

# FIELD SCREENING FINAL DATA DELIVERABLE COVER SHEET

**RECEIVED**  
MAY 03 2005

Date: Tuesday, June 01, 2004

Sample Authorization Form (SAF) Number: I04-037

**EDMC**

SDG Number (assigned by Sample Management): FP0183 Pages

Attachments (check all that apply or N/A):

6/2/04

- Test Results
- Narrative Summary
- Chain of Custody(s)
- Logbook Pages
- Anomaly Report

ms061104

Total number of pages (including cover sheet):

28 34

Comments:

**ISRM - Hexavalent Chromium - Sulfate - Water**

**THESE TESTS WERE CONDUCTED USING QC-1**

**RECEIVED**  
JUN - 8 2004

*James Hansen*  
Analyst Signature

*George Kelly*  
Reviewer's Signature

5/1/04  
Date

6/7/04  
Date

Distribution: CPP Sample Management A0-21  
Project (Specify)

Requires distribution to listed project personnel by Sample Management (check if applicable)

# On-Site Measurement of Cr +6

## ISRM Groundwater

SAF:104-037

Procedure: CP-GPP-EE-05, FSP 1.18

Logbook: HNF-N-296 2 Page 127

**5/13/2004**

Location	Heis Number	SAF	Date Collected	Time Collected	Sampler (Initials)	Sample Media	Date Analyzed	Time Analyzed	Analyst (Initials)	Cr +6 (mg/L)	Conductivity (uS/cm)
199-D4-20	B18Y67	104-037	5/13/2004	12:01	DEP	Water	5/13/2004	15:00	DJA	0.188	687

Logbook: HNF-N-296 2 Page 129

**5/14/2004**

Location	Heis Number	SAF	Date Collected	Time Collected	Sampler (Initials)	Sample Media	Date Analyzed	Time Analyzed	Analyst (Initials)	Cr +6 (mg/L)	Conductivity (uS/cm)
199-D4-36	B18Y84	104-037	5/14/2004	10:24	KBH	Water	5/14/2004	13:30	DJA	0.007	570
199-D4-48	B18Y95	104-037	5/14/2004	9:30	KBH	Water	5/14/2004	13:30	DJA	0.007	440

Logbook: HNF-N-296 2 Page 130

**5/18/2004**

Location	Heis Number	SAF	Date Collected	Time Collected	Sampler (Initials)	Sample Media	Date Analyzed	Time Analyzed	Analyst (Initials)	Cr +6 (mg/L)	Conductivity (uS/cm)
199-D5-43	B18YD0*	104-037	5/18/2004	8:10	RTS	Water	5/18/2004	13:00	DJA	1.20	549
199-D5-39	B18YC8*	104-037	5/18/2004	10:09	FMH	Water	5/18/2004	13:00	DJA	0.824	360

\* Sample Diluted 4X

Logbook: HNF-N-296 2 Page 131

**5/19/2004**

Location	Heis Number	SAF	Date Collected	Time Collected	Sampler (Initials)	Sample Media	Date Analyzed	Time Analyzed	Analyst (Initials)	Cr +6 (mg/L)	Conductivity (uS/cm)
199-D4-84	B18YC4	104-037	5/19/2004	8:26	RTS	Water	5/19/2004	15:00	DJA	0.353	720
199-D4-7	B18YB5	104-037	5/19/2004	9:13	DPC	Water	5/19/2004	15:00	DJA	<0.005	1389
199-D4-83	B18YC2	104-037	5/19/2004	9:18	RTS	Water	5/19/2004	15:00	DJA	0.068	278
199-D4-4	B18Y90	104-037	5/19/2004	9:48	LDW	Water	5/19/2004	15:00	DJA	0.006	1243
199-D4-85	B18YC6	104-037	5/19/2004	9:59	DPC	Water	5/19/2004	15:00	DJA	0.135	791
199-D4-6	B18Y99	104-037	5/19/2004	10:38	LDW	Water	5/19/2004	15:00	DJA	0.008	1676
199-D4-5	B18Y97	104-037	5/19/2004	10:41	RTS	Water	5/19/2004	15:00	DJA	<0.005	1667
199-D4-39	B18Y88*	104-037	5/19/2004	11:14	LDW	Water	5/19/2004	15:00	DJA	0.640	587
199-D4-38	B18Y86	104-037	5/19/2004	11:45	LDW	Water	5/19/2004	15:00	DJA	0.191	668

\* Sample Diluted 4X

Logbook: HNF-N-296 2 Page 132

**5/20/2004**

Location	Heis Number	SAF	Date Collected	Time Collected	Sampler (Initials)	Sample Media	Date Analyzed	Time Analyzed	Analyst (Initials)	Cr +6 (mg/L)	Conductivity (uS/cm)
199-D4-1	B18Y63	104-037	5/20/2004	10:14	LDW	Water	5/20/2004	14:30	TMJ	<0.005	1885
199-D4-26	B18Y72	104-037	5/20/2004	11:27	RTS	Water	5/20/2004	14:30	TMJ	0.024	746
199-D4-31	B18Y78	104-037	5/20/2004	10:40	RTS	Water	5/20/2004	14:30	TMJ	0.041	810
199-D4-32	B18Y82	104-037	5/20/2004	9:52	RTS	Water	5/20/2004	14:30	TMJ	0.010	773
199-D4-31	B18Y80	104-037	5/20/2004	10:40	RTS	Water	5/20/2004	14:30	TMJ	0.041	810

Logbook: HNF-N-296 2 Page 133

**5/24/2004**

Location	Heis Number	SAF	Date Collected	Time Collected	Sampler (Initials)	Sample Media	Date Analyzed	Time Analyzed	Analyst (Initials)	Cr +6 (mg/L)	Conductivity (uS/cm)
199-D4-62	B18YB1	104-037	5/24/2004	9:47	RRF	Water	5/24/2004	13:35	TMJ	0.008	1197
199-D4-62	B18YB3	104-037	5/24/2004	9:47	RRF	Water	5/24/2004	13:35	TMJ	0.008	1197
199-D4-78	B18YC0	104-037	5/24/2004	10:54	RRF	Water	5/24/2004	13:35	TMJ	0.009	1727

