT2-SMP  
JRJT2-DUP

Matrix.....: WATER

Date Sampled....: 03/21/07

Date Received...: 03/22/07

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Total Alkalinity	110 C	108 C	mg/L	1.8	(0-20)	SD Lot-Sample #: F7C220227-001 MCAWW 310.1	03/29/07	7088089
			Dilution Factor: 1					

**NOTE(S):**

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

C The analyte was detected in the associated method blank above the IDL/MDL.

C Analyte detected in method blank above the MDL/IDL.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F7C220104

Work Order #...: JRW8T-SMP  
JRW8T-DUP

Matrix.....: WATER

Date Sampled...: 03/27/07

Date Received...: 03/28/07

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Total Alkalinity	110 C	111 C	mg/L	0.90	(0-20)	SD Lot-Sample #: F7C280243-054 MCAWW 310.1	03/29/07	7088089
			Dilution Factor: 1					

**NOTE(S):**

- 
- Calculations are performed before rounding to avoid round-off errors in calculated results.
  - C The analyte was detected in the associated method blank above the IDL/MDL
  - C Analyte detected in method blank above the MDL/IDL.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F7C220104

Work Order #...: JRMW0-SMP  
JRMW0-DUP

Matrix.....: WATER

Date Sampled...: 03/22/07

Date Received...: 03/23/07

<u>PARAM</u>	<u>RESULT</u>	<u>DUPLICATE</u> <u>RESULT</u>	<u>UNITS</u>	<u>RPD</u> <u>RPD</u>	<u>LIMIT</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>PREP</u> <u>BATCH #</u>
Conductivity	636	615	uS/cm	3.4	(0-20)	SD Lot-Sample #: F7C230263-002 MCAWW 120.1	03/30/07	7089243
			Dilution Factor: 1					

## MATRIX SPIKE SAMPLE DATA REPORT

## General Chemistry

Client Lot #....: SL677

Matrix.....: WATER

Date Sampled....: 03/20/07

Date Received...: 03/21/07

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride	11.4	40.0	58.6 N,D	mg/L	118	MCAWW 300.0A	03/21/07	7081238
			Work Order #....: JRHE21CD		MS Lot-Sample #: F7C220104-002			
			Dilution Factor: 20					
Chloride	20.5	40.0	60.0 D	mg/L	99	MCAWW 300.0A	03/22-03/23/07	7082187
			Work Order #....: JRJQN1AH		MS Lot-Sample #: F7C220175-006			
			Dilution Factor: 20					
Chloride	ND	2.00	2.24 N	mg/L	112	MCAWW 300.0A	03/24/07	7085118
			Work Order #....: JRN6N1AH		MS Lot-Sample #: F7C240118-006			
			Dilution Factor: 1					
Conductivity	636	1410	2140	uS/cm	106	MCAWW 120.1	03/30/07	7089243
			Work Order #....: JRMW01AN		MS Lot-Sample #: F7C230263-002			
			Dilution Factor: 1					
Fluoride	0.42	2.00	2.70 N	mg/L	114	MCAWW 300.0A	03/21/07	7081239
			Work Order #....: JRHE21A6		MS Lot-Sample #: F7C220104-002			
			Dilution Factor: 1					
Fluoride	0.25	2.00	2.20	mg/L	97	MCAWW 300.0A	03/22-03/23/07	7082188
			Work Order #....: JRJQN1AK		MS Lot-Sample #: F7C220175-006			
			Dilution Factor: 1					
Fluoride	ND	2.00	2.09	mg/L	105	MCAWW 300.0A	03/24/07	7085119
			Work Order #....: JRN6N1AK		MS Lot-Sample #: F7C240118-006			
			Dilution Factor: 1					
Nitrate	9.6	8.00	18.1 D	mg/L	105	MCAWW 300.0A	03/21/07	7081242
			Work Order #....: JRHE21A9		MS Lot-Sample #: F7C220104-002			
			Dilution Factor: 20					
Nitrate	8.3	8.00	15.9 D	mg/L	96	MCAWW 300.0A	03/22-03/23/07	7082191
			Work Order #....: JRJQN1AR		MS Lot-Sample #: F7C220175-006			
			Dilution Factor: 20					
Nitrate	0.020	0.400	0.431	mg/L	103	MCAWW 300.0A	03/24/07	7085122
			Work Order #....: JRN6N1AR		MS Lot-Sample #: F7C240118-006			
			Dilution Factor: 1					
Nitrite	0.17	0.100	0.240 N	mg/L	73	MCAWW 300.0A	03/21/07	7081241
			Work Order #....: JRHE21A8		MS Lot-Sample #: F7C220104-002			
			Dilution Factor: 1					

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #...: SL677  
 Date Sampled...: 03/20/07