Analyst: DJ Alexander/ TM Johansen

Date: 5/24/2004

# On-Site Measurement of SO<sub>4</sub>

## ISRM Groundwater

SAF:104-037

Procedure: CP-GPP-EE-05, FSP 1.18

Logbook: HNF-N-296 2 Page 134-135

5/24/2004

Location	Heis Number	SAF	Date Collected	Time Collected	Sampler (Initials)	Sample Media	Date Analyzed	Time Analyzed	Analyst (Initials)	SO <sub>4</sub> (mg/L)
199-D4-38	***B18Y87	I04-037	5/19/2004	11:45	LDW	Water	5/24/2004	11:20	TMJ	80
199-D4-48	B18Y96	I04-037	5/14/2004	9:30	KBH	Water	5/24/2004	11:20	TMJ	41
199-D4-85	***B18YC7	I04-037	5/19/2004	9:59	DPC	Water	5/24/2004	11:20	TMJ	120
199-D4-4	****B18Y91	I04-037	5/19/2004	9:48	LDW	Water	5/24/2004	11:20	TMJ	310
199-D4-6	****B18YB0	I04-037	5/19/2004	10:38	LDW	Water	5/24/2004	11:20	TMJ	490
199-D4-7	****B18YB6	I04-037	5/19/2004	9:13	DPC	Water	5/24/2004	11:20	TMJ	260
199-D4-36	*B18Y85	I04-037	5/14/2004	10:24	KBH	Water	5/24/2004	11:20	TMJ	60
199-D5-43	*B18YD1	I04-037	5/18/2004	8:10	RTS	Water	5/24/2004	11:20	TMJ	58
199-D4-5	****B18Y98	I04-037	5/19/2004	10:41	RTS	Water	5/24/2004	11:20	TMJ	420
199-D4-39	B18Y89	I04-037	5/19/2004	11:14	LDW	Water	5/24/2004	11:20	TMJ	43
199-D5-39	B18YC9	I04-037	5/18/2004	10:09	FMH	Water	5/24/2004	11:20	TMJ	30
199-D4-83	B18YC3	I04-037	5/19/2004	9:18	RTS	Water	5/24/2004	12:15	TMJ	18
199-D4-20	****B18Y68	I04-037	5/13/2004	12:01	DEP	Water	5/24/2004	12:15	TMJ	116
199-D4-84	***B18YC5	I04-037	5/19/2004	8:26	RTS	Water	5/24/2004	12:15	TMJ	150
199-D4-31	***B18Y81	I04-037	5/20/2004	10:40	RTS	Water	5/24/2004	12:15	TMJ	125
199-D4-26	***B18Y73	I04-037	5/20/2004	11:27	RTS	Water	5/24/2004	12:15	TMJ	100
199-D4-31	***B18Y79	I04-037	5/20/2004	10:40	RTS	Water	5/24/2004	12:15	TMJ	120
199-D4-32	***B18Y83	I04-037	5/20/2004	9:52	RTS	Water	5/24/2004	12:15	TMJ	115
199-D4-1	****B18Y64	I04-037	5/20/2004	10:14	LDW	Water	5/24/2004	12:15	TMJ	360

\* 2X Dilution

\*\* 4X Dilution

\*\*\* 5X Dilution

\*\*\*\* 10X Dilution

Logbook: HNF-N-296 2 Page 136

5/24/2004

Location	Heis Number	SAF	Date Collected	Time Collected	Sampler (Initials)	Sample Media	Date Analyzed	Time Analyzed	Analyst (Initials)	SO <sub>4</sub> (mg/L)
199-D4-62	*B18YB2	I04-037	5/24/2004	9:47	RRF	Water	5/25/2004	9:47	TMJ	400
199-D4-62	*B18YB4	I04-037	5/24/2004	9:47	RRF	Water	5/25/2004	9:47	TMJ	400
199-D4-78	*B18YC1	I04-037	5/24/2004	9:47	RRF	Water	5/25/2004	10:54	TMJ	540

\* 10X Dilution

Analyst: TM Johansen

Date: 5/24/2004

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100-ISR/CR+6

Maxhansen/65/Amehmans

**Hexavalent Chromium Daily Activity Log**

**Project: 100-ISR/SAF No. I04-037**

**Logbook HNF-N-296 2**

**Date: 5/13/04**

Amehmans  
5/20/04

1330	Deb Alexander arrived on-site at 200W, HO 68N-1985 mobile laboratory. Set up to analyze samples for hexavalent chromium using a HACH DR 2010 spectrophotometer, S/N 980600009425, Method 950, low range hexavalent chromium.
1330 to 1415	Allowed samples picked up at 1313 to come to room temperature; waiting for last set of samples to come in. Left at 1415 to pick up remaining samples from samplers.
1430	Returned to mobile laboratory; set out remaining samples to equilibrate to room temperature.
1445	Prepared 0.10 mg/L standard by adding 240 µL of 12.5 mg/L HACH hexavalent chromium standard, lot # A0234, no expiration, to 29.76 mL of deionized water.
1500	Analyzed sample B18Y67.
1600	Disposed of analytical waste and cleaned up work area.
1610	Left 200W.

Sample #	Well #	SAF #	Concentration (mg/L)	Date Sampled	Time Sampled	Sampler
Blank	-	-	<0.005	-	-	-
0.10 mg/L std.	-	-037	0.101	-	-	-
B18Y67	199-D4-20	I04-307	0.188	5/13/04	12:01	DEP
Blank	-	-	<0.005	-	-	-
0.10 mg/L std.	-	-	0.100	-	-	-

Data recorded real time using a laptop computer.

AM 5/20/04

Maxhansen/Amehmans 5/20/04

Reviewed by: Maxhansen/Amehmans  
5/20/04

100 HR 3 CRM / 150m CRM

meadnisen/65/annex

meadnisen/65/annex  
5/20/04

**Hexavalent Chromium Daily Activity Log**  
**Project: 100-HR-3IAM (1&2) GW Monitoring / SAF I04-035**  
**Project: ISRM GW Monitoring / SAF I04-037**  
**Logbook HNF-N-296 2 Date: 05/14/04**

1245	Deb Alexander arrived on-site at 200W, HO 68N-1985 mobile laboratory. Set up to analyze samples for hexavalent chromium using a HACH DR 2010 spectrophotometer, S/N 980600009425, Method 950, low range hexavalent chromium.
1300	Allowed samples picked up at 1224 to come to room temperature.
1320	Prepared 0.10 mg/L standard by adding 240 µL of 12.5 mg/L HACH hexavalent chromium standard, lot # A0234, no expiration, to 29.76 mL of deionized water.
1330	Analyzed samples B18Y17, B18Y84, and B18Y95.
1400	Disposed of analytical waste and cleaned up work area.
1415	Left 200W.

Sample #	Well #	SAF #	Concentration (mg/L)	Date Sampled	Time Sampled	Sampler	Conductivity (us/cm)
0.10 mg/L std.	-	-	0.102	-	-	-	-
Blank	-	-	<0.005	-	-	-	-
B18Y17*	199-D4-22	I04-035	1.14	5/14/04	11:10	KBH	672
B18Y84	199-D4-36	I04-037	0.007	5/14/04	10:24	KBH	570
B18Y95	199-D4-48	I04-037	0.007	5/14/04	09:30	KBH	440
Blank	-	-	<0.005	-	-	-	-
0.10 mg/L std.	-	-	0.102	-	-	-	-

\* Sample diluted 4X.  
 Data recorded real time using a laptop computer.

~~meadnisen/65/annex 5/20/04~~

meadnisen/65/annex 5/20/04

Reviewed by: meadnisen/65/annex  
5/28/04

100 HR3 crte / 152M crte

Mannureen/GS/Amannureen

**Hexavalent Chromium Daily Activity Log**  
**Project: 100-HR-3IAM GW Monitoring / SAF I04-035**  
**Project: ISRM GW Monitoring / SAF I04-037**  
**Logbook HNF-N-296 2**  
**Date: 05/18/04**

*Amannureen*  
*5/20/04*

1230	Deb Alexander arrived on-site at 200W, HO 68N-1985 mobile laboratory. Set up to analyze samples for hexavalent chromium using a HACH DR 2010 spectrophotometer, S/N 980600009425, Method 950, low range hexavalent chromium.
1230-1255	Allowed samples to come to room temperature.
1255	Prepared 0.10 mg/L standard by adding 240 $\mu$ L of 12.5 mg/L HACH hexavalent chromium standard, lot # A0234, no expiration, to 29.76 mL of deionized water.
1300	Analyzed samples B18Y42, B18YD0, B18Y40, B18Y19, B18Y32, B18Y34, B18Y44, B18Y46, B18Y38, B18YC8, and B18Y36.
1400	Disposed of analytical waste and cleaned up work area.
1415	Left 200W.

Sample #	Well #	SAF #	Concentration (mg/L)	Date Sampled	Time Sampled	Sampler	Conductivity (us/cm)
0.10 mg/L std.	-	-	0.102	-	-	-	-
Blank	-	-	<0.005	-	-	-	-
B18Y42	199-D5-40/ FTB 876	I04-035	0.009	5/18/04	08:00	RTS	NA
B18YD0*	199-D5-43	I04-037	1.204	5/18/04	08:10	RTS	549
B18Y40	199-D5-40	I04-035	0.197	5/18/04	08:34	RTS	585
B18Y19	199-D4-23	I04-035	0.043	5/18/04	08:39	FMH	1258
B18Y32	199-D5-36	I04-035	0.007	5/18/04	09:03	RTS	222
B18Y34	199-D5-36	I04-035	0.006	5/18/04	09:03	RTS	222
B18Y44 **	199-D5-41	I04-035	2.335	5/18/04	09:30	RTS	411
B18Y46 **	199-D5-41	I04-035	2.375	5/18/04	09:30	RTS	411
B18Y38	199-D5-38	I04-035	0.075	5/18/04	09:36	FMH	456
B18YC8*	199-D5-39	I04-037	0.824	5/18/04	10:09	FMH	360
B18Y36	199-D5-37	I04-035	0.197	5/18/04	10:57	FMH	281
Blank	-	-	<0.005	-	-	-	-
0.10 mg/L std.	-	-	0.102	-	-	-	-

\* Sample diluted 4X.

\*\* Sample diluted 5X.

Data recorded real time using a laptop computer.

*Mannureen/Amannureen 5/20/04*

*Reviewed by: Amannureen/Amannureen 5/20/04*

KRM 1576

Mannison / G. S. Mannison

**Hexavalent Chromium Daily Activity Log**  
**Project: 100-ISRMM / SAF No. I04-037**  
**Logbook HNF-N-296 2**  
**Date: 5/19/04**

*Amber Mannison*  
5/20/04

1430	Deb Alexander arrived on-site at 200W, HO 68N-1985 mobile laboratory. Set up to analyze samples for hexavalent chromium using a HACH DR 2010 spectrophotometer, S/N 980600009425, Method 950, low range hexavalent chromium.
1430 to 1455	Allowed samples <del>picked up at 1224</del> <sup>mg 5:20:04</sup> to come to room temperature.
1455	Prepared 0.10 mg/L standard by adding 240 µL of 12.5 mg/L HACH hexavalent chromium standard, lot # A0234, no expiration, to 29.76 mL of deionized water.
1500	Analyzed samples.
1550	Disposed of analytical waste and cleaned up work area.
1605	Left 200W.

Sample #	Well #	SAF #	Concentration (mg/L)	Date Sampled	Time Sampled	Sampler	Conductivity (us/cm)
Blank	-	-	<0.005	-	-	-	-
0.10 mg/L std.	-	-	0.105	-	-	-	-
B18YC4	199-D4-84	I04-037	0.353	5/19/04	08:26	RTS	720
B18YB5	199-D4-7	I04-037	<0.005	5/19/04	09:13	DPC	1389
B18YC2	199-D4-83	I04-037	0.068	5/19/04	09:18	RTS	278
B18Y90	199-D4-4	I04-037	0.006	5/19/04	09:48	LDW	1243
B18YC6	199-D4-85	I04-037	0.135	5/19/04	09:59	<del>RTS</del> DPC	791
B18Y99	199-D4-6	I04-037	0.008	5/19/04	10:38	LDW	1676
B18Y97	199-D4-5	I04-037	<0.005	5/19/04	10:41	RTS	1667
B18Y88*	199-D4-39	I04-037	0.640	5/19/04	11:14	LDW	587
B18Y86/ <del>811</del>	199-D4-38	I04-037	0.191	5/19/04	11:45	LDW	668
Blank	-	-	<del>mg 5:20:04</del> <0.005	-	-	-	-
0.10 mg/L std.	-	-	0.103	-	-	-	-

\* Diluted Sample 4X

Data recorded real time using a laptop computer.

Mannison / Mannison 5/20/04

Reviewed by:  
Mannison / Mannison  
5/20/04

100-HR3 / 152m

Mohrjensen / 65/2004

5/27/04

**Hexavalent Chromium Daily Activity Log**  
**Project: 100-HR-3IAM GW Monitoring / SAF I04-035**  
**Project: ISRM GW Monitoring / SAF I04-037**  
**Logbook HNF-N-296 2**  
**Date: 05/20/04**

1345	TM Johansen arrived on-site at 200W, HO 68N-1985 mobile laboratory. Set up to analyze samples for hexavalent chromium using a HACH DR 2010 spectrophotometer, S/N 980600009425, Method 950, low range hexavalent chromium.
1350	Prepared 0.10 mg/L standard by adding 240 µL of 12.5 mg/L HACH hexavalent chromium standard, lot # A0234, no expiration, to 29.76 mL of deionized water.
1430	Analyzed samples.