Date Received...: 03/21/07

Matrix.....: WATER

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Nitrite	0.43	0.100	1.08 N	mg/L	648	MCAWW 300.0A	03/22-03/23/07	7082190
			Work Order #...: JRJQN1AP MS Lot-Sample #: F7C220175-006					
			Dilution Factor: 1					
Nitrite	ND	0.100	0.179 N	mg/L	179	MCAWW 300.0A	03/24/07	7085121
			Work Order #...: JRN6N1AP MS Lot-Sample #: F7C240118-006					
			Dilution Factor: 1					
Sulfate	51.0	80.0	126 D	mg/L	93	MCAWW 300.0A	03/21/07	7081240
			Work Order #...: JRHE21A7 MS Lot-Sample #: F7C220104-002					
			Dilution Factor: 20					
Sulfate	55.4	80.0	125 N,D	mg/L	87	MCAWW 300.0A	03/22-03/23/07	7082189
			Work Order #...: JRJQN1AM MS Lot-Sample #: F7C220175-006					
			Dilution Factor: 20					
Sulfate	ND	4.00	3.80	mg/L	95	MCAWW 300.0A	03/24/07	7085120
			Work Order #...: JRN6N1AM MS Lot-Sample #: F7C240118-006					
			Dilution Factor: 1					
Total Alkalinity	110	100	209	mg/L	99	MCAWW 310.1	03/29/07	7088089
			Work Order #...: JRW8T1AE MS Lot-Sample #: F7C280243-054					
			Dilution Factor: 1					
Total Cyanide	6.2	200	188	ug/L	91	SW846 9012	03/26-03/28/07	7085181
			Work Order #...: JRJRE1AJ MS Lot-Sample #: F7C220175-010					
			Dilution Factor: 1					
Total Organic Carbon	ND	5.00	4.86	mg/L	97	SW846 9060	03/29/07	7087368
			Work Order #...: JRHE21CA MS Lot-Sample #: F7C220104-002					
			Dilution Factor: 1					

NOTE (S):

- Calculations are performed before rounding to avoid round-off errors in calculated results.
- N Spiked analyte recovery is outside stated control limits.
- D Result was obtained from the analysis of a dilution.

## SAMPLE DUPLICATE EVALUATION REPORT

## General Chemistry

Client Lot #....: F7C220104

Work Order #....: JRHE2-SMP  
JRHE2-DUP

Matrix.....: WATER

Date Sampled....: 03/20/07

Date Received...: 03/21/07

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride	11.4 DN	19.6 DN	mg/L	53	(0-20)	SD Lot-Sample #: F7C220104-002 MCAWW 300.0A	03/21/07	7081238
						Dilution Factor: 20		
Fluoride	0.42 N	0.43 N	mg/L	4.0	(0-20)	SD Lot-Sample #: F7C220104-002 MCAWW 300.0A	03/21/07	7081239
						Dilution Factor: 1		
Sulfate	51.0 D	52.3 D	mg/L	2.4	(0-20)	SD Lot-Sample #: F7C220104-002 MCAWW 300.0A	03/21/07	7081240
						Dilution Factor: 20		
Nitrite	0.17 N	0.22 N	mg/L	29	(0-20)	SD Lot-Sample #: F7C220104-002 MCAWW 300.0A	03/21/07	7081241
						Dilution Factor: 1		
Nitrate	9.6 D	9.8 D	mg/L	1.8	(0-20)	SD Lot-Sample #: F7C220104-002 MCAWW 300.0A	03/21/07	7081242
						Dilution Factor: 20		
Total Organic Carbon	ND	ND	mg/L	0	(0-20)	SD Lot-Sample #: F7C220104-002 SW846 9060	03/29/07	7087368
						Dilution Factor: 1		

**NOTE(S):**

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

DN Result obtained from dilution; spike sample recovery outside control limits.

N Spiked analyte recovery is outside stated control limits.

D Result was obtained from the analysis of a dilution.

## SAMPLE DUPLICATE EVALUATION REPORT

## General Chemistry

Client Lot #....: F7C220104

Work Order #....: JRJQN-SMP  
JRJQN-DUP

Matrix.....: WATER

Date Sampled....: 03/21/07

Date Received...: 03/22/07

PARAM RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride					SD Lot-Sample #: F7C220175-006		
20.5 D	19.0 D	mg/L	7.3	(0-20)	MCAWW 300.0A	03/22-03/23/07	7082187
		Dilution Factor: 20					
Fluoride					SD Lot-Sample #: F7C220175-006		
0.25	0.25	mg/L	0.55	(0-20)	MCAWW 300.0A	03/22-03/23/07	7082188
		Dilution Factor: 1					
Sulfate					SD Lot-Sample #: F7C220175-006		
55.4 DN	53.0 DN	mg/L	4.6	(0-20)	MCAWW 300.0A	03/22-03/23/07	7082189
		Dilution Factor: 20					
Nitrite					SD Lot-Sample #: F7C220175-006		
0.43 N	0.93 N	mg/L	74	(0-20)	MCAWW 300.0A	03/22-03/23/07	7082190
		Dilution Factor: 1					
Nitrate					SD Lot-Sample #: F7C220175-006		
8.3 D	8.0 D	mg/L	3.7	(0-20)	MCAWW 300.0A	03/22-03/23/07	7082191
		Dilution Factor: 20					

**NOTE(S) :**

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

D Result was obtained from the analysis of a dilution.

DN Result obtained from dilution; spike sample recovery outside control limits.

N Spiked analyte recovery is outside stated control limits.