Sample #	Well #	SAF #	Concentration (mg/L)	Date Sampled	Time Sampled	Sampler	Conductivity (us/cm)
0.10 mg/L std.	-	-	0.103	-	-	-	-
Blank	-	-	<0.005	-	-	-	-
B18Y63	199-D4-1	I04-037	<0.005	5/20/04	10:14	LDW	1885
B18Y72	199-D4-26	I04-037	0.024	5/20/04	11:27	RTS	746
B18Y78	199-D4-31	I04-037	0.041	5/20/04	10:40	RTS	810
B18Y82	199-D4-32	I04-037	0.010	5/20/04	09:52	RTS	773
B18Y21	199-D5-13	I04-035	0.708	5/20/04	11:09	KJY	604
B18Y30	199-D5-33	I04-035	0.005	5/20/04	12:23	KJY	184
B18Y31	199-D5-34	I04-035	0.008	5/20/04	12:34	RTS	234
B18Y48	199-D5-42	I04-035	0.037	5/20/04	11:25	LDW	496
B18Y50	199-D5-44	I04-035	<0.005	5/20/04	10:47	LDW	216
B18Y52	199-D8-55	I04-035	0.017	5/20/04	09:51	KJY	153
B18Y04	199-D8-69	I04-035	0.063	5/20/04	08:56	KJY	368
B18XY6	199-D8-70	I04-035	0.062	5/20/04	12:45	LDW	368
B18Y860	199-D4-31	I04-037	0.041	5/20/04	10:40	RTS	810
mg/L	*199-D4-39	mg/L	0.840	5/19/04	10:57	LDW	-
Blank	-	-	<0.005	-	-	-	-
0.10 mg/L std.	-	-	0.103	-	-	-	-

\* Sample collected due to yellow discoloration

Data recorded real time using a laptop computer.

Mohrjensen / 65/2004

Reviewed by: DJ Alexander  
 of alexander 6/2/04

100-KR4 crne / 191m crne

133  
T.M. Johansen / GS / T.M. Johansen

**Hexavalent Chromium Daily Activity Log**  
**Project: KR-4 GW Monitoring / SAF I04-036**  
**ISRM GW Monitoring / SAF I04-037**  
**Logbook HNF-N-296 2**  
**Date: 5/24/04**

T.M. Johansen  
5/27/04

1300	T. M. Johansen arrived on-site at 200W, HO 68N-1985 mobile laboratory. Set up to analyze samples for hexavalent chromium using a HACH DR 2010 spectrophotometer, S/N 980600009425, Method 950, low range hexavalent chromium.
1305	Prepared 0.10 mg/L standard by adding 240 µL of 12.5 mg/L HACH hexavalent chromium standard, lot # A2361, no expiration, to 29.76 mL of deionized water.
1335	Analyze samples.

Sample #	Well #	SAF #	Concentration (mg/L)	Date Sampled	Time Sampled	Sampler	Conductivity (us/cm)
Blank	-	-	<0.005	-	-	-	-
0.10 mg/L std.	-	-	0.108	-	-	-	-
B18YB1	199-D4-62	I04-037	0.008	5/24/04	09:47	RRF	1197
B18YB3	199-D4-62	I04-037	0.008	5/24/04	09:47	RRF	1197
B18YC0	199-D4-78	I04-037	0.009	5/24/04	10:54	RRF	1727
B18Y61	199-K-18	I04-036	0.149	5/24/04	10:13	DEP	583
B18Y62	199-K-20	I04-036	0.066	5/24/04	10:29	DEP	543
B18Y55	199-K-114A	I04-036	0.028	5/24/04	09:34	DEP	228
B18Y59	199-K-130	I04-036	0.101	5/24/04	09:02	DEP	333
B18Y60	199-K-130	I04-036	0.102	5/24/04	09:02	DEP	333
0.10 mg/L std.	-	-	0.107	-	-	-	-

Data recorded real time using a laptop computer.

T.M. Johansen 5/27/04

T.M. Johansen / T.M. Johansen 5/27/04

Reviewed by:  
DJ Alexander / DJ Alexander  
6/2/04

0000009

100-151m 504 / 100-HR3 504

Tranmeren / Ab. Brumms

*J. Alexander*  
5/24/04

**Sulfate Daily Activity Log**  
**Project: ISRM GW Monitoring/SAF I04-037**  
**100-HR-3 GW Monitoring/SAF I04-035**  
**Date: 5/24/04**

0758	TM Johansen arrived on-site at 200W, HO 68N-1985 mobile laboratory. Set up to recalibrate the Sulfate method, and then to analyze samples for sulfate using a HACH DR 2010 spectrophotometer, S/N 980600009425, Method 952, sulfate.
0803	Prepared 10 mg/L standard by adding 0.3 mL of 1000 mg/L HACH sulfate standard, lot # N7108, no expiration, to 29.70 mL of deionized water.
0805	Prepared 20 mg/L standard by adding 0.6 mL of 1000 mg/L HACH sulfate standard, lot # N7108, no expiration, to 29.40 mL of deionized water.
0807	Prepared 30 mg/L standard by adding 0.9 mL of 1000 mg/L HACH sulfate standard, lot # N7108, no expiration, to 29.10 mL of deionized water.
0810	Prepared 40 mg/L standard by adding 1.2 mL of 1000 mg/L HACH sulfate standard, lot # N7108, no expiration, to 28.8 mL of deionized water.
0812	Prepared 50 mg/L standard by adding 1.5 mL of 1000 mg/L HACH sulfate standard, lot # N7108, no expiration, to 28.50 mL of deionized water.
0814	Prepared 60 mg/L standard by adding 1.8 mL of 1000 mg/L HACH sulfate standard, lot # N7108, no expiration, to 28.20 mL of deionized water.
0850	Sulfate program recalibration complete. Program number remains at 952.
0900	Set up to analyze samples for sulfate using a HACH DR 2010 spectrophotometer, S/N 980600009425, Method 952, sulfate. Removed samples from refrigerator and allowed to warm to room temperature.
0910	Diluted samples B18Y06, B18Y08, B18Y39, B18Y45, B18Y14 and B18Y18 (2X) by adding 10 mL sample to 10 mL deionized water. Diluted samples B180V0, B180V2 and B18Y10 (4X) by adding 5 mL sample to 15 mL deionized water. Diluted sample B18Y41 (5X) by adding 4 mL sample to 16 mL deionized water. Diluted samples B18Y16 and B18Y20 (10X) by adding 2 mL sample to 18 mL deionized water. Samples B18Y47, B18Y12, B18Y33, B18Y35, B18Y37 and B18Y43 did not require dilution.
1030	Analyzed samples B18Y06 through B18Y41.
1045	Diluted samples B18Y85 and B18YD1 (2X) by adding 10 mL sample to 10 mL deionized water. Diluted samples B18Y87 and B18YC7 (5X) by adding 4 mL sample to 16 mL deionized water. Diluted samples B18Y91, B18YB0, B18YB6 and B18Y98 (10X) by adding 2 mL sample to 18 mL deionized water. Samples B18Y96, B18Y89 and B18YC9 did not require dilution.
1120	Analyzed samples B18Y87 through B18YC9.
1130	Diluted samples B18YC5, B18Y49, B18Y81, B18Y73, B18Y79 and B18Y83 (5X) by adding 4 mL sample to 16 mL deionized water. Diluted sample B18Y68 and B18Y64 (10X) by adding 2 mL sample to 18 mL deionized water. Samples B18YC3 and B18Y51 did not require dilution.
1215	Analyzed samples B18YC3 through B18Y64.

Sample #	Well #	Dilution	SAF #	Concentration (mg/L)	Date Sampled	Time Sampled	Sampler
Blank	-	-	-	0	-	-	-
50 mg/L std.	-	-	-	48	-	-	-
B18Y06	199-D2-6	2X	I04-035	120	5/13/04	08:25	FMH
B18Y08	199-D3-2	2X	I04-035	114	5/13/04	12:04	FMH
<del>B18Y08</del> B18Y06	199-D4-15	4X	I04-035	64	5/13/04	09:16	FMH
<del>B18Y08</del> B18Y06	199-D4-15	4X	I04-035	64	5/13/04	09:16	FMH
B18Y39	199-D5-38	2X	I04-035	72	5/18/04	09:36	FMH

TMJ 6/1/04

*Tranmeren / Brumms 5/24/04*

Revised by:  
DJ Alexander / adalexander 6/2/04

100-162M504 / 100-11R3504

Madsen / G. Madsen

J. Madsen  
10/10/04  
5/24/04

**Sulfate Daily Activity Log**  
**Project: ISRM GW Monitoring/SAF I04-037**  
**100-HR-3 GW Monitoring/SAF I04-035**  
**Date: 5/24/04**

Sample #	Well #	Dilution	SAF #	Concentration (mg/L)	Date Sampled	Time Sampled	Sampler
B18Y45	199-D5-41	<del>2X NA</del>	I04-035	<del>26</del> 58	5/18/04	09:30	RTS
B18Y47	199-D5-41	NA	I04-035	58	5/18/04	09:30	RTS
B18Y12	199-D5-14/ FTB 878	NA	I04-035	0	5/13/04	07:15	FMH
B18Y10	199-D4-13	4X	I04-035	96	5/13/04	10:39	FMH
B18Y16	199-D4-19	10X	I04-035	370	5/13/04	11:19	FMH
B18Y20	199-D4-23	10X	I04-035	160	5/18/04	08:39	FMH
B18Y33	199-D5-36	NA	I04-035	9	5/18/04	09:03	RTS
B18Y35	199-D5-36	NA	I04-035	10	5/18/04	09:03	RTS
B18Y37	199-D5-37	NA	I04-035	17	5/18/04	10:57	FMH
B18Y43	199-D5-40/ FTB 876	NA	I04-035	0	5/18/04	08:00	RTS
B18Y14	199-D4-14	2X	I04-035	98	5/13/04	10:03	FMH
B18Y18	199-D4-22	2X	I04-035	112	5/14/04	11:10	KBH
B18Y41	199-D5-40	5X	I04-035	70	5/18/04	08:34	RTS
B18Y87	199-D4-38	5X	I04-037	80	5/19/04	11:45	LDW
B18Y96	199-D4-48	NA	I04-037	41	5/14/04	09:30	KBH
B18YC7	199-D4-85	5X	I04-037	120	5/19/04	09:59	DPC
B18Y91	199-D4-4	10X	I04-037	310	5/19/04	09:48	LDW
B18YB0	199-D4-6	10X	I04-037	490	5/19/04	10:38	LDW
B18YB6	199-D4-7	10X	I04-037	260	5/19/04	09:13	DPC
B18Y85	199-D4-36	2X	I04-037	60	5/14/04	10:24	KBH
B18YD1	199-D5-43	2X	I04-037	58	5/18/04	08:10	RTS
B18Y98	199-D4-5	10X	I04-037	420	5/19/04	10:41	RTS
B18Y89	199-D4-39	NA	I04-037	43	5/19/04	11:14	LDW
B18YC9	199-D5-39	NA	I04-037	30	5/18/04	10:09	FMH
B18YC3	199-D4-83	NA	I04-037	18	5/19/04	09:18	RTS
B18Y68	199-D4-20	10X	I04-037	116	5/13/04	12:01	DEP
B18YC5	199-D4-84	5X	I04-037	150	5/19/04	08:26	RTS
B18Y49	199-D5-42	5X	I04-035	195	5/20/04	11:25	LDW
B18Y51	199-D5-44	NA	I04-035	7	5/20/04	10:47	LDW
B18Y81	199-D4-31	5X	I04-037	125	5/20/04	10:40	RTS
B18Y73	199-D4-26	5X	I04-037	100	5/20/04	11:27	RTS
B18Y79	199-D4-31	5X	I04-037	120	5/20/04	10:40	RTS
B18Y83	199-D4-32	5X	I04-037	115	5/20/04	09:52	RTS
B18Y64	199-D4-1	10X	I04-037	360	5/20/04	10:14	LDW
50 mg/L std.	-	-	-	48	-	-	-

Data were recorded real-time using a laptop computer.

Reviewed by:

Madsen / Madsen 5/24/04

DJ Alexander / DJ Alexander  
6/2/04

136m 504

Thomsen / 657 / 5/25/04

Thomsen  
5/25/04

**Sulfate Daily Activity Log**  
**Project: ISRM GW Monitoring / SAF I04-037**  
**Logbook HNF-N-296 2**  
**Date: 5/25/04**

1200	TM Johansen arrives on-site at 200W, HO 68N-1985 mobile laboratory. Set up to recalibrate the Sulfate method, and then to analyze samples for sulfate using a HACH DR 2010 spectrophotometer, S/N 980600009425, Method 952, sulfate.
1205	Prepared 50 mg/L standard by adding 1.5 mL of 1000 mg/L HACH sulfate standard, lot # N7108, no expiration, to 28.50 mL of deionized water.
1215	Diluted samples B18PY9, B18R01 and B18TK2 10X by adding 2 mL sample to 18 mL deionized water.
1250	Analyzed samples.

Sample #	Well #	SAF #	Concentration (mg/L)	Date Sampled	Time Sampled	Sampler
Blank	-	-	0	-	-	-
0.10 mg/L std.	-	-	48	-	-	-
*B18YB2	199-D4-62	I04-037	400	5/24/04	09:47	RRF
*B18YB4	199-D4-62	I04-037	400	5/24/04	09:47	RRF
*B18YC1	199-D4-78	I04-037	540	5/24/04	09:47:054	RRF
0.10 mg/L std.	-	-	48	-	-	-

\* 10X Dilution

Data recorded real time using a laptop computer.

TM 5/27/04

Thomsen / 657 / 5/27/04

Reviewed by:  
DJ Alexander  
Alexander

6/2/04







PNNL

# CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #

104-037-7

Page 1 of 1

Collector <b>R.T. SICKLE</b>	Contact/Requester DL STEWART	Telephone No. 509-376-5056	MSIN	FAX
SAF No. 104-037	Sampling Origin HANFORD SITE	Purchase Order/Charge Code		
Project Title CERCLA ISRM GW MONITORING, MAY 2004	Logbook No. SAWS-H79	Ice Chest No. SML-531	Temp.	
Shipped To (Lab) Mobile Field Laboratory	Method of Shipment GOVT. VEHICLE	Bill of Lading/Air Bill No.		
Protocol CERCLA	Data Turnaround 45 Days	Offsite Property No.		

POSSIBLE SAMPLE HAZARDS/REMARKS  
\*\* \*\*

**SPECIAL INSTRUCTIONS** Hold Time Total Activity Exemption: Yes  No   
 TOTAL ACTIVITY EXEMPTION APPLIES UNLESS OTHERWISE STATED.  
 Batch all PNNL GW samples submitted under "104" SAFs into one SDG, not to exceed SDG closure of 14 days.  
 Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B18Y78 (F)		W	5-20-04	1040	1x40-mL. aGs*	COLOR_TK_FLD: Hexavalent Chromium (1)	None
B18Y79		W	↓	↓	1x40-mL. aGs*	COLOR_TK_FLD: Sulfate (1)	None
<i>OR</i>							
5-20-04							

Relinquished By <b>R.T. SICKLE</b>	Sign <i>[Signature]</i>	Date/Time 5-20-04	Received By <i>[Signature]</i>	Print <i>[Signature]</i>	Date/Time 5-20-04	<b>Matrix *</b> S = Soil DS = Drum Solids SE = Sediment DL = Drum Liqui SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By		Date/Time	Received By		Date/Time	
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) Return to Project		Disposed By <i>[Signature]</i>		Date/Time 5/24/04 1400	

Collector <b>R.T. SICKLE</b>	Contact/Requester DL STEWART	Telephone No. <b>509-376-5056</b>	MSIN	FAX
SAF No. <b>104-037</b>	Sampling Origin HANFORD SITE	Purchase Order/Charge Code		
Project Title CERCLA ISRM GW MONITORING, MAY 2004	Logbook No. <b>SAWS-479</b>	Ice Chest No. <b>SmL-531</b>	Temp.	
Shipped To (Lab) Mobile Field Laboratory	Method of Shipment GOVT. VEHICLE	Bill of Lading/Air Bill No.		
Protocol CERCLA	Data Turnaround 45 Days	Offsite Property No.		

**POSSIBLE SAMPLE HAZARDS/REMARKS**  
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**SPECIAL INSTRUCTIONS**    **Hold Time**    Total Activity Exemption: Yes  No   
 TOTAL ACTIVITY EXEMPTION APPLIES UNLESS OTHERWISE STATED.  
 Batch all PNNL GW samples submitted under "104" SAF's into one SDG, not to exceed SDG closure of 14 days.  
 Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B18Y80 (F)		W	5-20-04	1040	1x40-mL aGs*	COLOR_TK_FLD: Hexavalent Chromium (1)	None
B18Y81		W	↓	↓	1x40-mL aGs*	COLOR_TK_FLD: Sulfate (1)	None
<div style="font-size: 2em; opacity: 0.5; transform: rotate(-15deg); position: absolute; top: 50%; left: 50%; pointer-events: none;">             [Handwritten Signature and Date: 5-20-04]           </div>							

Relinquished By <b>R.T. SICKLE</b> [Signature]	Print	Sign	Date/Time <b>5-20-04</b>	Received By [Signature]	Print	Sign	Date/Time <b>5-20-04</b>	<b>Matrix *</b> S = Soil                      DS = Drum Solids SE = Sediment              DL = Drum Liquid SO = Solid                    T = Tissue SL = Sludge                  WI = Waste W = Water                    L = Liquid O = Oil                        V = Vegetation A = Air                        X = Other
Relinquished By	Date/Time	Received By	Date/Time					
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) <b>Return to PNNL</b>			Disposed By [Signature]		Date/Time <b>5/24/04 1400</b>		



PNNL

# CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **104-037-11**

Page 1 of 1

Collector <b>K.B. HULSE</b>	Contact/Requester DL STEWART	Telephone No. 509-376-5056	MSIN	FAX
SAF No. 104-037	Sampling Origin HANFORD SITE	Purchase Order/Charge Code		
Project Title CERCLA ISRM GW MONITORING, MAY 2004	Logbook No. SAWS-H79	Ice Chest No. SML-531	Temp.	
Shipped To (Lab) Mobile Field Laboratory	Method of Shipment GOVT. VEHICLE	Bill of Lading/Air Bill No.		
Protocol CERCLA	Data Turnaround 45 Days	Offsite Property No.		

**POSSIBLE SAMPLE HAZARDS/REMARKS**  
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**SPECIAL INSTRUCTIONS** Hold Time Total Activity Exemption: Yes  No   
 TOTAL ACTIVITY EXEMPTION APPLIES UNLESS OTHERWISE STATED.  
 Batch all PNNL GW samples submitted under "104" SAF's into one SDG, not to exceed SDG closure of 14 days.  
 Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B18Y84 (F)		W	5/14/04	1024	1x40-mL aGs*	COLOR_TK_FLD: Hexavalent Chromium (1)	None
B18Y85		W	↓	↓	1x40-mL aGs*	COLOR_TK_FLD: Sulfate (1)	None

Relinquished By <b>K.B. HULSE</b>	Print <i>K.B. Hulse</i>	Sign <i>K.B. Hulse</i>	Date/Time MAY 14 2004 1224	Received By <i>DJ Alexander</i>	Print <i>DJ Alexander</i>	Sign <i>DJ Alexander</i>	Date/Time MAY 14 2004 1224
Relinquished By	Date/Time	Received By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time

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

<b>FINAL SAMPLE DISPOSITION</b>	Disposal Method (e.g., Return to customer, per lab procedure, used in process) <i>Return to Project</i>	Disposed By <i>J. Richardson</i>	Date/Time <i>5/24/04 1400</i>
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Collector <b>DURATEK L. D. WALL</b>	Contact/Requester <b>DL STEWART</b>	Telephone No. <b>509-376-5056</b> MSIN FAX
SAF No. <b>104-037</b>	Sampling Origin <b>HANFORD SITE</b>	Purchase Order/Charge Code
Project Title <b>CERCLA ISRM GW MONITORING, MAY 2004</b>	Logbook No. <b>DTS-SAWS-1476</b>	Ice Chest No. Temp.
Shipped To (Lab) <b>Mobile Field Laboratory</b>	Method of Shipment <b>GOVT. VEHICLE</b>	Bill of Lading/Air Bill No.
Protocol <b>CERCLA</b>	Data Turnaround <b>45 Days</b>	Offsite Property No.

**POSSIBLE SAMPLE HAZARDS/REMARKS**  
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**SPECIAL INSTRUCTIONS** Hold Time Total Activity Exemption: Yes  No   
 TOTAL ACTIVITY EXEMPTION APPLIES UNLESS OTHERWISE STATED.  
 Batch all PNNL GW samples submitted under "104" SAF's into one SDG, not to exceed SDG closure of 14 days.  
 Submit invoices & deliverables to DL Stewart, PNNL.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B18Y86 (F)		W	5-19-04	1145	1x40-mL aGs*	COLOR_TK_FLD: Hexavalent Chromium (1)	None
B18Y87		W	+	+	1x40-mL aGs*	COLOR_TK_FLD: Sulfate (1)	None

Relinquished By <b>DURATEK L. D. WALL</b>	Print <i>L.D. Wall</i>	Sign <i>L.D. Wall</i>	Date/Time <b>MAY 19 2004</b>	Received By <i>J Alexander</i>	Print <i>J Alexander</i>	Sign <i>J Alexander</i>	Date/Time <b>MAY 19 2004</b>	Matrix * S = Soil DS = Drum Solids SE = Sediment DL = Drum Liqui SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By	Date/Time	Received By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time	
Relinquished By	Date/Time	Received By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time	

<b>FINAL SAMPLE DISPOSITION</b>	Disposal Method (per Return to customer, per lab procedure, used in process) <b>Return to Project</b>	Disposed By <i>J. J. Hansen</i>	Date/Time <b>5/24/04 1400</b>
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PNNL

# CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #  
**104-037-27**  
Page 1 of 1

Collector <b>DURATEK L. D. WALL</b>	Contact/Requester <b>DL STEWART</b>	Telephone No. 509-376-5056	MSIN	FAX
SAF No. 104-037	Sampling Origin HANFORD SITE	Purchase Order/Charge Code		
Project Title CERCLA ISRM GW MONITORING, MAY 2004	Logbook No. <b>DTS-SAWS-1176</b>	Ice Chest No.	Temp.	
Shipped To (Lab) Mobile Field Laboratory	Method of Shipment GOVT. VEHICLE	Bill of Lading/Air Bill No.		
Protocol CERCLA	Data Turnaround 45 Days	Offsite Property No.		

**POSSIBLE SAMPLE HAZARDS/REMARKS**  
\*\* \*\*

**SPECIAL INSTRUCTIONS** Hold Time Total Activity Exemption: Yes  No   
 TOTAL ACTIVITY EXEMPTION APPLIES UNLESS OTHERWISE STATED.  
 Batch all PNNL GW samples submitted under "104" SAF's into one SDG, not to exceed SDG closure of 14 days.  
 Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B18Y99 (F)		W	5-19-04	1039	1x40-mL aGs*	COLOR_TK_FLD: Hexavalent Chromium (1)	None
B18YB0		W	↓	↓	1x40-mL aGs*	COLOR_TK_FLD: Sulfate (1)	None

Relinquished By <b>DURATEK L. D. WALL</b>	Print <i>L.D. Wall</i>	Sign <i>L.D. Wall</i>	Date/Time 330 <b>MAY 19 2004</b>	Received By <i>Jalepander Jalepander</i>	Print <i>Jalepander Jalepander</i>	Sign <i>Jalepander Jalepander</i>	Date/Time 1336 <b>MAY 19 2004</b>	<b>Matrix *</b> S = Soil DS = Drum Solids SE = Sediment DL = Drum Liqui SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By	Date/Time	Received By	Date/Time	Received By	Date/Time	Date/Time		
Relinquished By	Date/Time	Received By	Date/Time	Received By	Date/Time	Date/Time		
Relinquished By	Date/Time	Received By	Date/Time	Received By	Date/Time	Date/Time		

<b>FINAL SAMPLE DISPOSITION</b>	Disposal Method (e.g., Return to customer, per lab procedure, used in process) <i>Return to project</i>	Disposed By <i>Imoanansen</i>	Date/Time <i>5/24/04 1400</i>
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PNNL

# CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I04-037-30**

Page 1 of 1

<b>Collector</b> R. R. FOX	<b>Contact/Requester</b> DL STEWART	<b>Telephone No.</b> 509-376-5056	<b>MSIN</b> FAX
<b>SAF No.</b> I04-037	<b>Sampling Origin</b> HANFORD SITE	<b>Purchase Order/Charge Code</b>	
<b>Project Title</b> CERCLA ISRM GW MONITORING, MAY 2004	<b>Logbook No.</b> DTS-SAWS-1180	<b>Ice Chest No.</b> SMC 526	<b>Temp.</b>
<b>Shipped To (Lab)</b> Mobile Field Laboratory	<b>Method of Shipment</b> GOVT. VEHICLE	<b>Bill of Lading/Air Bill No.</b>	
<b>Protocol</b> CERCLA	<b>Data Turnaround</b> 45 Days	<b>Offsite Property No.</b>	

**POSSIBLE SAMPLE HAZARDS/REMARKS**  
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**SPECIAL INSTRUCTIONS**      **Hold Time**      **Total Activity Exemption:** Yes  No   
 TOTAL ACTIVITY EXEMPTION APPLIES UNLESS OTHERWISE STATED.  
 Batch all PNNL GW samples submitted under "I04" SAF's into one SDG, not to exceed SDG closure of 14 days.  
 Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B18YB3 (F)		W	5-24-04	0947	1x40-mL aGs*	COLOR_TK_FLD: Hexavalent Chromium (1)	None
B18YB4		W	↓	↓	1x40-mL aGs*	COLOR_TK_FLD: Sulfate (1)	None

<b>Relinquished By</b> R. R. FOX	<b>Print</b>	<b>Sign</b>	<b>Date/Time</b> 1250 5-24-04	<b>Received By</b>	<b>Print</b>	<b>Sign</b>	<b>Date/Time</b> 1250 5-24-04	<b>Matrix *</b> S = Soil                      DS = Drum Solids SE = Sediment              DL = Drum Lioui SO = Solid                    T = Tissue SL = Sludge                  WI = Wine W = Water                    L = Liquid O = Oil                        V = Vegetation A = Air                         X = Other
<b>Relinquished By</b>			<b>Date/Time</b>	<b>Received By</b>			<b>Date/Time</b>	
<b>Relinquished By</b>			<b>Date/Time</b>	<b>Received By</b>			<b>Date/Time</b>	
<b>Relinquished By</b>			<b>Date/Time</b>	<b>Received By</b>			<b>Date/Time</b>	

<b>FINAL SAMPLE DISPOSITION</b>	<b>Disposal Method (e.g. Return to customer, per lab procedure, used in process)</b> Return to origin	<b>Disposed By</b> J. M. Anderson	<b>Date/Time</b> 5/25/04 1200
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PNNL

# CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #

I04-037-41

Page 1 of 1

Collector <b>R.T. SICKLE</b>	Contact/Requester DL STEWART	Telephone No. 509-376-5036	MSIN FAX
SAF No. I04-037	Sampling Origin HANFORD SITE	Purchase Order/Charge Code	
Project Title CERCLA ISRM GW MONITORING, MAY 2004	Logbook No. SAWS-H29	Ice Chest No. SML-531	Temp.
Shipped To (Lab) Mobile Field Laboratory	Method of Shipment GOVT. VEHICLE	Bill of Lading/Air Bill No.	
Protocol CERCLA	Data Turnaround 45 Days	Offsite Property No.	

**POSSIBLE SAMPLE HAZARDS/REMARKS**  
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**SPECIAL INSTRUCTIONS** Hold Time Total Activity Exemption: Yes  No   
 TOTAL ACTIVITY EXEMPTION APPLIES UNLESS OTHERWISE STATED.  
 Batch all PNNL GW samples submitted under "I04" SAF's into one SDG, not to exceed SDG closure of 14 days.  
 Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B18YC4 (F)		W	5-19-04	0826	1x40-mL aGs*	COLOR_TK_FLD: Hexavalent Chromium (1)	None
B18YC5		W	I	I	1x40-mL aGs*	COLOR_TK_FLD: Sulfate (1)	None
<i>[Large handwritten signature and '5-19-04' written across the table]</i>							

Relinquished By <b>R.T. SICKLE</b> <i>[Signature]</i>	Print <b>R.T. SICKLE</b>	Sign <i>[Signature]</i>	Date/Time 5-19-04 1330	Received By <b>DL Alexander</b> <i>[Signature]</i>	Print <b>DL Alexander</b>	Sign <i>[Signature]</i>	Date/Time 5-19-04 1330	<b>Matrix *</b> S = Soil DS = Drum Solids SF = Sediment DL = Drum Liqut SO = Solid T = Tissue SL = Sludae WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By	Date/Time	Received By	Date/Time	Received By	Date/Time	Date/Time		
Relinquished By	Date/Time	Received By	Date/Time	Received By	Date/Time	Date/Time		
Relinquished By	Date/Time	Received By	Date/Time	Received By	Date/Time	Date/Time		

<b>FINAL SAMPLE DISPOSITION</b>	Disposal Method (e.g., Return to customer, per lab procedure, used in process) <i>Return to project</i>	Disposed By <i>[Signature]</i>	Date/Time 5/24/04 1400
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Collector <b>F.M. HALL</b>	Contact/Requester DL STEWART	Telephone No. 509-376-5056	MSIN	FAX
SAF No. 104-037	Sampling Origin HANFORD SITE	Purchase Order/Charge Code		
Project Title CERCLA ISRM GW MONITORING, MAY 2004	Logbook No. 075 - SAWS H 76	Ice Chest No.	Temp.	
Shipped To (Lab) Mobile Field Laboratory	Method of Shipment GOVT. VEHICLE	Bill of Lading/Air Bill No.		
Protocol CERCLA	Data Turnaround 45 Days	Offsite Property No.		

**POSSIBLE SAMPLE HAZARDS/REMARKS**  
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**SPECIAL INSTRUCTIONS** Hold Time Total Activity Exemption: Yes  No   
 TOTAL ACTIVITY EXEMPTION APPLIES UNLESS OTHERWISE STATED.  
 Batch all PNNL GW samples submitted under "104" SAF's into one SDG, not to exceed SDG closure of 14 days.  
 Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B18YC8 (F)		W	5-18-04	1009	1x40-ml aGs*	COLOR_TK_FLD: Hexavalent Chromium (1)	None
B18YC9		W	↓	↓	1x40-ml aGs*	COLOR_TK_FLD: Sulfate (1)	None

Relinquished By <b>F.M. HALL</b>	Print Sign <i>[Signature]</i>	Date/Time MAY 18 2004	212	Received By D Alexander	Print Sign <i>[Signature]</i>	Date/Time MAY 18 2004	212	Matrix *
Relinquished By	Date/Time	Received By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time	S = Soil DS = Drum Solids SE = Sediment DL = Drum Liou SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By	Date/Time	Received By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time	
Relinquished By	Date/Time	Received By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time	
Relinquished By	Date/Time	Received By	Date/Time	Relinquished By	Date/Time	Received By	Date/Time	

**FINAL SAMPLE DISPOSITION** Disposal Method (e.g., Return to customer per lab procedure, used in process) *Return to Project* Disposed By *J. Mansu* Date/Time *5/29/04 1400*

